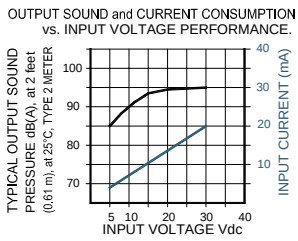
MW-09-530-Q(M)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

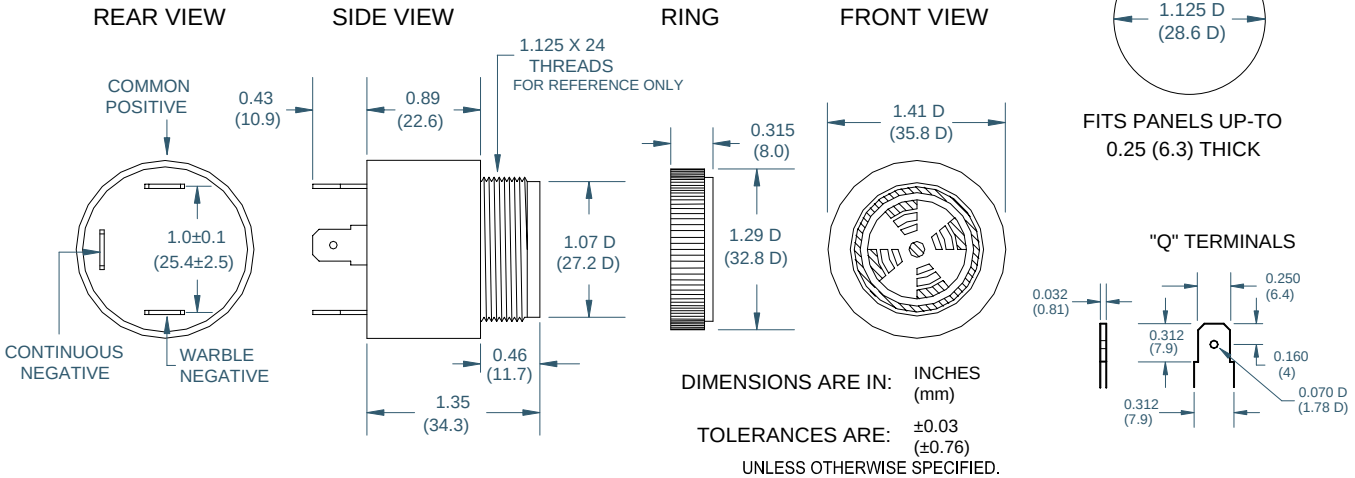


The MW-09-530-Q(M)D is a medium loud output, dual function, panel mounted alarm for operating voltages of 5-30VDC. The alarm functions as a medium warble tone and as a continuous tone. Both tone modes have a typical sound pressure level of 95 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Medium Loud Dual Function Warble/Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	Continuous Mode 2900±250 Hz. Warble Mode High Frequency Peak: 3000±250 Hz. Warble Mode Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second in Warble Mode
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

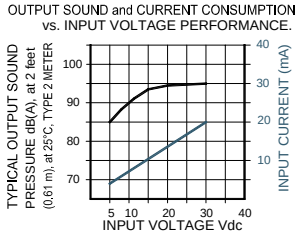
All specifications subject to change without notice.

MW-09-530-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



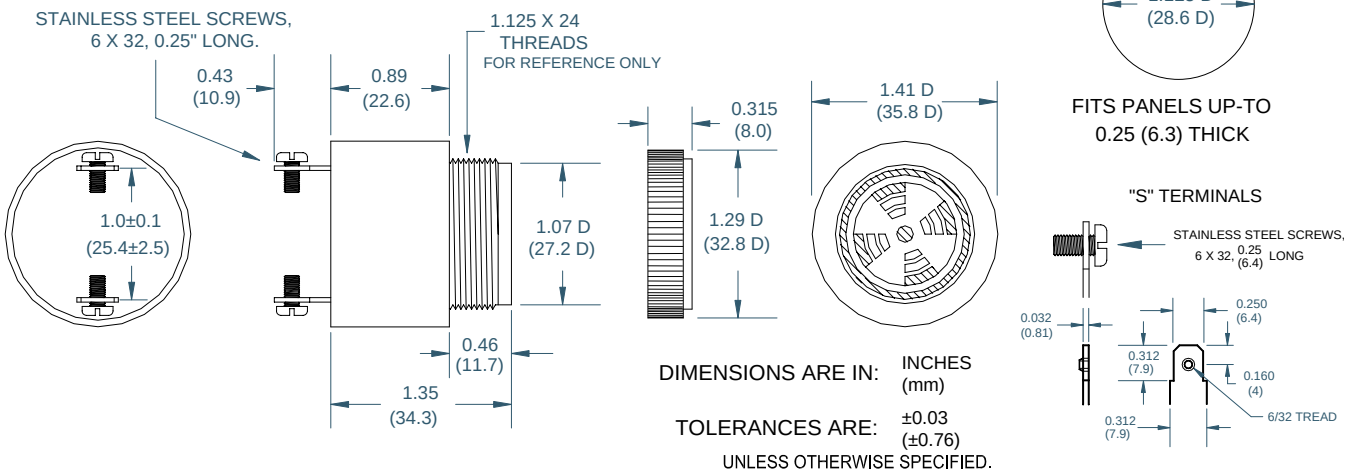
The MW-09-530-S is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 5-30 VDC and warbles at a rate of 2 times per second.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

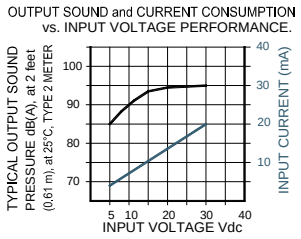
All specifications subject to change without notice.

MW-09-530-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

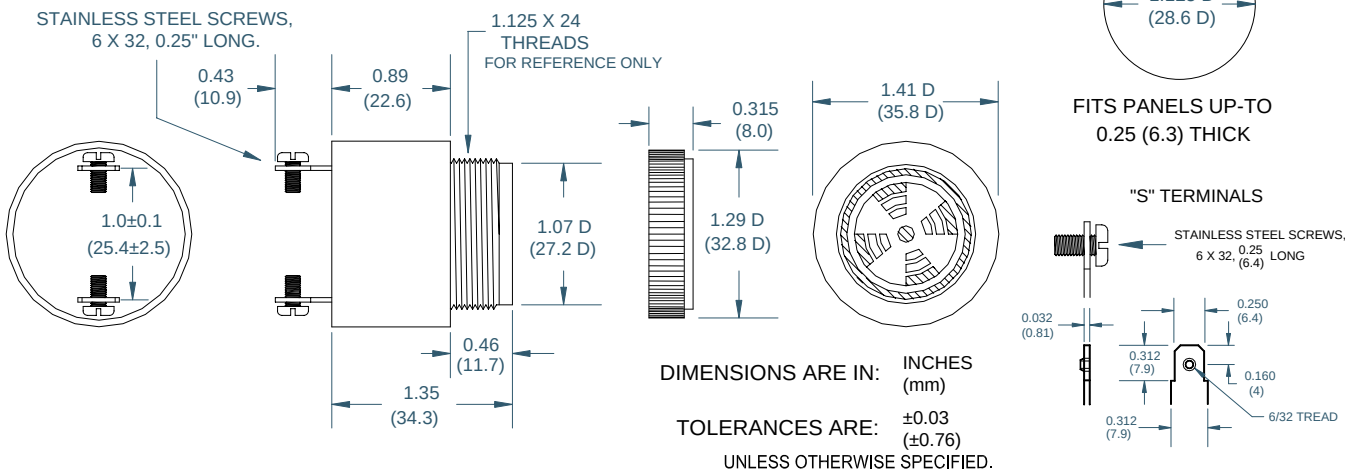


The MW-09-530-S(F) is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 5-30 VDC and warbles at a rate of 10 times per second. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76) UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

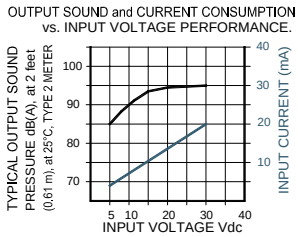
All specifications subject to change without notice.

MW-09-530-S(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

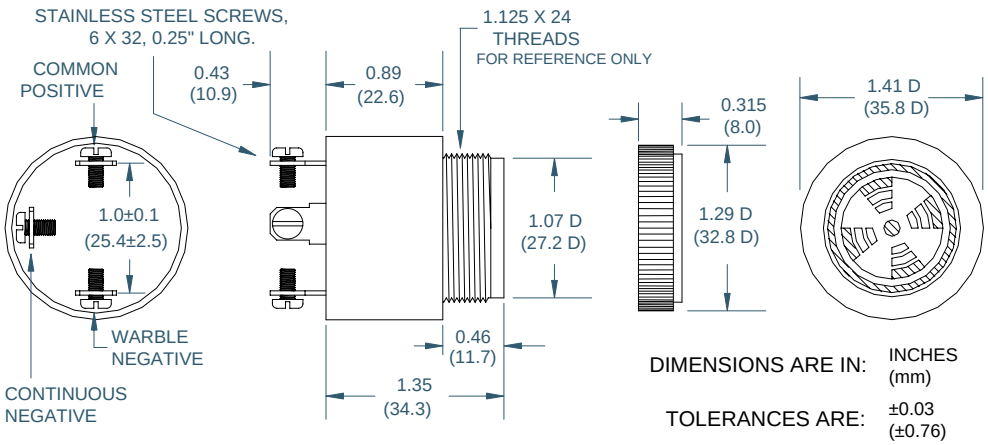


The MW-09-530-S(F)D is a medium loud output, dual function, panel mounted alarm for operating voltages of 5-30VDC. The alarm functions as a fast warble tone and as a continuous tone.

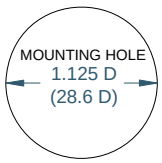
SPECIFICATIONS

Operating Mode:	Medium Loud Dual Function Warble/Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	Continuous Mode 2900±250 Hz. Warble Mode High Frequency Peak: 3000±250 Hz. Warble Mode Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second in Warble Mode
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

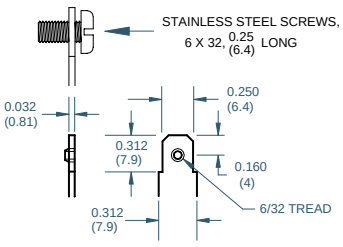


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

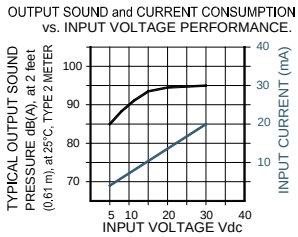
All specifications subject to change without notice.

MW-09-530-S(M)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

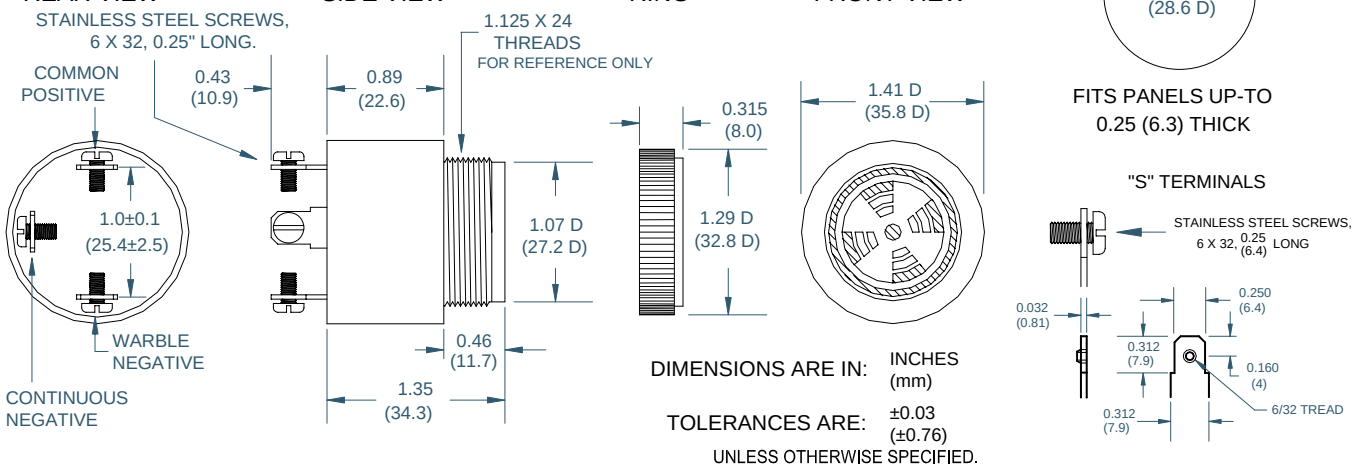


The MW-09-530-S(M)D is a medium loud output, dual function, panel mounted alarm for operating voltages of 5-30VDC. The alarm functions as a medium warble tone and as a continuous tone.

SPECIFICATIONS

Operating Mode:	Medium Loud Dual Function Warble/Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	Continuous Mode 2900±250 Hz. Warble Mode High Frequency Peak: 3000±250 Hz. Warble Mode Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second in Warble Mode
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

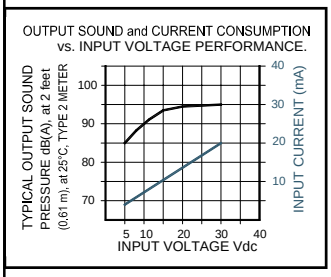
All specifications subject to change without notice.

MW-09-530-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



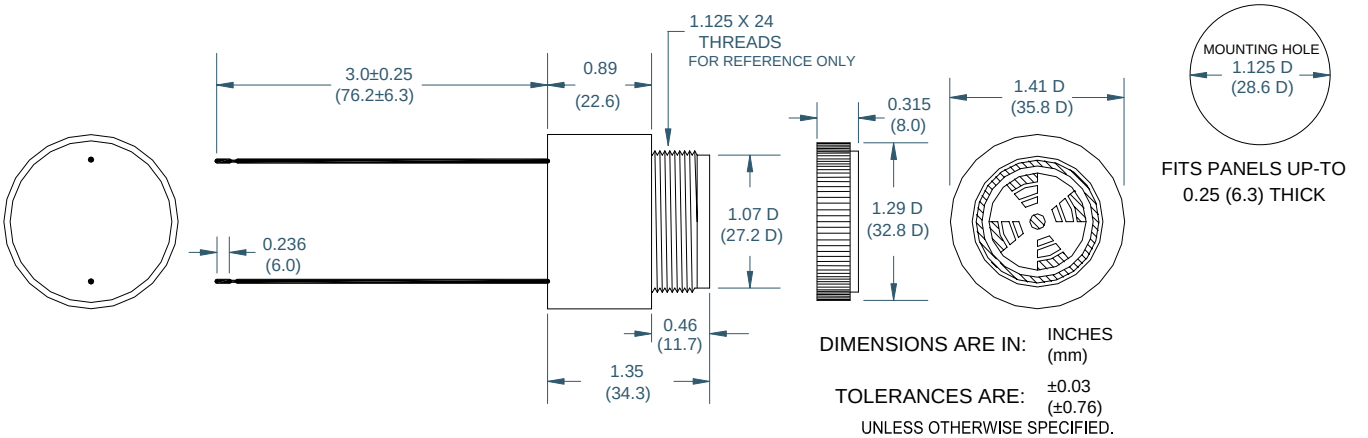
The MW-09-530-W is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 5-30 VDC and warbles at a rate of 2 times per second. It is terminated with two 24AWG wires, 3" long, stripped 0.25". The case is designed for panel mounting.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

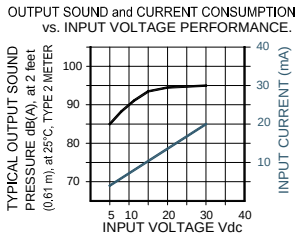
All specifications subject to change without notice.

MW-09-530-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



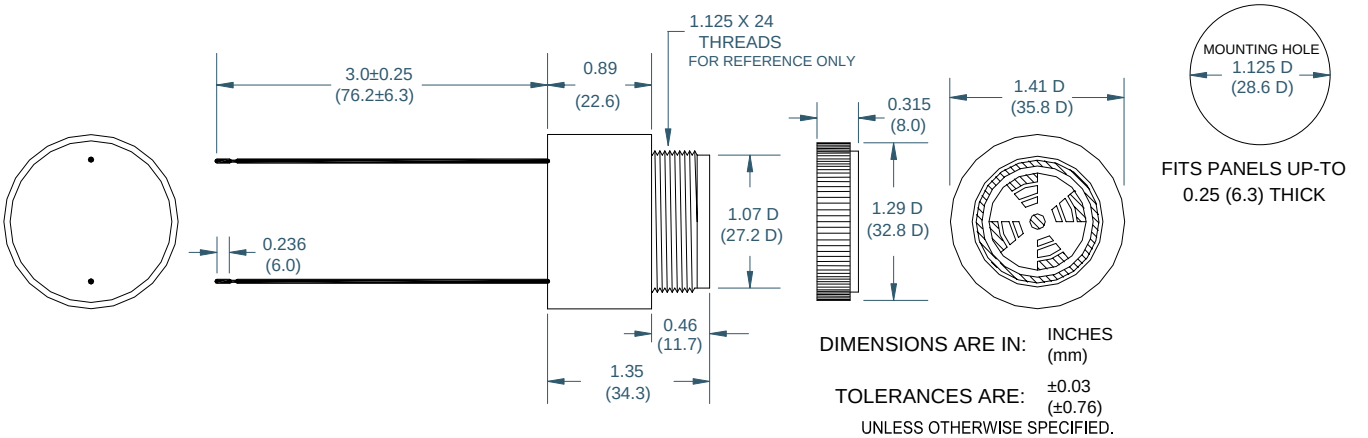
The MW-09-530-W(F) is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 5-30 VDC and warbles at a rate of 10 times per second. It is terminated with two 24AWG wires, 3" long, stripped 0.25". The case is designed for panel mounting.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW | SIDE VIEW | RING | FRONT VIEW | PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

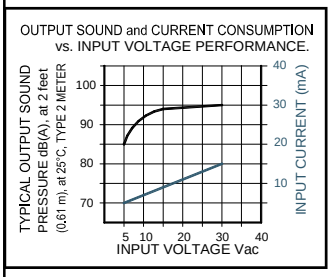
All specifications subject to change without notice.

MW-09-531-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



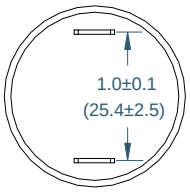
The MW-09-531-Q(F) is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 5-24 VAC/VDC and warbles at a rate of 10 times per second. The terminals are standard 0.25" quick-connect blades. The case is designed for panel mounting.

SPECIFICATIONS

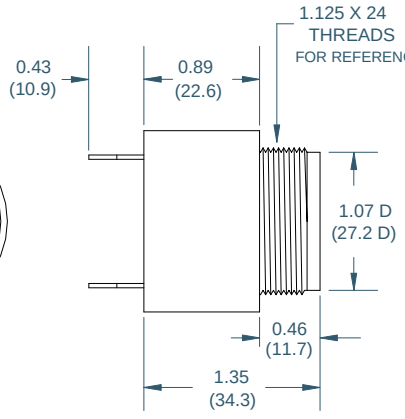
Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/Vdc
Nominal Operating Voltage:	24 Vac/Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	85±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

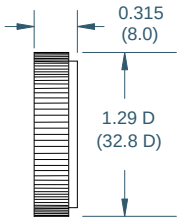
REAR VIEW



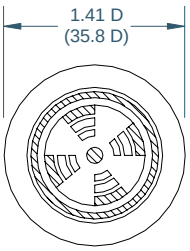
SIDE VIEW



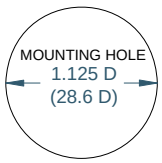
RING



FRONT VIEW

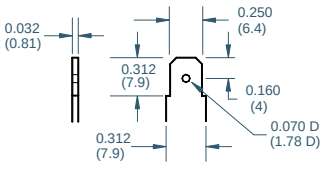


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

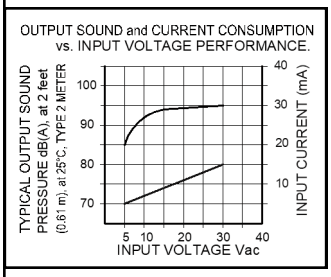
All specifications subject to change without notice.

MW-09-531-Q(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

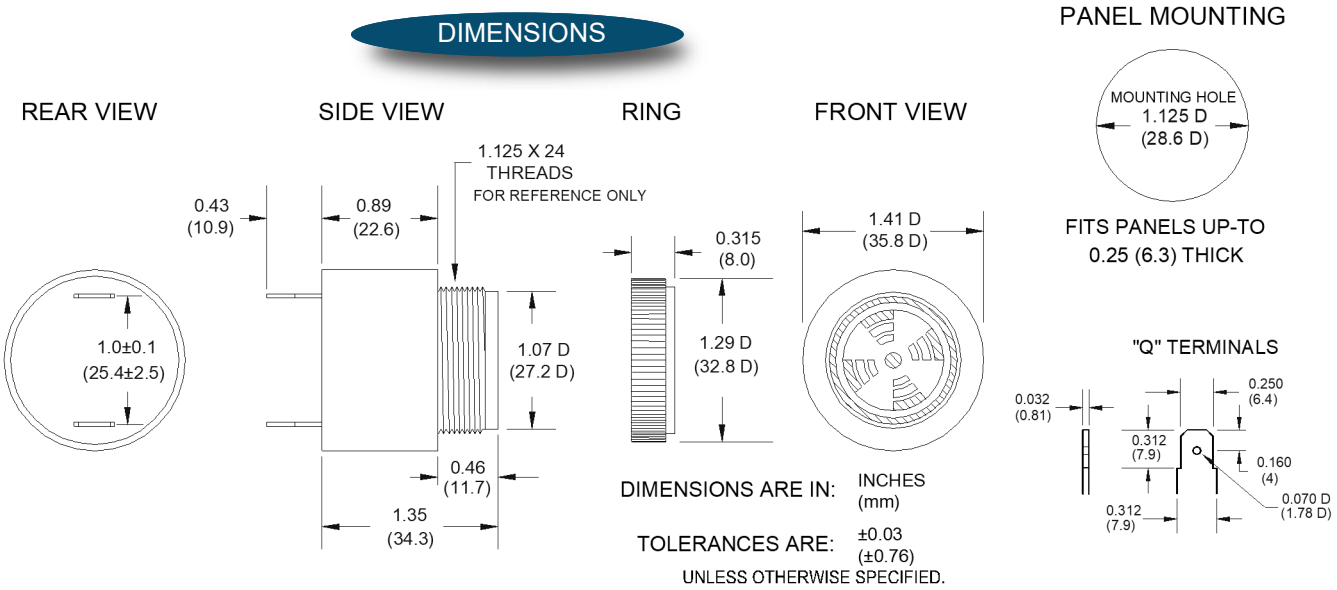


The MW-09-531-Q(M) is a warble tone alarm with a typical loudness level of 95 dB (A). It can be operated over a voltage range of 5-24 VAC/VDC and warbles at a rate of 2 times per second. The terminals are standard 0.25" quick-connect blades. The case is designed for panel mounting.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/Vdc
Nominal Operating Voltage:	24 Vac/Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	85±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

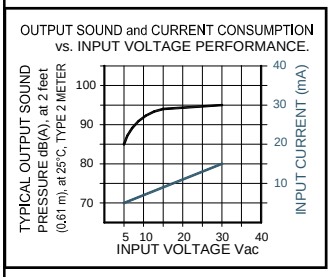
All specifications subject to change without notice.

MW-09-531-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

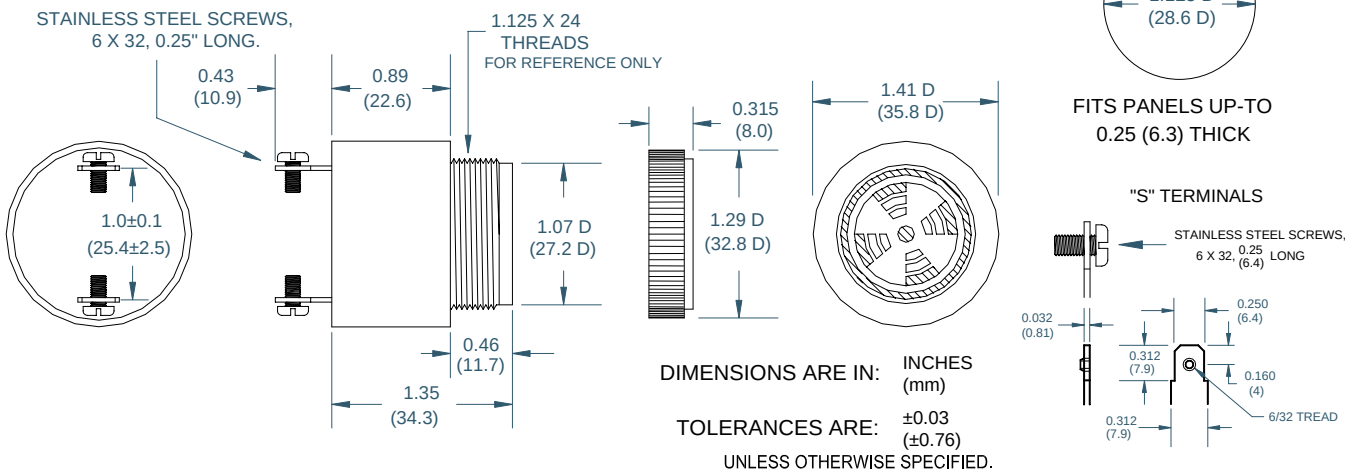


The MW-09-531-S is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 5-24 VAC/VDC and warbles at a rate of 2 times per second. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/Vdc
Nominal Operating Voltage:	24 Vac/Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	85±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

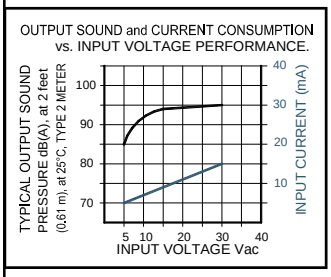
All specifications subject to change without notice.

MW-09-531-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

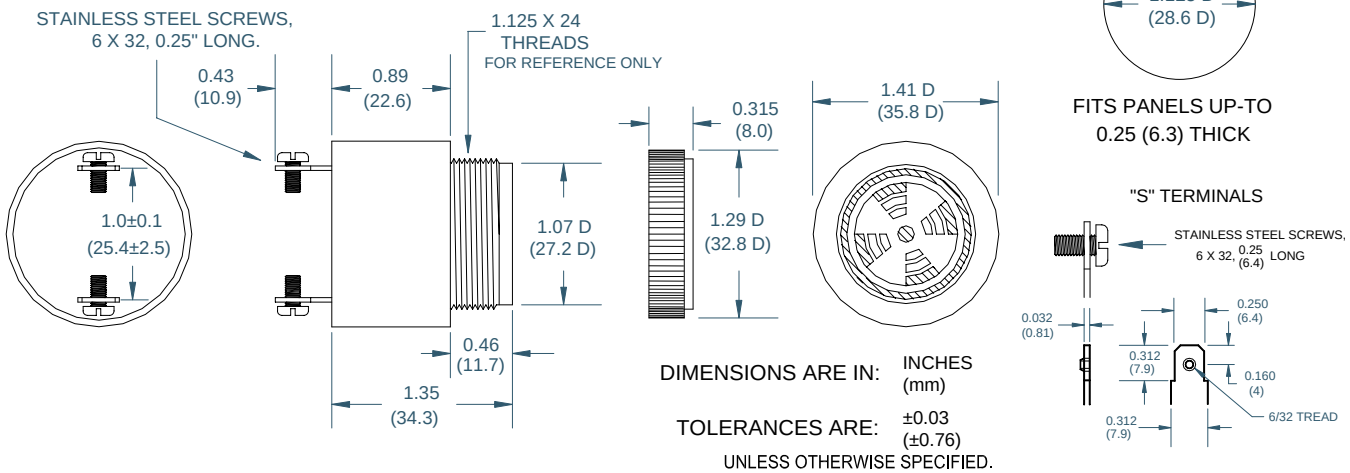


The MW-09-531-S(F) is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 5-24 VAC/VDC and warbles at a rate of 10 times per second. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/Vdc
Nominal Operating Voltage:	24 Vac/Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	85±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76) UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

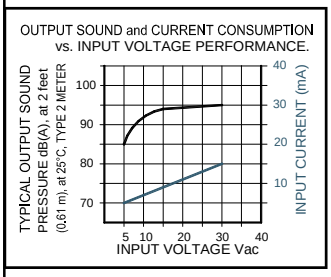
All specifications subject to change without notice.

MW-09-531-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



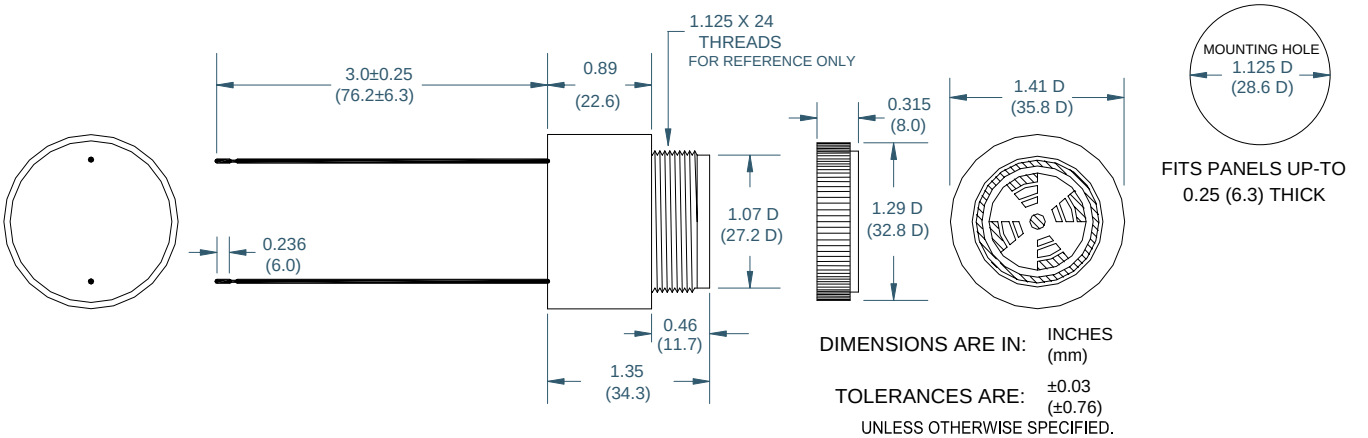
The MW-09-531-W is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 5-24 VAC/VDC and warbles at a rate of 2 times per second. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/Vdc
Nominal Operating Voltage:	24 Vac/Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	85±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW | SIDE VIEW | RING | FRONT VIEW | PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

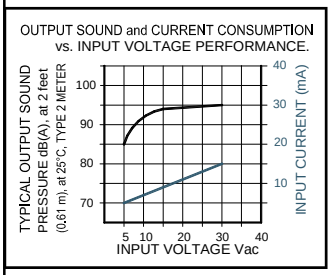
All specifications subject to change without notice.

MW-09-531-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



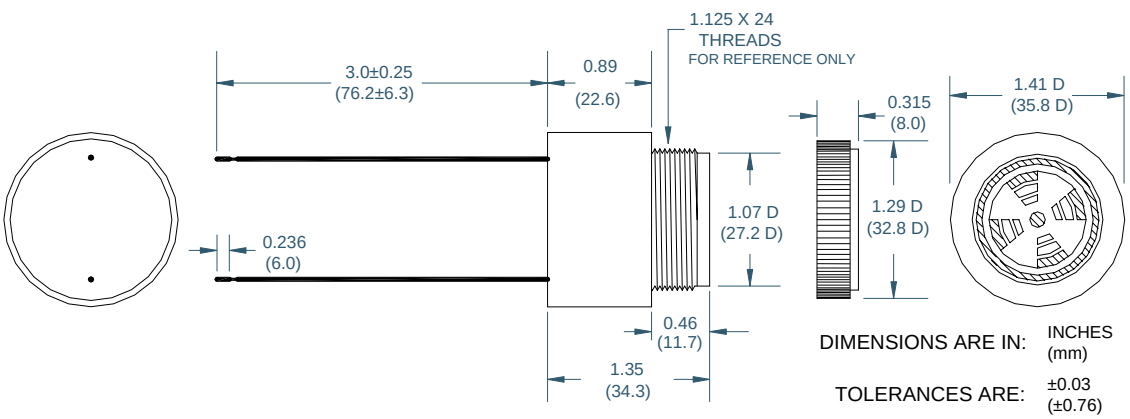
The MW-09-531-W(F) is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 5-24 VAC/VDC and warbles at a rate of 10 times per second. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

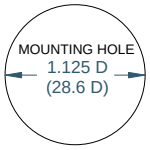
SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/Vdc
Nominal Operating Voltage:	24 Vac/Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	85±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW | SIDE VIEW | RING | FRONT VIEW | PANEL MOUNTING





FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

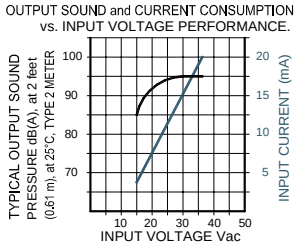
All specifications subject to change without notice.

MW-09-550-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



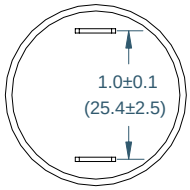
The MW-09-550-Q is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over voltage ranges of 15-36 Vac and 15-50 Vdc. The terminals are standard 0.25" quick-connect blades. The case is designed for panel mounting in a 1.125" hole with a knurled ring nut.

SPECIFICATIONS

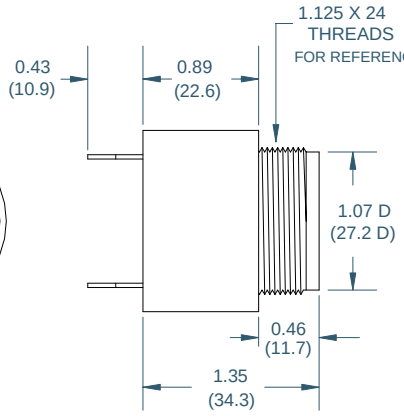
Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	15-36 Vac, 15-50 Vdc
Nominal Operating Voltage:	36 Vac
Operating Frequency:	High Frequency Peak: 2900±250 Hz. Low Frequency Peak: 2200±250 Hz. 15±25% Cycles per second
Typical Operating Current:	5 mA at 15 Vac 20 mA at 36 Vac
Typical Sound Pressure:	85±5 dB(A), at 15 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 36 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

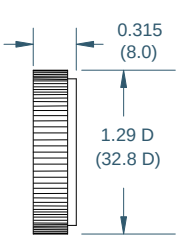
REAR VIEW



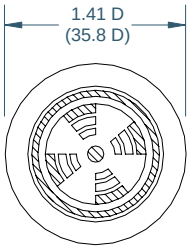
SIDE VIEW



RING



FRONT VIEW

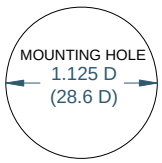


DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

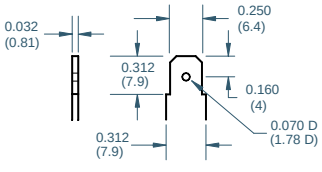
UNLESS OTHERWISE SPECIFIED.

PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

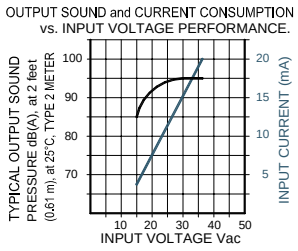
All specifications subject to change without notice.

MW-09-550-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

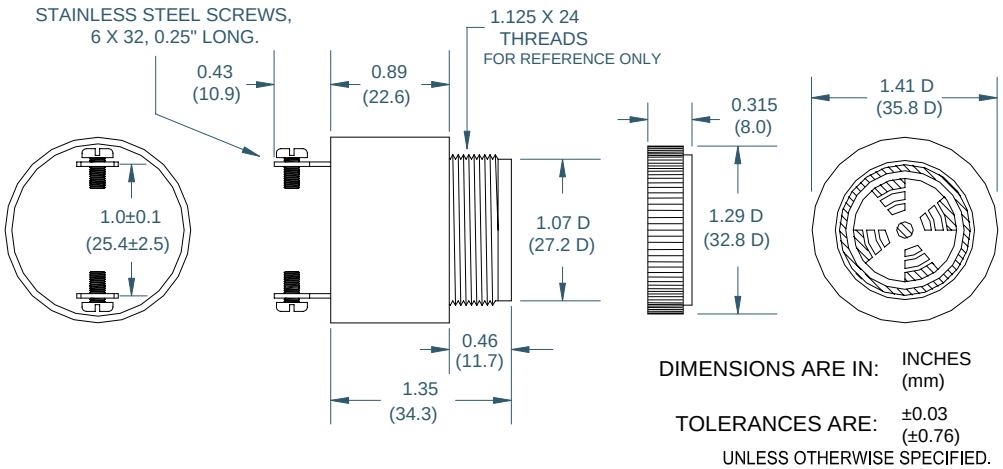


The MW-09-550-S is a warble tone alarm which can be operated over voltage ranges of 15-36 Vac and 15-50 Vdc. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs. The case is designed for panel mounting in a 1.125" hole with a knurled ring nut.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	15-36 Vac, 15-50 Vdc
Nominal Operating Voltage:	36 Vac
Operating Frequency:	High Frequency Peak: 2900±250 Hz. Low Frequency Peak: 2200±250 Hz. 15±25% Cycles per second
Typical Operating Current:	5 mA at 15 Vac 20 mA at 36 Vac
Typical Sound Pressure:	85±5 dB(A), at 15 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 36 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

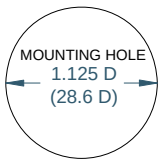


DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

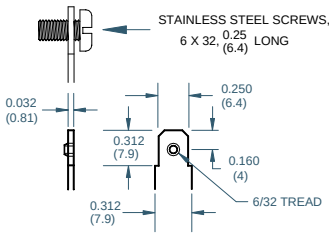
UNLESS OTHERWISE SPECIFIED.

PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

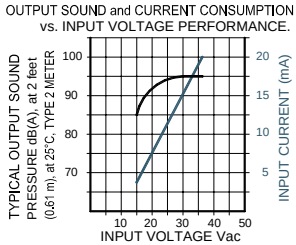
All specifications subject to change without notice.

MW-09-550-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



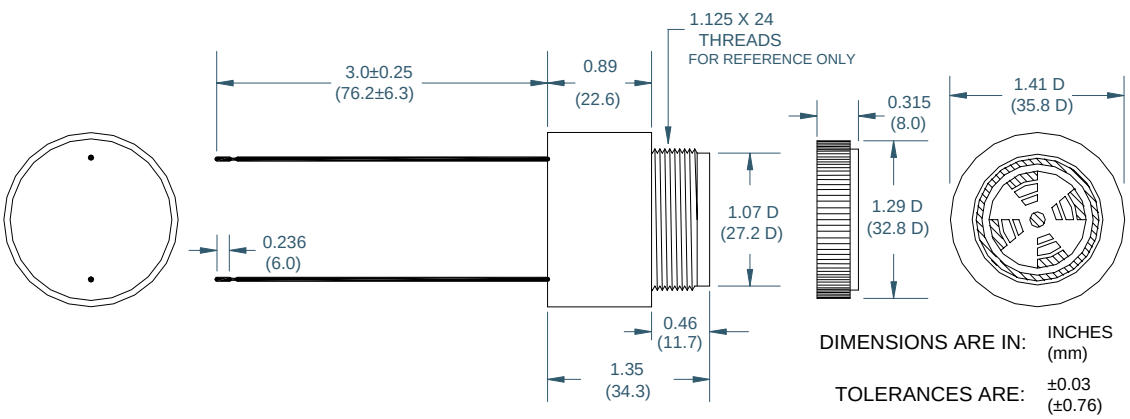
The MW-09-550-W is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over voltage ranges of 15-36 Vac and 15-50 Vdc. It is terminated with two 24AWG wires, 3" long, stripped 0.25". The case is designed for panel mounting in a 1.125" hole with a knurled ring nut.

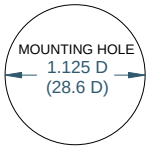
SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	15-36 Vac, 15-50 Vdc
Nominal Operating Voltage:	36 Vac
Operating Frequency:	High Frequency Peak: 2900±250 Hz. Low Frequency Peak: 2200±250 Hz. 15±25% Cycles per second
Typical Operating Current:	5 mA at 15 Vac 20 mA at 36 Vac
Typical Sound Pressure:	85±5 dB(A), at 15 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 36 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING





FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

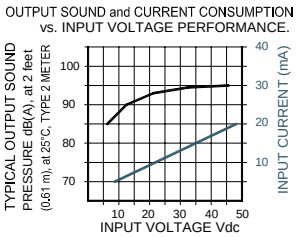
All specifications subject to change without notice.

MW-09-948-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

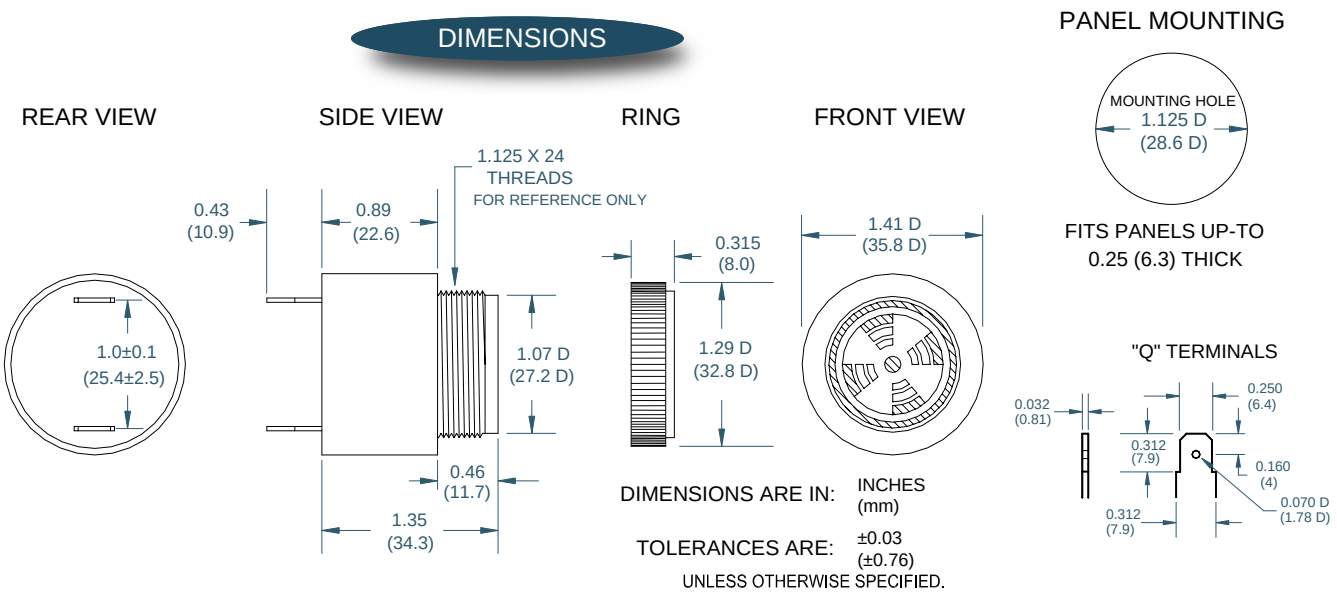


The MW-09-948-Q(F) is a warble tone alarm with a typical loudness level of 95 dB (A). It can be operated over a voltage range of 9-48 VDC and warbles at a rate of 10 times per second. The terminals are standard 0.25" quick-connect blades. The case is designed for panel mounting in a 1.125" hole with a knurled ring nut.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	5 mA at 9 Vdc 20 mA at 48 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

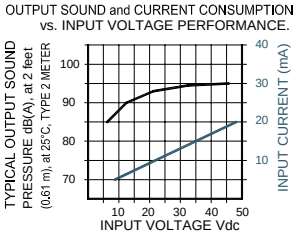
All specifications subject to change without notice.

MW-09-948-Q(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

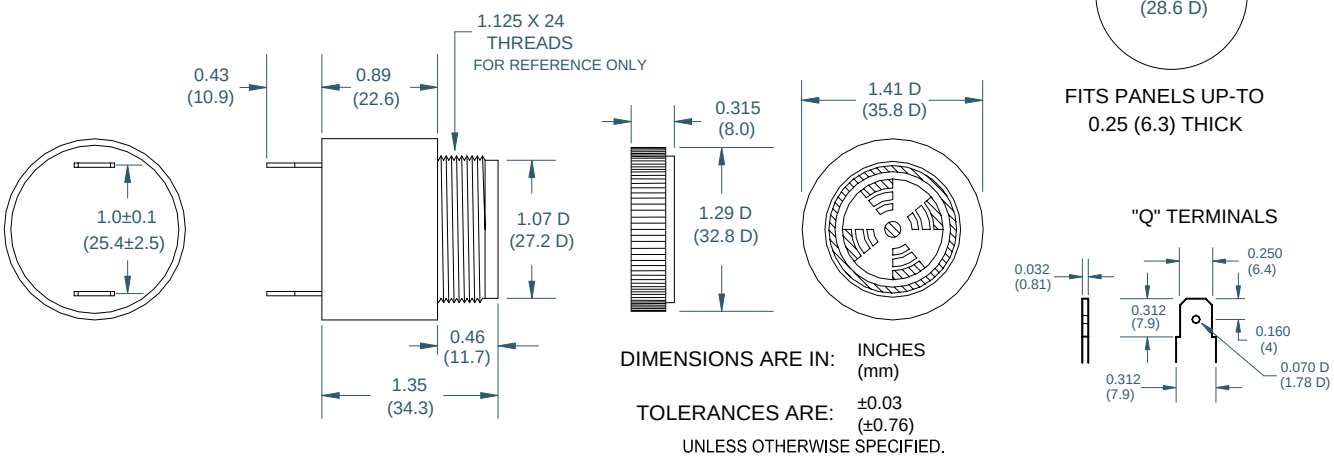


The MW-09-948-Q(M) is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 9-48 VDC and warbles at a rate of 2 times per second. The terminals are standard 0.25" quick-connect blades. The case is designed for panel mounting in a 1.125" hole with a knurled ring nut.

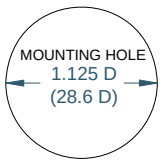
SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 9 Vdc 20 mA at 48 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

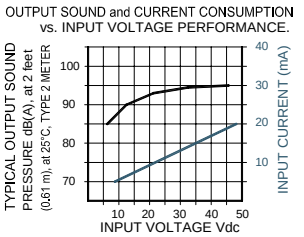
All specifications subject to change without notice.

MW-09-948-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

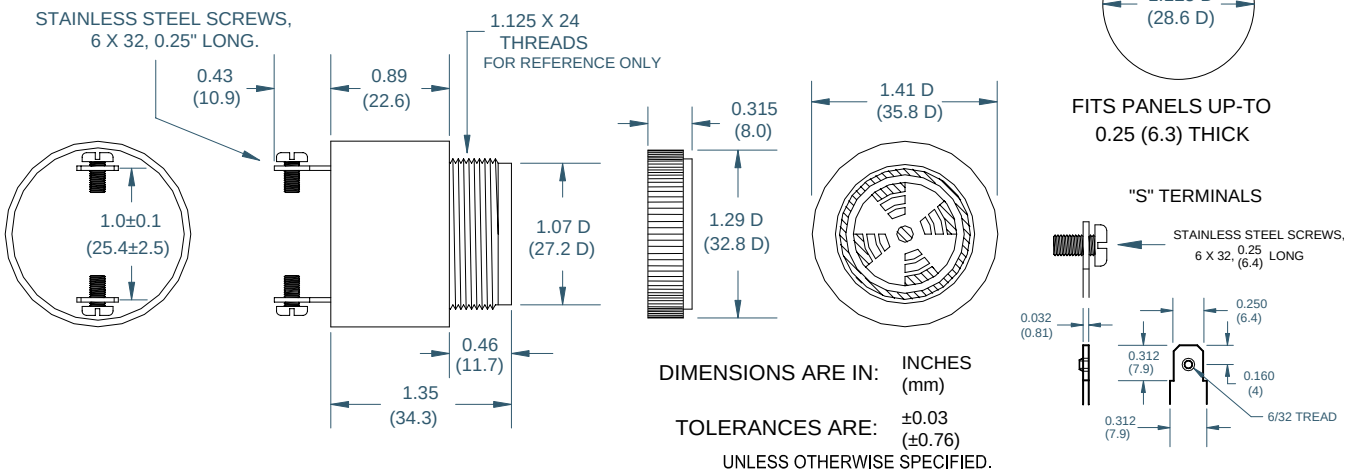


The MW-09-948-S(F) is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 9-48 VDC and warbles at a rate of 10 times per second. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	5 mA at 9 Vdc 20 mA at 48 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

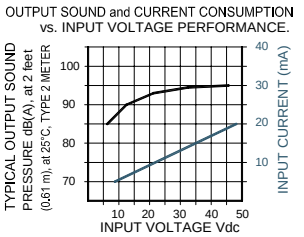
All specifications subject to change without notice.

MW-09-948-S(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

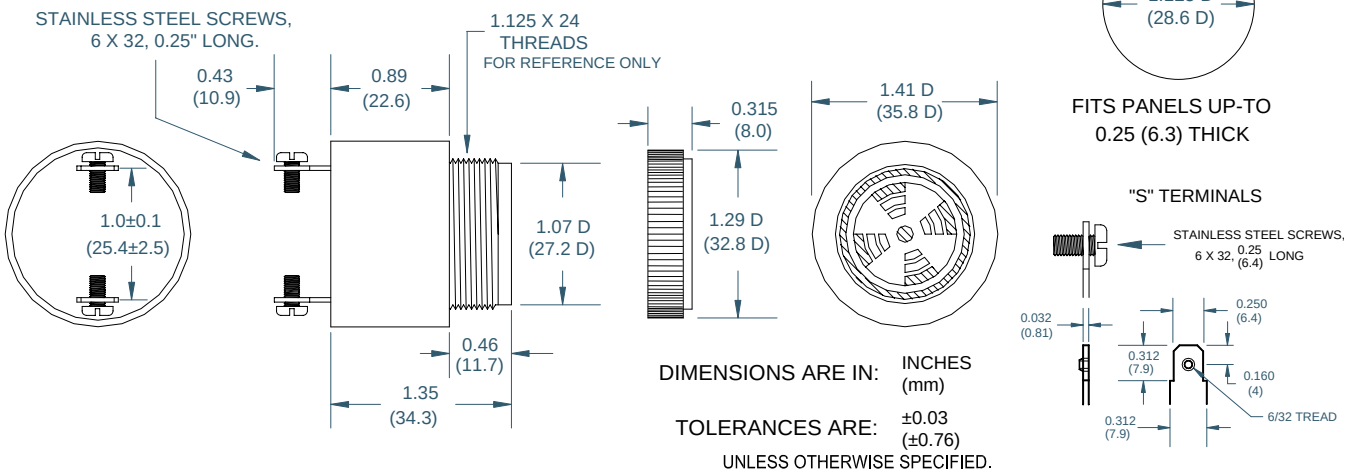


The MW-09-948-S(M) is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 9-48 VDC and warbles at a rate of 2 times per second. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 9 Vdc 20 mA at 48 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

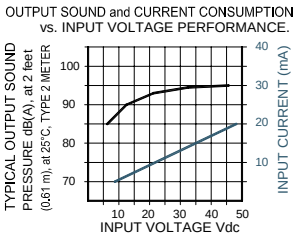
All specifications subject to change without notice.

MW-09-948-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



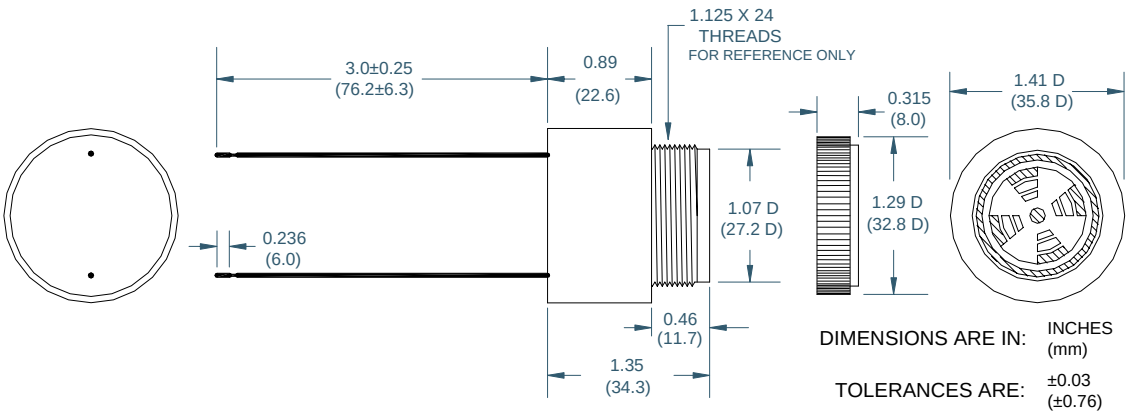
The MW-09-948-W(F) is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 9-48 VDC and warbles at a rate of 10 times per second. It is terminated with two 24AWG wires, 3" long, stripped 0.25". The case is designed for panel mounting.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	5 mA at 9 Vdc 20 mA at 48 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

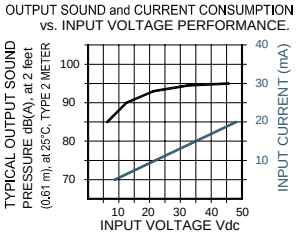
All specifications subject to change without notice.

MW-09-948-W(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



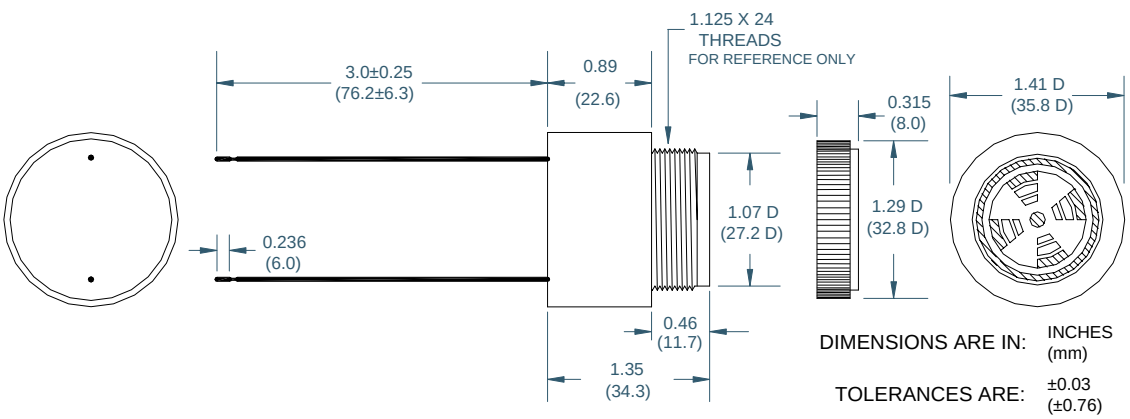
The MW-09-948-W(M) is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 9-48 VDC and warbles at a rate of 2 times per second. It is terminated with two 24AWG wires, 3" long, stripped 0.25". The case is designed for panel mounting.

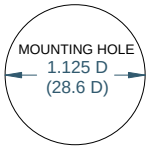
SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 9 Vdc 20 mA at 48 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING





FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

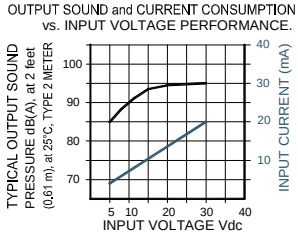
All specifications subject to change without notice.

MW-V07-530-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



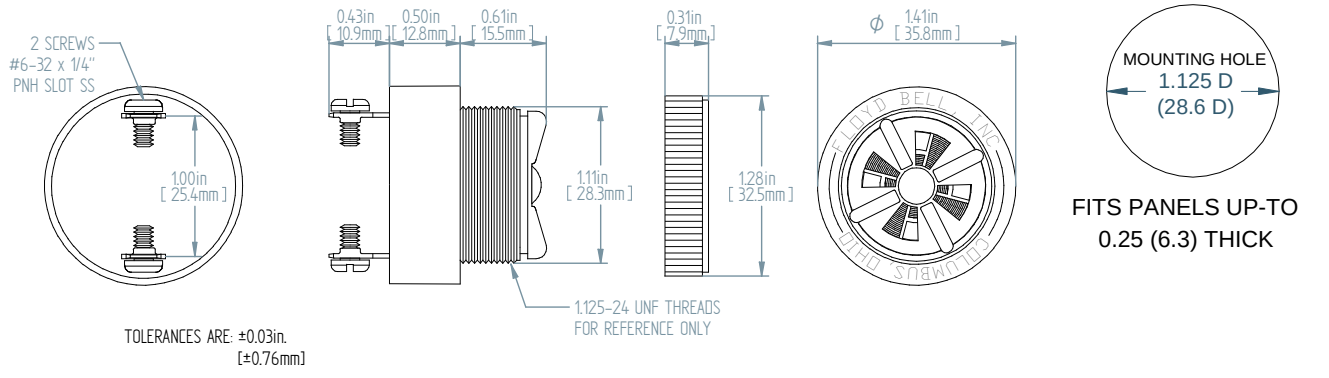
The MW-V07-530-S is a warble tone alarm that can be operated over a voltage range of 5-30 VDC and warbles at a rate of 2 times per second.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.09

Copyright © 2009 Floyd Bell Inc.

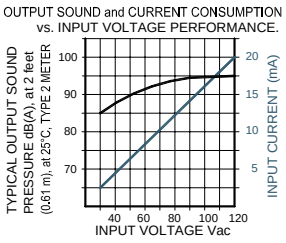
All specifications subject to change without notice.

MW-V09-201-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



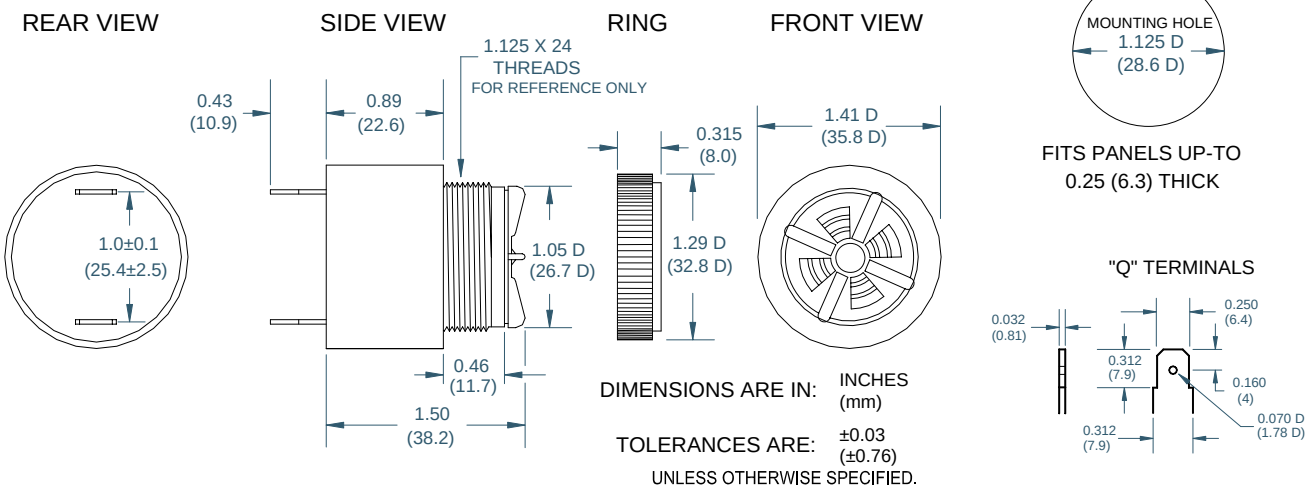
The MW-V09-201-Q is a warble tone alarm with a typical loudness level of 95 dB (A). It can be operated over a voltage range of 30-120VAC and warbles at a rate of 15 times per second.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	High Frequency Peak: 2900±250 Hz. Low Frequency Peak: 2200±250 Hz. 15±25% Cycles per second
Typical Operating Current:	5 mA at 30 Vac 20 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

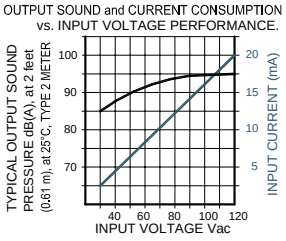
All specifications subject to change without notice.

MW-V09-201-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



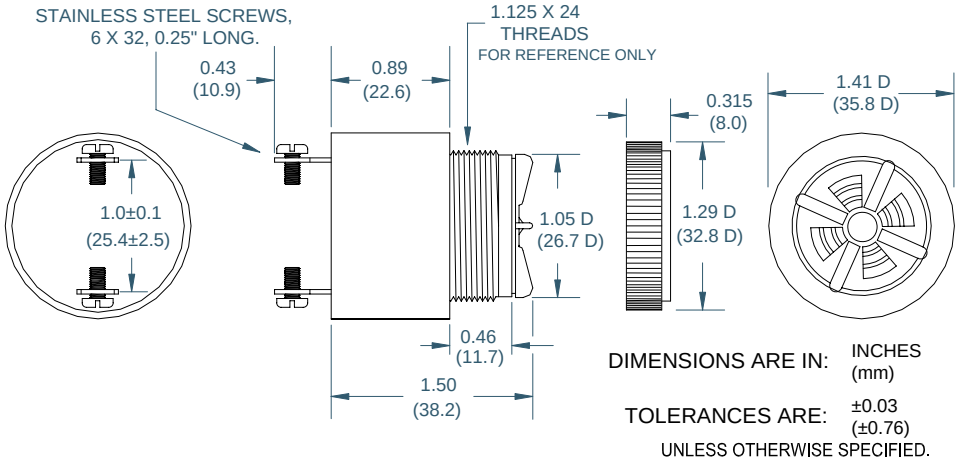
The MW-V09-201-S can be operated over a voltage range of 30-120VAC and warbles at a rate of 15 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

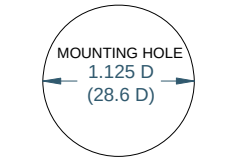
SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	High Frequency Peak: 2900±250 Hz. Low Frequency Peak: 2200±250 Hz. 15±25% Cycles per second
Typical Operating Current:	5 mA at 30 Vac 20 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

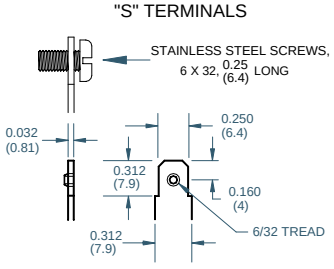
RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS





FITS PANELS UP-TO 0.25 (6.3) THICK



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

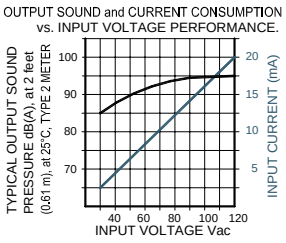
All specifications subject to change without notice.

MW-V09-201-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



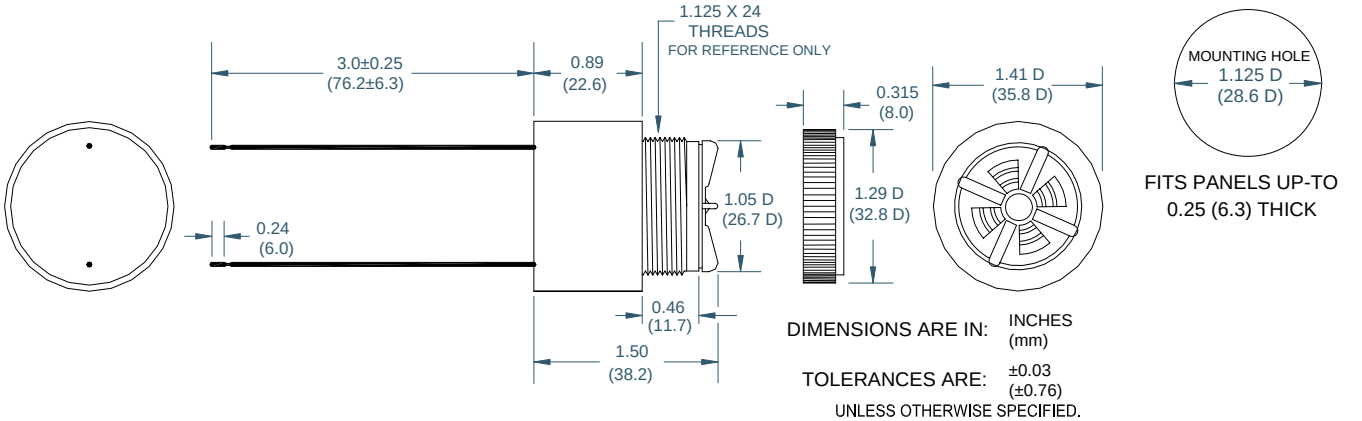
The MW-V09-201-W is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 30-120VAC and warbles at a rate of 15 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	High Frequency Peak: 2900±250 Hz. Low Frequency Peak: 2200±250 Hz. 15±25% Cycles per second
Typical Operating Current:	5 mA at 30 Vac 20 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

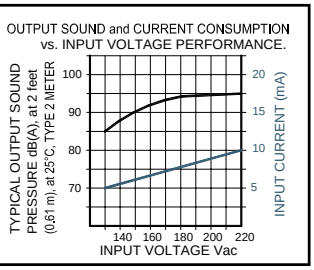
All specifications subject to change without notice.

MW-V09-301-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



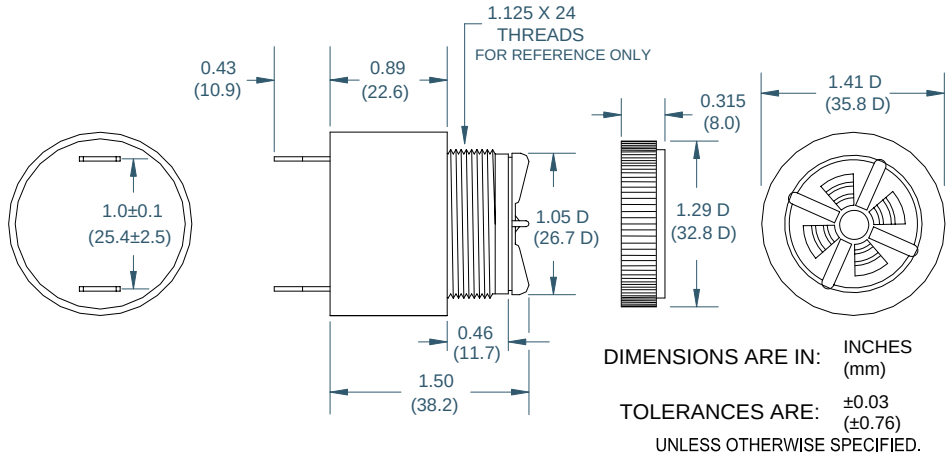
The MW-V09-301-Q is a warble tone alarm with a typical loudness level of 95 dB (A). It can be operated over a voltage range of 130-220VAC and warbles at a rate of 15 times per second.

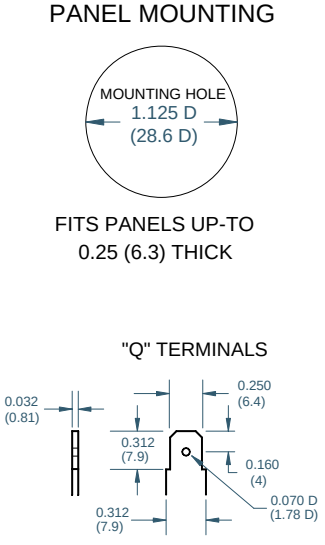
SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	High Frequency Peak: 2900±250 Hz. Low Frequency Peak: 2200±250 Hz. 15±25% Cycles per second
Typical Operating Current:	5 mA at 130 Vac 10 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS





Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

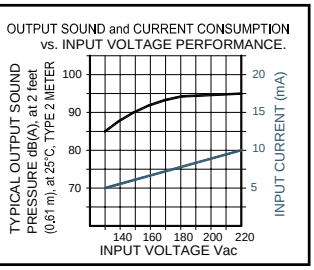
All specifications subject to change without notice.

MW-V09-301-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



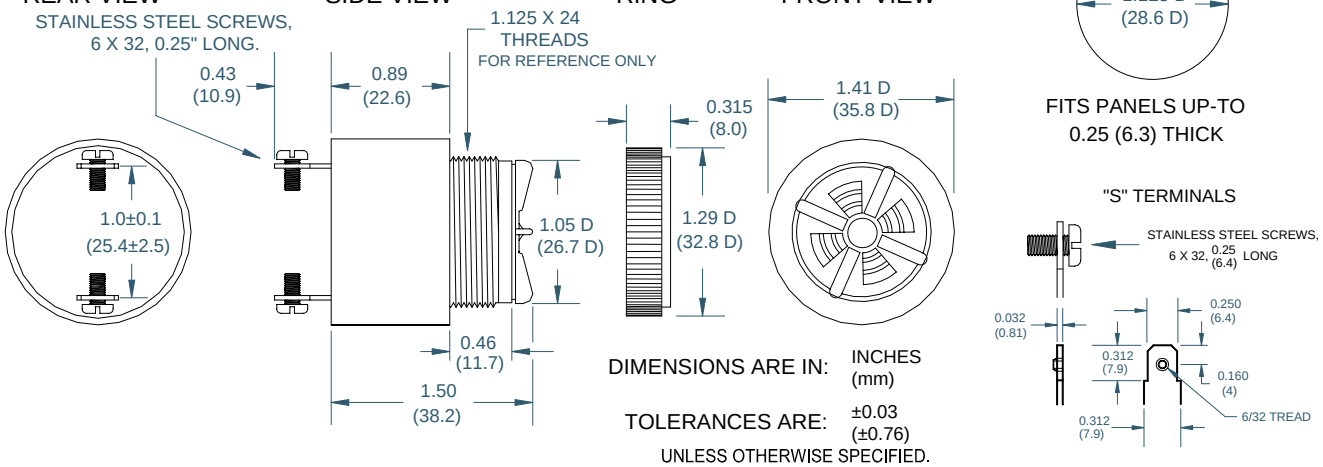
The MW-V09-301-S is a warble tone alarm with a typical loudness level of 95 dB (A). It can be operated over a voltage range of 130-220VAC and warbles at a rate of 15 times per second.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	High Frequency Peak: 2900±250 Hz. Low Frequency Peak: 2200±250 Hz. 15±25% Cycles per second
Typical Operating Current:	5 mA at 130 Vac 10 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

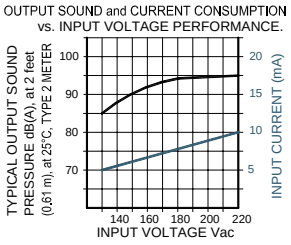
All specifications subject to change without notice.

MW-V09-301-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



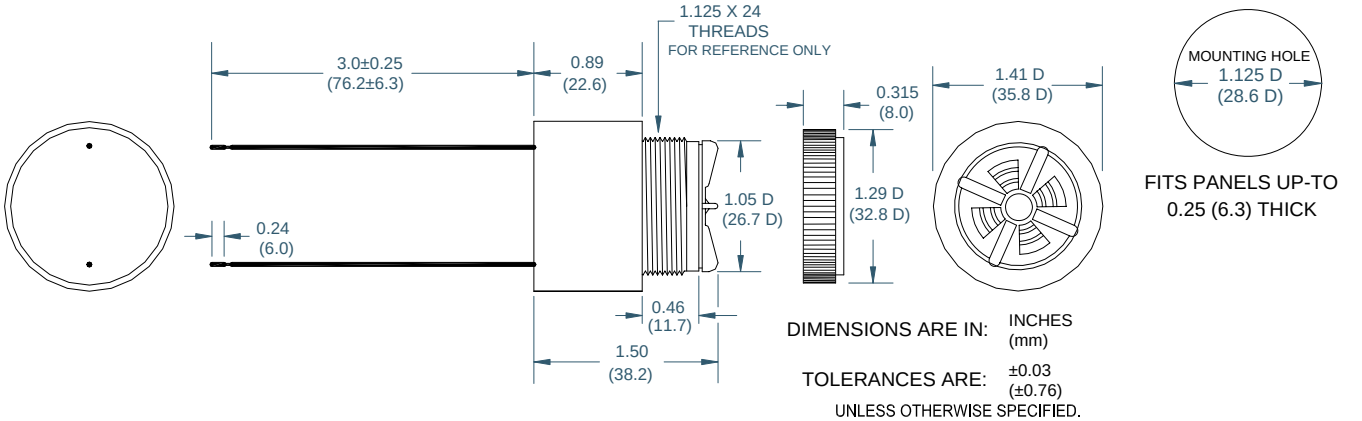
The MW-V09-301-W is a warble tone alarm with a typical loudness level of 95 dB(A). It can be operated over a voltage range of 130-220VAC and warbles at a rate of 15 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	High Frequency Peak: 2900±250 Hz. Low Frequency Peak: 2200±250 Hz. 15±25% Cycles per second
Typical Operating Current:	5 mA at 130 Vac 10 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

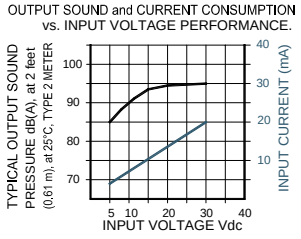
All specifications subject to change without notice.

MW-V09-530-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



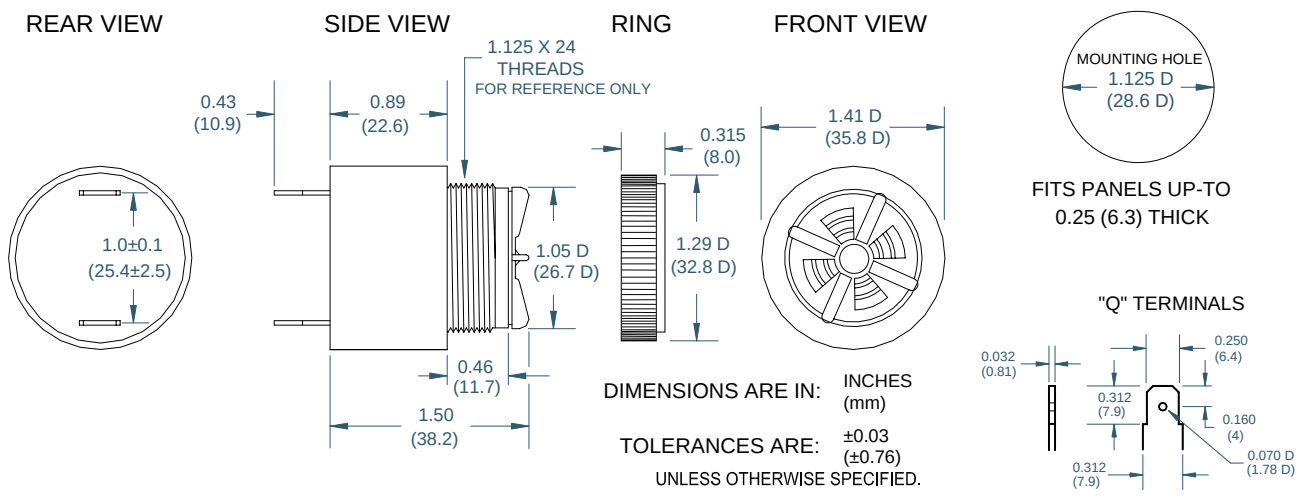
The MW-V09-530-Q is a warble tone alarm that can be operated over a voltage range of 5-30 VDC and warbles at a rate of 2 times per second.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

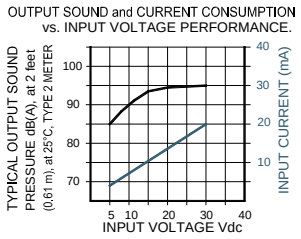
All specifications subject to change without notice.

MW-V09-530-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

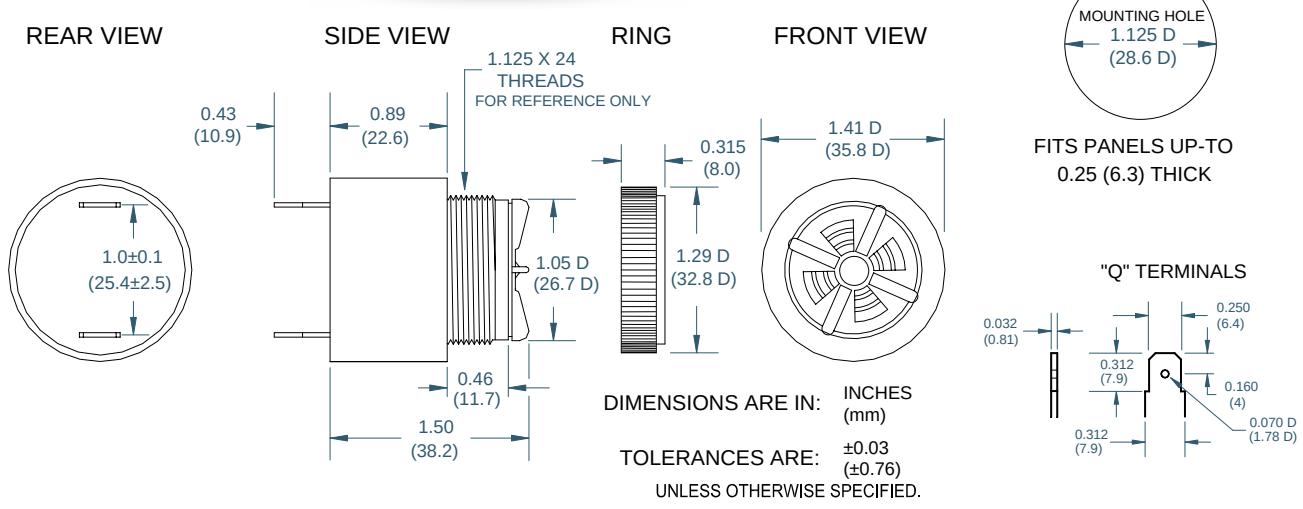


The MW-V09-530-Q(F) is a warble tone alarm that can be operated over a voltage range of 5-30 VDC and warbles at a rate of 10 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

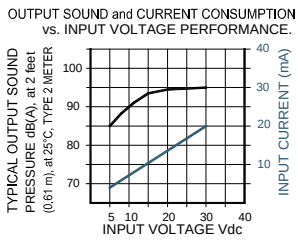
All specifications subject to change without notice.

MW-V09-530-Q(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

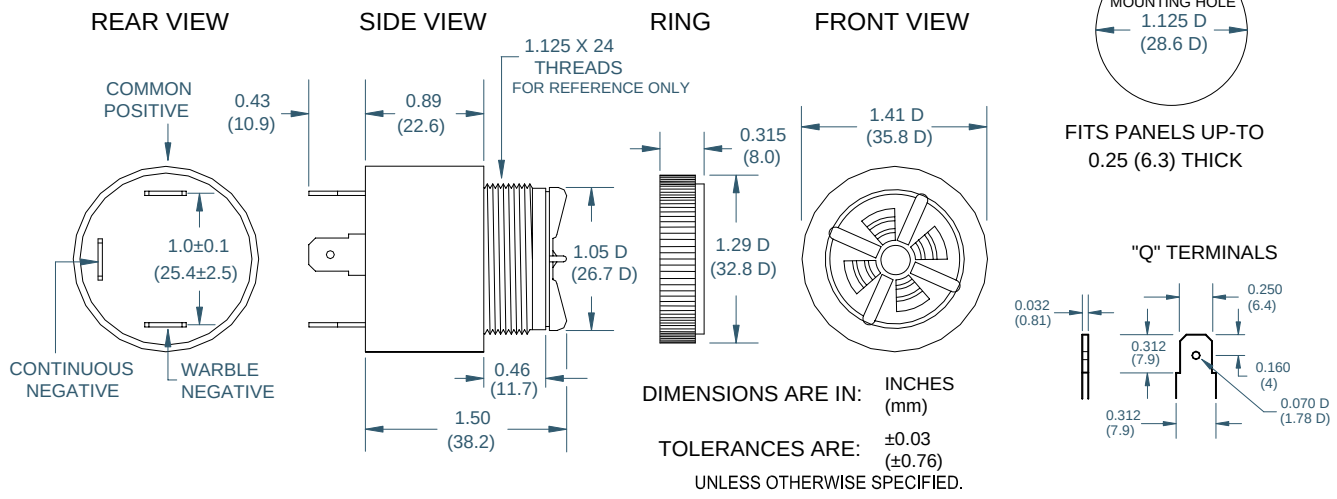


The MW-V09-530-Q(F)D is a medium loud output, dual function, panel mounted alarm for operating voltages of 5-30VDC. The alarm functions as a fast warble tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

SPECIFICATIONS

Operating Mode:	Medium Loud Dual Function Warble/Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	Continuous Mode 2900±250 Hz. Warble Mode High Frequency Peak: 3000±250 Hz. Warble Mode Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second in Warble Mode
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

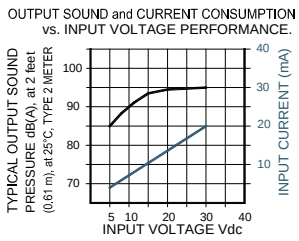
All specifications subject to change without notice.

MW-V09-530-Q(M)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

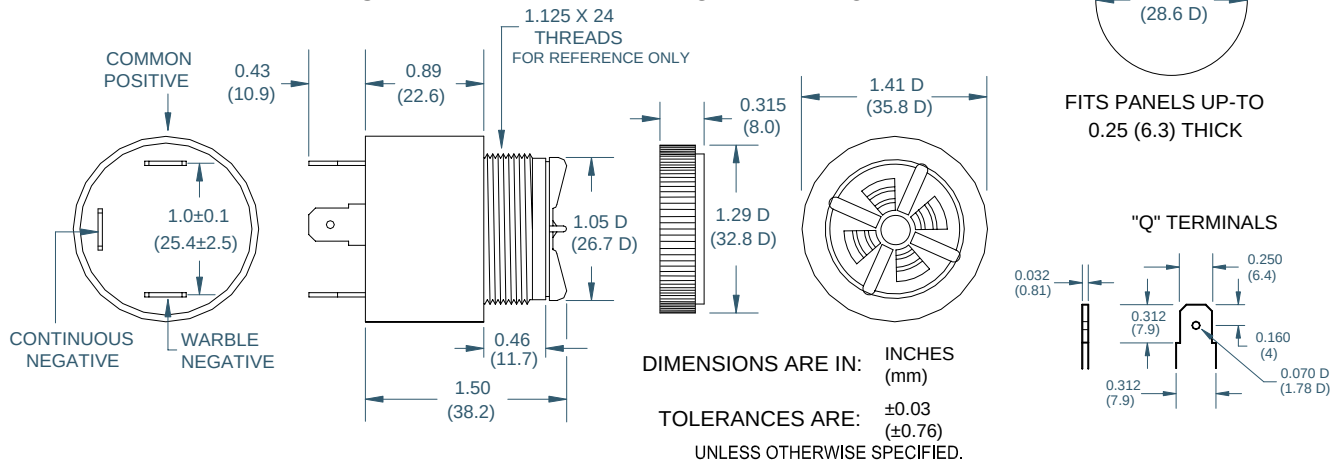


The MW-V09-530-Q(M)D is a medium loud output, dual function, panel mounted alarm for operating voltages of 5-30VDC. The alarm functions as a medium warble tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

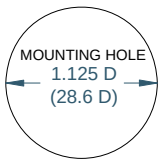
SPECIFICATIONS

Operating Mode:	Medium Loud Dual Function Warble/Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	Continuous Mode 2900±250 Hz. Warble Mode High Frequency Peak: 3000±250 Hz. Warble Mode Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second in Warble Mode
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

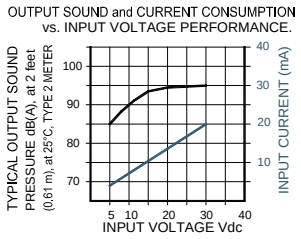
All specifications subject to change without notice.

MW-V09-530-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



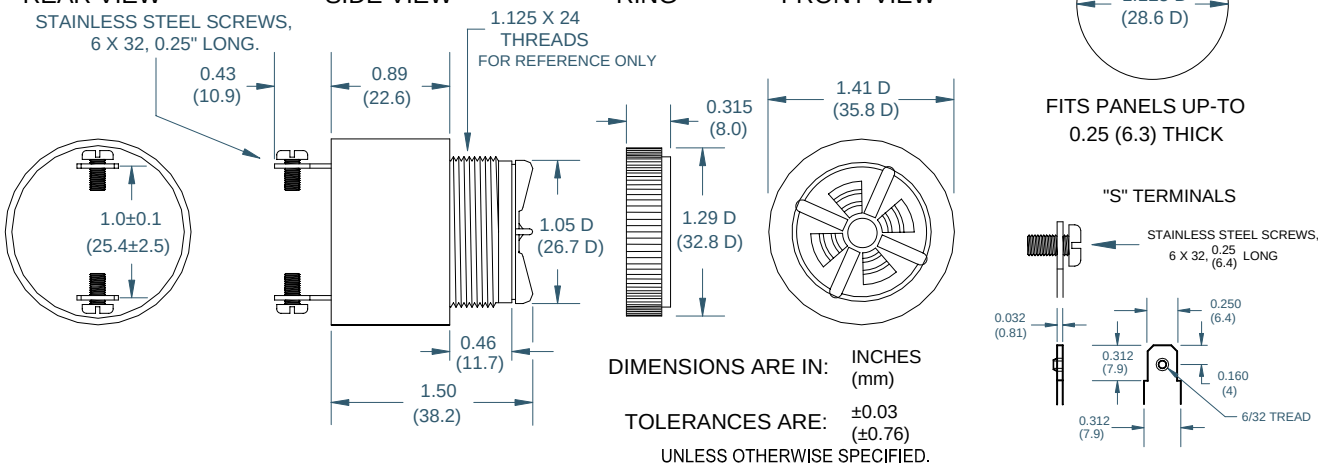
The MW-V09-530-S is a warble tone alarm that can be operated over a voltage range of 5-30 VDC and warbles at a rate of 2 times per second.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

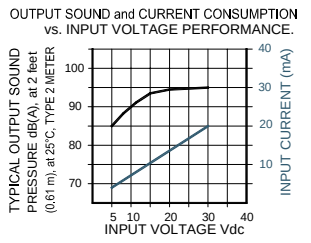
All specifications subject to change without notice.

MW-V09-530-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

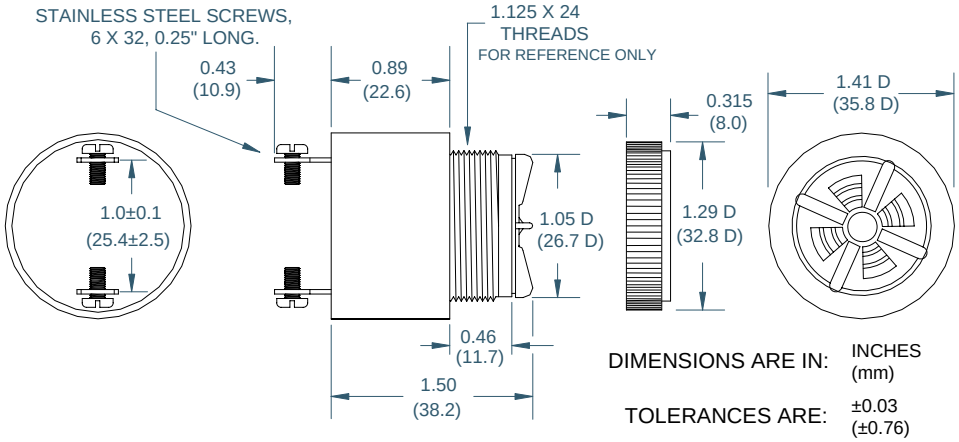


The MW-V09-530-S(F) is a warble tone alarm that can be operated over a voltage range of 5-30 VDC and warbles at a rate of 10 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

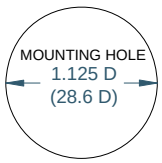


DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

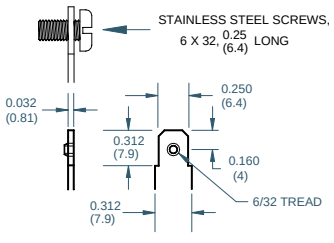
UNLESS OTHERWISE SPECIFIED.

PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

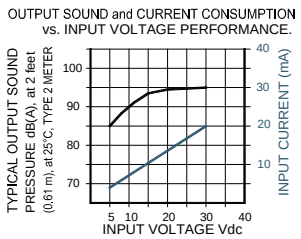
All specifications subject to change without notice.

MW-V09-530-S(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

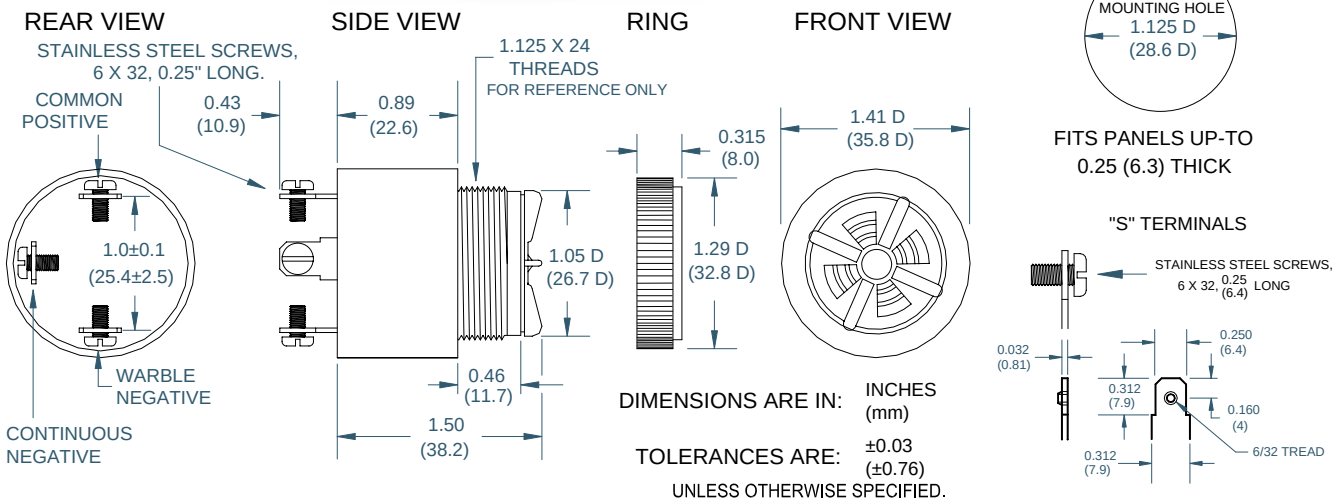


The MW-V09-530-S(F)D is a medium loud output, dual function, panel mounted alarm for operating voltages of 5-30VDC. The alarm functions as a fast warble tone and as a continuous tone.

SPECIFICATIONS

Operating Mode:	Medium Loud Dual Function Warble/Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	Continuous Mode 2900±250 Hz. Warble Mode High Frequency Peak: 3000±250 Hz. Warble Mode Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second in Warble Mode
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

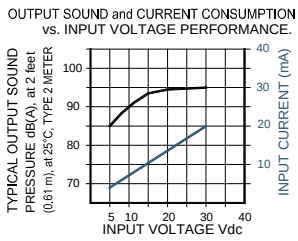
All specifications subject to change without notice.

MW-V09-530-S(M)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

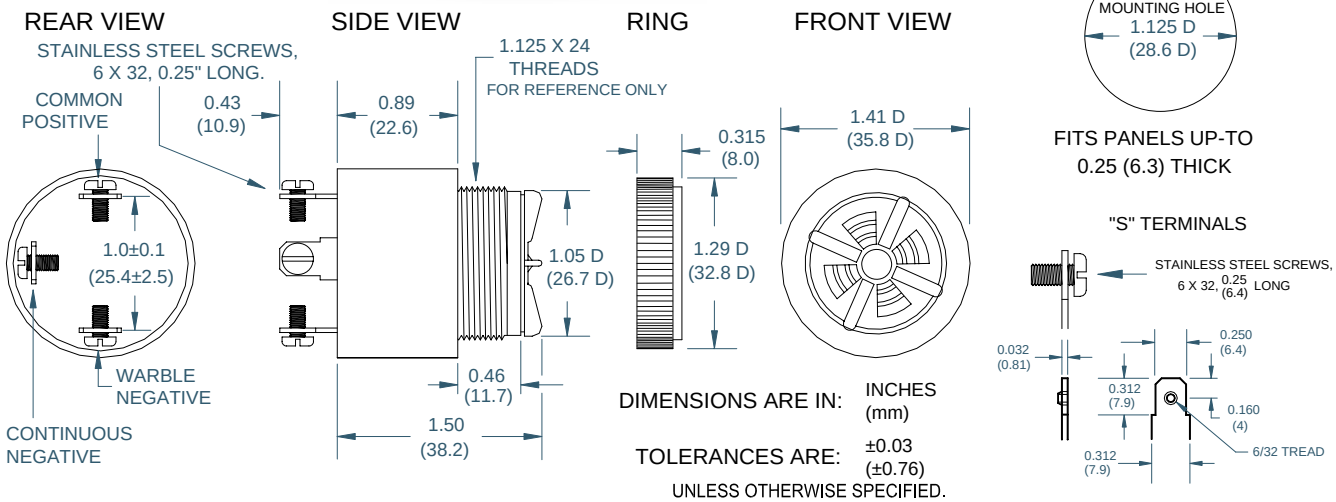


The MW-V09-530-S(M)D is a medium loud output, dual function, panel mounted alarm for operating voltages of 5-30VDC. The alarm functions as a medium warble tone and as a continuous tone.

SPECIFICATIONS

Operating Mode:	Medium Loud Dual Function Warble/Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	Continuous Mode 2900±250 Hz. Warble Mode High Frequency Peak: 3000±250 Hz. Warble Mode Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second in Warble Mode
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

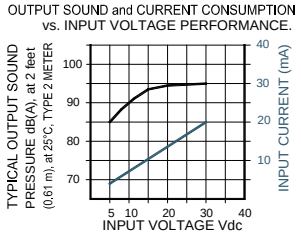
All specifications subject to change without notice.

MW-V09-530-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



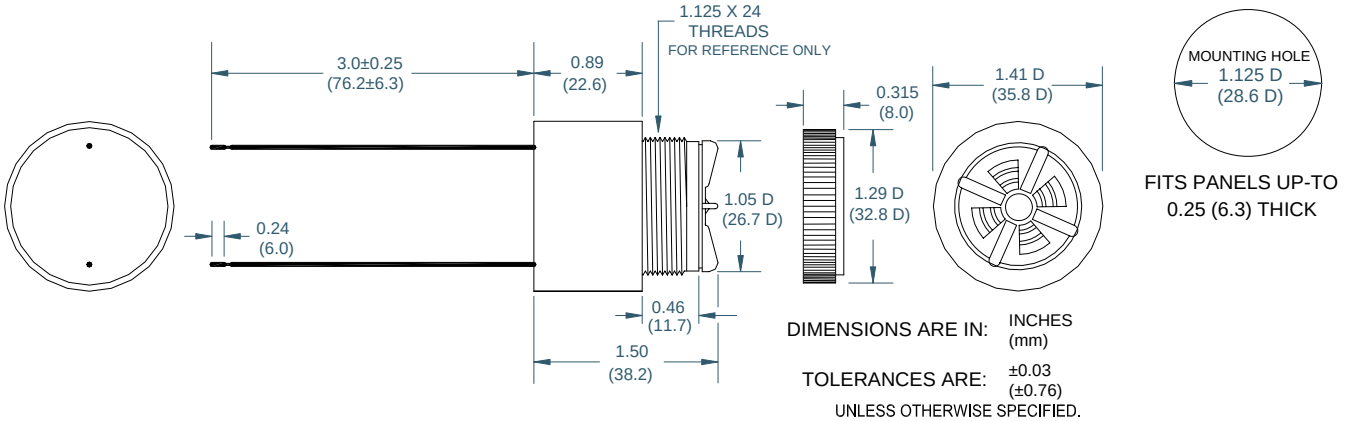
The MW-V09-530-W is a warble tone alarm that can be operated over a voltage range of 5-30 VDC and warbles at a rate of 2 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

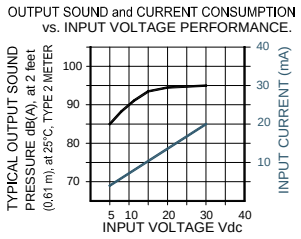
All specifications subject to change without notice.

MW-V09-530-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



The MW-V09-530-W(F) is a warble tone alarm that can be operated over a voltage range of 5-30 VDC and warbles at a rate of 10 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

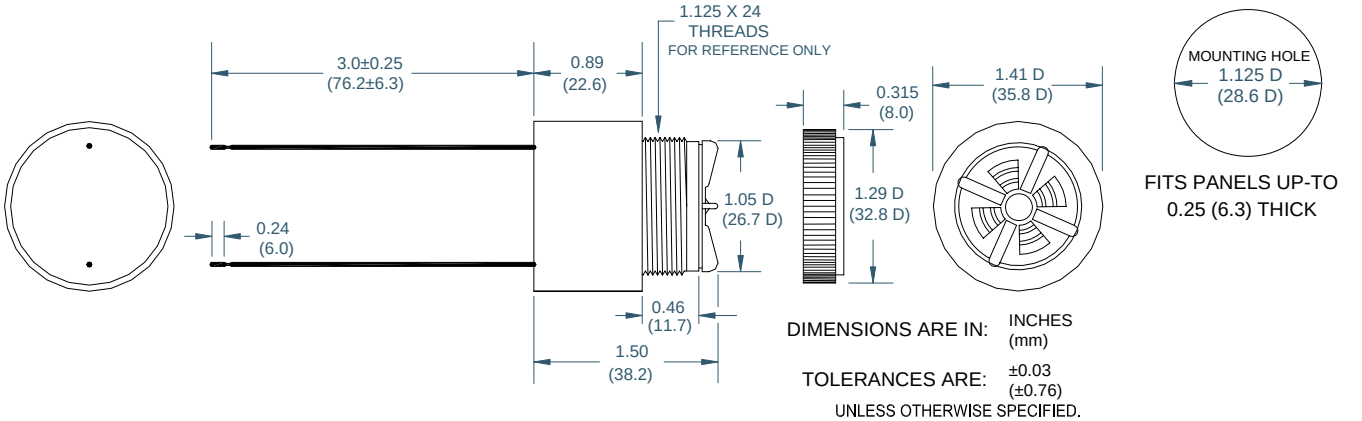
REAR VIEW

SIDE VIEW

RING

FRONT VIEW

PANEL MOUNTING



Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

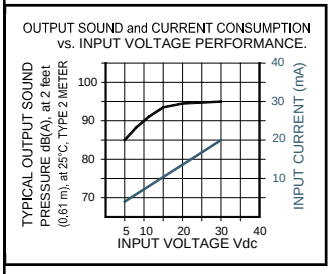
All specifications subject to change without notice.

MW-V09-530-W(M)D

Made in USA

Image Not Available

- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package



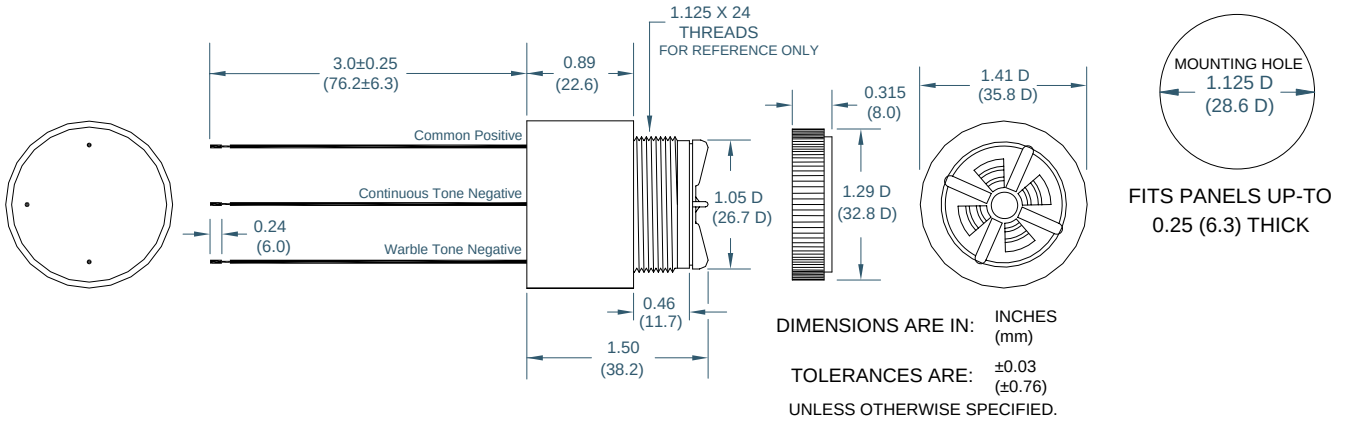
The MW-V09-530-W(M)D is a medium loud output, dual function, panel mounted alarm for operating voltages of 5-30VDC. The alarm functions as a medium warble tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

SPECIFICATIONS

Operating Mode:	Medium Loud Dual Function Warble/Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	Continuous Mode 2900±250 Hz. Warble Mode High Frequency Peak: 3000±250 Hz. Warble Mode Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second in Warble Mode
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

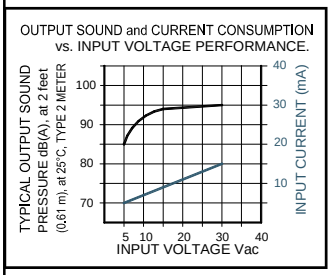
All specifications subject to change without notice.

MW-V09-531-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

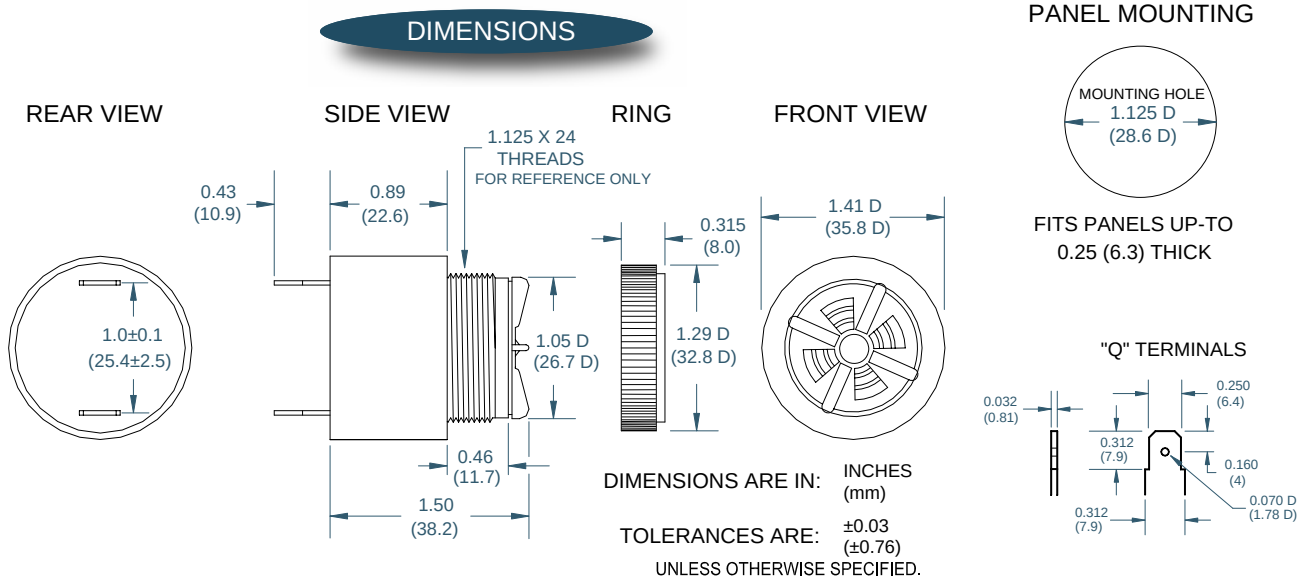


The MW-V09-531-Q is a warble tone alarm for operating voltages of 5-24 VAC/VDC and warbles at a rate of 2 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/Vdc
Nominal Operating Voltage:	24 Vac/Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

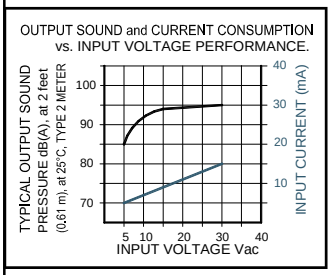
All specifications subject to change without notice.

MW-V09-531-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

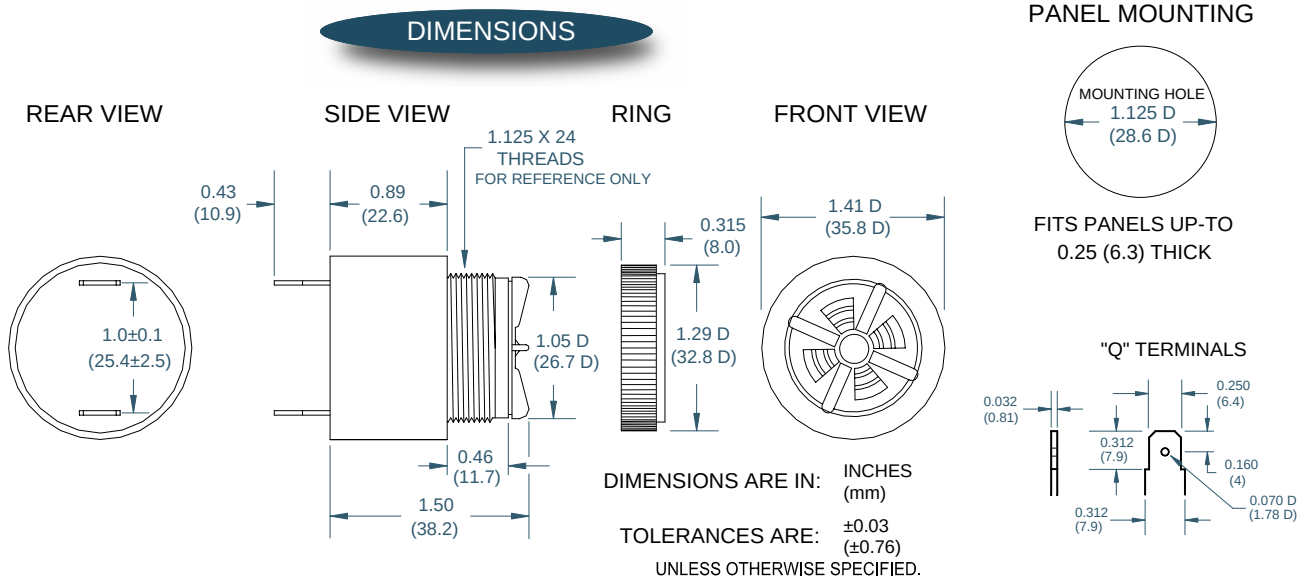


The MW-V09-531-Q(F) is a warble tone alarm for operating voltages of 5-24 VAC/VDC and warbles at a rate of 10 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/Vdc
Nominal Operating Voltage:	24 Vac/Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

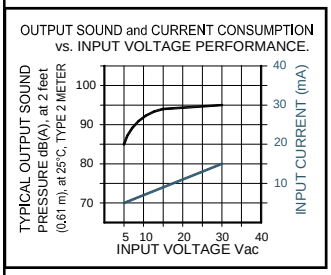
All specifications subject to change without notice.

MW-V09-531-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

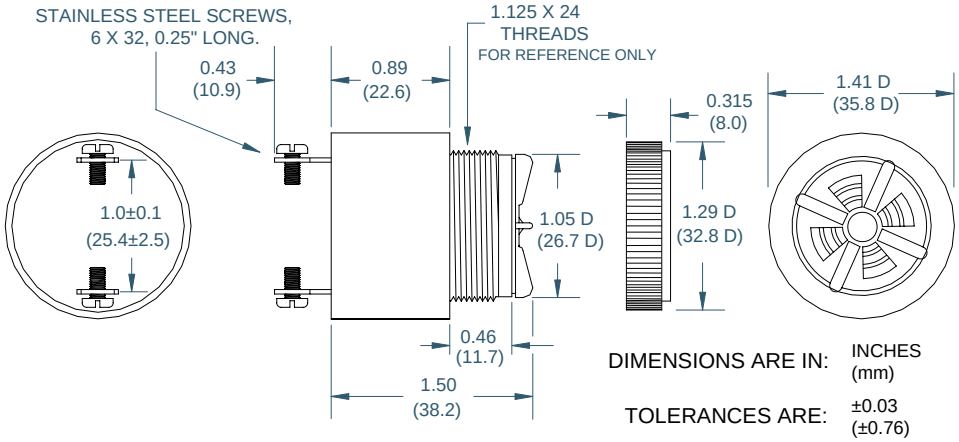


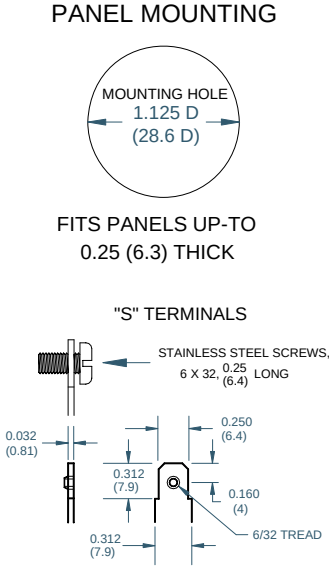
The MW-V09-531-S is a warble tone alarm for operating voltages of 5-24 VAC/VDC and warbles at a rate of 2 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/Vdc
Nominal Operating Voltage:	24 Vac/Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

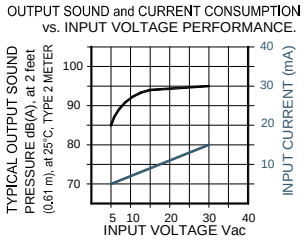
All specifications subject to change without notice.

MW-V09-531-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

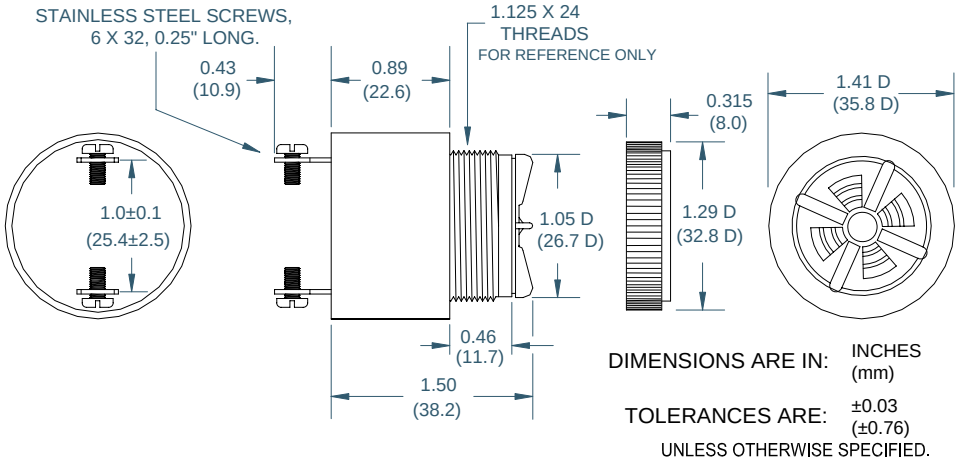


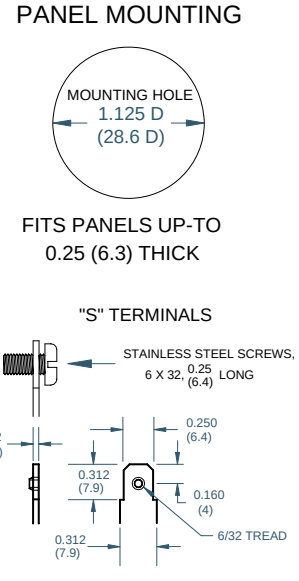
The MW-V09-531-S(F) is a warble tone alarm for operating voltages of 5-24 VAC/VDC and warbles at a rate of 10 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/Vdc
Nominal Operating Voltage:	24 Vac/Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

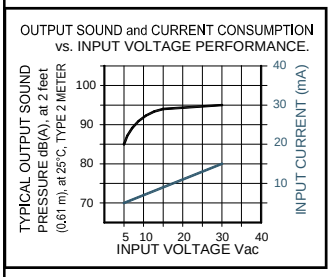
All specifications subject to change without notice.

MW-V09-531-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



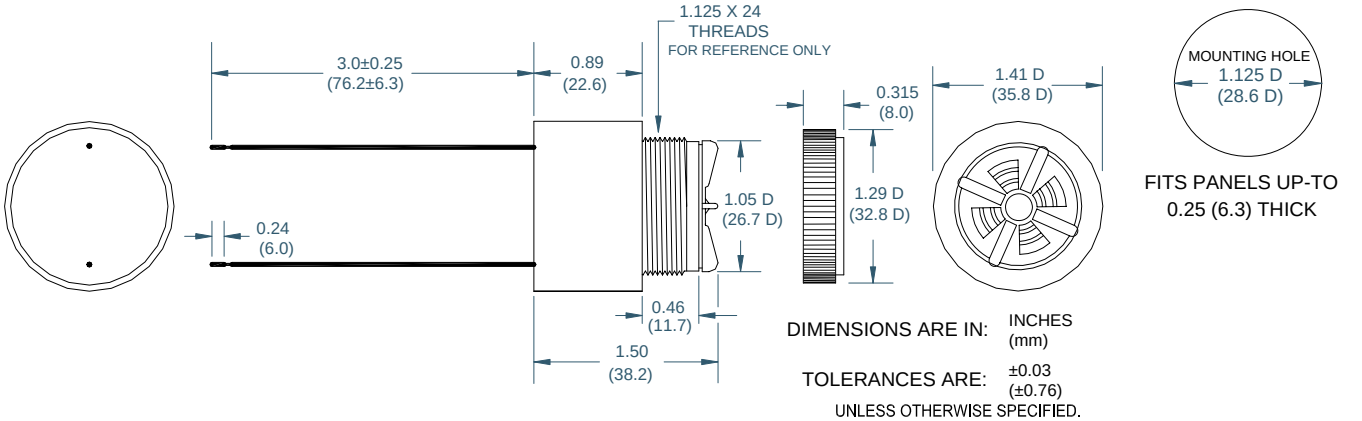
The MW-V09-531-W is a warble tone alarm for operating voltages of 5-24 VAC/VDC and warbles at a rate of 2 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/Vdc
Nominal Operating Voltage:	24 Vac/Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

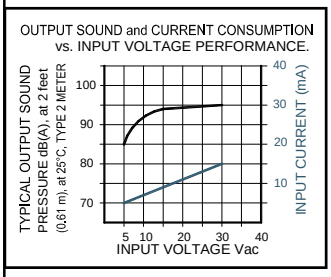
All specifications subject to change without notice.

MW-V09-531-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



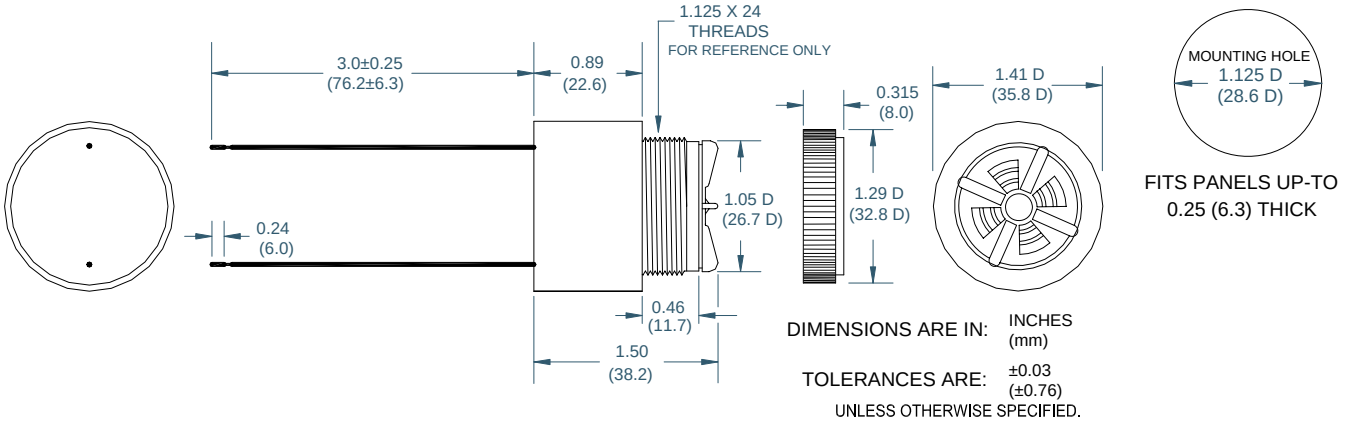
The MW-V09-531-W(F) is a warble tone alarm for operating voltages of 5-24 VAC/VDC and warbles at a rate of 10 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/Vdc
Nominal Operating Voltage:	24 Vac/Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

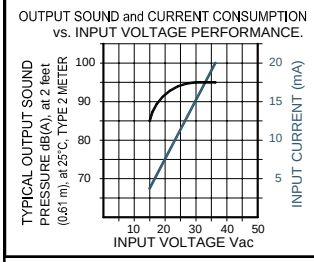
All specifications subject to change without notice.

MW-V09-550-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

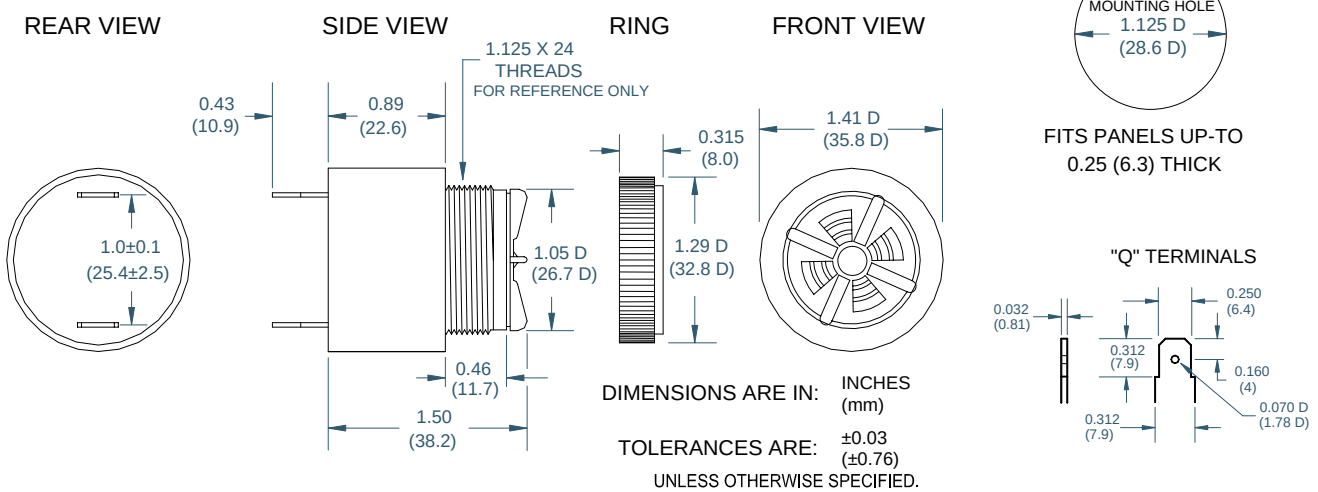


The MW-V09-550-Q is a warble tone alarm with a built-in volume control that provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment. The case is designed for panel mounting in a 1.125" hole with a knurled ring nut.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	15-36 Vac, 15-50 Vdc
Nominal Operating Voltage:	36 Vac
Operating Frequency:	High Frequency Peak: 2900±250 Hz. Low Frequency Peak: 2200±250 Hz. 15±25% Cycles per second
Typical Operating Current:	5 mA at 15 Vac 20 mA at 36 Vac
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 15 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 36 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

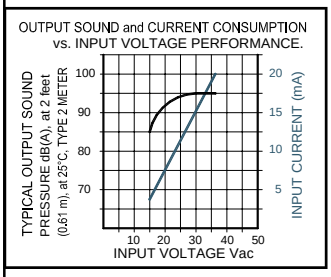
All specifications subject to change without notice.

MW-V09-550-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

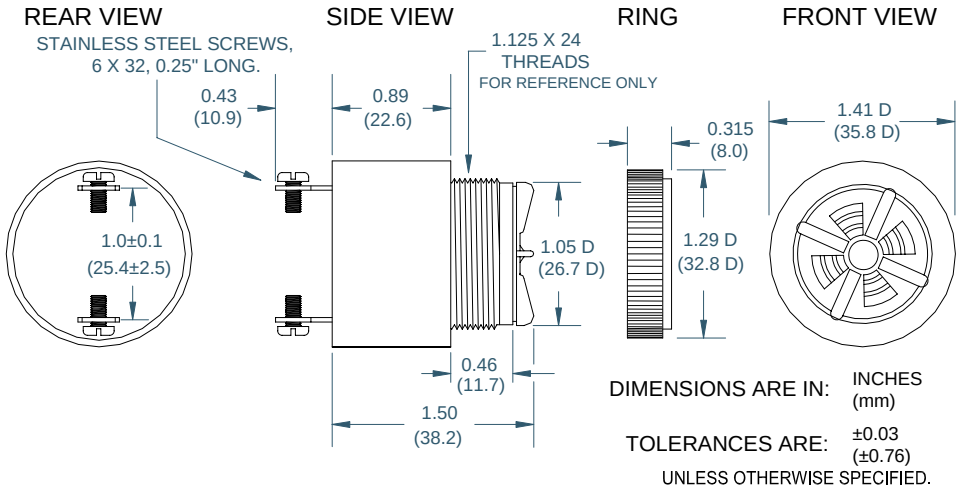


The MW-V09-550-S is a warble tone alarm with a built-in volume control that provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs. The case is designed for panel mounting in a 1.125" hole with a knurled ring nut.

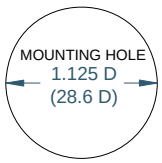
SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	15-36 Vac, 15-50 Vdc
Nominal Operating Voltage:	36 Vac
Operating Frequency:	High Frequency Peak: 2900±250 Hz. Low Frequency Peak: 2200±250 Hz. 15±25% Cycles per second
Typical Operating Current:	5 mA at 15 Vac 20 mA at 36 Vac
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 15 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 36 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

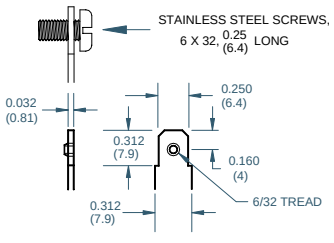


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

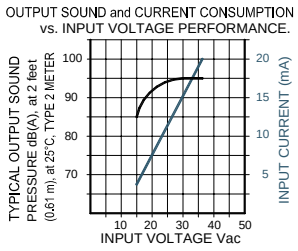
All specifications subject to change without notice.

MW-V09-550-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

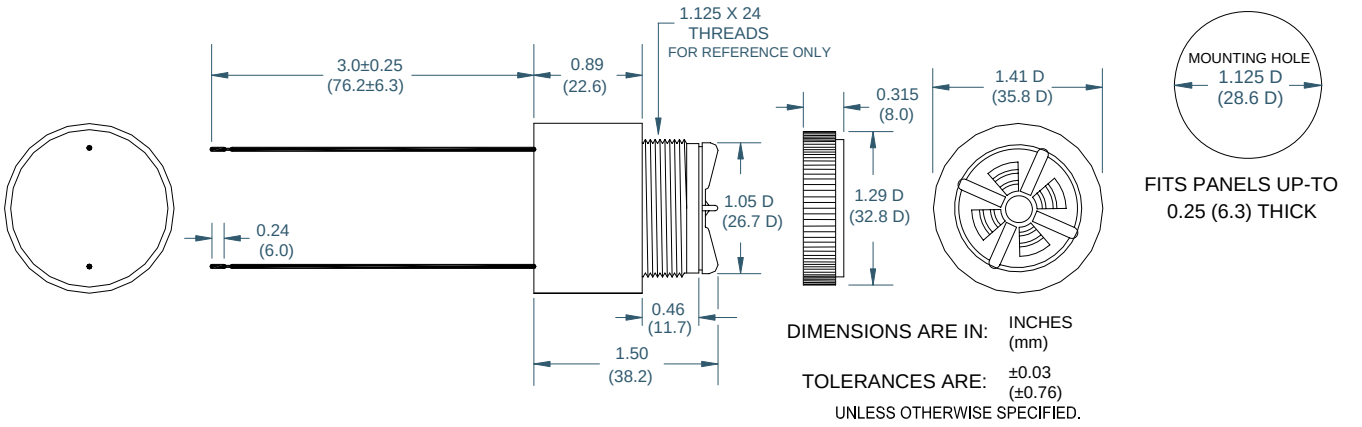


The MW-V09-550-W is a warble tone alarm with a built-in volume control that provides variable attenuation up to 20 dB(A) typically. It can be operated over voltage ranges of 15-36 Vac and 15-50 Vdc. It is terminated with two 24AWG wires, 3" long, stripped 0.25". The case is designed for panel mounting.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	15-36 Vac, 15-50 Vdc
Nominal Operating Voltage:	36 Vac
Operating Frequency:	High Frequency Peak: 2900±250 Hz. Low Frequency Peak: 2200±250 Hz. 15±25% Cycles per second
Typical Operating Current:	5 mA at 15 Vac 20 mA at 36 Vac
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 15 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 36 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

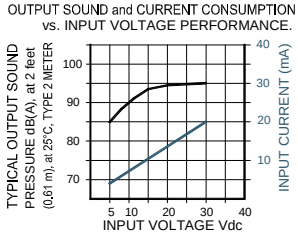
All specifications subject to change without notice.

MW-V09-616-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



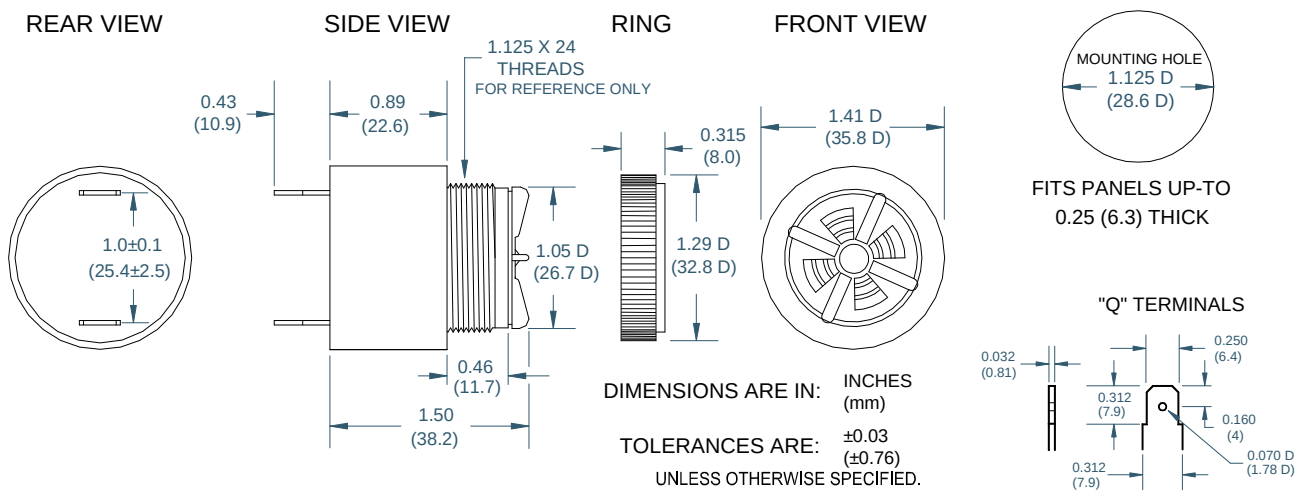
The MW-V09-616-Q is a warble tone alarm that can be operated over a voltage range of 5-30VDC and warbles at a rate of 2 times per second.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 20 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

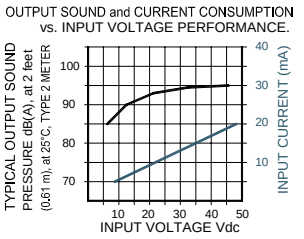
All specifications subject to change without notice.

MW-V09-948-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

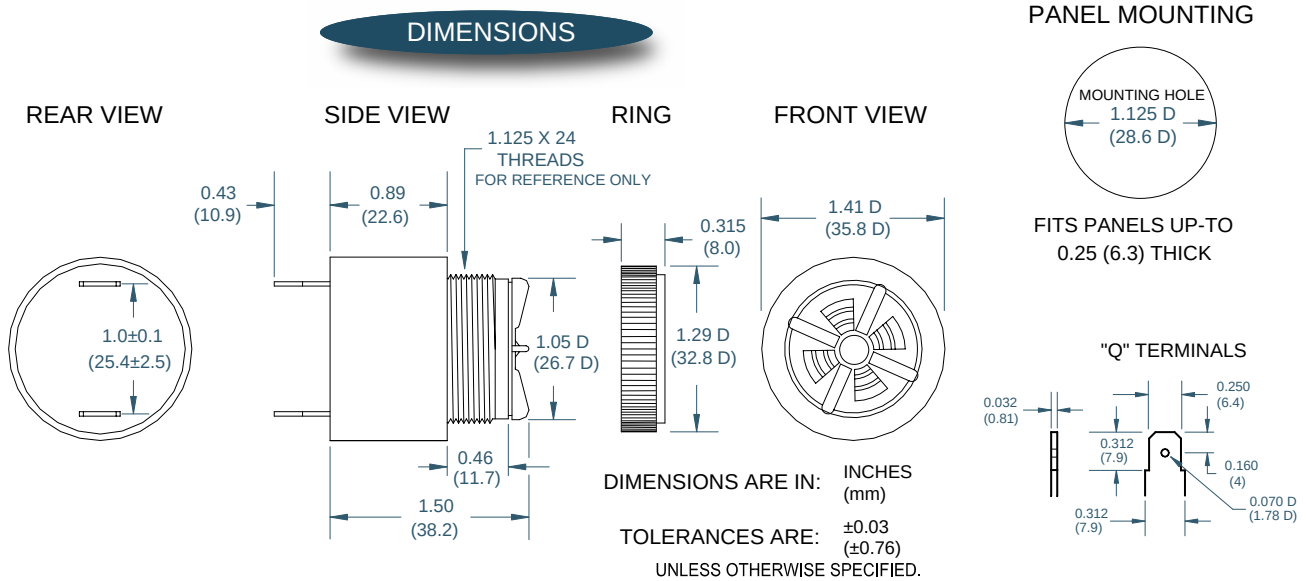


The MW-V09-948-Q(F) is a warble tone alarm that can be operated over a voltage range of 9-48 VDC and warbles at a rate of 10 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	5 mA at 9 Vdc 20 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

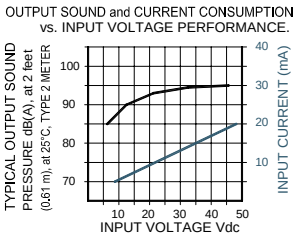
All specifications subject to change without notice.

MW-V09-948-Q(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

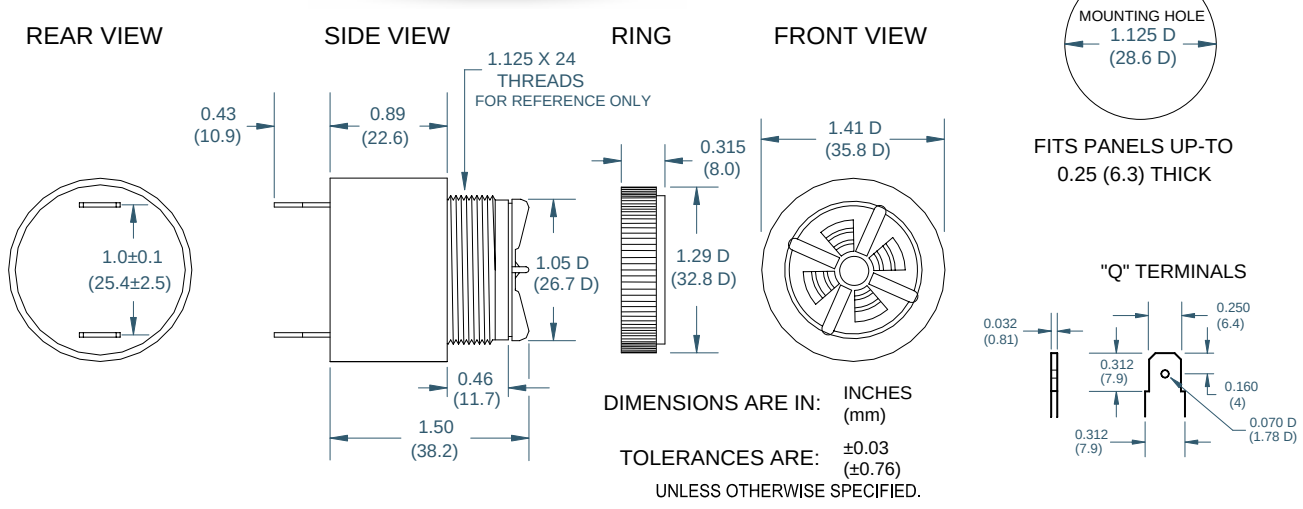


The MW-V09-948-Q(M) is a warble tone alarm that can be operated over a voltage range of 9-48 VDC and warbles at a rate of 2 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 9 Vdc 20 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

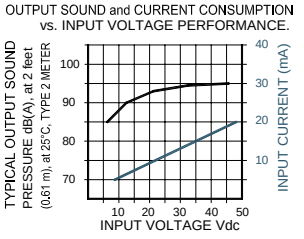
All specifications subject to change without notice.

MW-V09-948-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

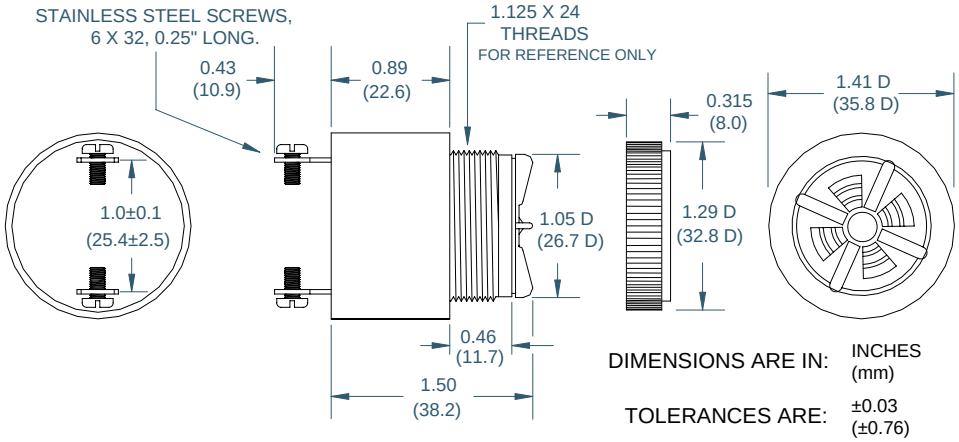


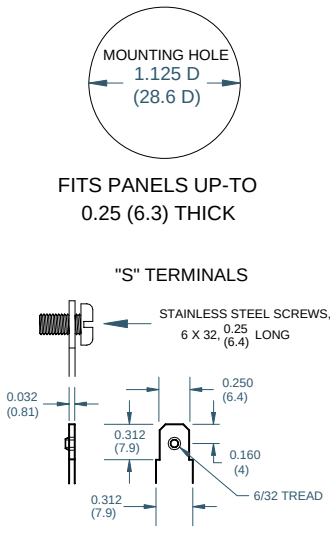
The MW-V09-948-S(F) is a warble tone alarm that can be operated over a voltage range of 9-48 VDC and warbles at a rate of 10 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	5 mA at 9 Vdc 20 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

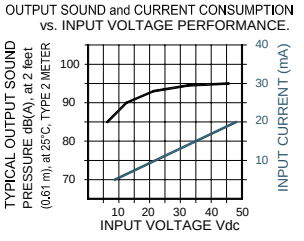
All specifications subject to change without notice.

MW-V09-948-S(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

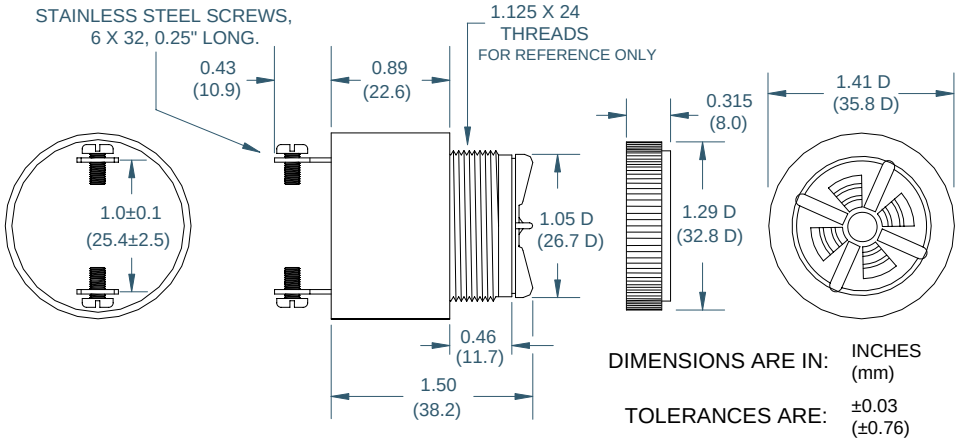


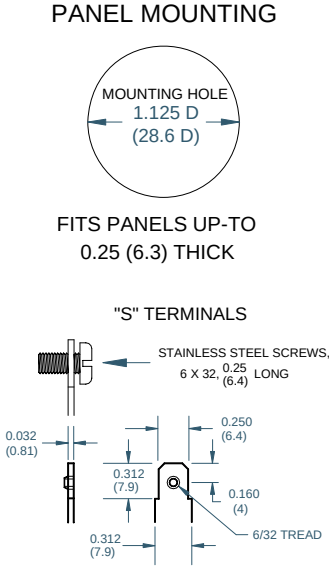
The MW-V09-948-S(M) is a warble tone alarm that can be operated over a voltage range of 9-48 VDC and warbles at a rate of 2 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 9 Vdc 20 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

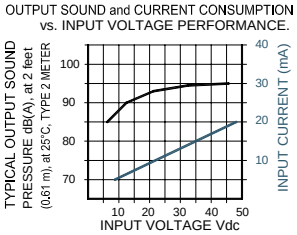
All specifications subject to change without notice.

MW-V09-948-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



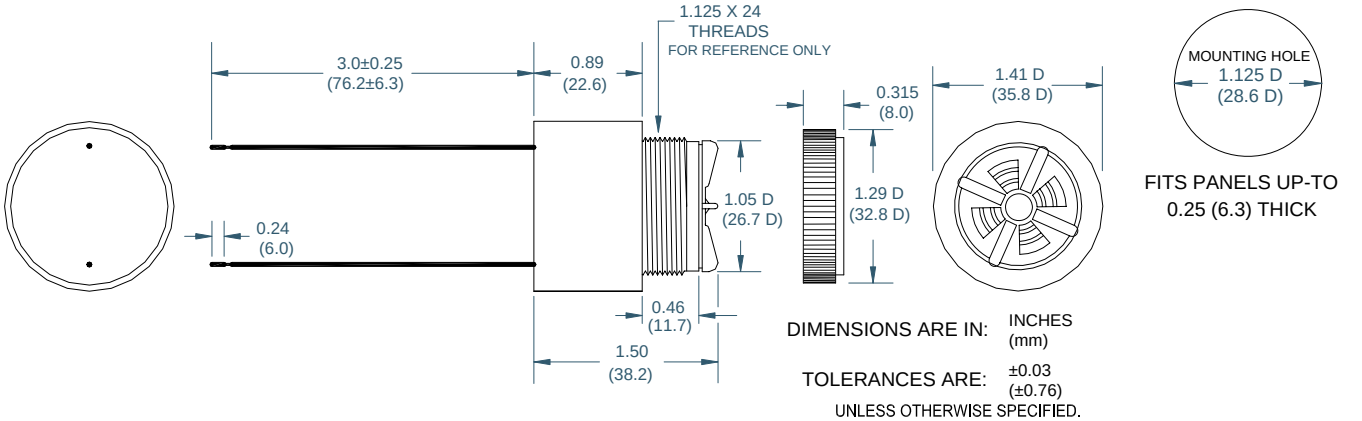
The MW-V09-948-W(F) is a warble tone alarm that can be operated over a voltage range of 9-48 VDC and warbles at a rate of 10 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 10±25% Cycles per second
Typical Operating Current:	5 mA at 9 Vdc 20 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

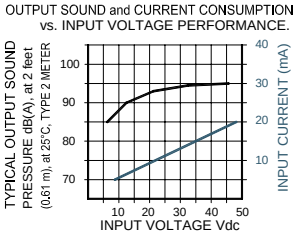
All specifications subject to change without notice.

MW-V09-948-W(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



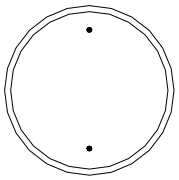
The MW-V09-948-W(M) is a warble tone alarm that can be operated over a voltage range of 9-48 VDC and warbles at a rate of 2 times per second. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

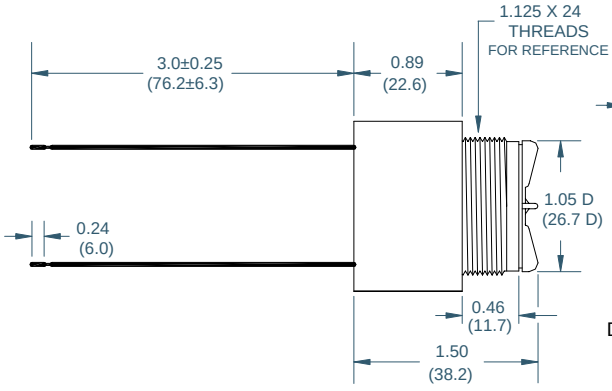
Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	High Frequency Peak: 3000±250 Hz. Low Frequency Peak: 2600±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 9 Vdc 20 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

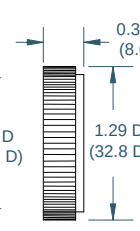
REAR VIEW



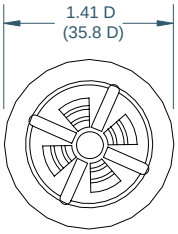
SIDE VIEW



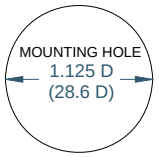
RING



FRONT VIEW



PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

All specifications subject to change without notice.

PBX-1H

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Lower current than conventional ringers
- Volume control provides up to 15 dB attenuation
- Reliable Piezoelectric Technology
- Installs Easily
- Not intended for frequency selective ringing systems

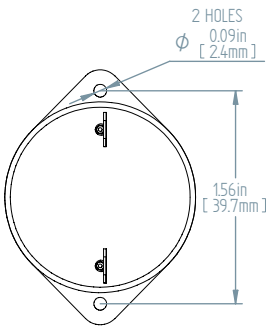
The PBX-1H is a pleasant warbling, electronic PBX ringer. It can be operated over a voltage range of 5-20 Vrms at 50-60 Hz. The wire leads come with telephone-standard spade lug terminals.

SPECIFICATIONS

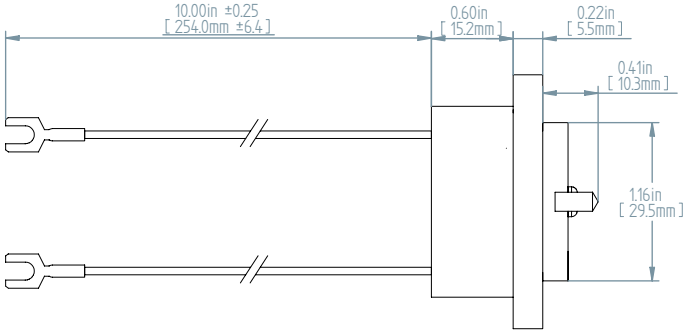
Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-20 Vrms, 50-60 Hz or 7-20 Vdc
Nominal Operating Voltage:	20 Vrms
Operating Frequency:	High Frequency Peak: 3500±250 Hz. Low Frequency Peak: 2900±250 Hz. 15±25% Cycles per second
Typical Operating Current:	15 mA at 20 Vdc
Typical Sound Pressure:	95±5 dB(A), at 20 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	2 wire leads with telephone-standard spade lug terminals
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- ABS Thermoplastic, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibrations- Withstand vibrations between 0 and 55 Hz. on all axis.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

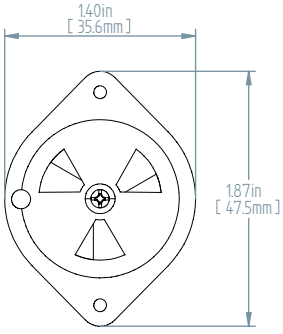
REAR



SIDE



FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

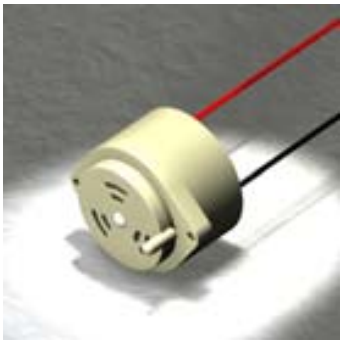
Revision: 4.08

Copyright © 2008 Floyd Bell Inc.

All specifications subject to change without notice.

PBX-1L

Made in USA



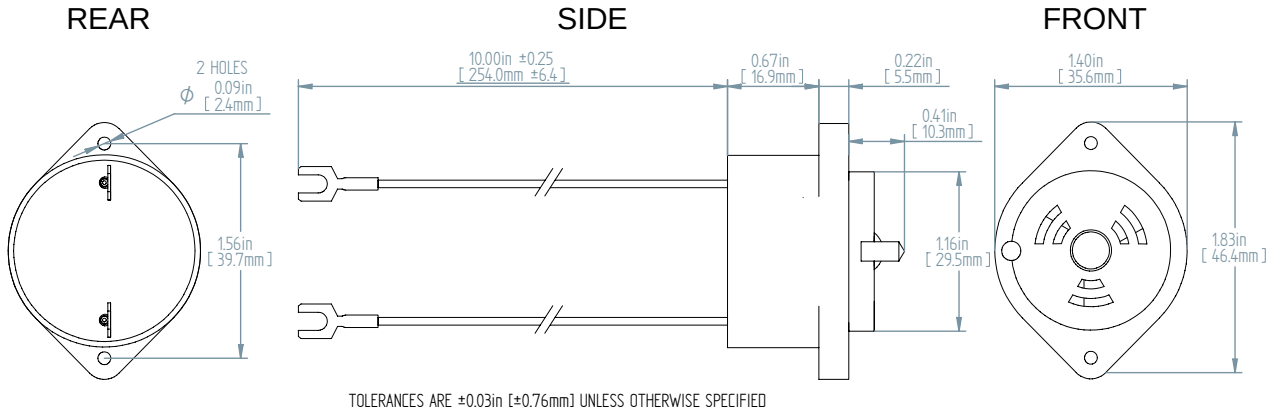
- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Lower current than conventional ringers
- Volume control provides up to 15 dB attenuation
- Reliable Piezoelectric Technology
- Installs Easily
- Not intended for frequency selective ringing systems

The PBX-1L is a pleasant warbling, electronic PBX ringer. It can be operated over a voltage range of 5-20 Vrms at 50-60 Hz. The wire leads come with telephone-standard spade lug terminals.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-20 Vrms, 50-60 Hz or 7-20 Vdc
Nominal Operating Voltage:	20 Vrms, 50 to 60 Hz
Operating Frequency:	High Frequency Peak: 2900±250 Hz. Low Frequency Peak: 2200±250 Hz. (Dominant) 15±25% Cycles per second
Typical Operating Current:	15 mA at 20 Vdc
Typical Sound Pressure:	95±5 dB(A), at 20 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	2 wire leads with telephone-standard spade lug terminals
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- ABS Thermoplastic, Beige Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibrations- Withstand vibrations between 0 and 55 Hz. on all axis.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.08

Copyright © 2008 Floyd Bell Inc.

All specifications subject to change without notice.

PBX-2H

Made in USA



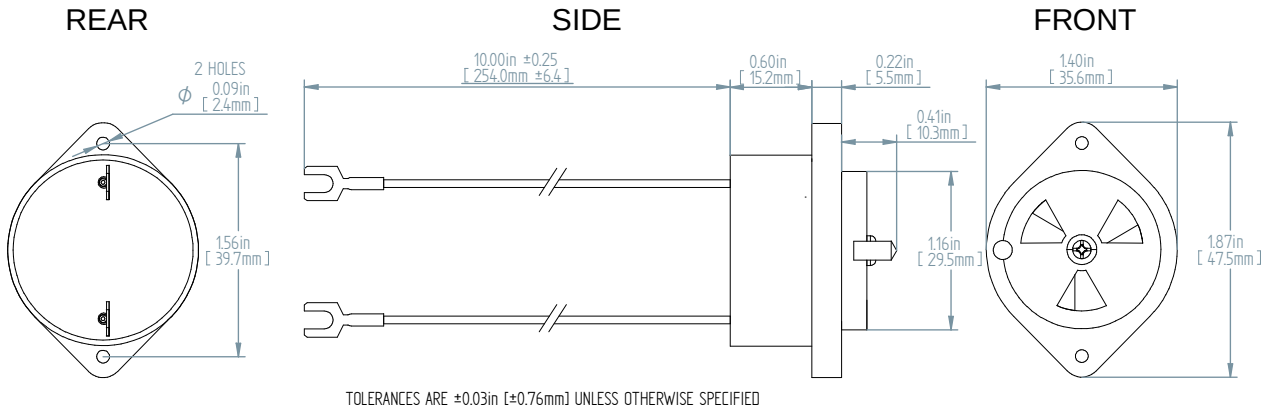
- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Lower current than conventional ringers
- Volume control provides up to 15 dB attenuation
- Reliable Piezoelectric Technology
- Installs Easily
- Not intended for frequency selective ringing systems

The PBX-2H is a pleasant warbling, electronic PBX ringer. It can be operated over a voltage range of 15-36 Vrms at 50-60 Hz. The wire leads come with telephone-standard spade lug terminals.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	15-50 Vdc or 15-36 Vrms, 50-60 Hz
Nominal Operating Voltage:	36 Vrms, 50 to 60 Hz
Operating Frequency:	High Frequency Peak: 3500±250 Hz. Low Frequency Peak: 2900±250 Hz. 15±25% Cycles per second
Typical Operating Current:	20 mA at 36 Vdc
Typical Sound Pressure:	95±5 dB(A), at 36 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	2 wire leads with telephone-standard spade lug terminals
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- ABS Thermoplastic, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Humidity- 95% relative humidity at +40℃ continuou sly for 100 hours. Vibrations- Withstand vibrations between 0 and 55 Hz. on all axis.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

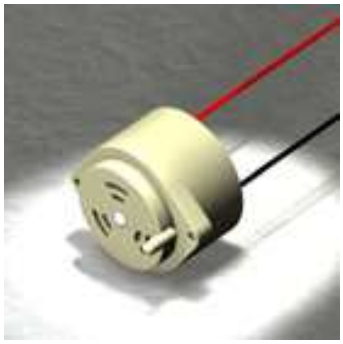
Revision: 9.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

PBX-2L

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Lower current than conventional ringers
- Volume control provides up to 15 dB attenuation
- Reliable Piezoelectric Technology
- Installs Easily
- Not intended for frequency selective ringing systems

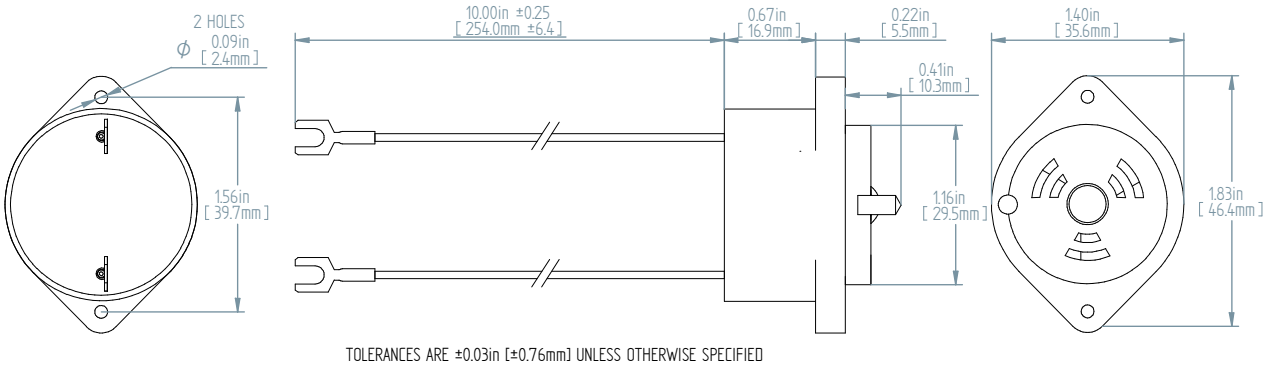
The PBX-2L is a pleasant warbling, electronic PBX ringer. It can be operated over a voltage range of 15-36 Vrms at 50-60 Hz. The wire leads come with telephone-standard spade lug terminals.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	15-50 Vdc or 15-36 Vrms, 50-60 Hz
Nominal Operating Voltage:	36 Vrms, 50 to 60 Hz
Operating Frequency:	High Frequency Peak: 2900±250 Hz. Low Frequency Peak: 2200±250 Hz. (Dominant) 15±25% Cycles per second
Typical Operating Current:	20 mA at 36 Vdc
Typical Sound Pressure:	95±5 dB(A), at 36 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	2 wire leads with telephone-standard spade lug terminals
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- ABS Thermoplastic, Beige Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Humidity- 95% relative humidity at +40℃ continuou sly for 100 hours. Vibrations- Withstand vibrations between 0 and 55 Hz. on all axis.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

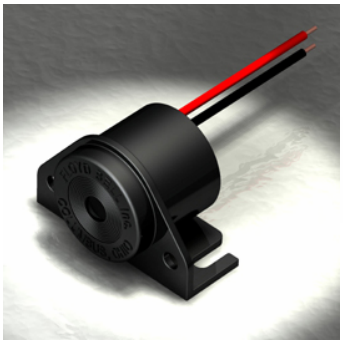
Revision: 9.13

Copyright © 2013 Floyd Bell Inc.

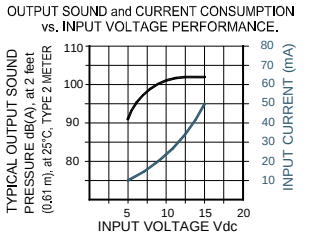
All specifications subject to change without notice.

PM-80

Made in USA



- UL Certified
- Meets SAE J1171
- Meets EMC 89/336/EEC
- Epoxy Encapsulated and Polarity Protected Circuit
- Plastics 94V-0 Flame Rated
- 304 Stainless Steel Sound Diaphragm



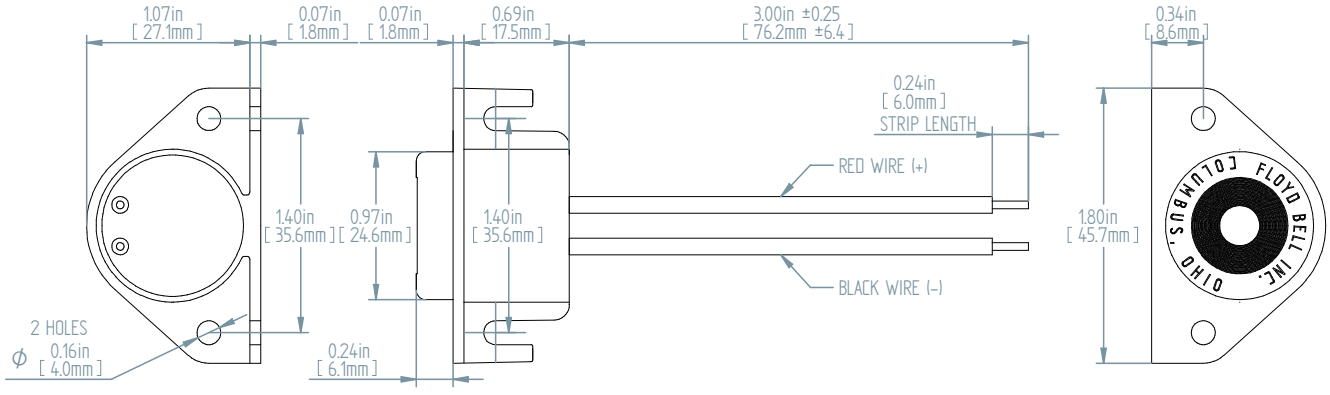
The PM-80 is a miniature, high-output, continuous tone alarm with a typical sound pressure level of 103 dB(A). It can be operated from 5-15VDC. The alarm is terminated with two 18AWG wires, 3" long, with 0.25" strip.

SPECIFICATIONS

Operating Mode:	Continuous Tone
Operating Voltage:	5-15 VDC
Nominal Operating Voltage:	12 VDC
Operating Frequency:	2900 ± 250 Hz.
Typical Operating Current:	10 mA at 5 VDC 50 mA at 15 VDC
Typical Sound Pressure:	92±5 dB(A), at 5 VDC, at 24 inches (61 cm), at 25℃ . 103±5 dB(A), at 15 VDC, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure SAE J1171 Ignition Protection EMC89/336/EEC Electromagnetic Compatibility Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration– Tested to 20gs @ 25Hz to 100Hz, 10gs @ 100Hz to 500Hz.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

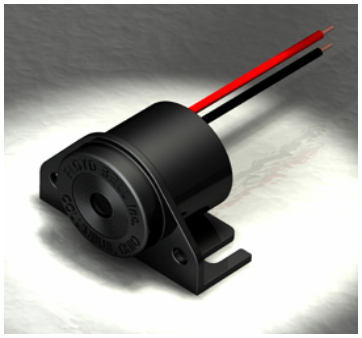
Revision: 8.09

Copyright © 2009 Floyd Bell Inc.

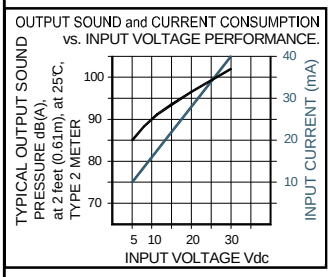
All specifications subject to change without notice.

PM-81

Made in USA



- Expanded Voltage Range
- Small Footprint
- Epoxy Encapsulated
- Polarity Protected Circuit
- Plastics 94V-0 Flame Rated
- 304 Stainless Steel Sound Diaphragm



The PM-81 is a miniature, high-output, continuous tone alarm with a typical sound pressure level of 103 dB(A). It can be operated from 5-30VDC. The alarm is terminated with two 18AWG wires, 3" long, with 0.25" strip.

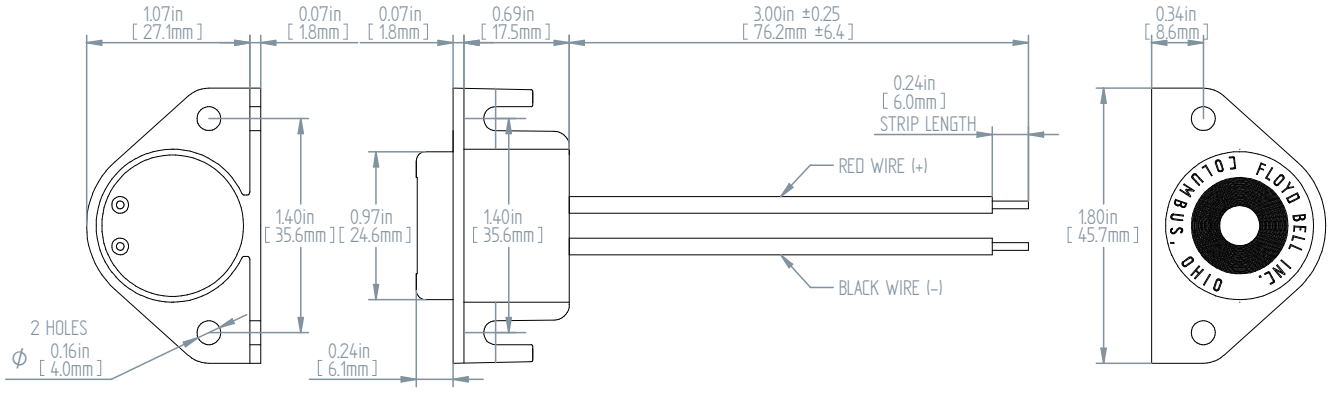
SPECIFICATIONS

Operating Mode:	Continuous Tone
Operating Voltage:	5-30 VDC
Nominal Operating Voltage:	24 VDC
Operating Frequency:	2900 ± 250 Hz.
Typical Operating Current:	10 mA at 5 VDC 40 mA at 30 VDC
Typical Sound Pressure:	85±5 dB(A), at 5 VDC, at 24 inches (61 cm), at 25℃ . 103±5 dB(A), at 30 VDC, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure SAE J1171 Ignition Protection EMC89/336/EEC Electromagnetic Compatibility Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration– Tested to 20gs @ 25Hz to 100Hz, 10gs @ 100Hz to 500Hz.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS

REAR SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

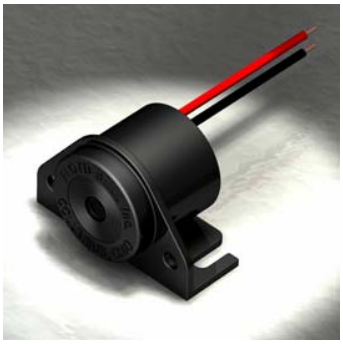
Revision: 02.11

Copyright © 2011 Floyd Bell Inc.

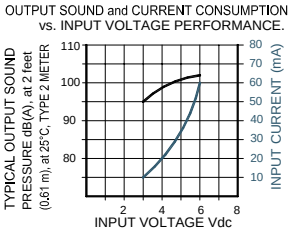
All specifications subject to change without notice.

PM-100

Made in USA



- Polarity Protected
- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Fits Compact Spaces
- Reliable Piezoelectric Technology

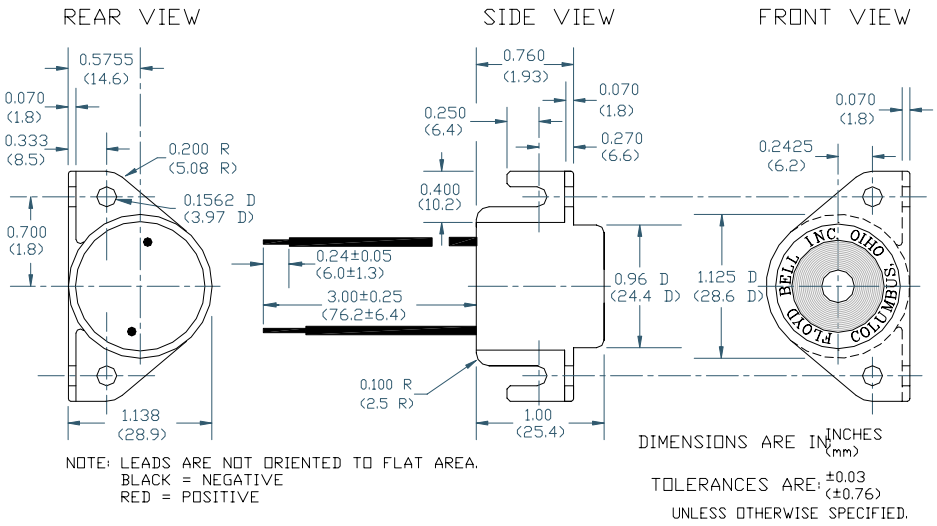


The PM-100 is a miniature, high-output, continuous tone alarm with a typical sound pressure level of 102 dB(A). It can be operated from 3-6VDC. The alarm is terminated with two 18AWG wires, 3" long, with 0.25" strip.

SPECIFICATIONS

Operating Mode:	Continuous Tone
Operating Voltage:	3-6 VDC
Nominal Operating Voltage:	6 VDC
Operating Frequency:	2900 ± 250 Hz.
Typical Operating Current:	10 mA at 3 VDC 60 mA at 6 VDC
Typical Sound Pressure:	95±5 dB(A), at 3 VDC, at 24 inches (61 cm), at 25°C. 102±5 dB(A), at 6 VDC, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

All specifications subject to change without notice.

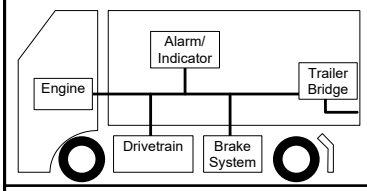
TCAN-98R-930-H

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Included Gasket.
- Reliable Piezoelectric Technology
- Deutsch DT04-4P
- CE Approved
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application



Floyd Bell's new TCAN or Twin CAN alarm & Light is specifically designed to meet the specifications of J1939-15 (250Kb/s) automotive standard, including arbitrary address capability. This robust alarm combines the functionality of a multi-tone audible alarm and multi-function Light all in one package. While on the network, the alarm and light function independently each with its own PGN. (see J1939-15 communication reference document)

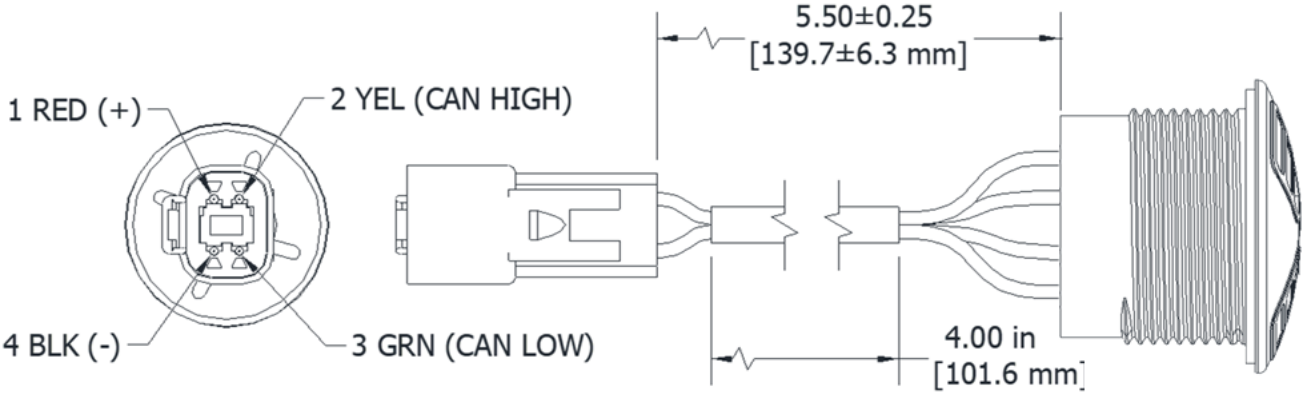
SPECIFICATIONS

Operating Mode:	J1939-15 CAN Device
Baud Rate:	250Kb/s
Operating Voltage Range::	9-30Vdc (+Red, -Black)
Nominal Operating Voltage:	24Vdc (+Red, -Black)
CAN-H and CAN-L Voltage:	5Vdc Nominal (CH&CL tolerate –3Vdc to +24Vdc with respect to ground)
Frequency Range:	1.6Khz to 2Khz
Resonant Frequency:	1800 Hz. (Max output can be achieved at this frequency)
Typical Operating Current Alarm:	30 mA at 12 Vdc, 35 mA at 24 Vdc, 40 mA at 30 Vdc
Typical Operating Current Light:	50 mA at 12 Vdc, 35 mA at 24 Vdc, 30 mA at 30 Vdc
Typical Idle Current:	<20 mA from 12Vdc or 24 Vdc
Sound Pressure Range:	Network adjustable from 60 dB(A)±5,-to-108dBA ± 5, 10 steps.
Termination:	Deutsch DT04-4P housing, 638112-1 gold terminals and four, 18AWG GXL Wires, Red, Black, Yellow, and Green
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	Polarity Protected - Red and Black only.
CE Certified:	Laboratory tested and certified per declarations doc.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit– CAN interface, power conditioning, Micro, amp. Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket – 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300hr. IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

Preliminary

BACK

SIDE



TOLERANCES ARE ± 0.03 ± 0.76mm UNLESS OTHERWISE NOTED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

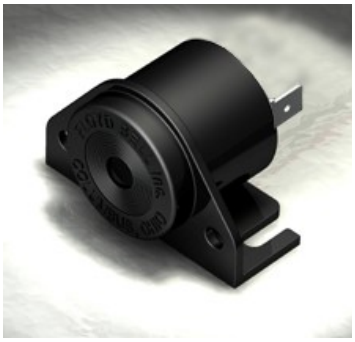
Revision: 10.21

Copyright © 2021 Floyd Bell Inc.

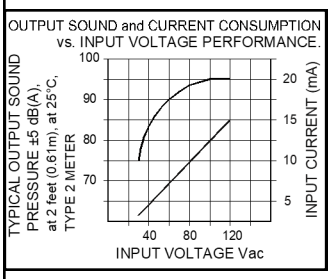
All specifications subject to change without notice.

TCH-82-530-Q(F)

Made in USA



- Patented Revolutionary Turbo Design
- Corrosion Resistant Stain-less Steel Diaphragm
- Reliable Piezoelectric Technology

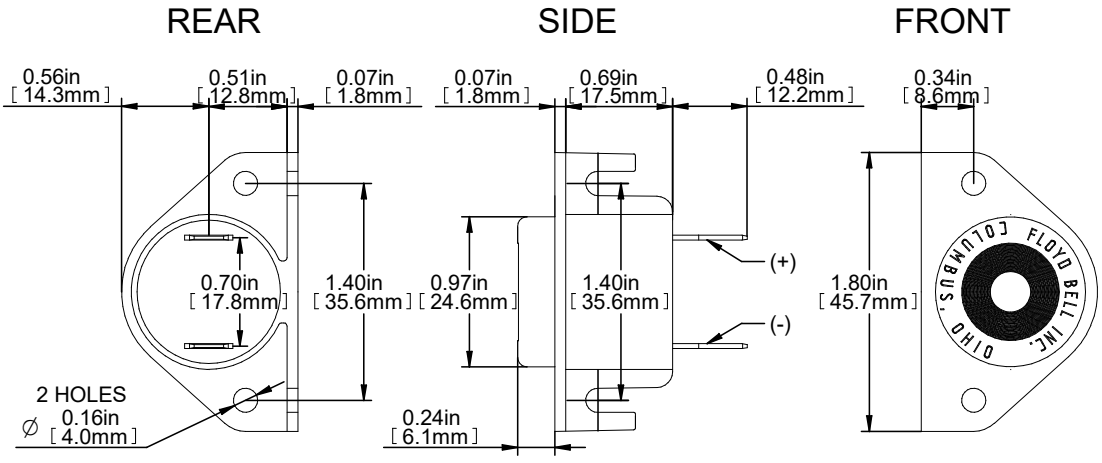


The Turbo TCH-82-530-Q(F) is a medium loud output, flange mounted alarm for operating voltages of 5-30VDC. The alarm will chime 3 times per second when power is applied.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	12 / 24 Vdc
Operating Frequency:	2900±250 Hz. 3 chimes per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

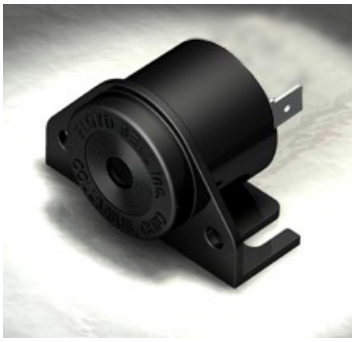
Revision: 1.13

Copyright © 2013 Floyd Bell Inc.

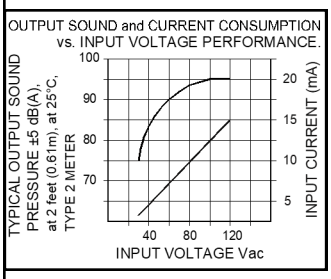
All specifications subject to change without notice.

TCH-82-530-Q(M)

Made in USA



- Patented Revolutionary Turbo Design
- Corrosion Resistant Stain-less Steel Diaphragm
- Reliable Piezoelectric Technology

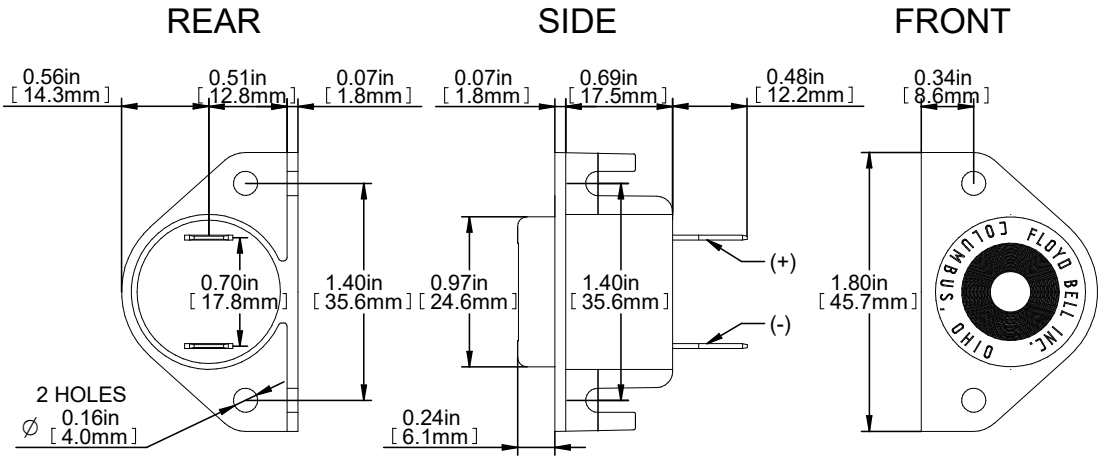


The Turbo TCH-82-530-Q(M) is a medium loud output, flange mounted alarm for operating voltages of 5-30VDC. The alarm will chime 1 time per second when power is applied.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	12 / 24 Vdc
Operating Frequency:	2900±250 Hz. 1 chime per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 1.13

Copyright © 2013 Floyd Bell Inc.

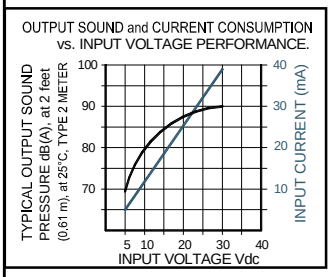
All specifications subject to change without notice.

TCH-86-530-P(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



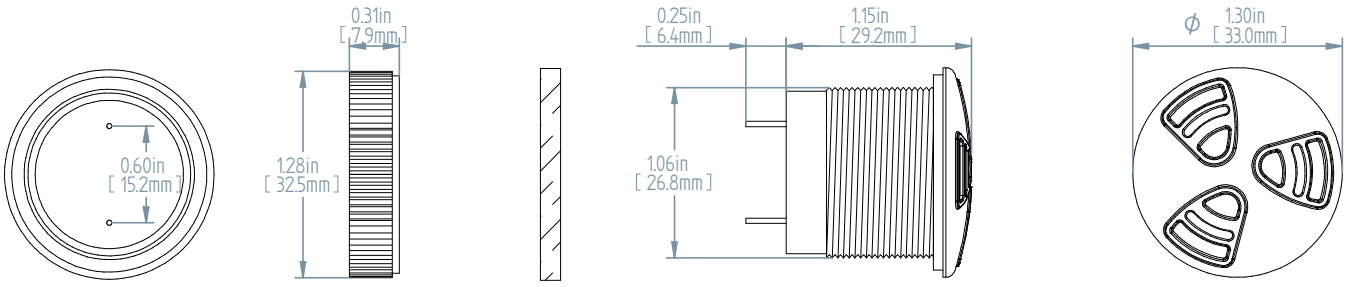
The Turbo TCH-86-530-P(F) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

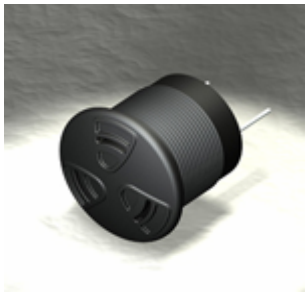
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

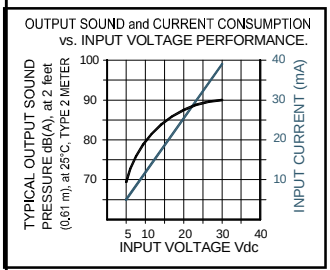
All specifications subject to change without notice.

TCH-86-530-P(M)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



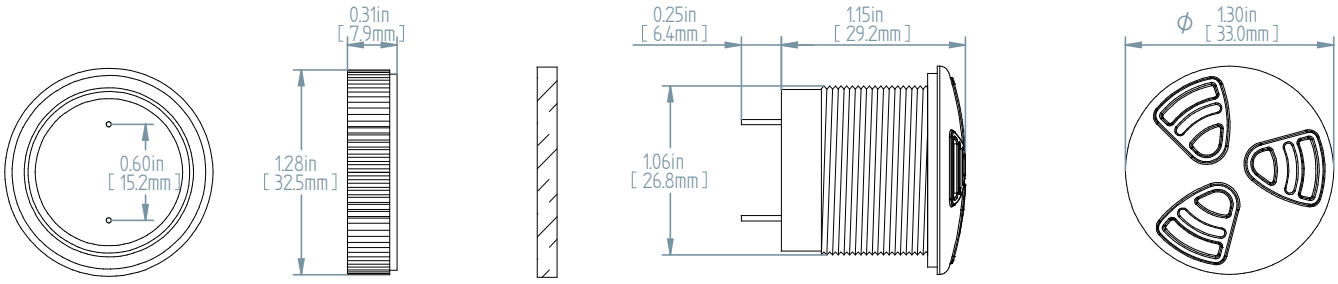
The Turbo TCH-86-530-P(M) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

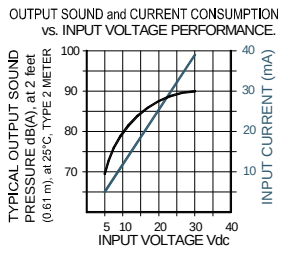
All specifications subject to change without notice.

TCH-86-530-Q(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



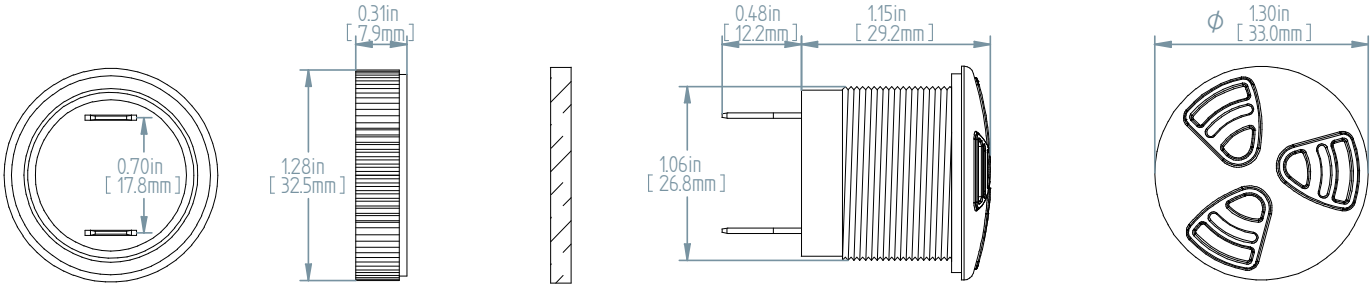
The Turbo TCH-86-530-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

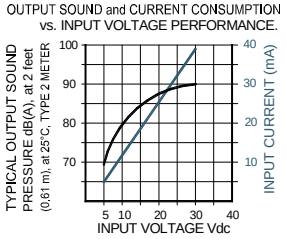
All specifications subject to change without notice.

TCH-86-530-Q(M)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



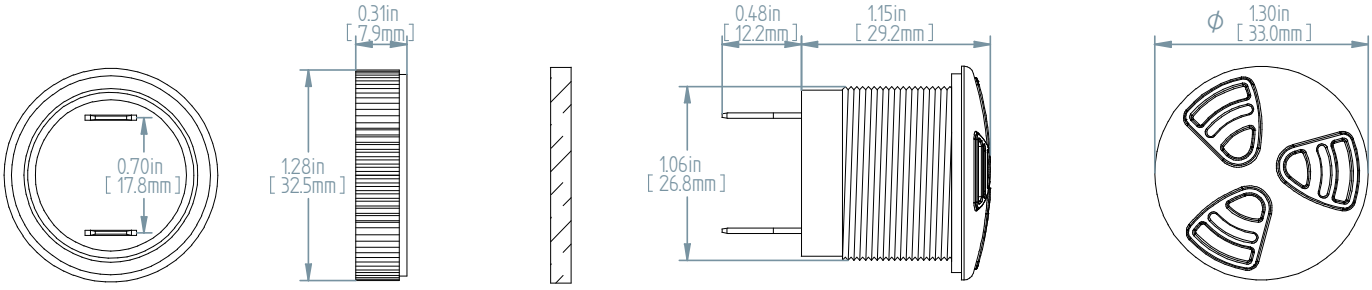
The Turbo TCH-86-530-Q(M) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

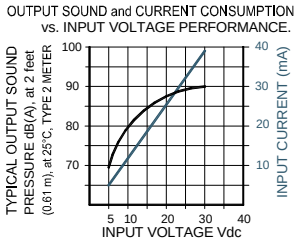
All specifications subject to change without notice.

TCH-86-530-S(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



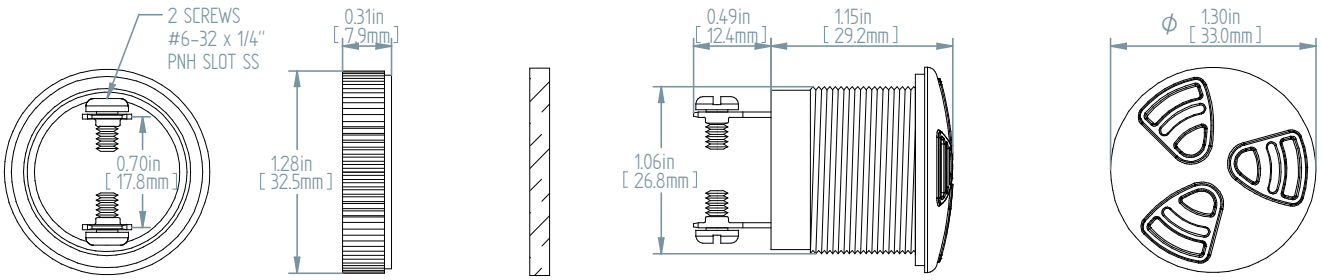
The Turbo TCH-86-530-S(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

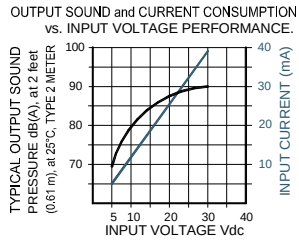
All specifications subject to change without notice.

TCH-86-530-S(M)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

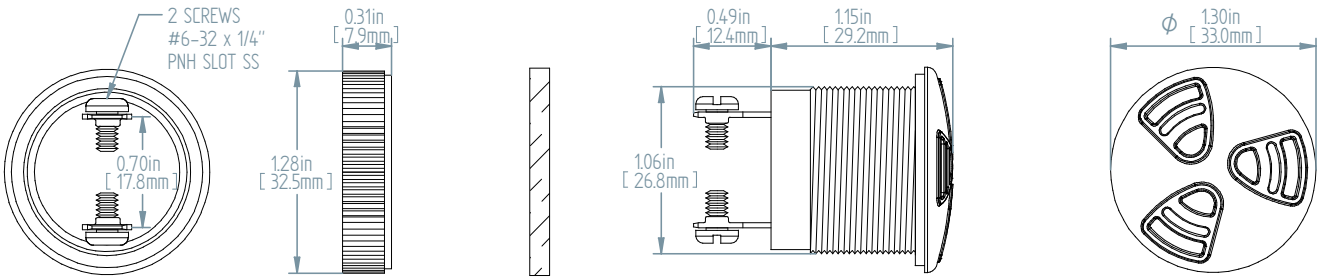


The Turbo TCH-86-530-S(M) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

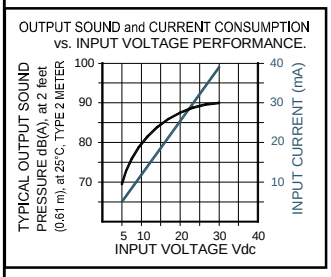
All specifications subject to change without notice.

TCH-86-530-W(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

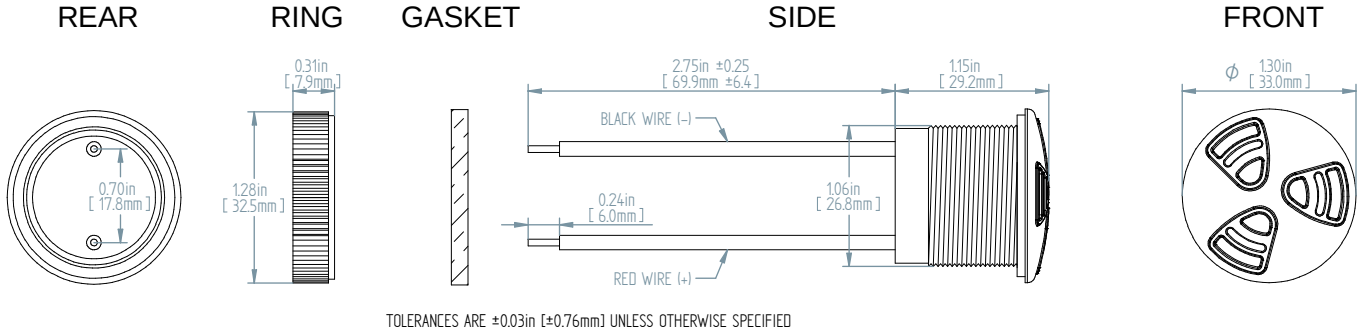


The Turbo TCH-86-530-W(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

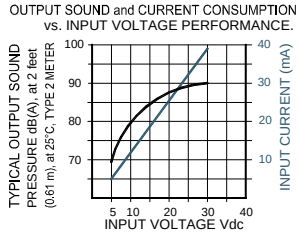
All specifications subject to change without notice.

TCH-86-530-W(M)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



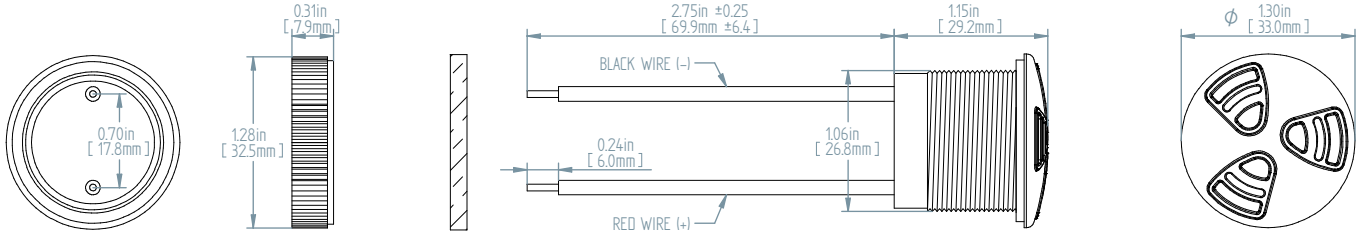
The Turbo TCH-86-530-W(M) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

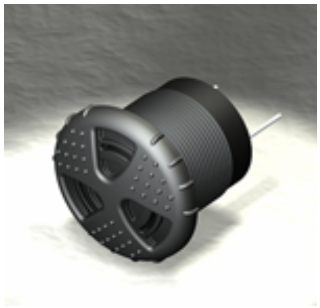
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

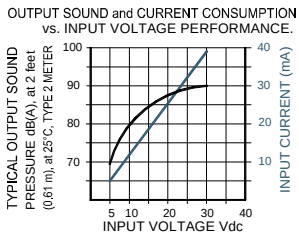
All specifications subject to change without notice.

TCH-V86-530-P(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



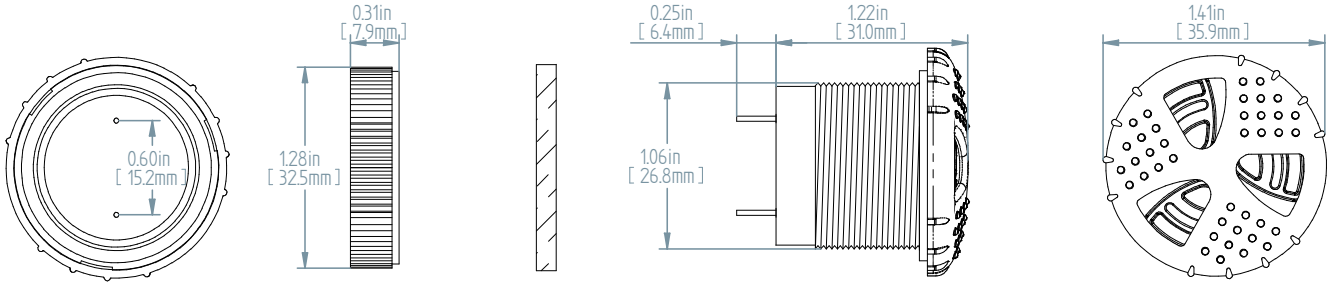
The Turbo TCH-V86-530-P(F) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

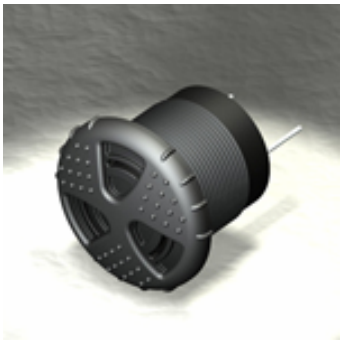
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

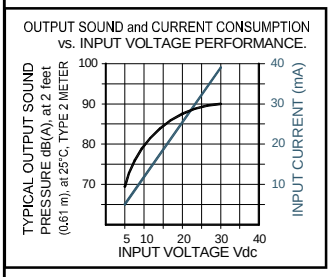
All specifications subject to change without notice.

TCH-V86-530-P(M)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



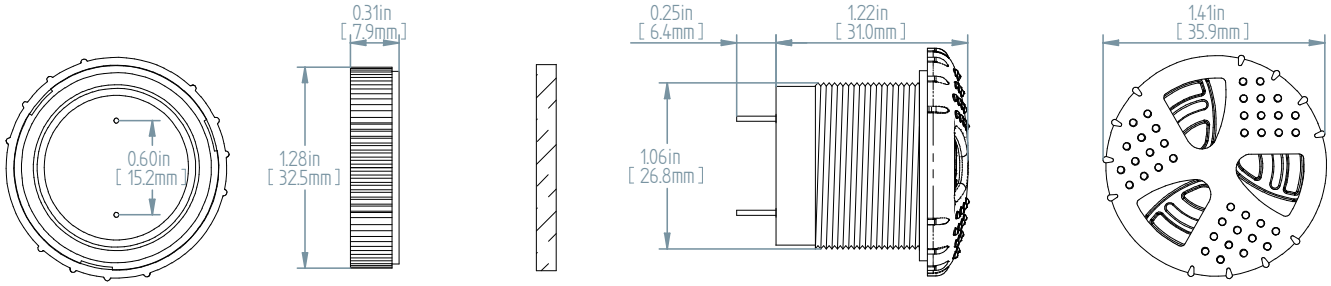
The Turbo TCH-V86-530-P(M) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

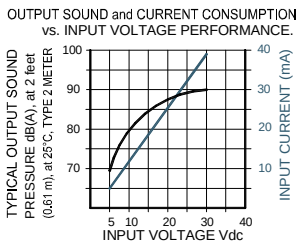
All specifications subject to change without notice.

TCH-V86-530-Q(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

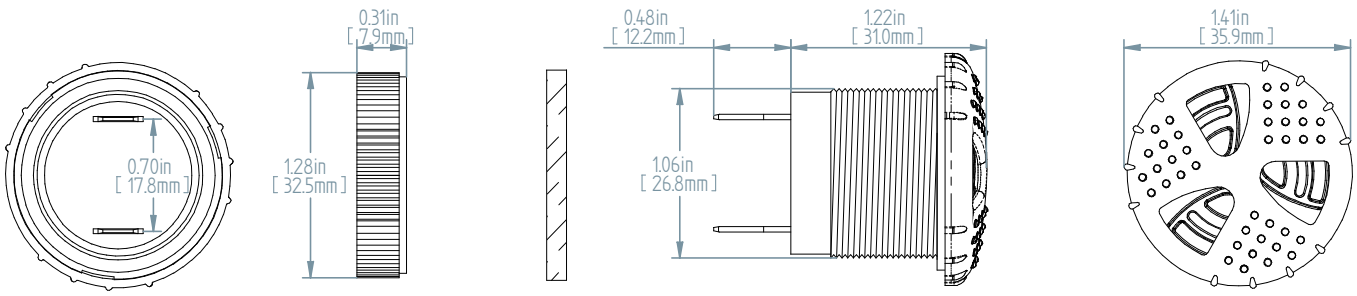


The Turbo TCH-V86-530-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

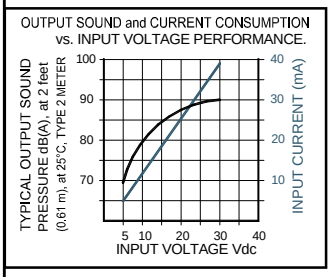
All specifications subject to change without notice.

TCH-V86-530-Q(M)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TCH-V86-530-Q(M) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

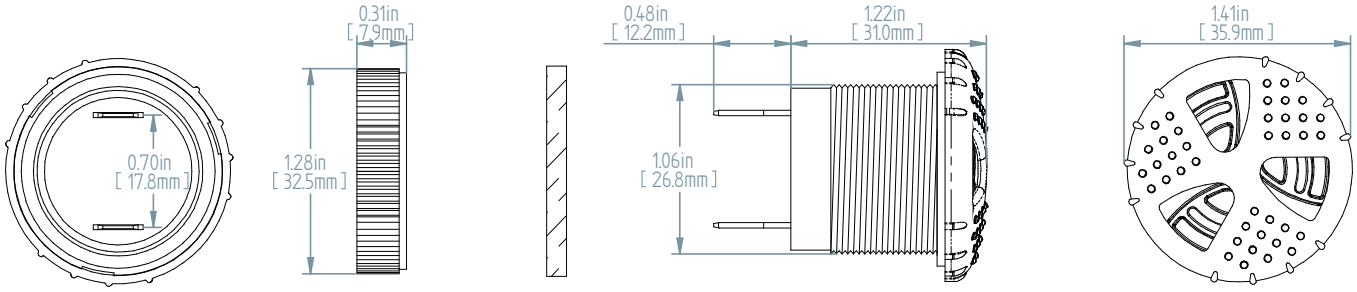
SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 12.11

Copyright © 2011 Floyd Bell Inc.

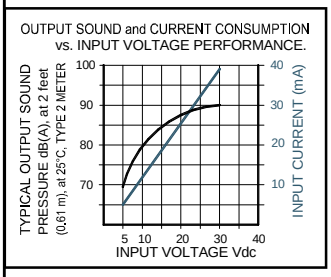
All specifications subject to change without notice.

TCH-V86-530-S(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



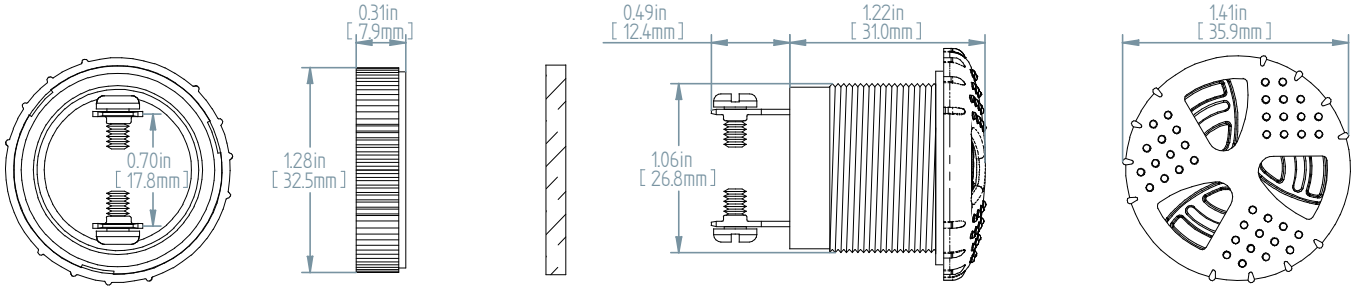
The Turbo TCH-V86-530-S(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

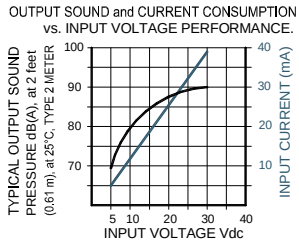
All specifications subject to change without notice.

TCH-V86-530-S(M)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



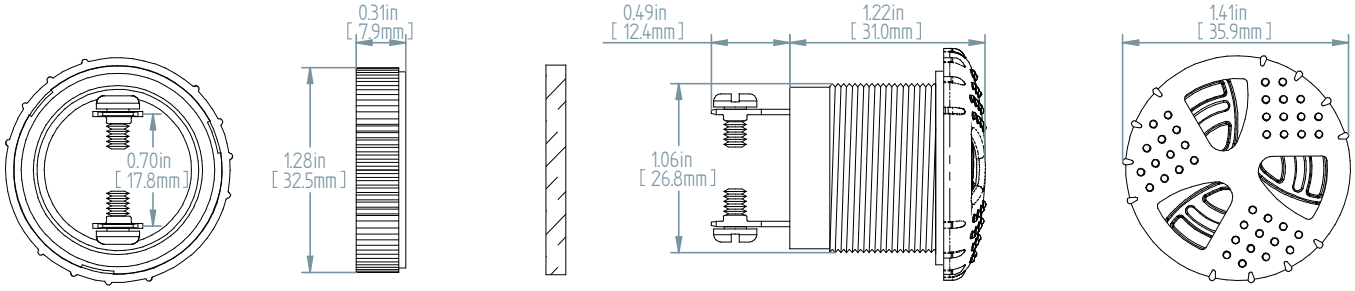
The Turbo TCH-V86-530-S(M) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

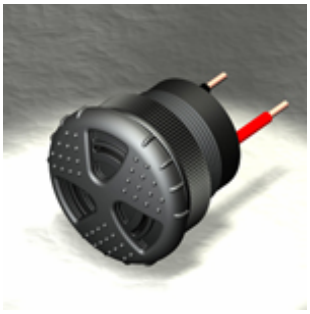
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

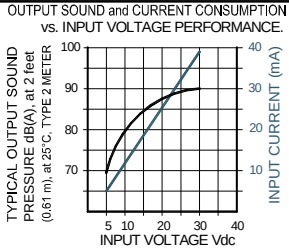
All specifications subject to change without notice.

TCH-V86-530-W(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

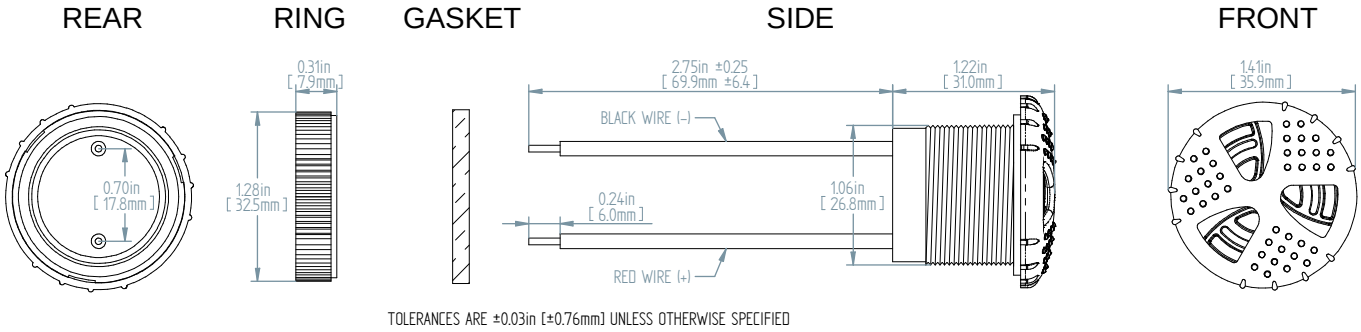


The Turbo TCH-V86-530-W(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

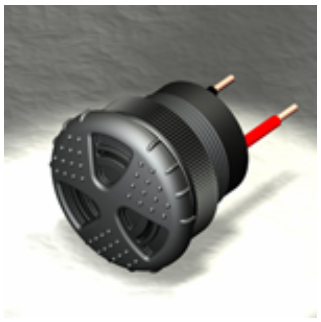
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

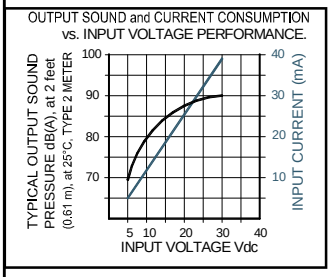
All specifications subject to change without notice.

TCH-V86-530-W(M)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

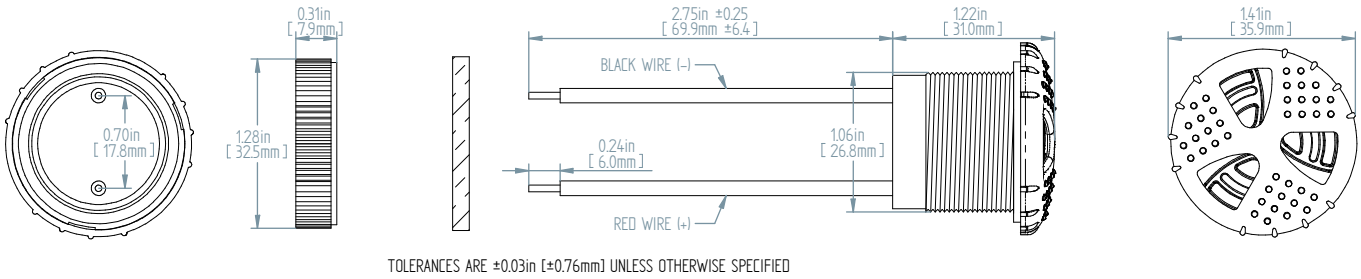


The Turbo TCH-V86-530-W(M) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 70±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 90±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

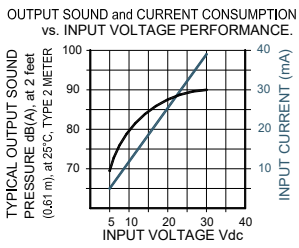
All specifications subject to change without notice.

TCH-V86-530-Q(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



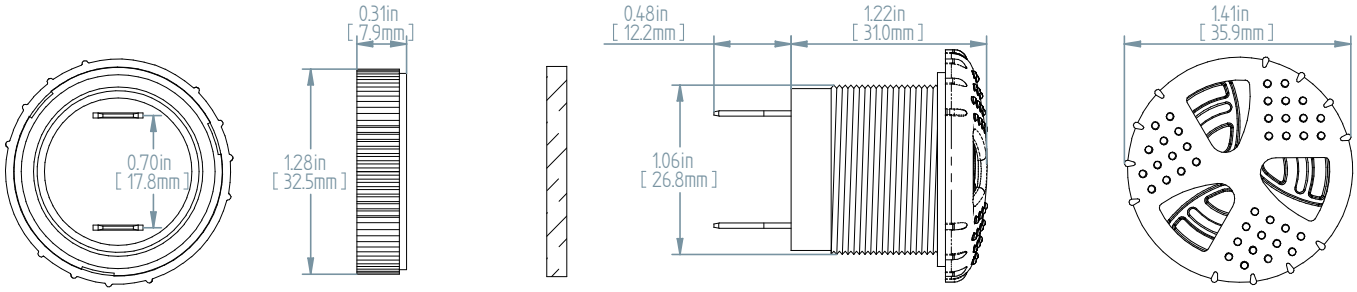
The Turbo TCH-V86-948-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 70±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 90±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

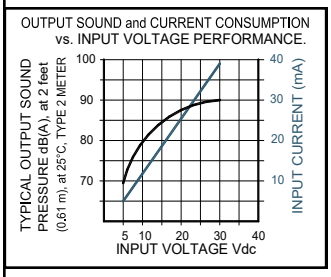
All specifications subject to change without notice.

TCH-V86-948-Q(M)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TCH-V86-948-Q(M) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

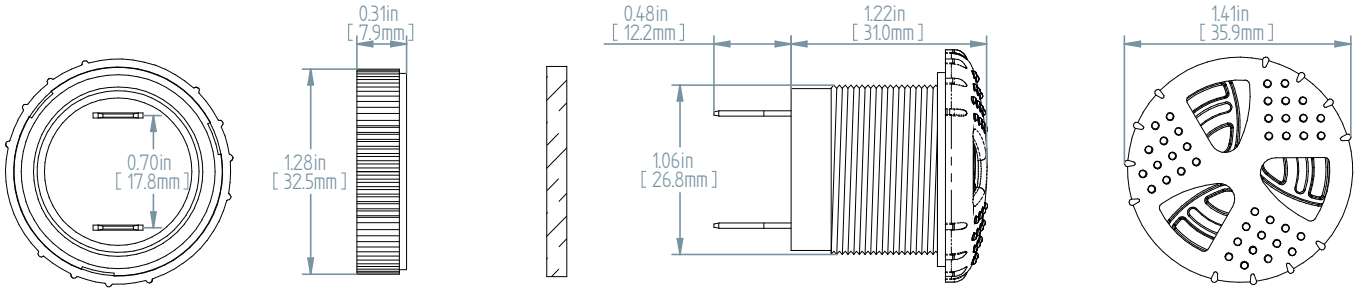
SPECIFICATIONS

Operating Mode:	Medium Loud Chime Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Chimes per second
Typical Operating Current:	4 mA at 5 Vdc 40 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 70±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 90±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 12.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLDH-87RG-930-Q

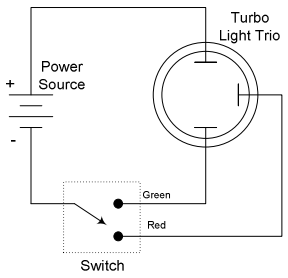
Made in USA

Pending



- Emits BRIGHT Green or Red Light
- Indoor or Outdoor Use
- Viewable in Direct Sunlight
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuit



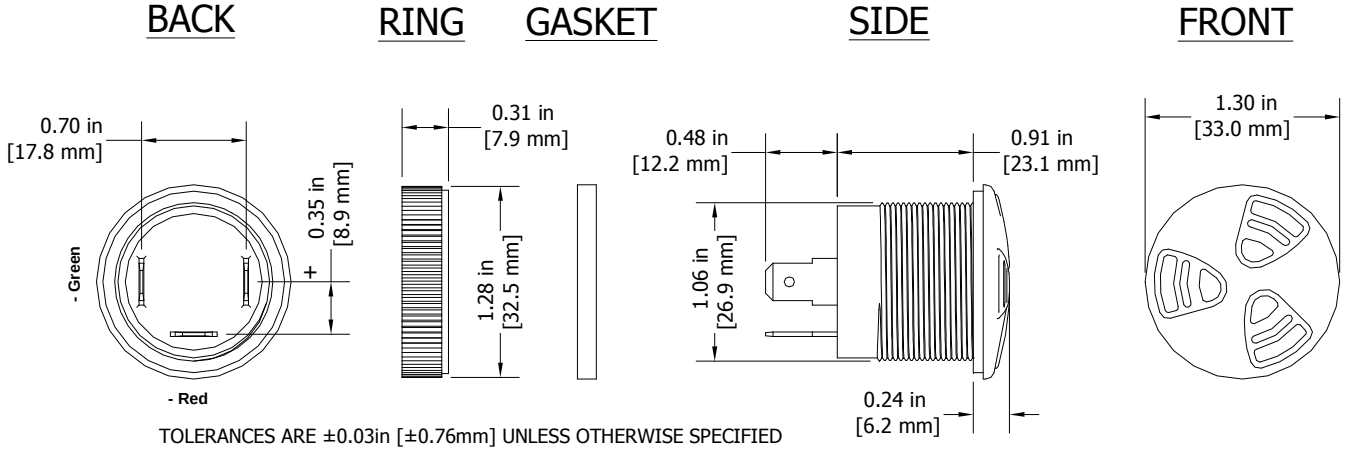
The Turbo Light Duo TLDH Series are continuous, multi-color, extra-bright output LED panel indicators for operating voltages of 9-30VDC. The Turbo Light Duo design features a regulated power supply, 2 light colors, low profile, tamper resistant case and easy to use active low switch inputs. This clear-lens polycarbonate panel light is rugged and ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	Extra-Bright Continuous Output LED Panel Indicator
Color:	Emits Red or Green Light (Individually)
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	(8000 cd/m^2 Red) or (9000 cd/m^2 Green) ± 20% at 30 Vdc
Max. Operating Current:	145 mA at 9 Vdc 50 mA at 30 Vdc
Termination:	3 Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness, One positive Blade and three negative Blades for color select.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40℃ to +85℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

Preliminary

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 08.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLH-87B-930-Q

Made in USA



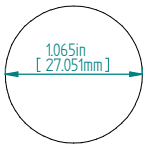
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLH Series are continuous extra-bright output, LED panel indicators for operating voltages of 9-30VDC. Twice as bright as the TLM Series, the TLH Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	Extra-Bright Continuous Output LED Panel Indicator
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	1700 cd/m^2 ± 20% at 9 Vdc 1850 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Blue Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

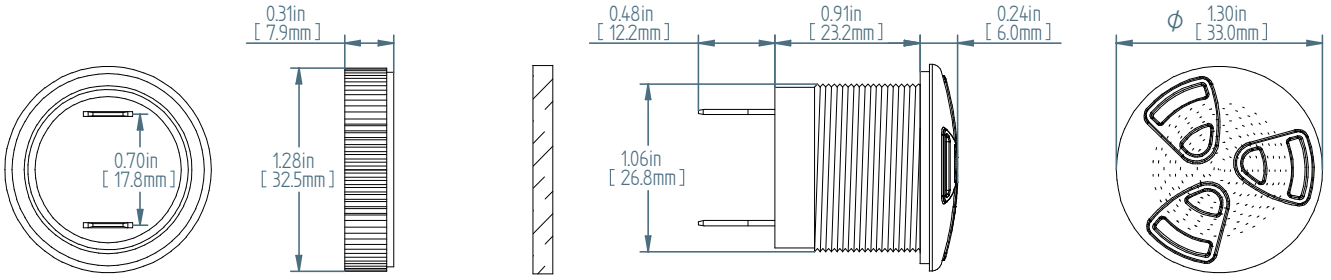
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLH-87B-930-S

Made in USA



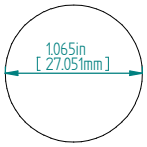
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLH Series are continuous extra-bright output, LED panel indicators for operating voltages of 9-30VDC. Twice as bright as the TLM Series, the TLH Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

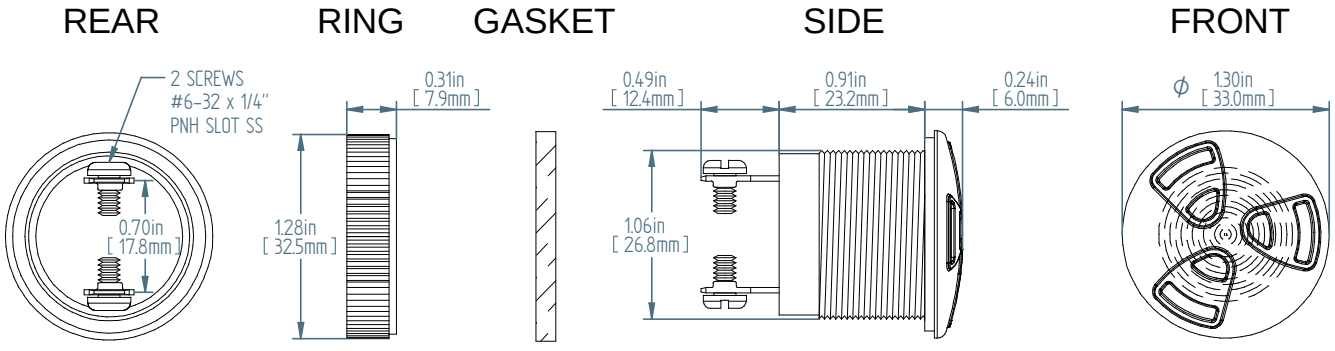
Operating Mode:	Extra-Bright Continuous Output LED Panel Indicator
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	1700 cd/m^2 ± 20% at 9 Vdc 1850 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Blue Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

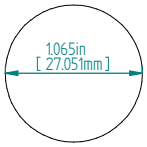
TLH-87G-930-Q

Made in USA



- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

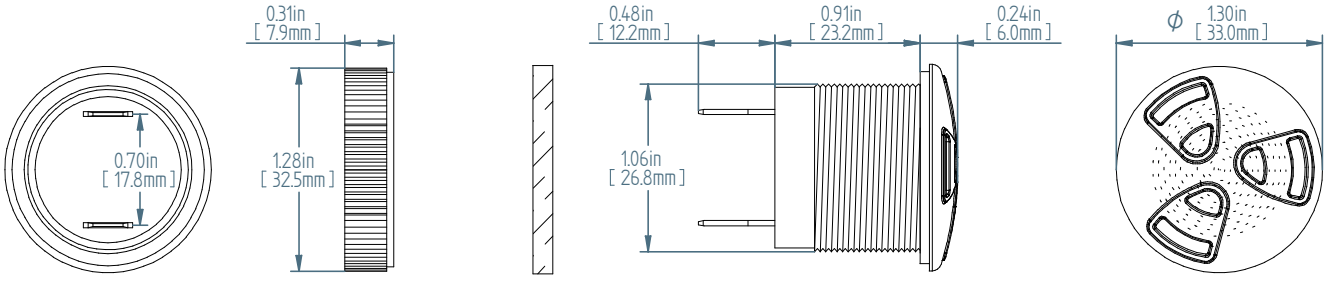
The Turbo Light TLH Series are continuous extra-bright output, LED panel indicators for operating voltages of 9-30VDC. Twice as bright as the TLM Series, the TLH Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	Extra-Bright Continuous Output LED Panel Indicator
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	4500 cd/m^2 ± 20% at 9 Vdc 4700 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Green Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLH-87G-930-S

Made in USA



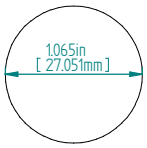
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLH Series are continuous extra-bright output, LED panel indicators for operating voltages of 9-30VDC. Twice as bright as the TLM Series, the TLH Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	Extra-Bright Continuous Output LED Panel Indicator
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	4500 cd/m^2 ± 20% at 9 Vdc 4700 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Green Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

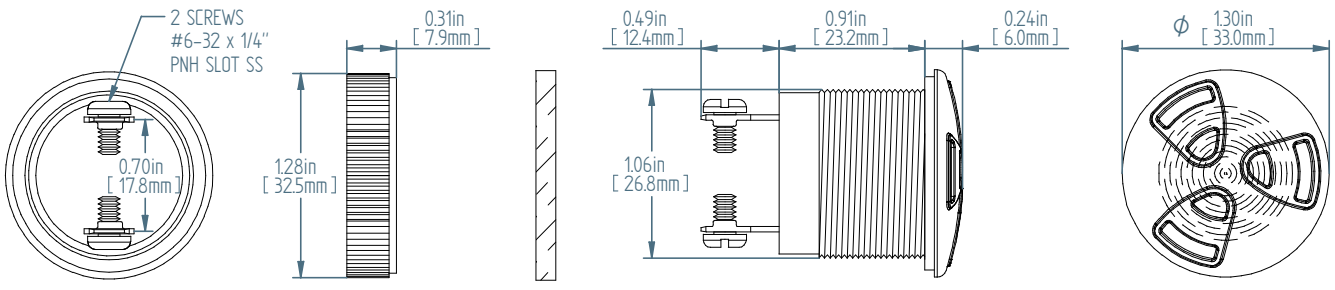
PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLH-87R-930-P

Made in USA



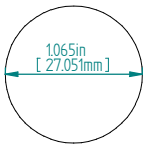
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLH Series are continuous extra-bright output, LED panel indicators for operating voltages of 9-30VDC. Twice as bright as the TLM Series, the TLH Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	Extra-Bright Continuous Output LED Panel Indicator
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	5300 cd/m^2 ± 20% at 9 Vdc 5700 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40℃ to +85℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

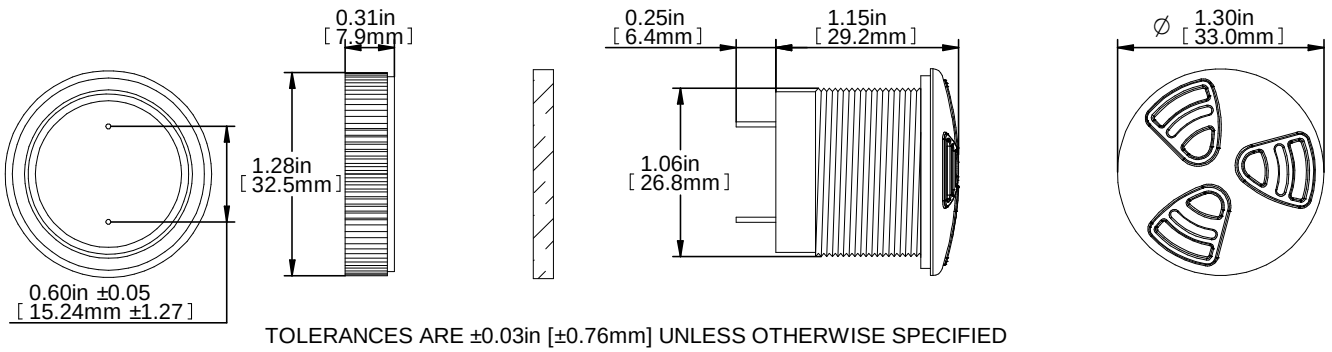
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 11.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLH-87R-930-Q

Made in USA



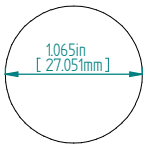
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLH Series are continuous extra-bright output, LED panel indicators for operating voltages of 9-30VDC. Twice as bright as the TLM Series, the TLH Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	Extra-Bright Continuous Output LED Panel Indicator
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	5300 cd/m^2 ± 20% at 9 Vdc 5700 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

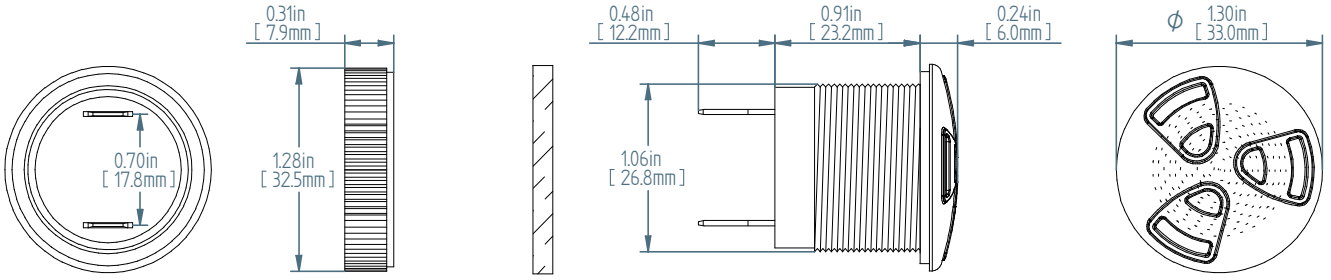
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLH-87R-930-S

Made in USA



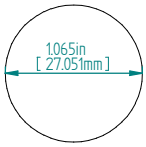
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLH Series are continuous extra-bright output, LED panel indicators for operating voltages of 9-30VDC. Twice as bright as the TLM Series, the TLH Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

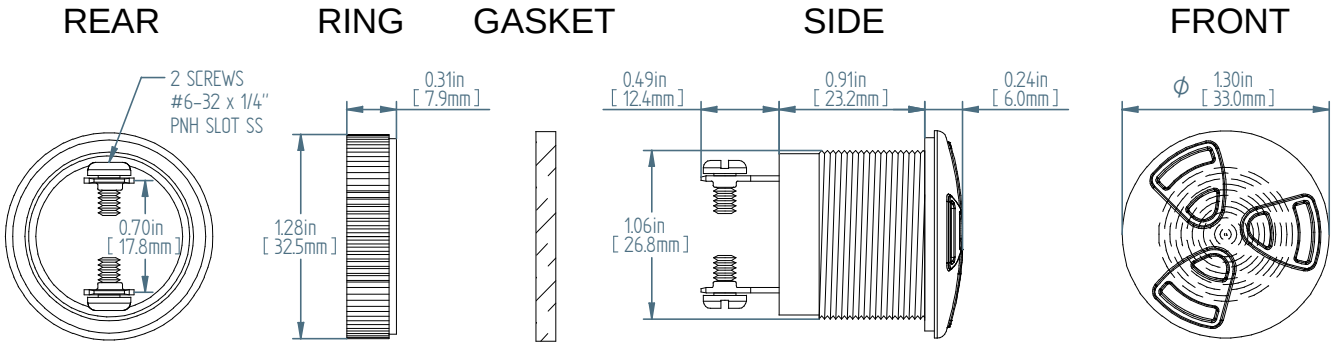
Operating Mode:	Extra-Bright Continuous Output LED Panel Indicator
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	5300 cd/m^2 ± 20% at 9 Vdc 5700 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLH-87W-930-Q

Made in USA



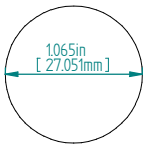
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLH Series are continuous extra-bright output, LED panel indicators for operating voltages of 9-30VDC. Twice as bright as the TLM Series, the TLH Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

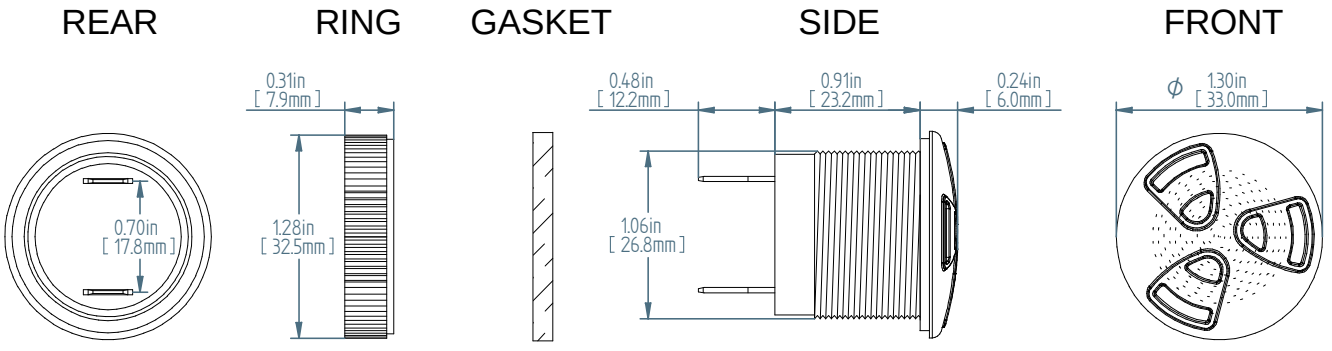
Operating Mode:	Extra-Bright Continuous Output LED Panel Indicator
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	13500 cd/m^2 ± 20% at 9 Vdc 14500 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLH-87W-930-S

Made in USA



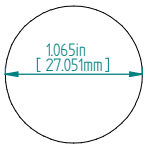
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLH Series are continuous extra-bright output, LED panel indicators for operating voltages of 9-30VDC. Twice as bright as the TLM Series, the TLH Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	Extra-Bright Continuous Output LED Panel Indicator
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	13500 cd/m^2 ± 20% at 9 Vdc 14500 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

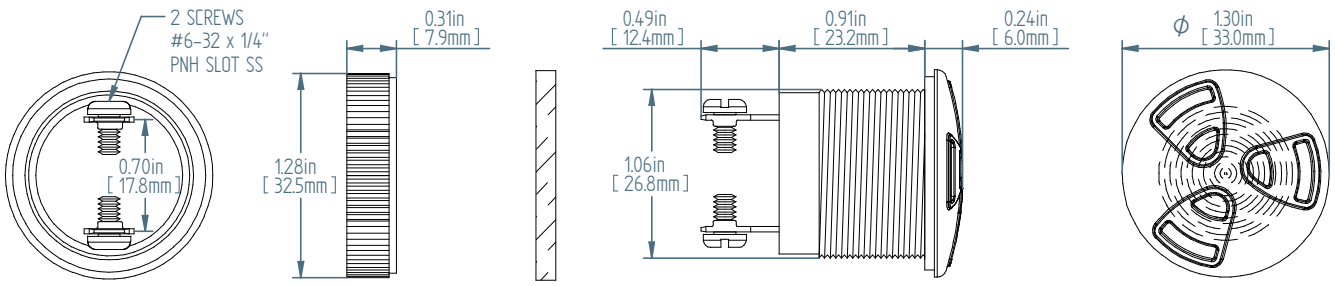
PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLH-87Y-930-P

Made in USA



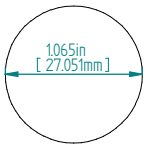
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLH Series are continuous extra-bright output, LED panel indicators for operating voltages of 9-30VDC. Twice as bright as the TLM Series, the TLH Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	Extra-Bright Continuous Output LED Panel Indicator
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	12100 cd/m^2 ± 20% at 9 Vdc 13000 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40℃ to +85℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Yellow Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

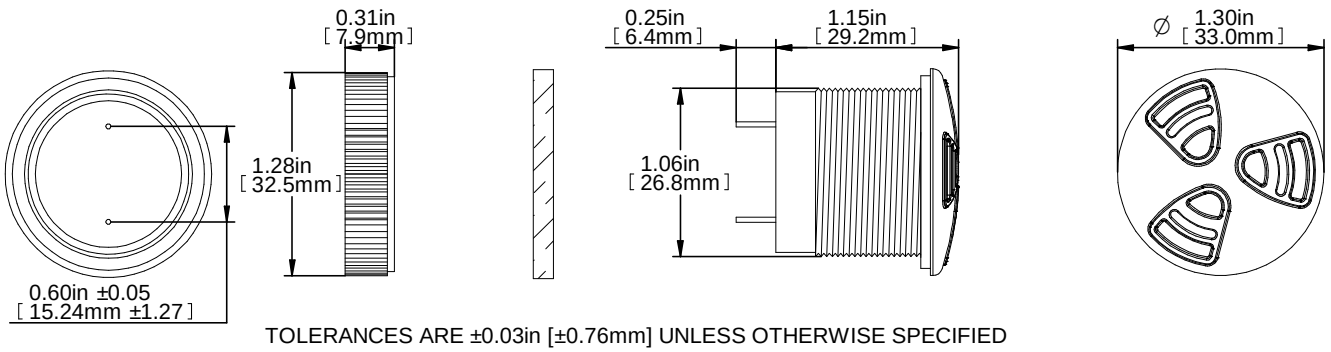
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 11.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLH-87Y-930-Q

Made in USA



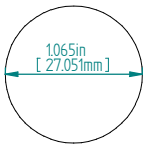
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLH Series are continuous extra-bright output, LED panel indicators for operating voltages of 9-30VDC. Twice as bright as the TLM Series, the TLH Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

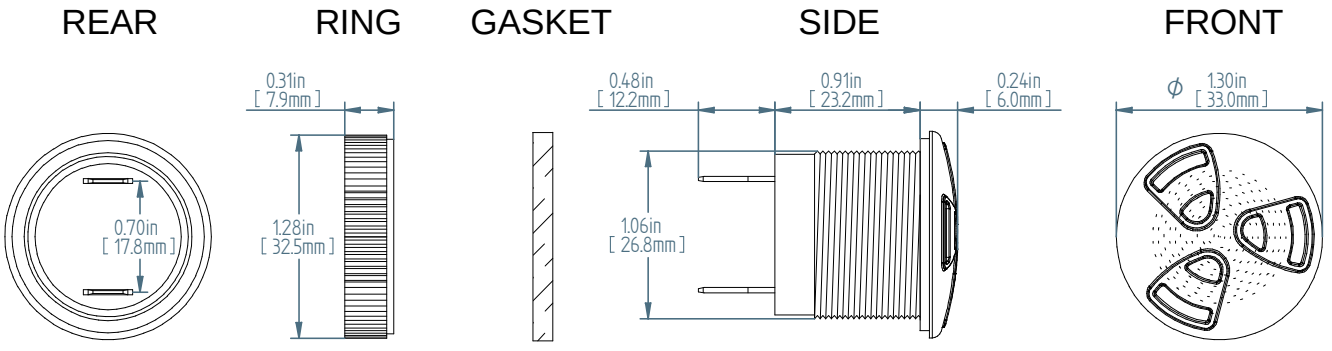
Operating Mode:	Extra-Bright Continuous Output LED Panel Indicator
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	12100 cd/m^2 ± 20% at 9 Vdc 13000 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Yellow Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLH-87Y-930-S

Made in USA



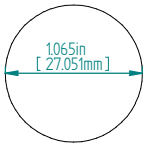
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLH Series are continuous extra-bright output, LED panel indicators for operating voltages of 9-30VDC. Twice as bright as the TLM Series, the TLH Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	Extra-Bright Continuous Output LED Panel Indicator
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	12100 cd/m^2 ± 20% at 9 Vdc 13000 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Yellow Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

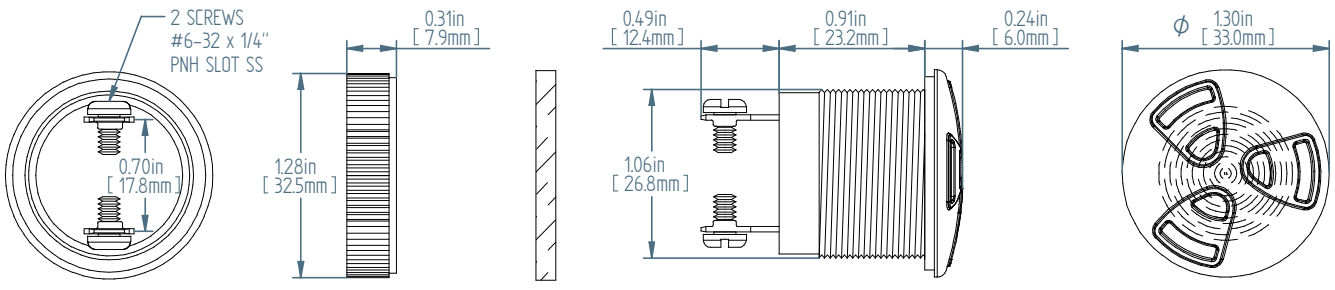
PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88B-930-QF

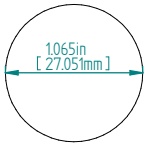
Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

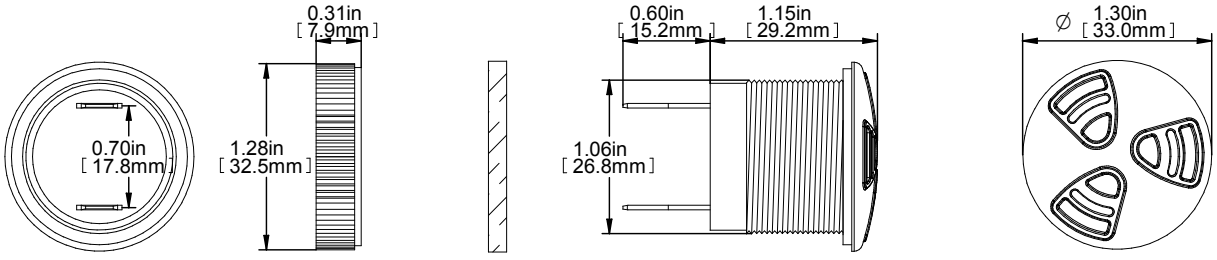
Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88B-930-QS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

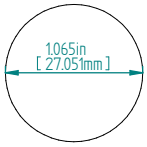
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

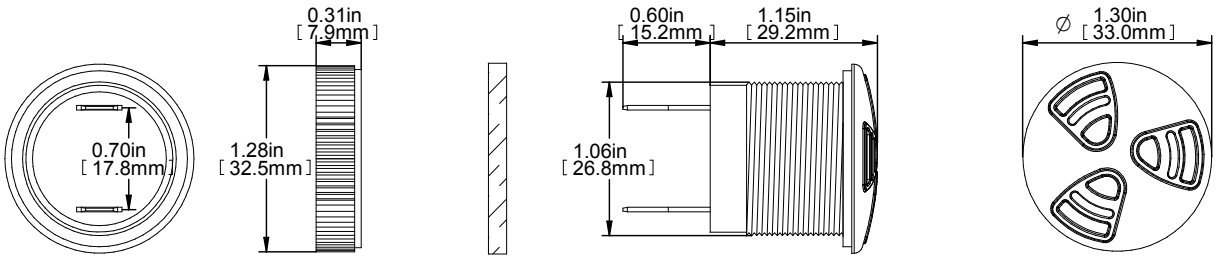
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88B-930-SF

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

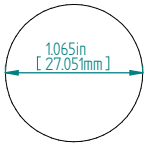
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

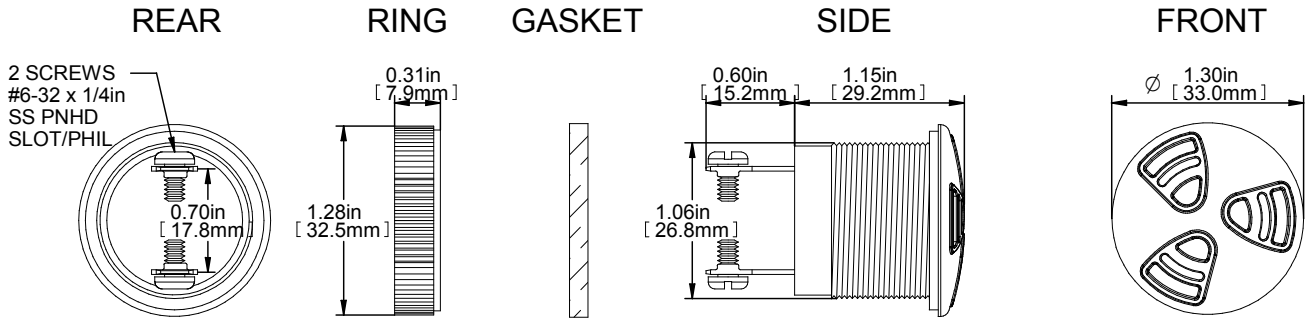
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88B-930-SS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

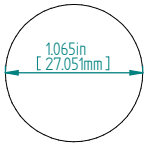
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

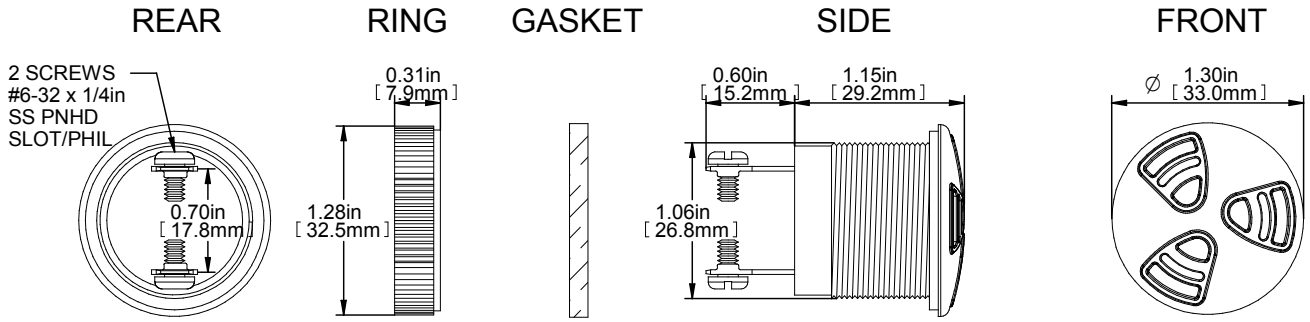
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88B-930-WF

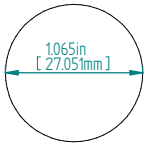
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

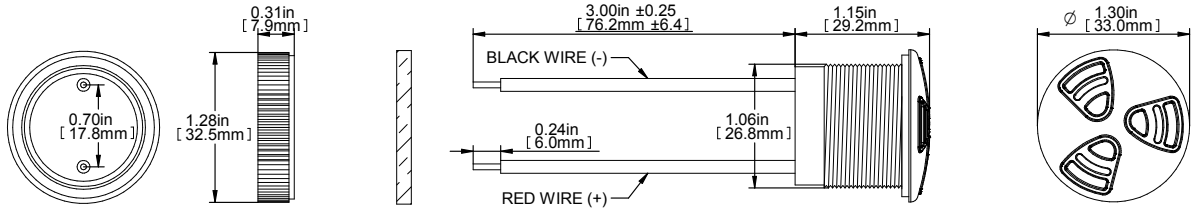
Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88B-930-WS

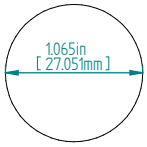
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

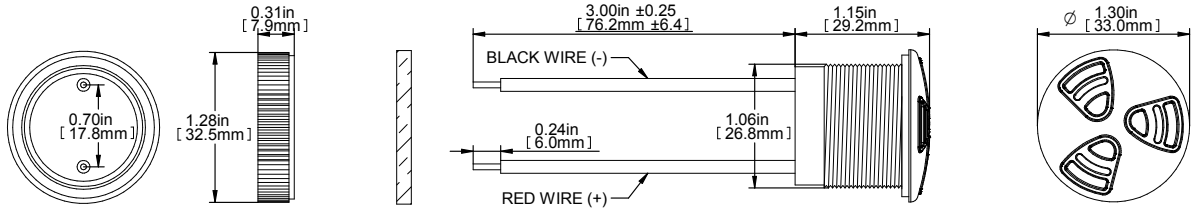
Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88G-930-QF

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

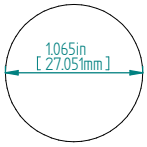
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 1*03±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours * IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

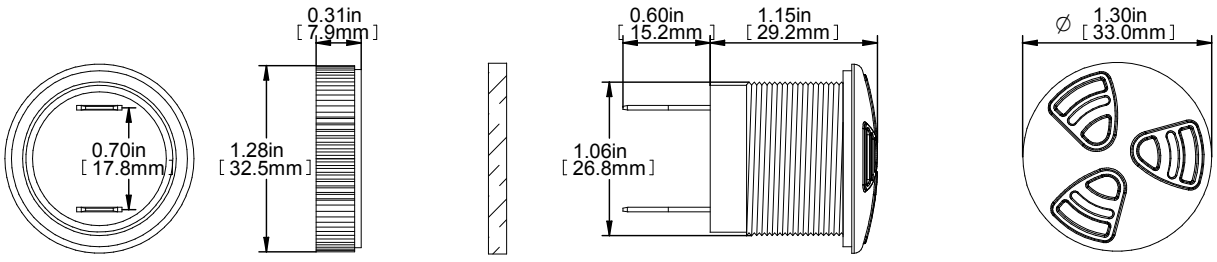
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88G-930-QS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

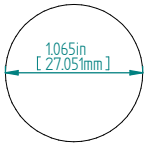
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

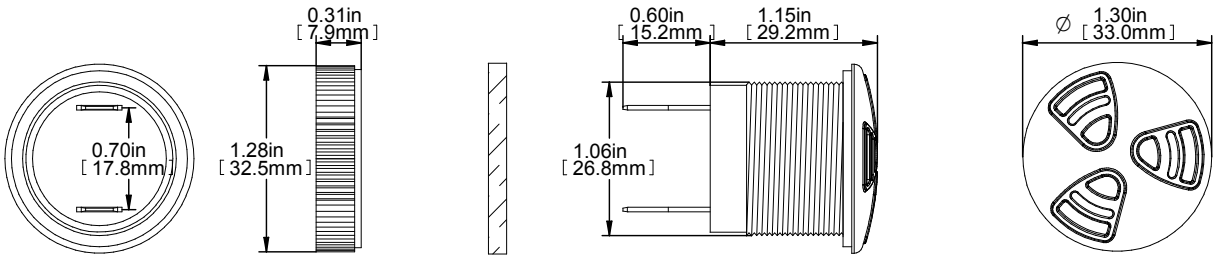
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88G-930-SF

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

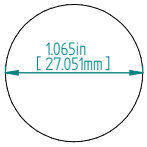
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

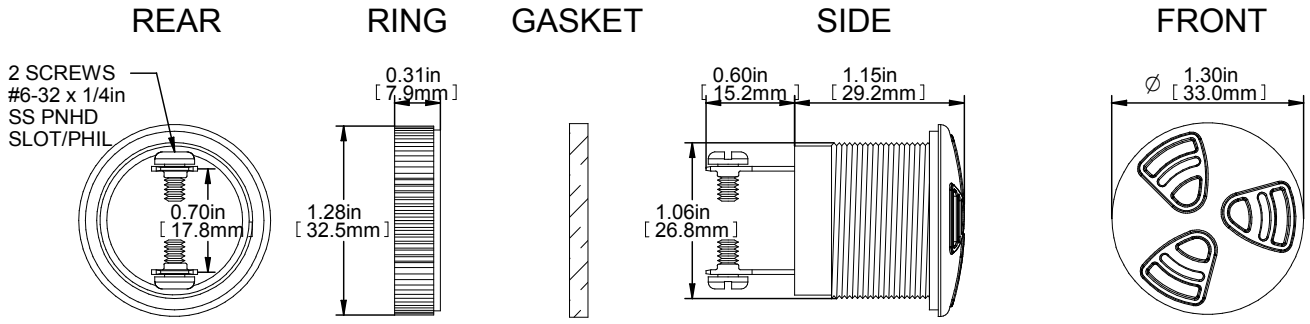
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88G-930-SS

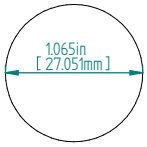
Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

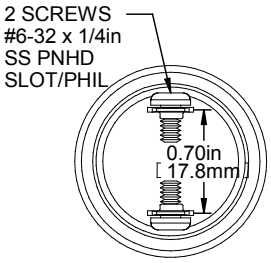
Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

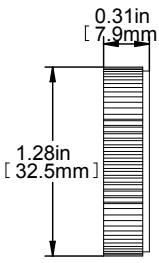
PRELIMINARY

DIMENSIONS

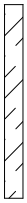
REAR



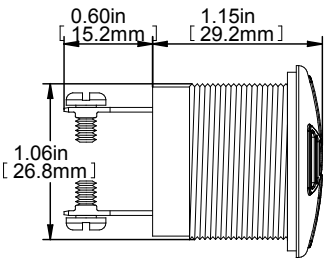
RING



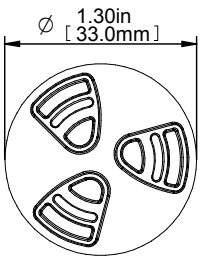
GASKET



SIDE



FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88G-930-WF

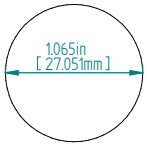
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

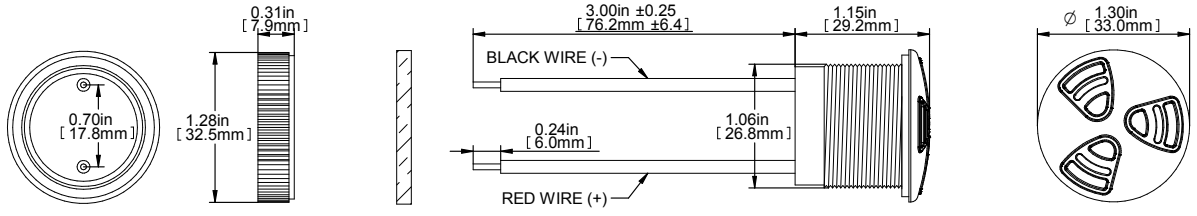
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88G-930-WS

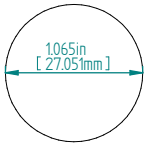
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

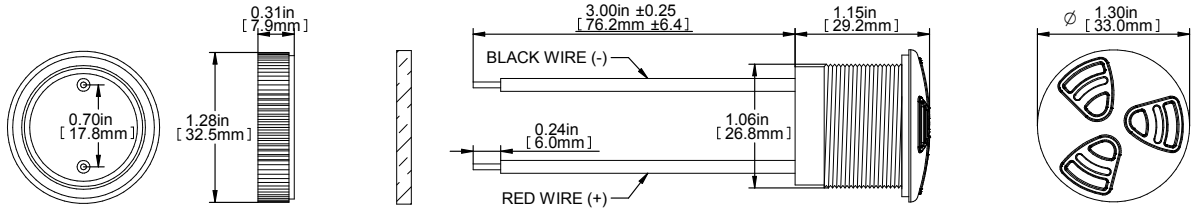
Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88R-930-QF

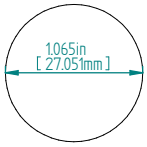
Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

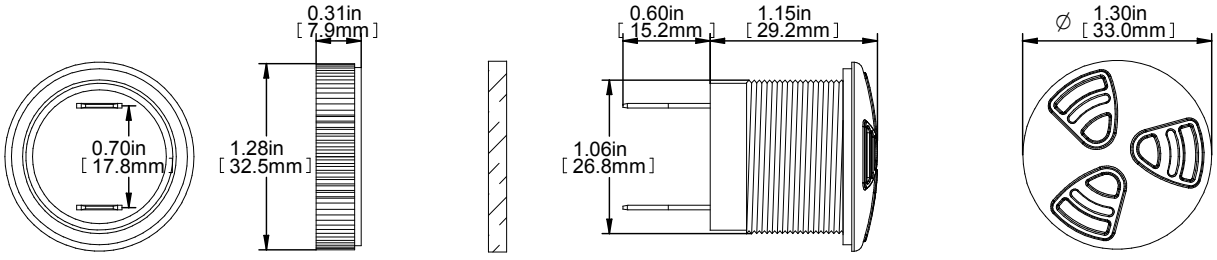
Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88R-930-QS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

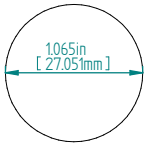
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

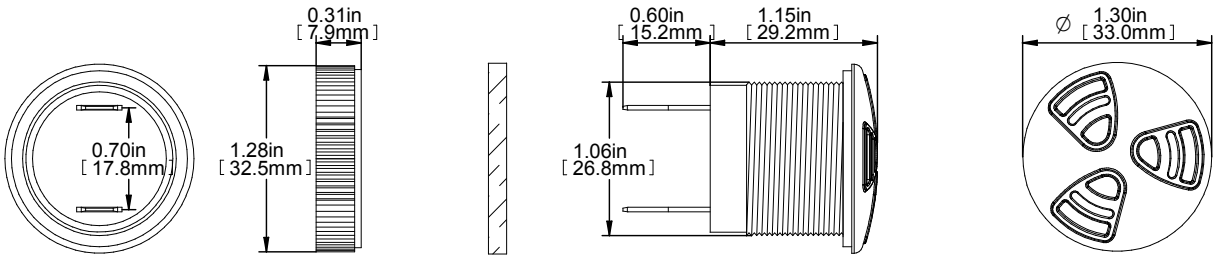
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88R-930-SF

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

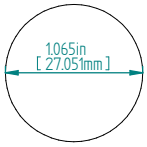
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

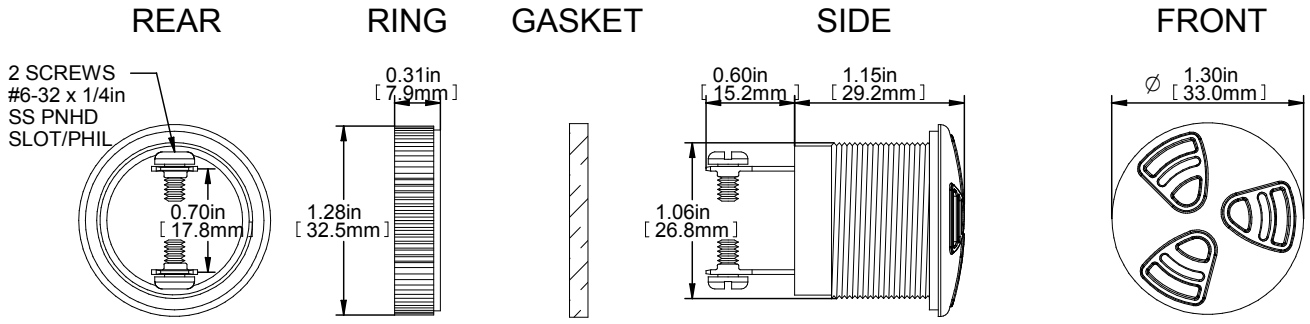
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88R-930-SS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

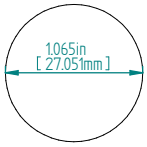
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

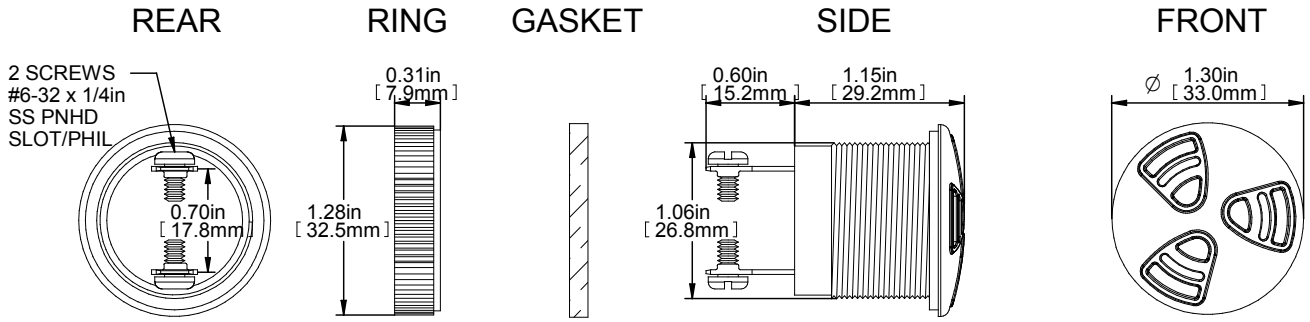
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88R-930-WF

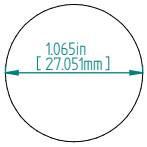
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

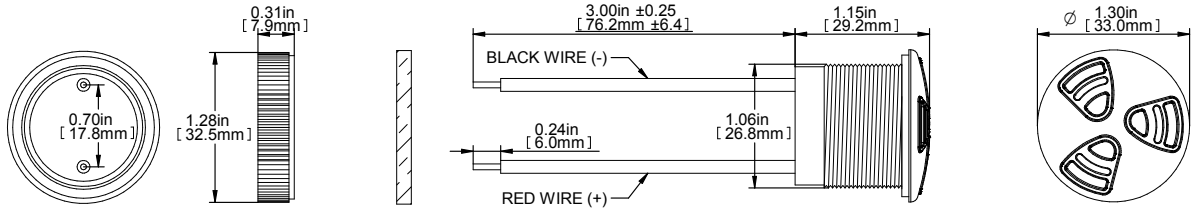
Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88R-930-WS

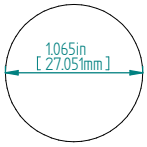
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

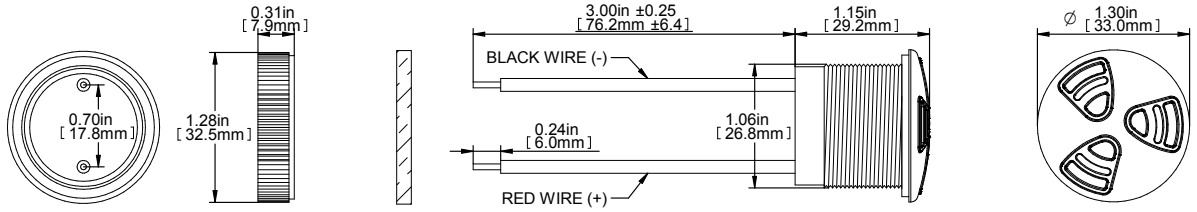
Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88W-930-QF

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

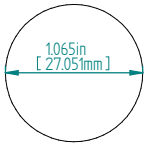
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

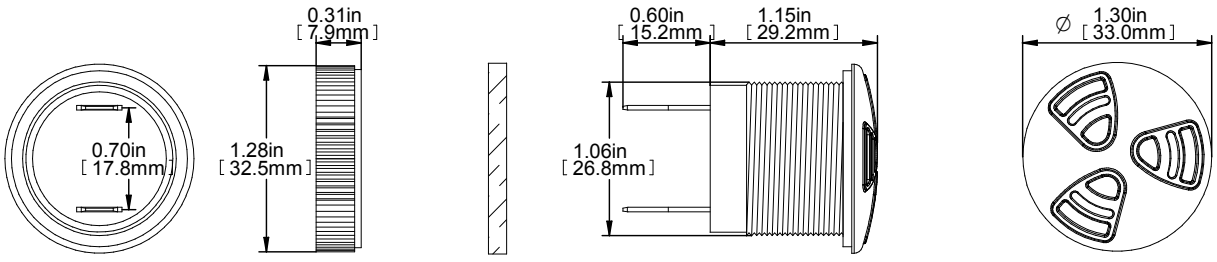
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88W-930-QS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

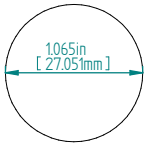
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

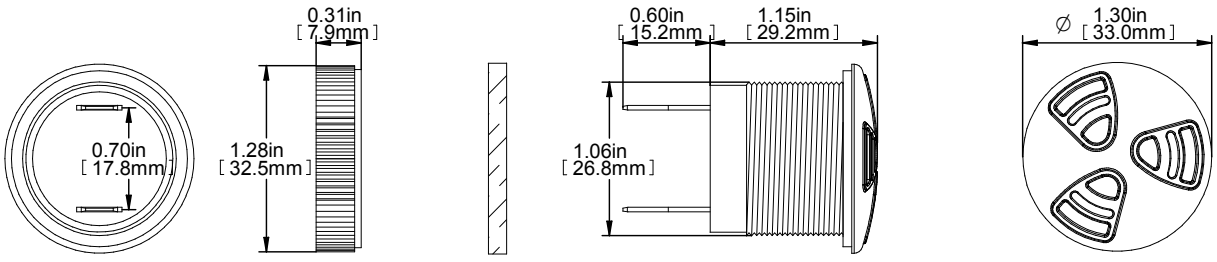
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88W-930-SF

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

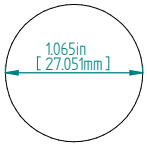
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

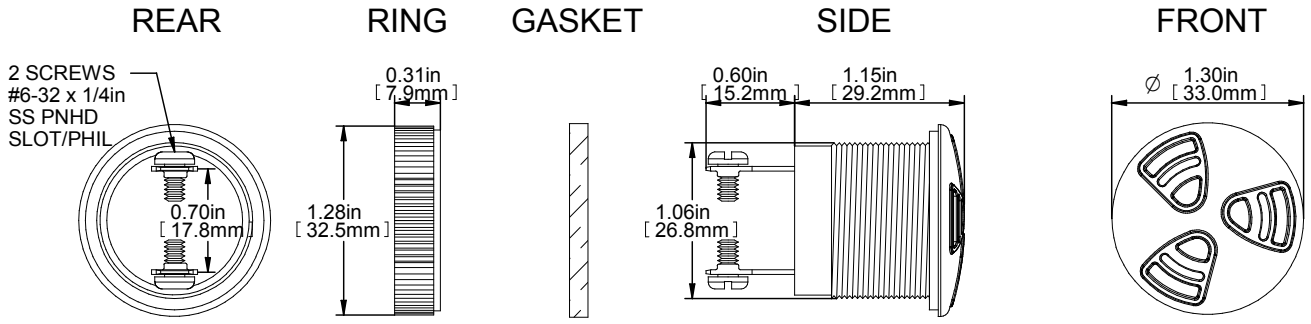
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88W-930-SS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

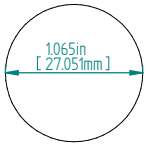
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

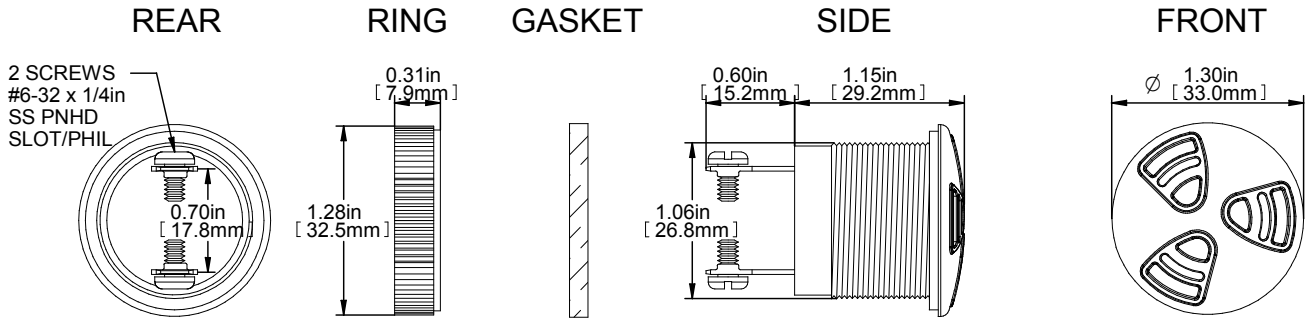
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88W-930-WF

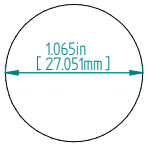
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

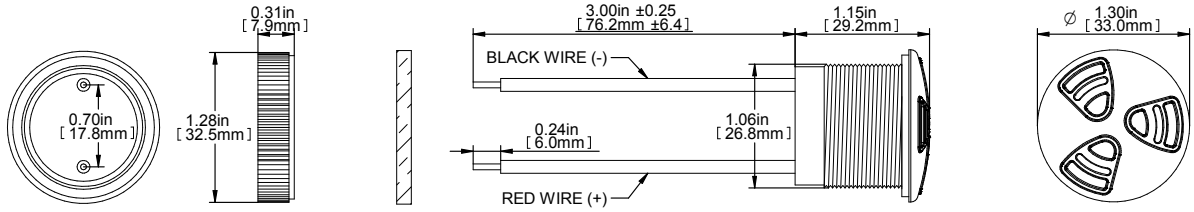
Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88W-930-WS

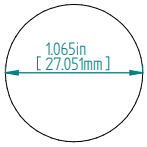
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

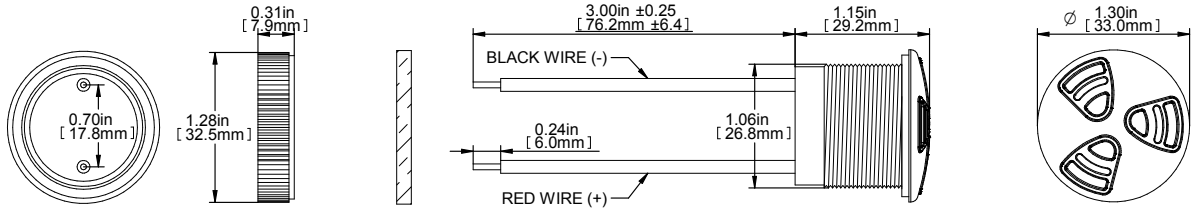
Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88Y-930-QF

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

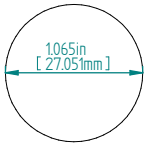
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

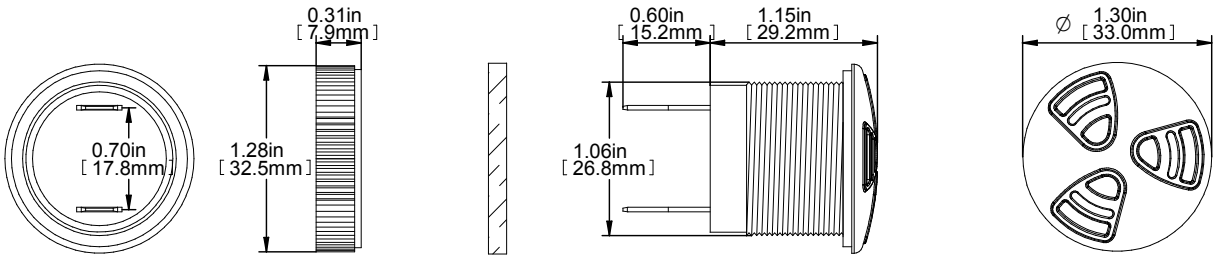
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88Y-930-QS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

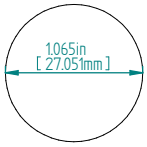
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

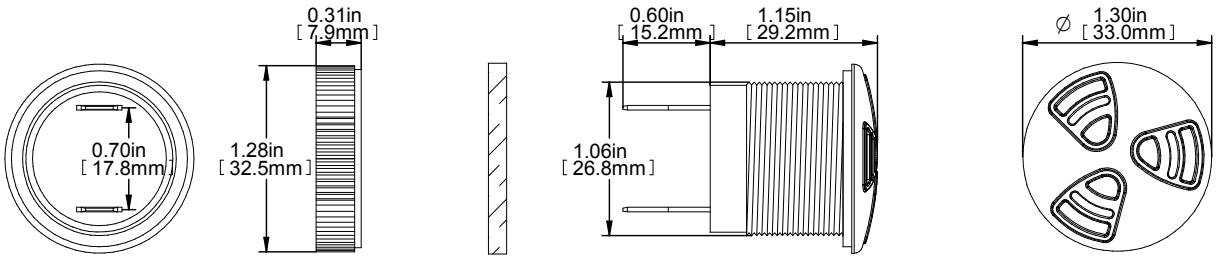
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88Y-930-SF

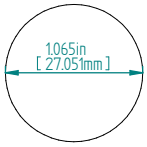
Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

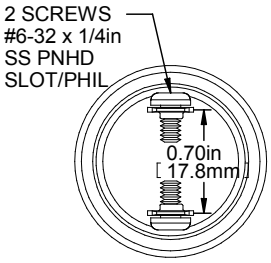
Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

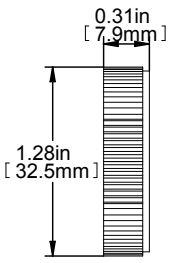
PRELIMINARY

DIMENSIONS

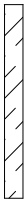
REAR



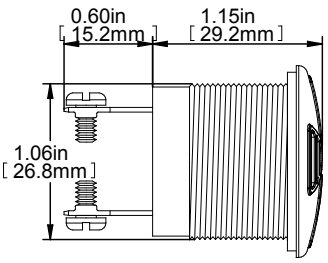
RING



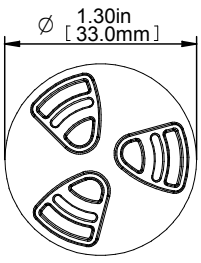
GASKET



SIDE



FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

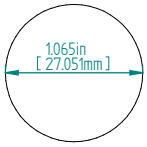
TLHB-88Y-930-SS

Made in USA



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

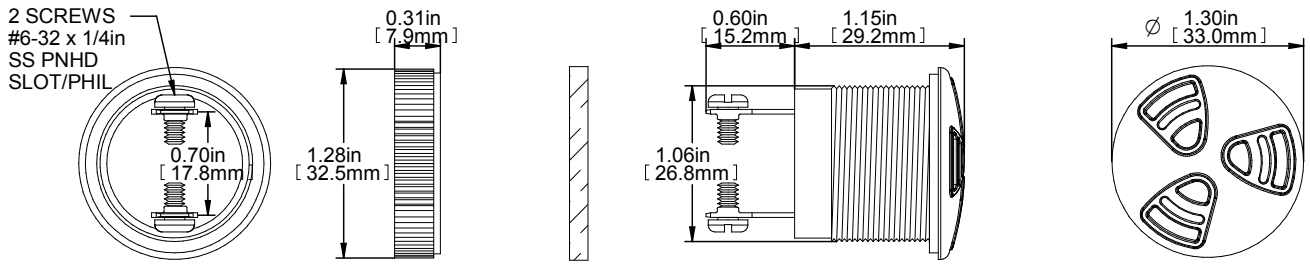
Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88Y-930-WF

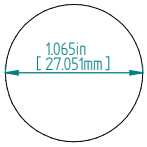
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

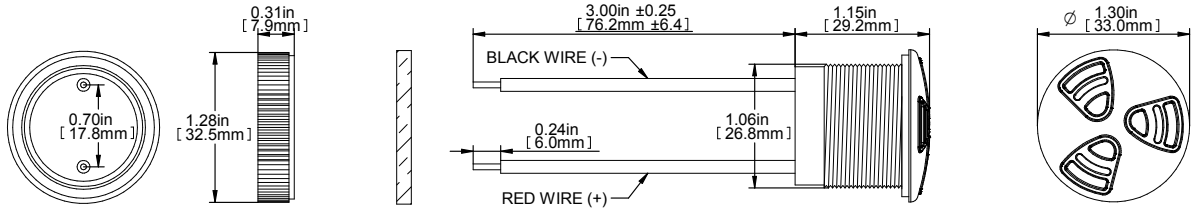
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-88Y-930-WS

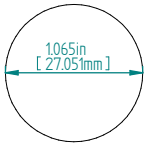
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

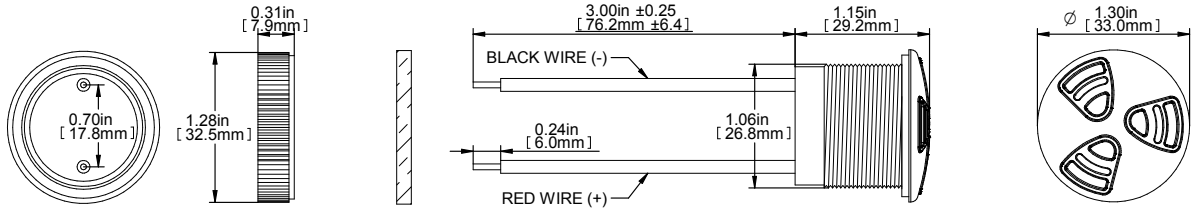
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHB-V88R-930-QS

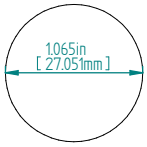
Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

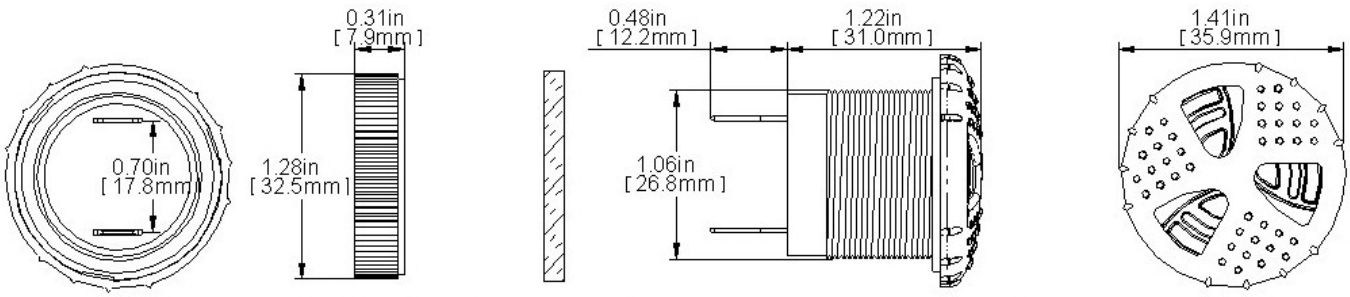
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: *85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

Not Evaluated by UL

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED
Dimensions shown with volume control installed on unit.

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 3.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-88B-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

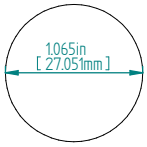
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

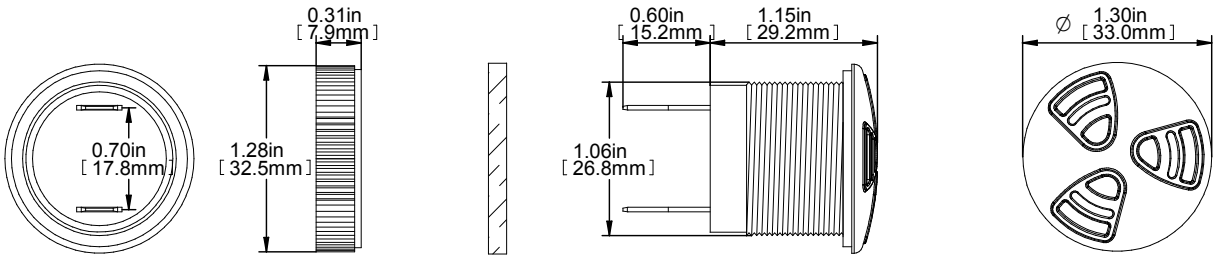
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-88B-930-S

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

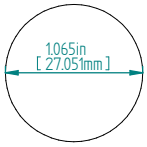
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

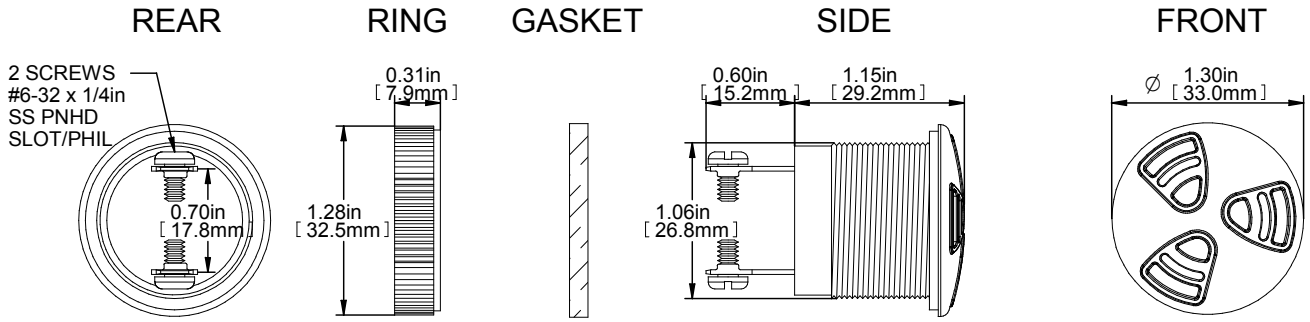
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-88B-930-W

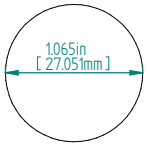
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

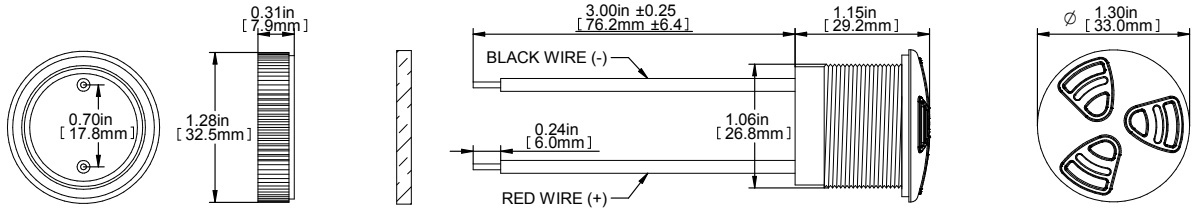
Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-88G-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

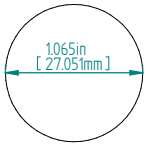
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

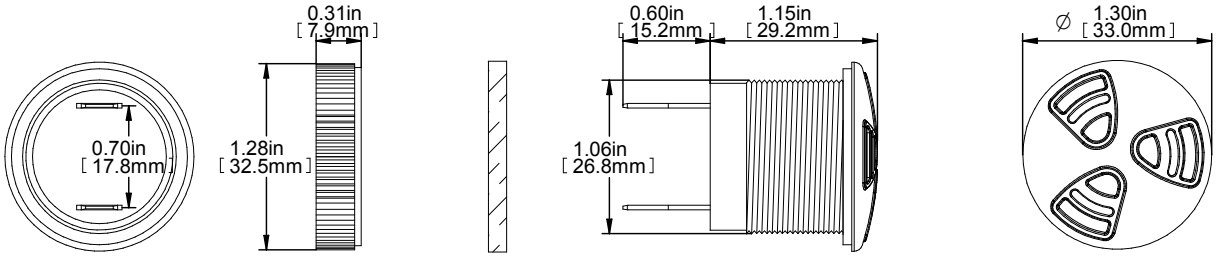
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-88G-930-S

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

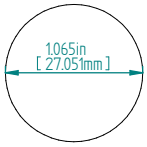
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

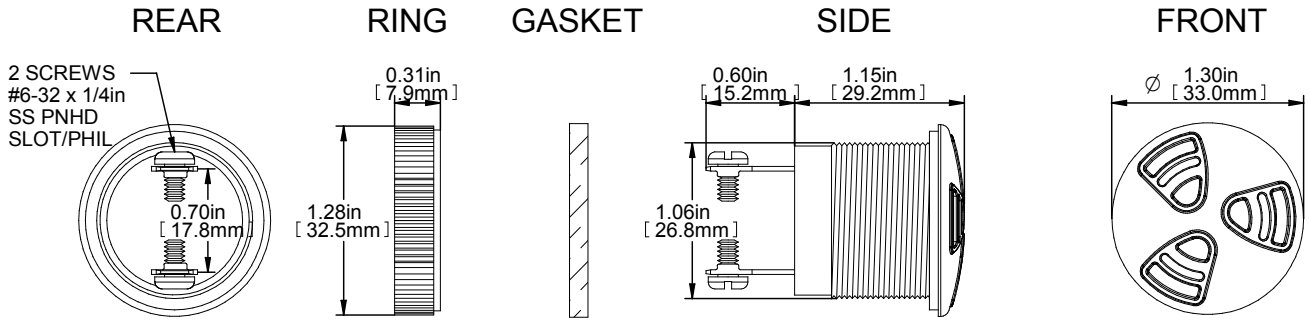
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-88G-930-W

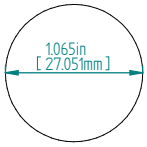
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

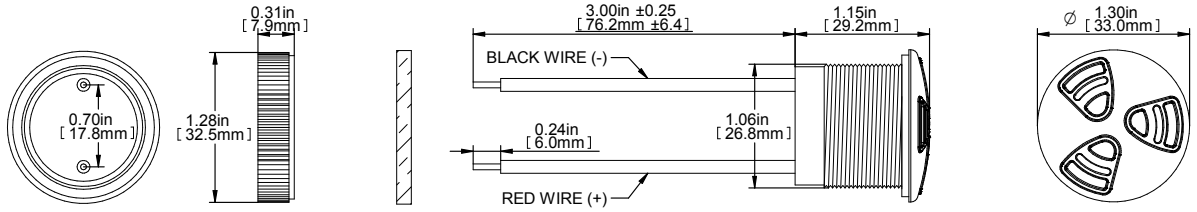
Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-88R-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

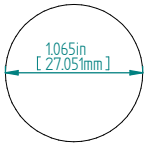
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

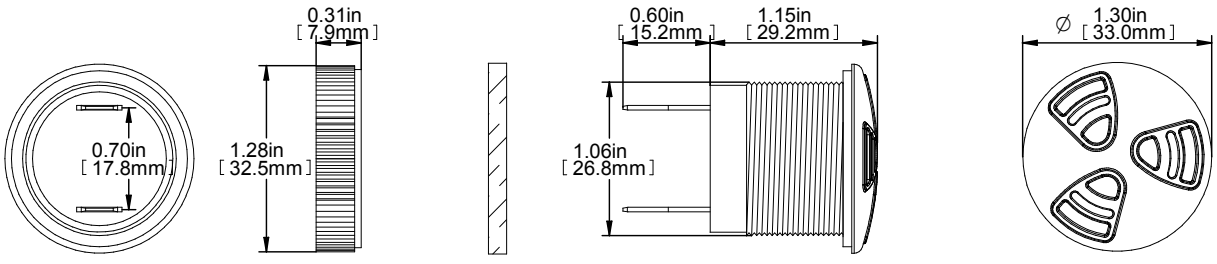
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-88R-930-S

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

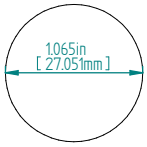
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

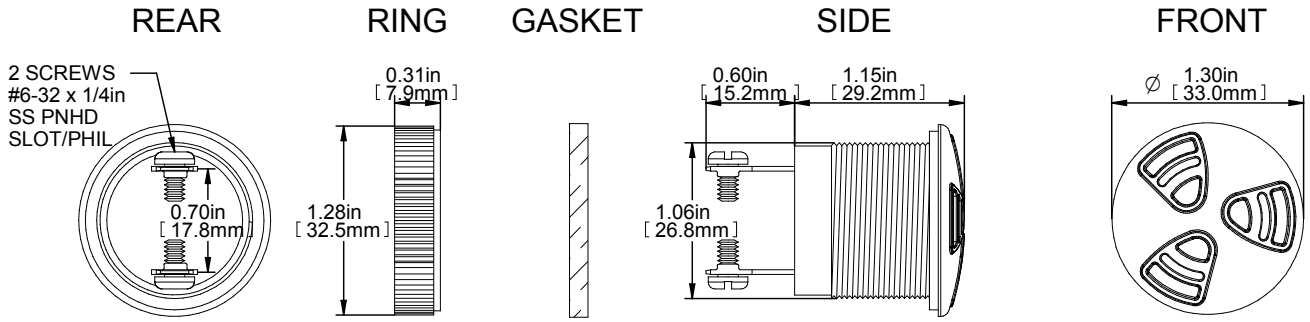
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-88R-930-W

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

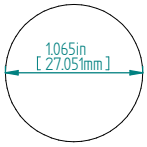
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

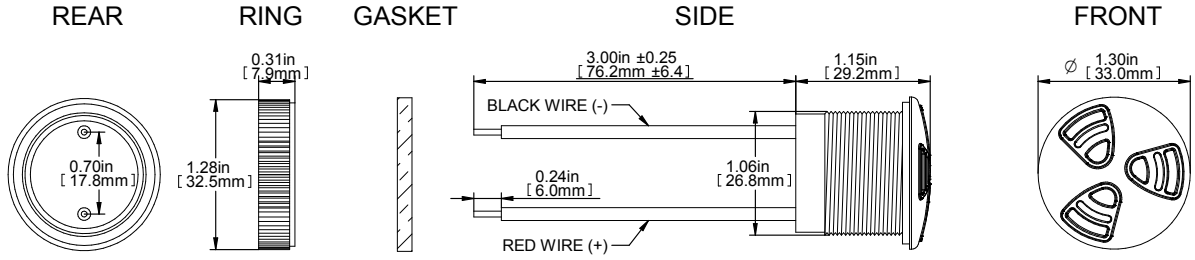
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.15

Copyright © 2015 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-88W-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

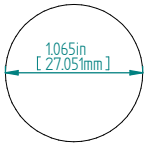
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

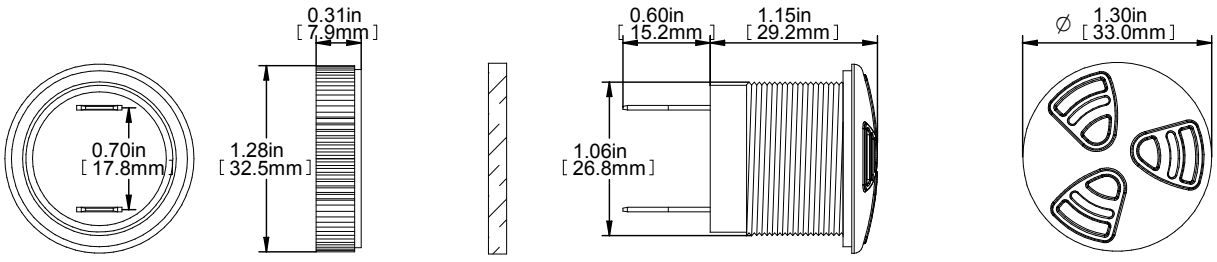
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-88W-930-S

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

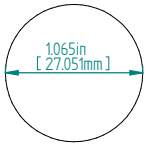
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

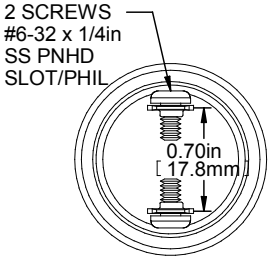
PANEL MOUNTING



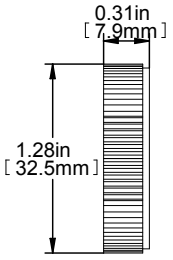
FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

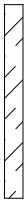
REAR



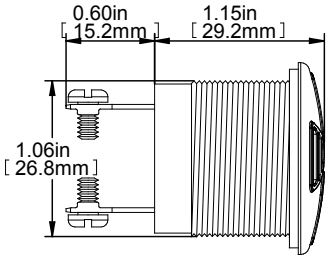
RING



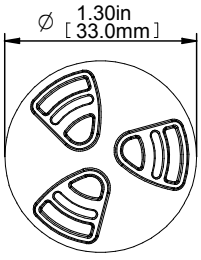
GASKET



SIDE



FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-88W-930-W

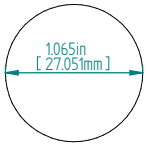
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

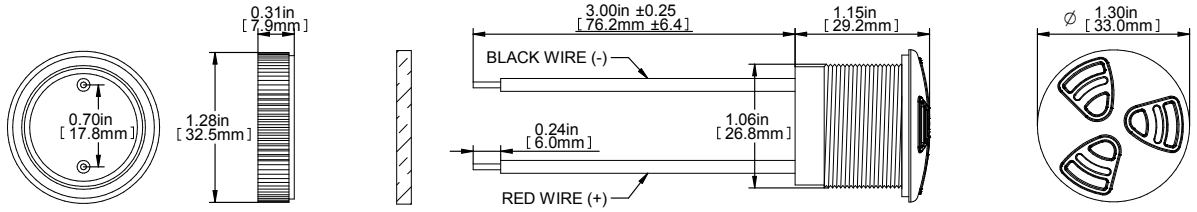
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-88Y-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

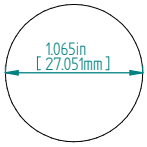
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

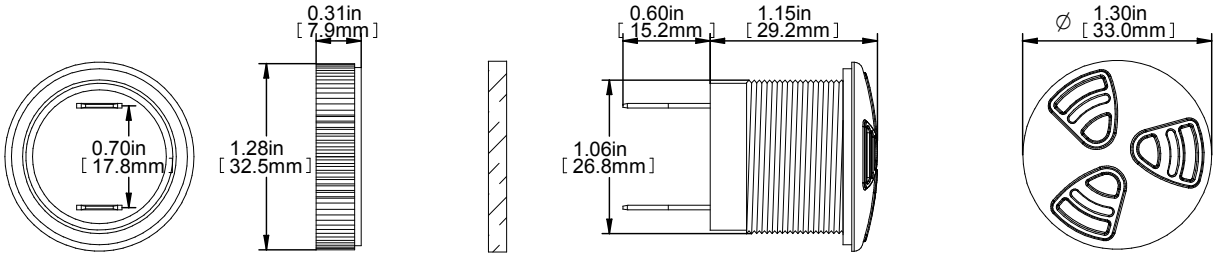
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-88Y-930-S

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

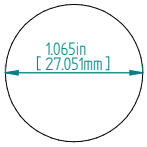
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

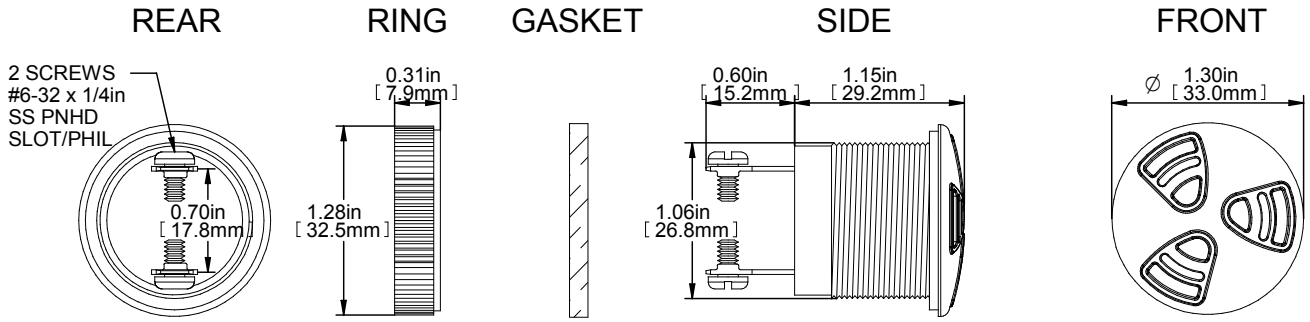
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-88Y-930-W

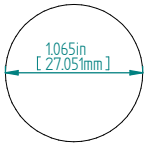
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

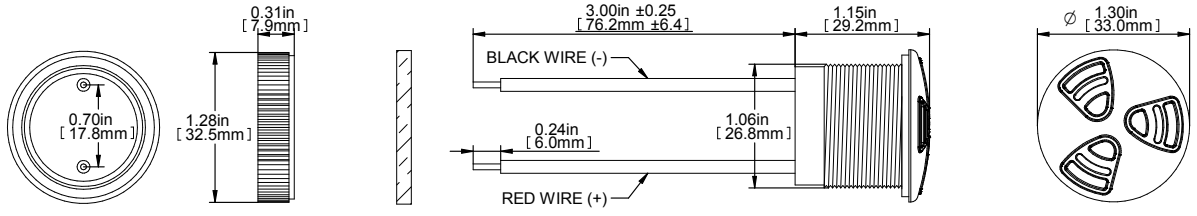
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

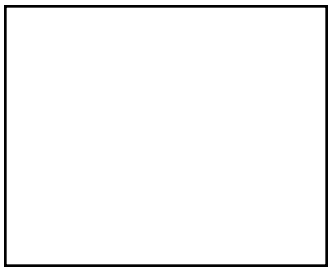
Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-V88G-930-Q

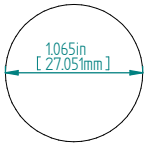
Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

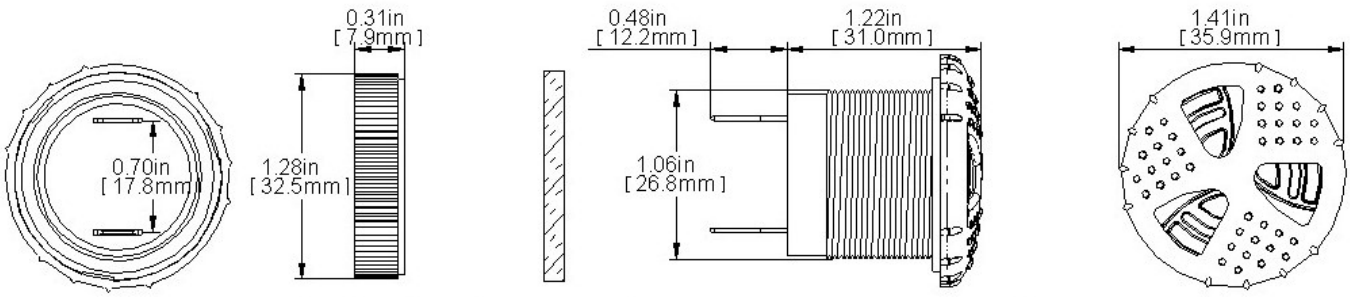
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: *85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED
Dimensions shown with volume control installed on unit.

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLHC-V88R-930-Q

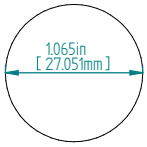
Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

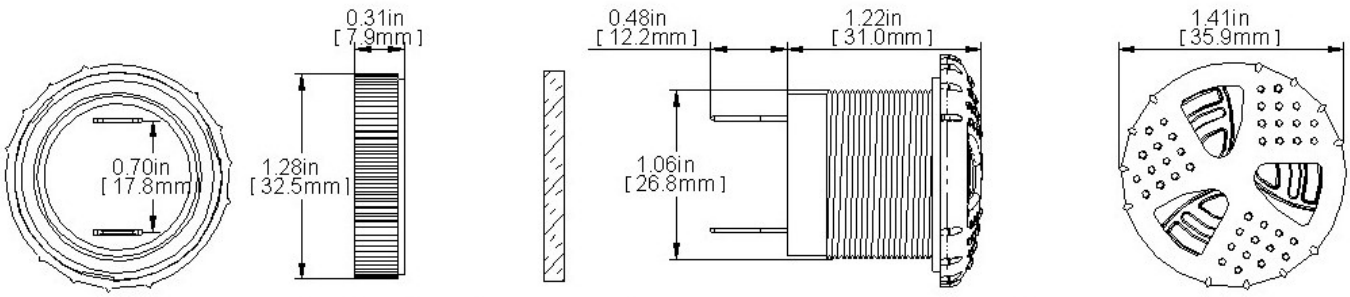
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: *85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED
Dimensions shown with volume control installed on unit.

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.13

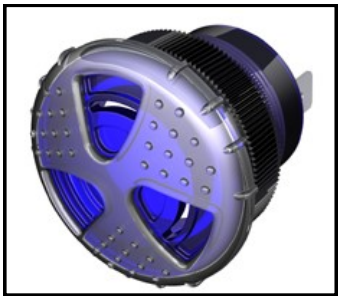
Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-V88B-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

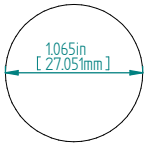
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With the volume control fully open. *85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

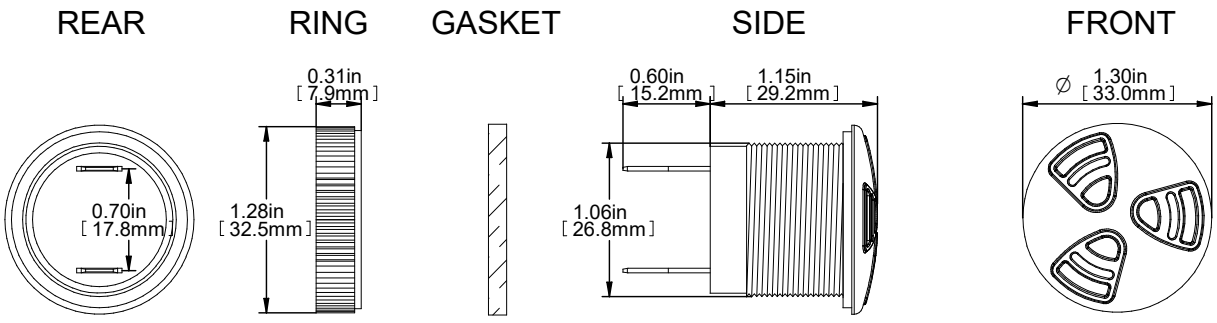
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-88B-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

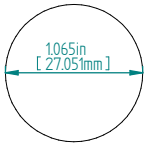
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

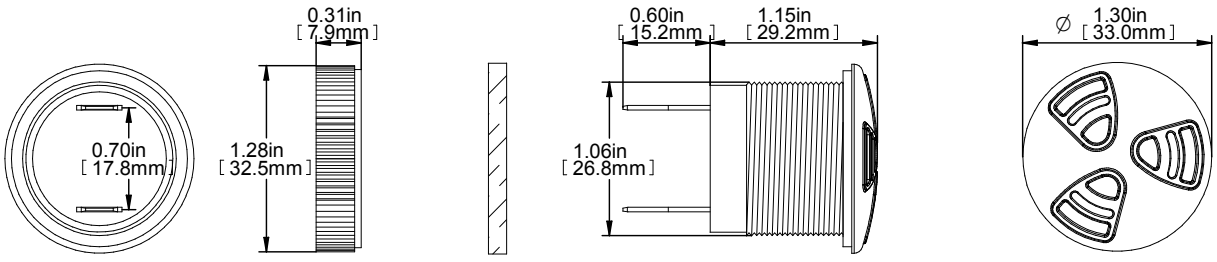
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-88B-930-S

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

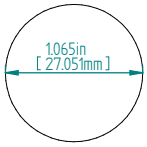
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

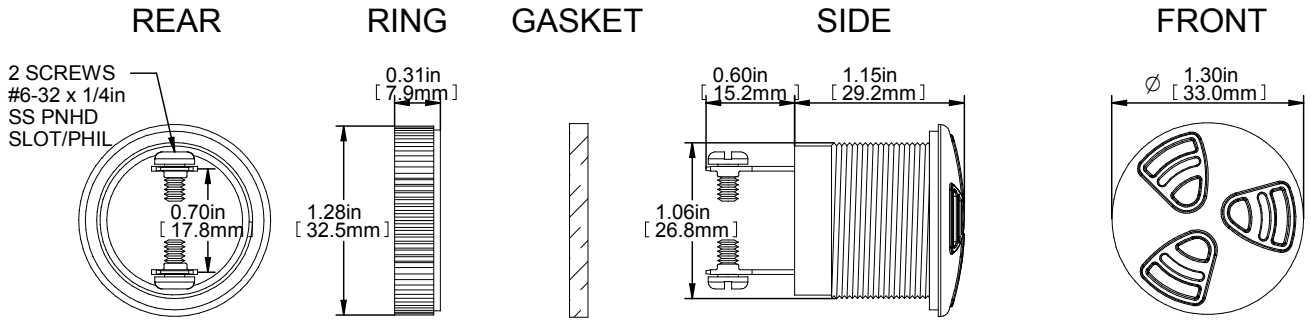
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-88B-930-W

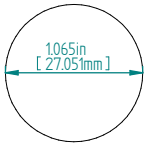
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

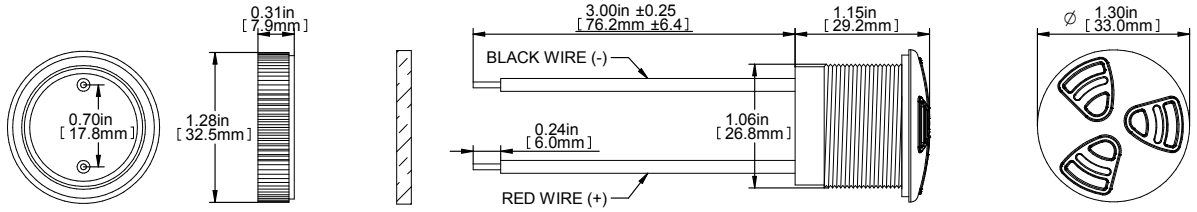
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-88G-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

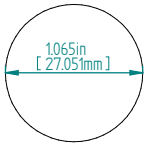
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

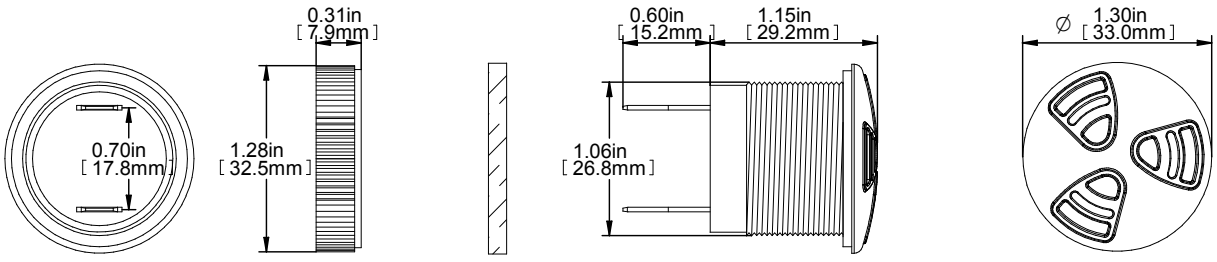
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-88G-930-S

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

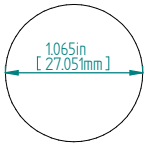
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

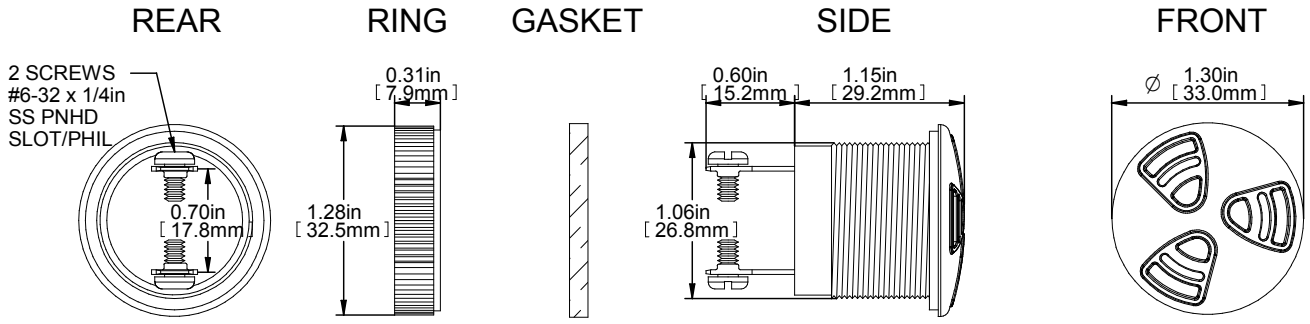
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-88G-930-W

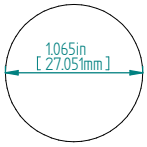
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

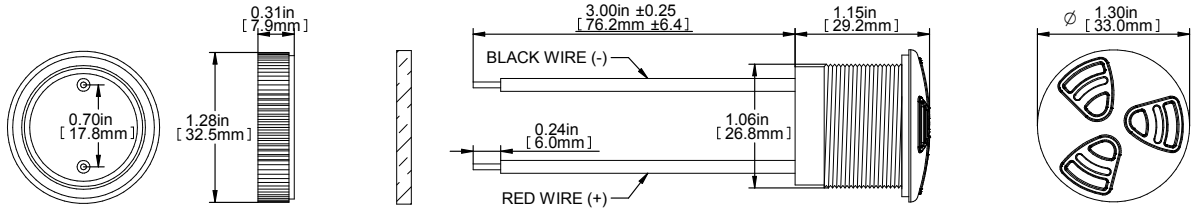
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-88R-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

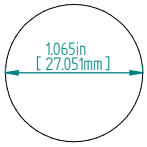
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

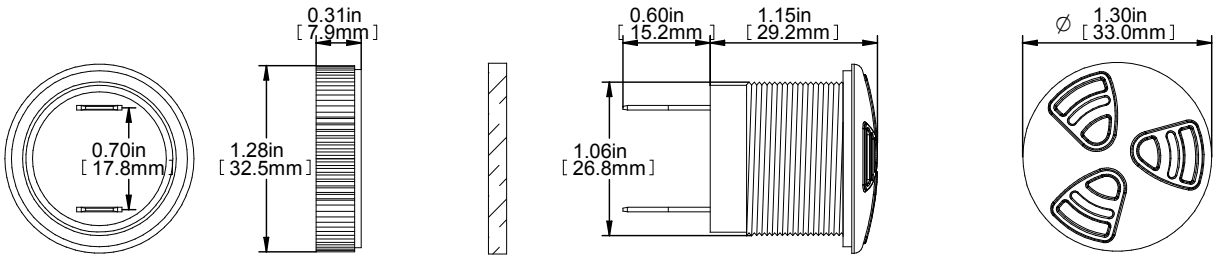
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-88R-930-S

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

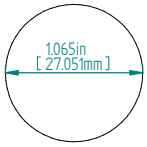
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

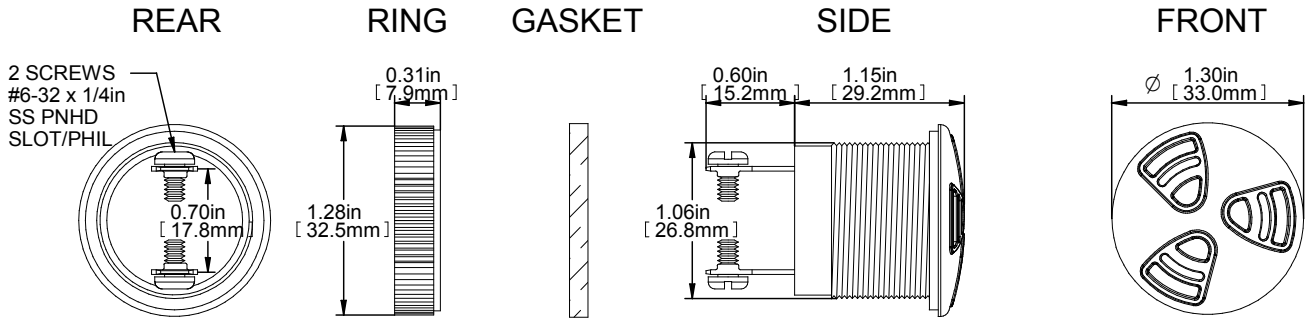
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-88R-930-W

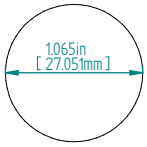
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

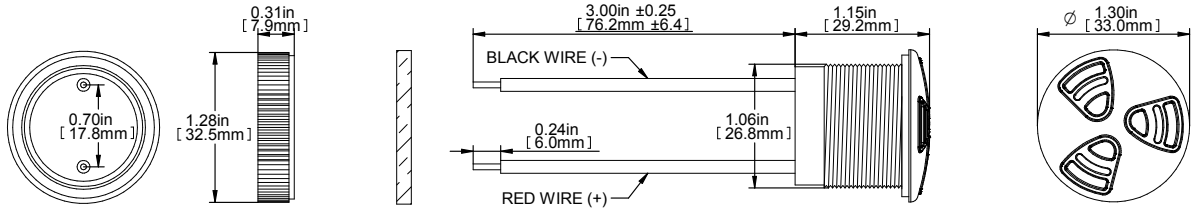
Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-88W-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

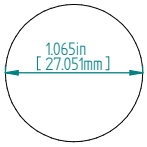
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

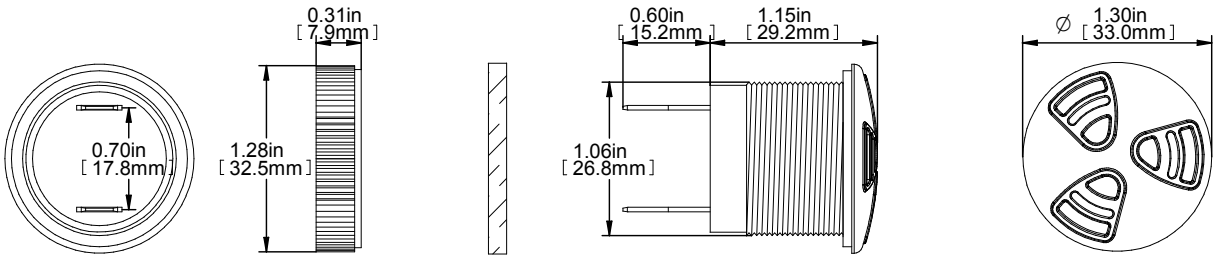
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-88W-930-S

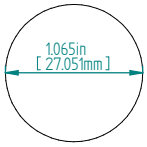
Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

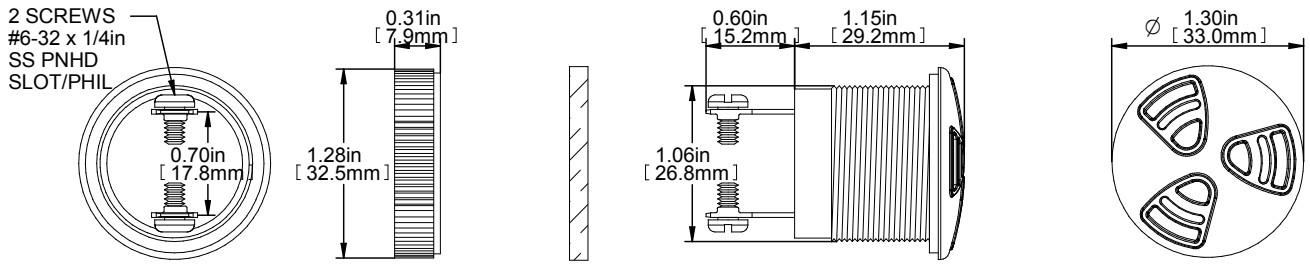
Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-88W-930-W

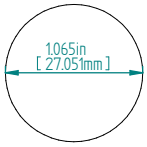
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

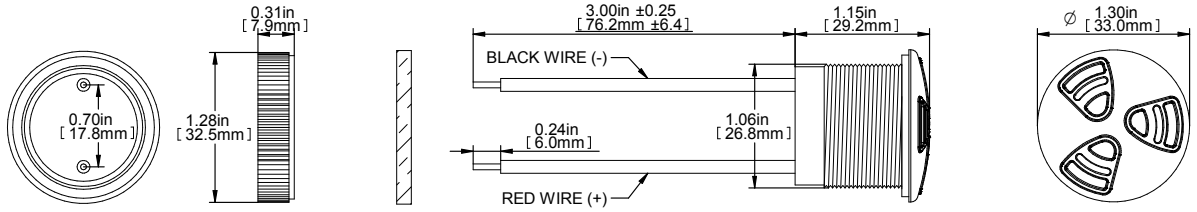
Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-88B-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

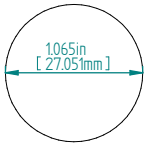
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

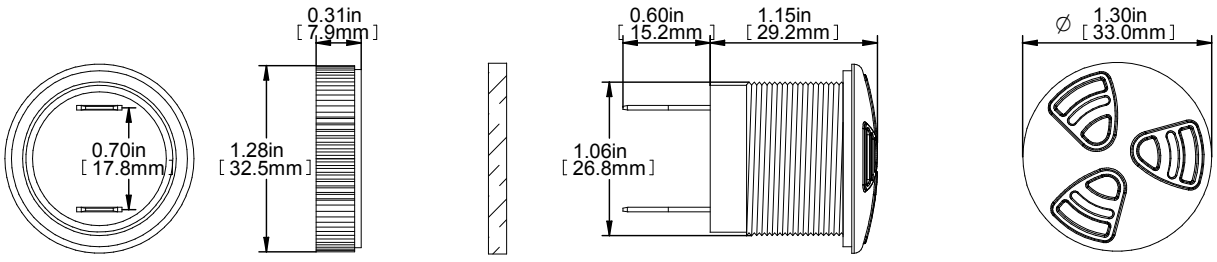
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-88Y-930-S

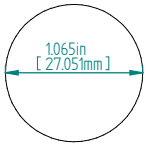
Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

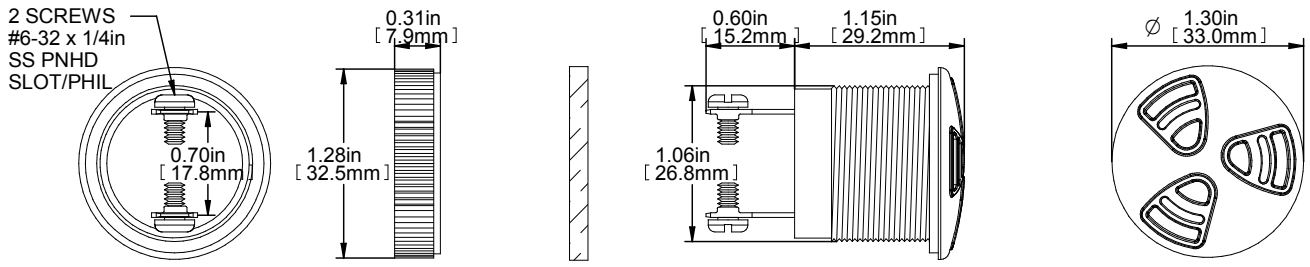
Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-88B-930-W

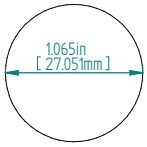
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

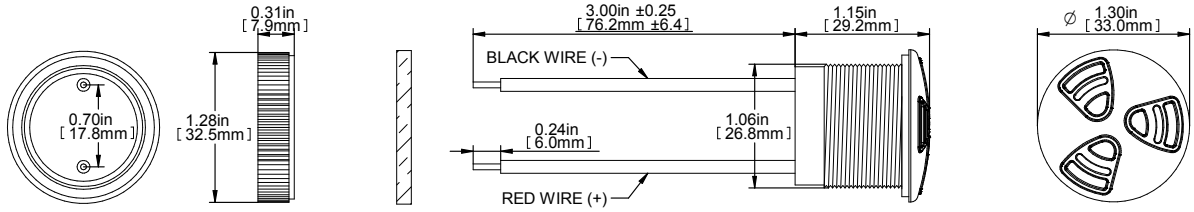
Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

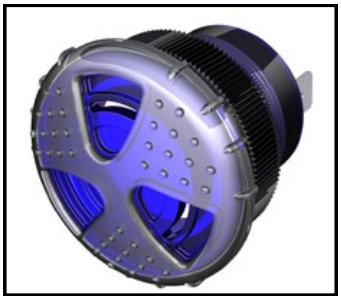
Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHO-V88B-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

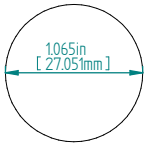
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With the volume control fully open. *85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

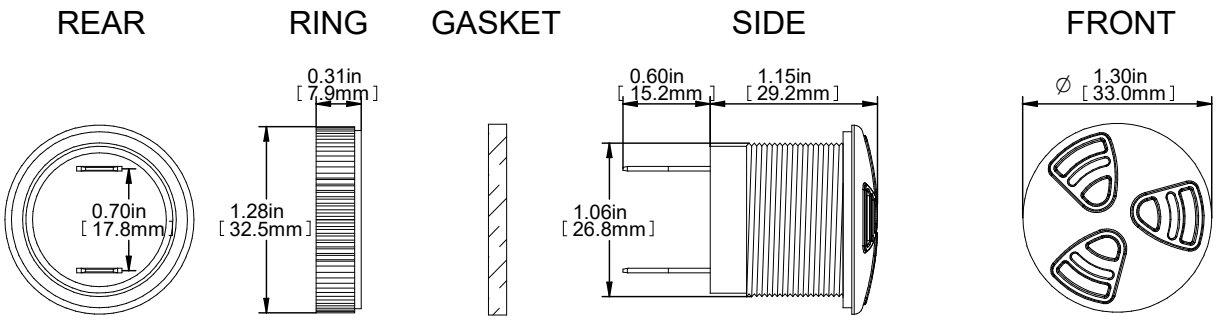
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88B-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

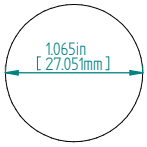
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

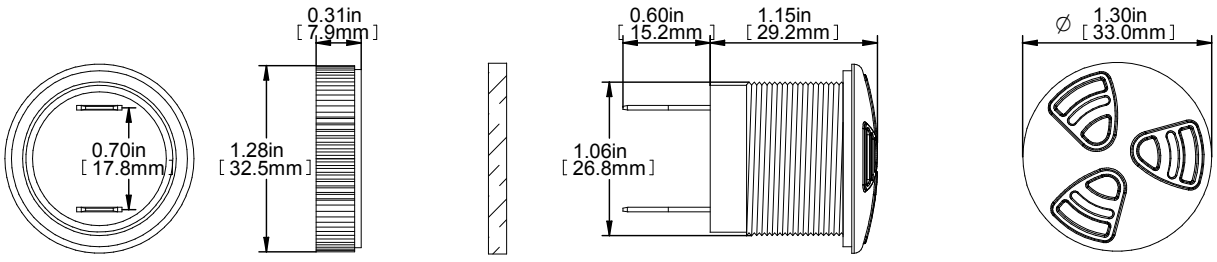
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88B-930-S

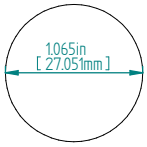
Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

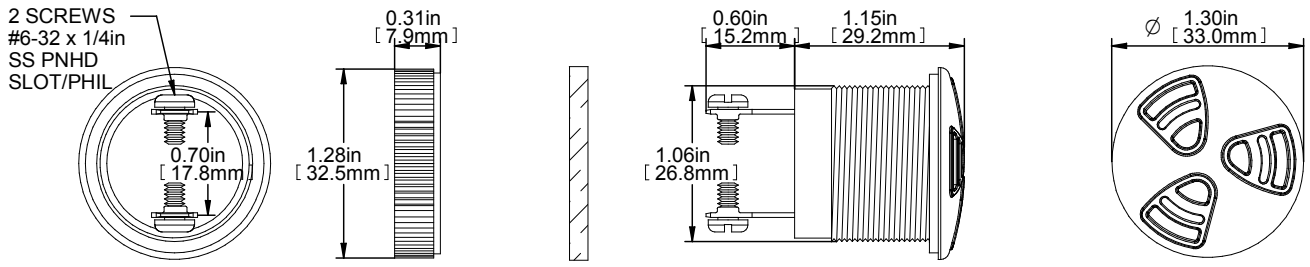
Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88B-930-W

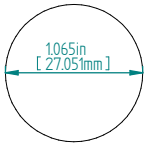
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

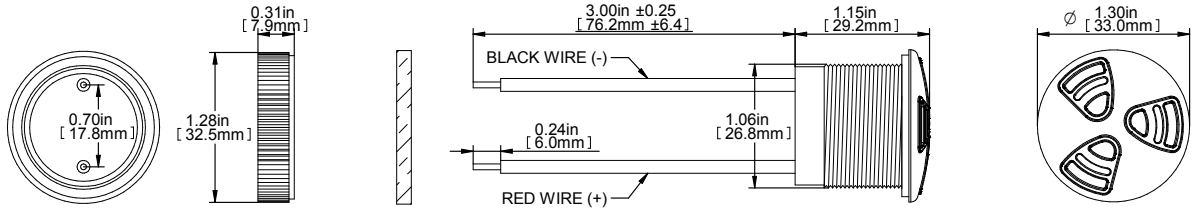
Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88G-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

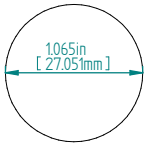
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

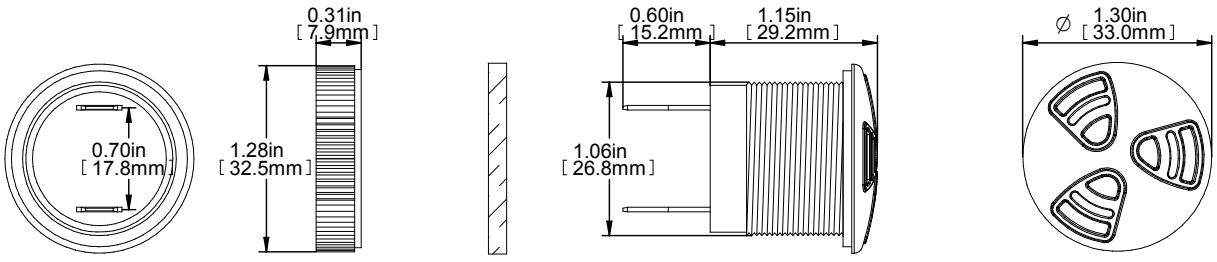
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88G-930-S

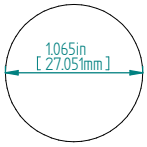
Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

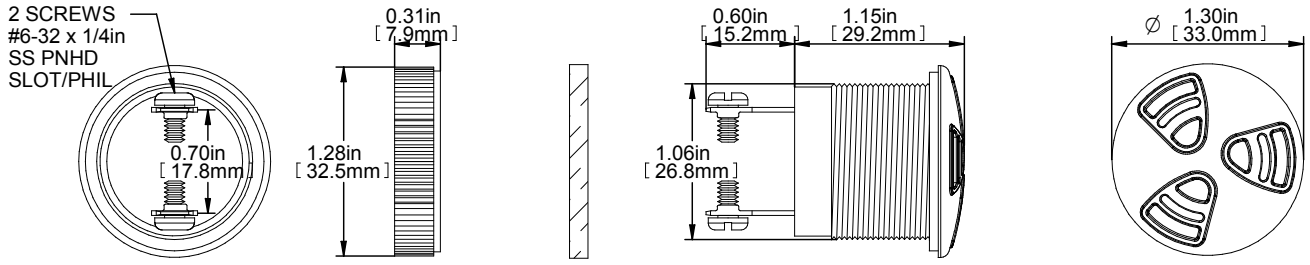
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88G-930-W

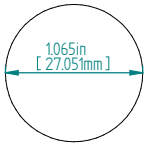
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

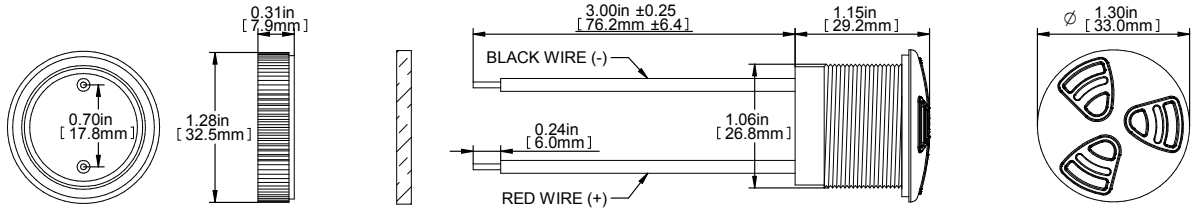
Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88R-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

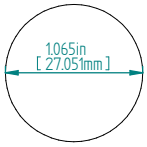
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

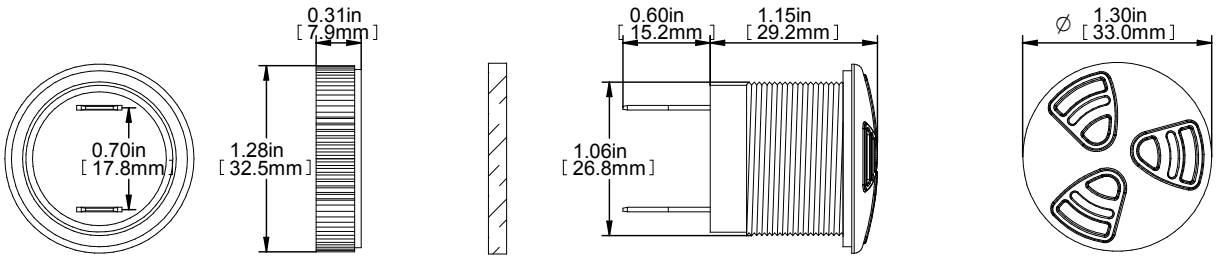
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88R-930-S

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

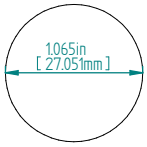
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

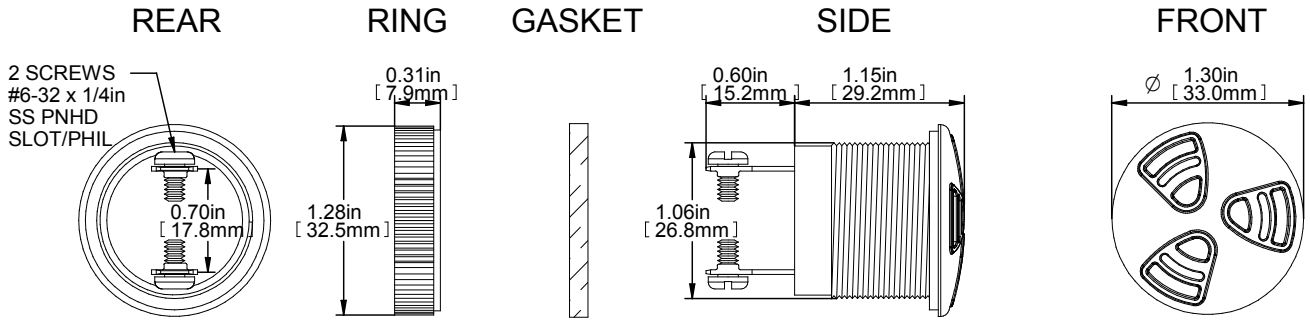
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88R-930-W

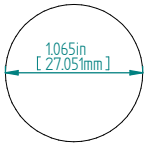
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

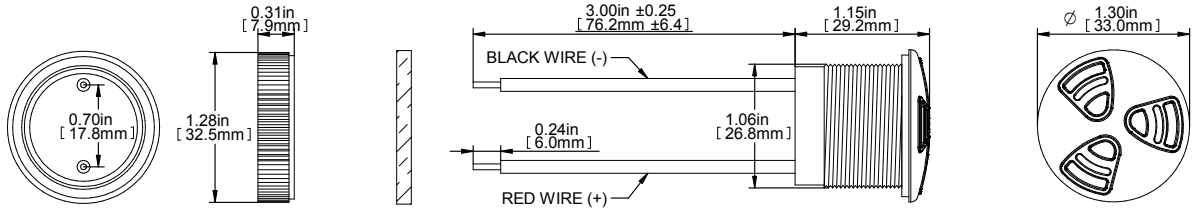
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88W-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

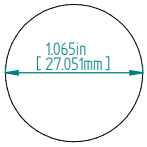
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

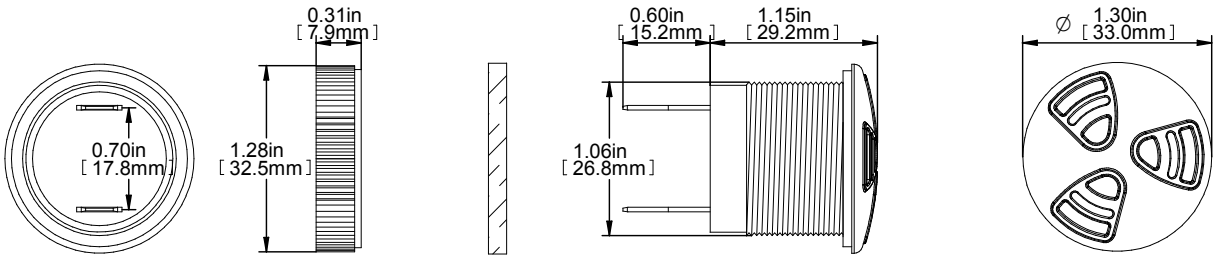
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88W-930-S

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

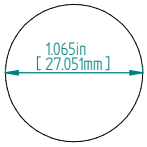
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

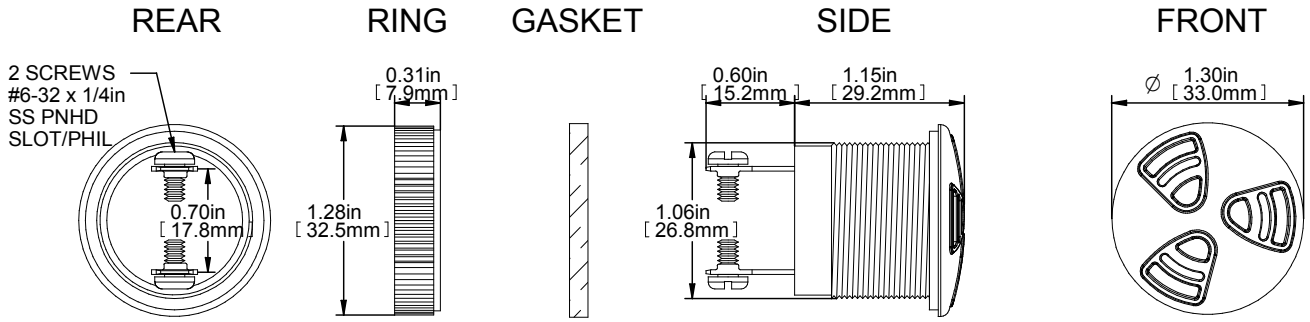
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88W-930-W

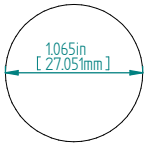
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

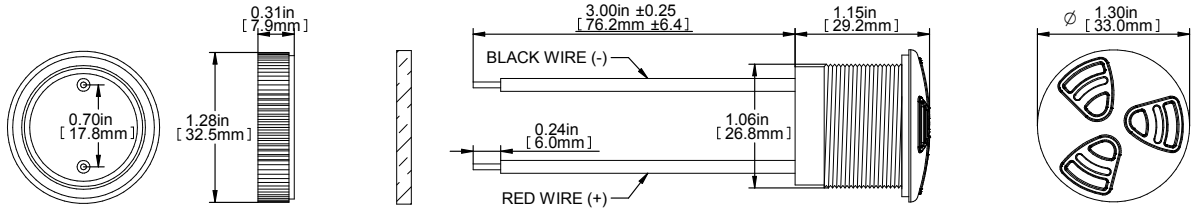
Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88Y-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

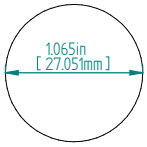
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

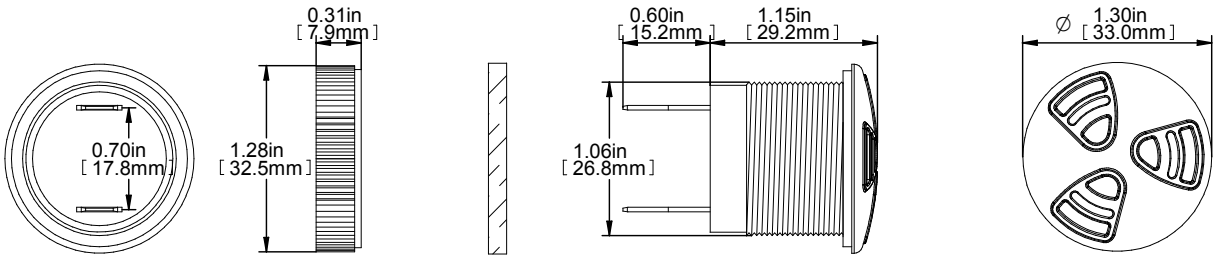
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88Y-930-S

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

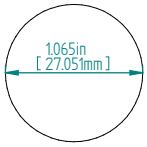
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

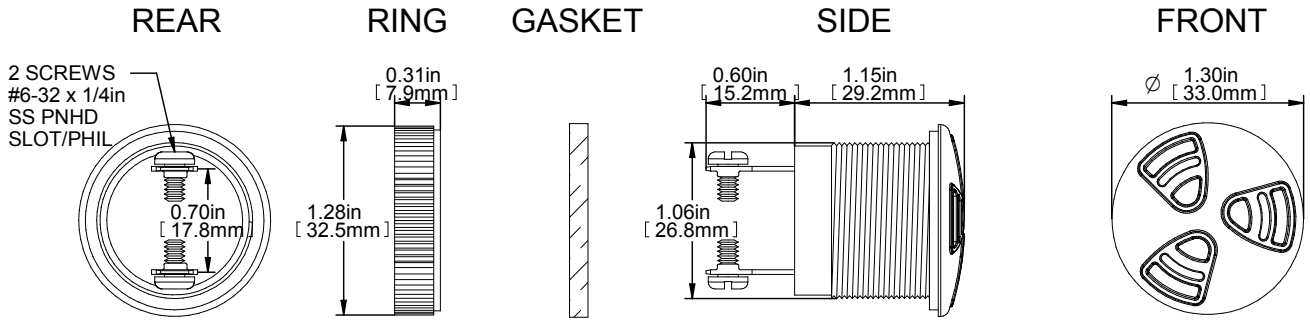
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88Y-930-W

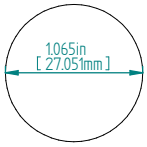
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

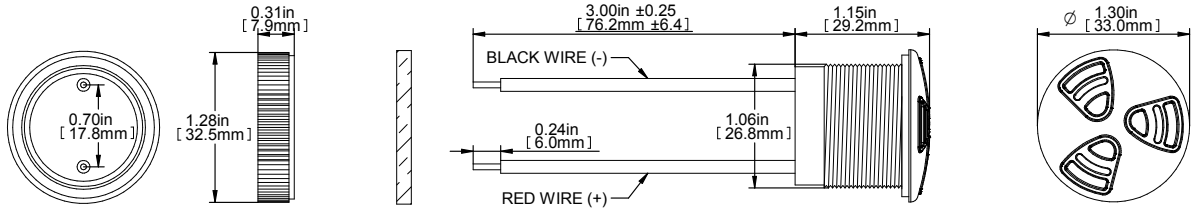
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHS-88R-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

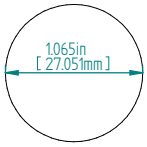
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: *85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

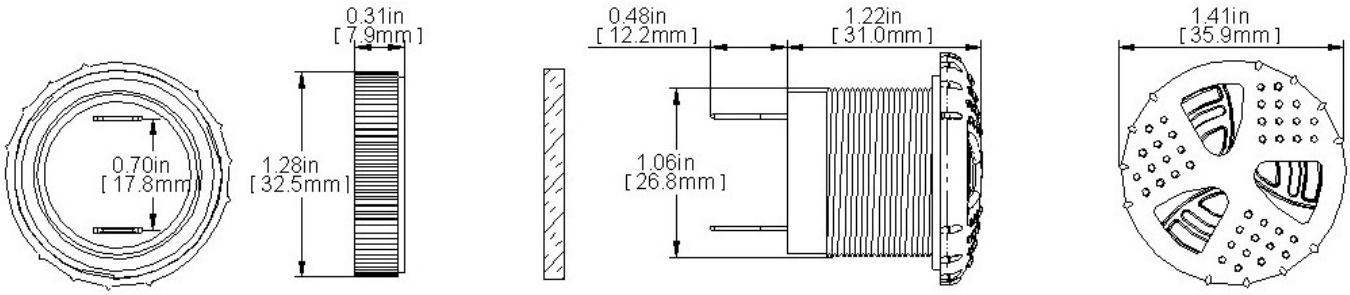
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED
Dimensions shown with volume control installed on unit.

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 1.20

Copyright © 2020 Floyd Bell Inc.

All specifications subject to change without notice.

TLHT-88B-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

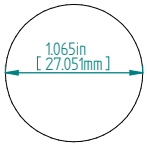
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Staccato Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

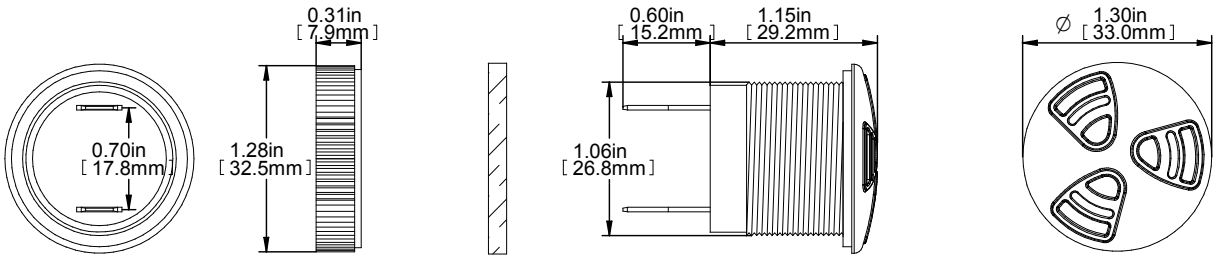
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHT-88B-930-W

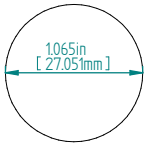
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

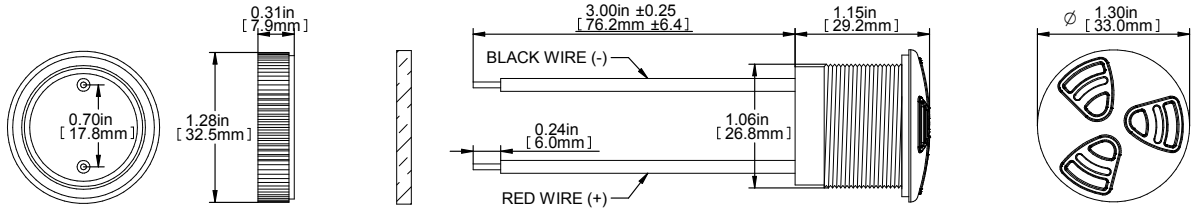
Operating Mode:	Extra Bright LED Plus Extra Loud Staccato Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHT-88G-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

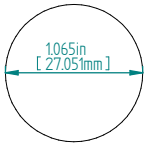
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Staccato Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

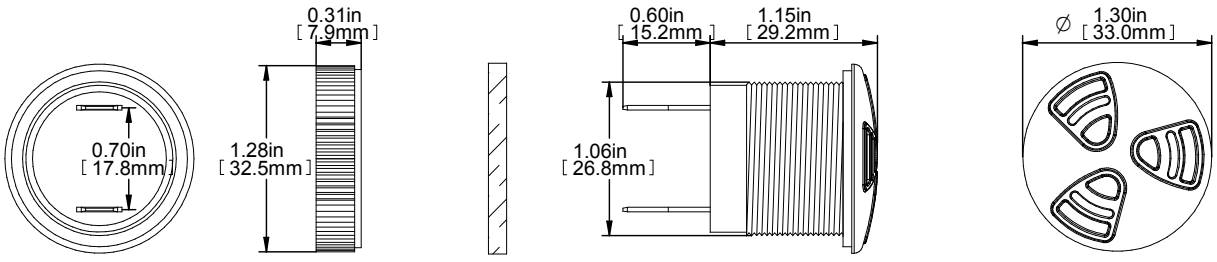
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHT-88G-930-W

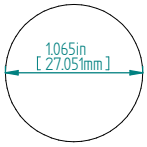
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

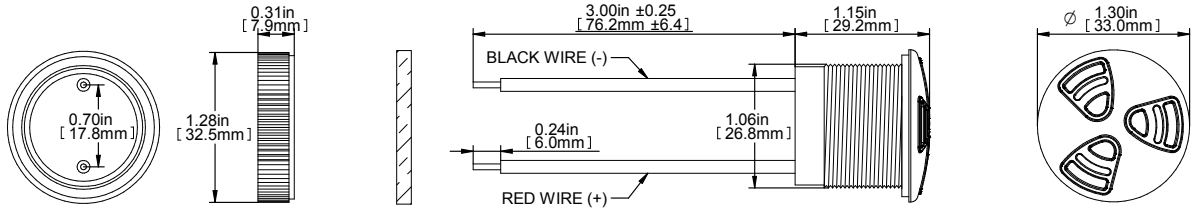
Operating Mode:	Extra Bright LED Plus Extra Loud Staccato Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHT-88R-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

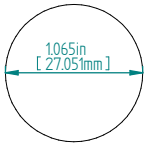
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Staccato Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

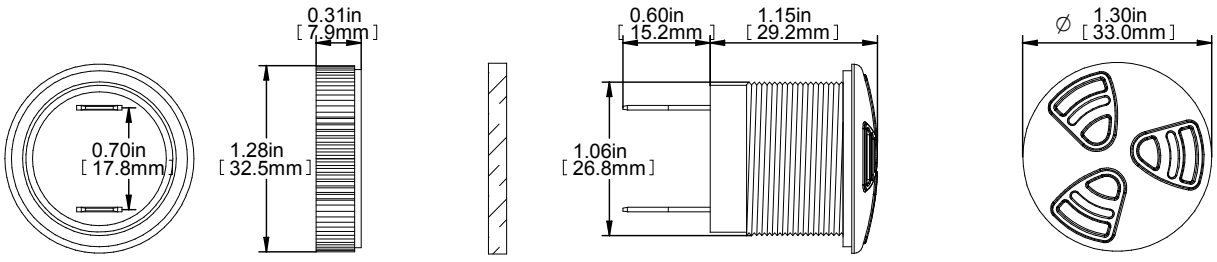
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHT-88R-930-S

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

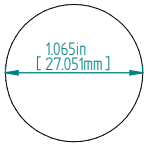
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Staccato Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

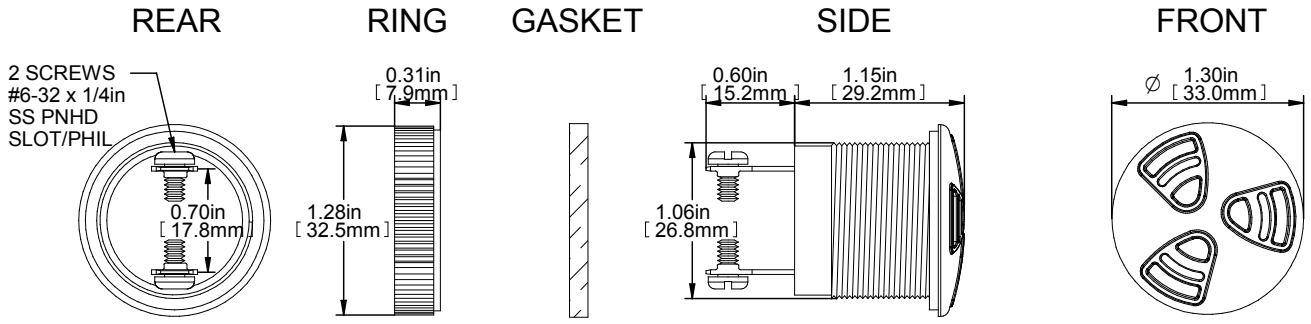
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHT-88R-930-W

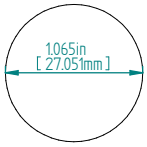
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

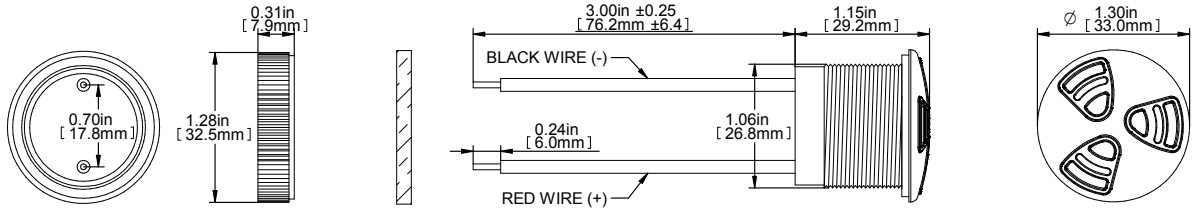
Operating Mode:	Extra Bright LED Plus Extra Loud Staccato Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHT-88W-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

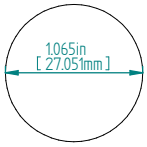
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Staccato Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

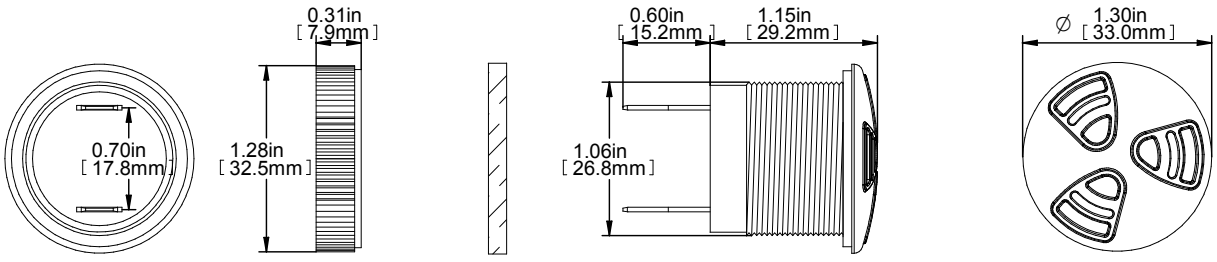
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHT-88W-930-W

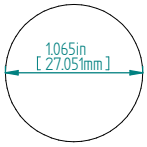
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

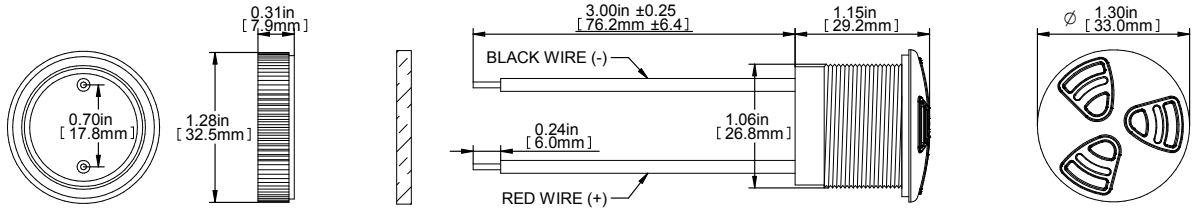
Operating Mode:	Extra Bright LED Plus Extra Loud Staccato Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHT-88Y-930-Q

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

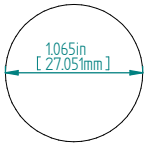
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Staccato Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

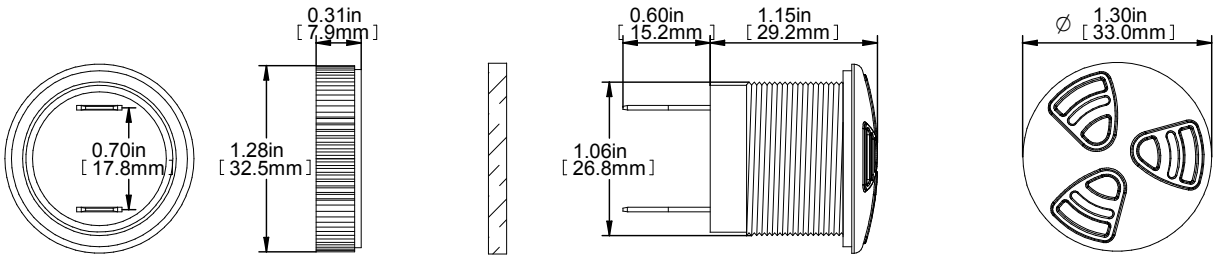
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHT-88Y-930-W

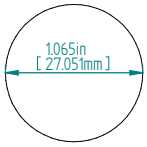
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

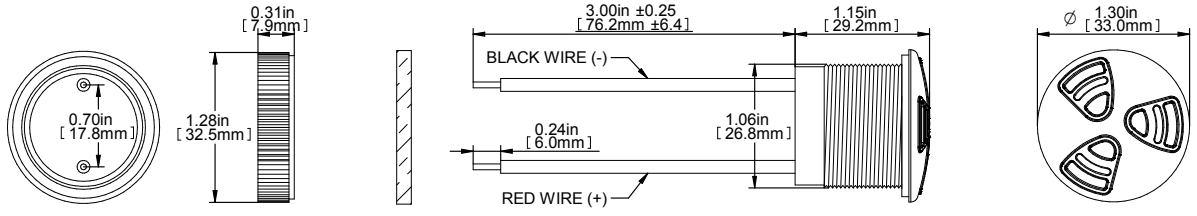
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Staccato Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88B-930-QF

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

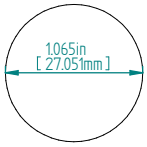
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

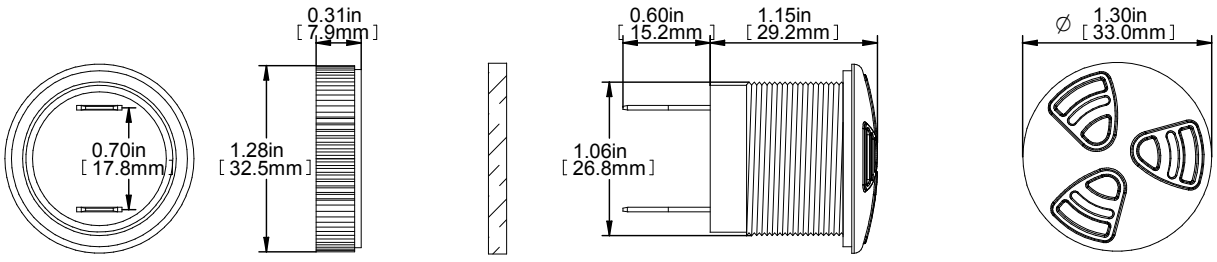
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88B-930-QS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

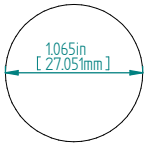
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

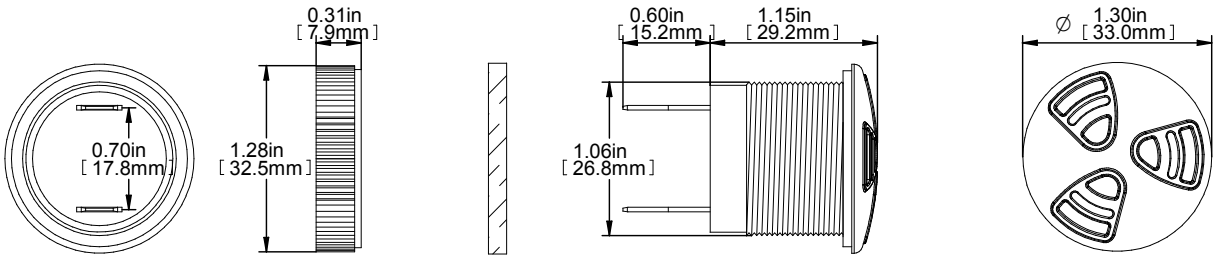
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88B-930-SF

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

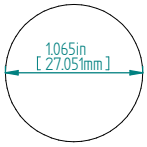
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

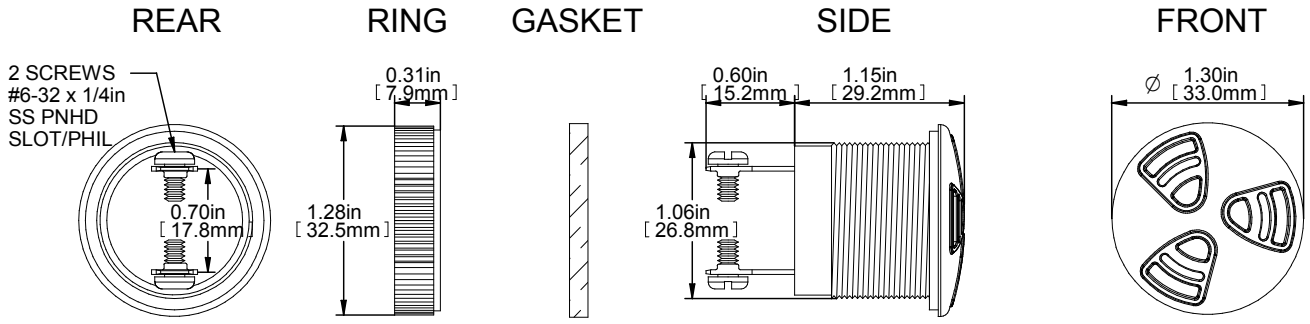
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88B-930-SS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

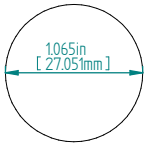
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

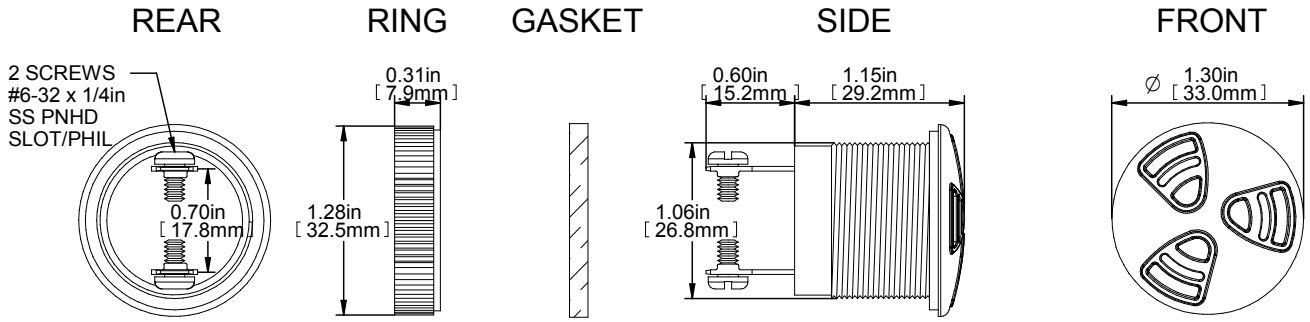
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88B-930-WF

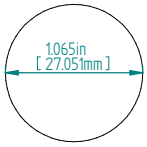
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

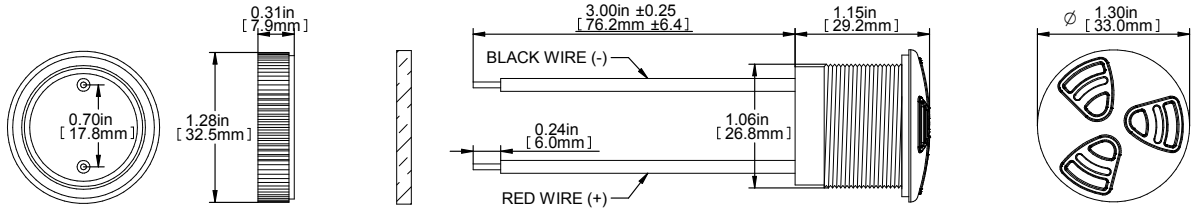
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88B-930-WS

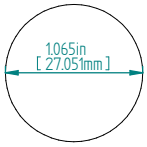
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Blue light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

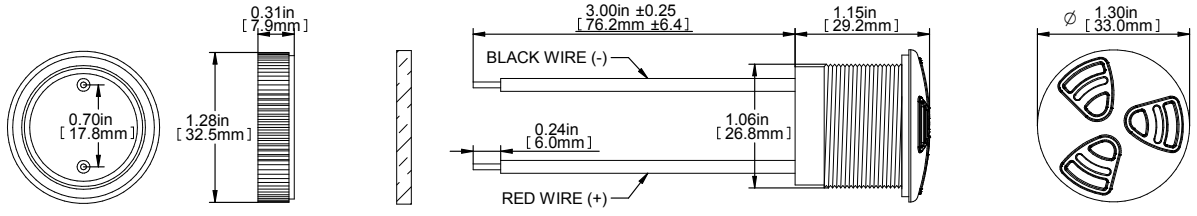
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88G-930-QF

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

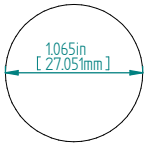
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

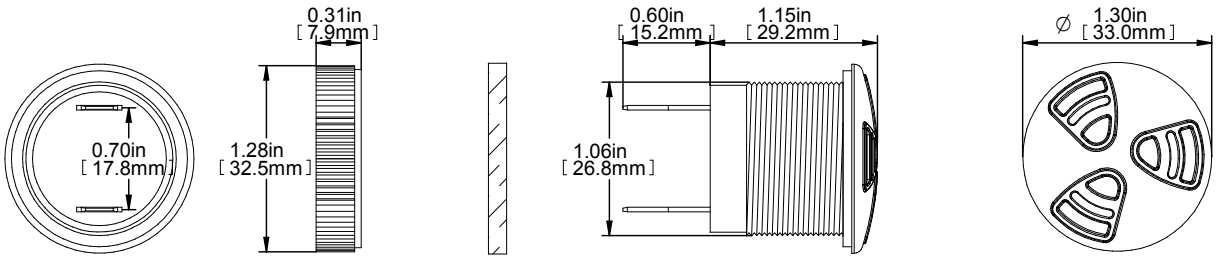
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88G-930-QS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

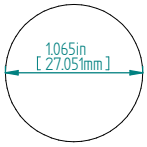
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

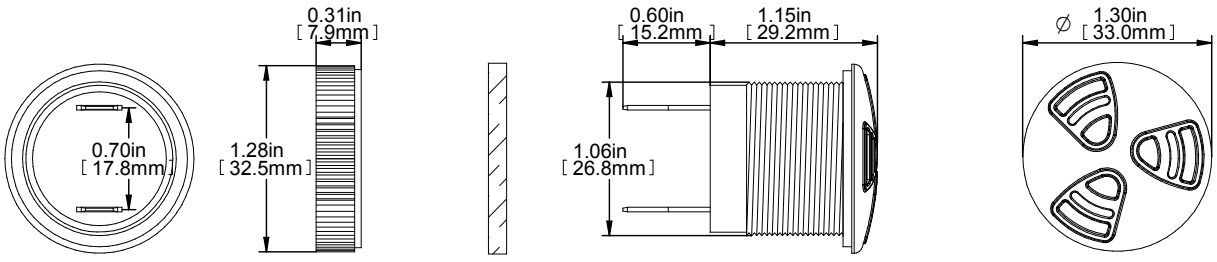
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88G-930-SF

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

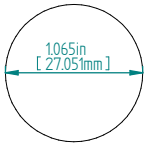
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

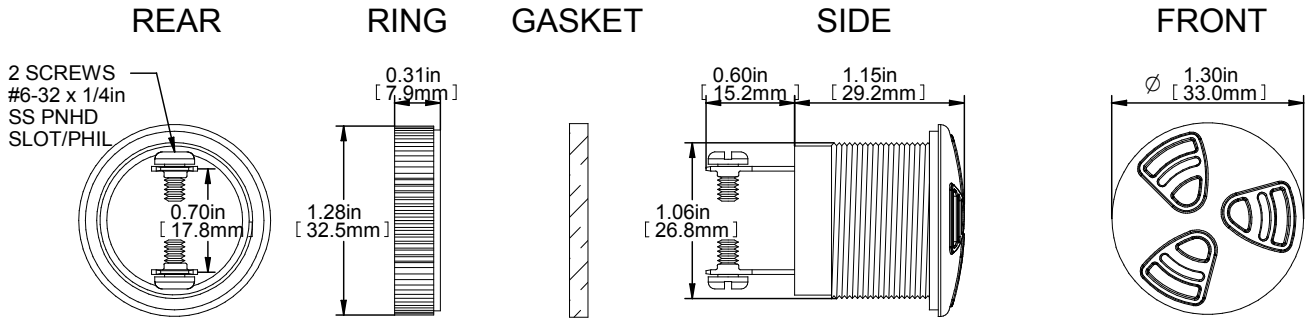
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88G-930-SS

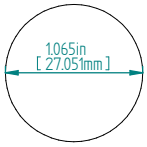
Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

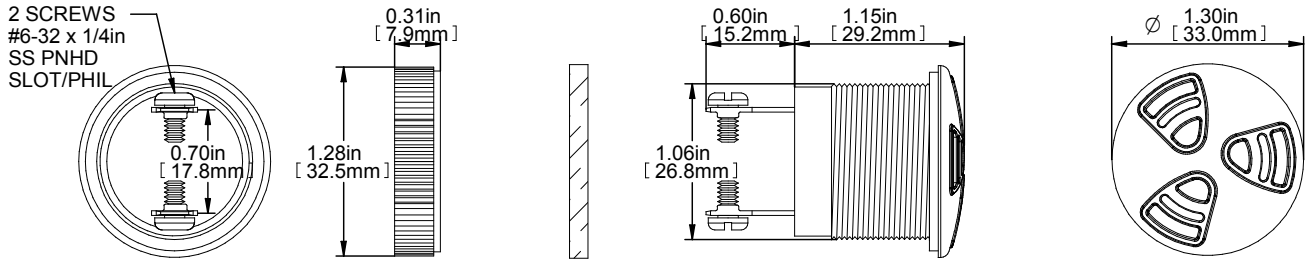
Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88G-930-WF

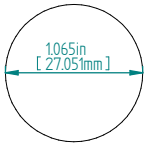
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

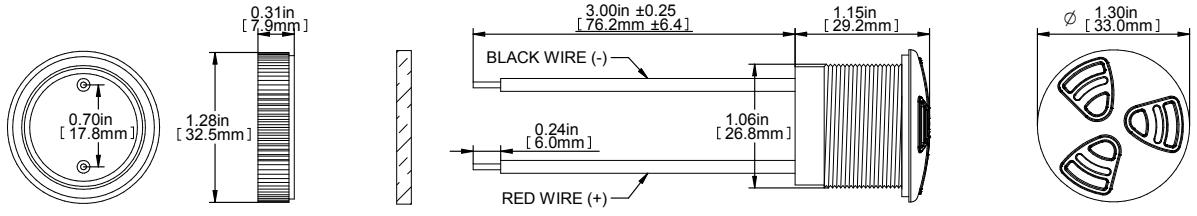
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88G-930-WS

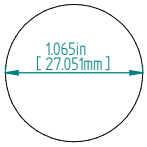
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Green light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

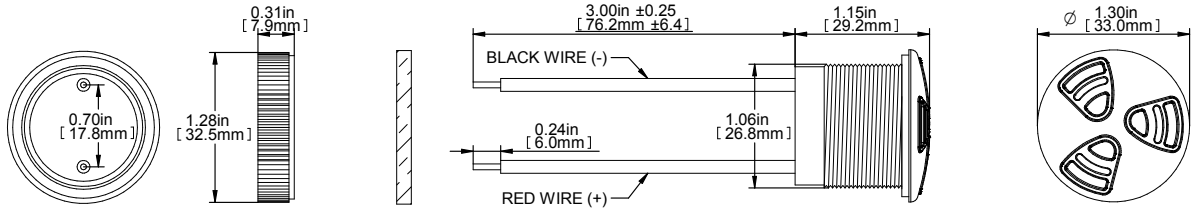
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

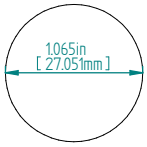
TLHW-88R-930-QF

Made in USA



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- RoHS Compliant

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

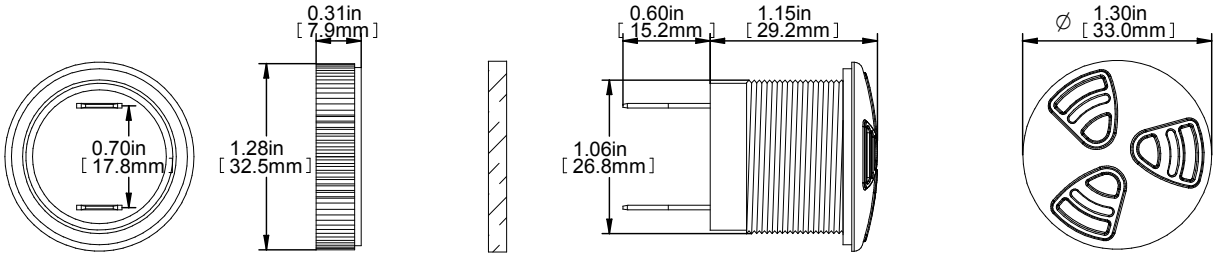
Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88R-930-QS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

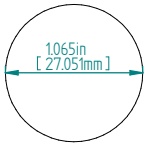
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

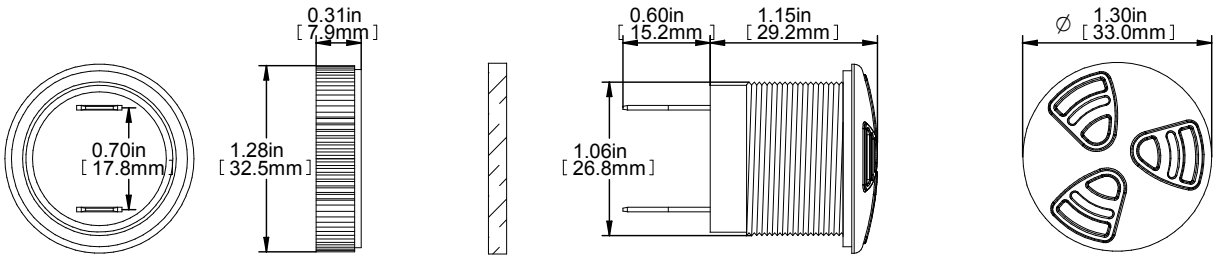
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88R-930-SF

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

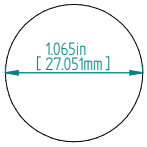
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

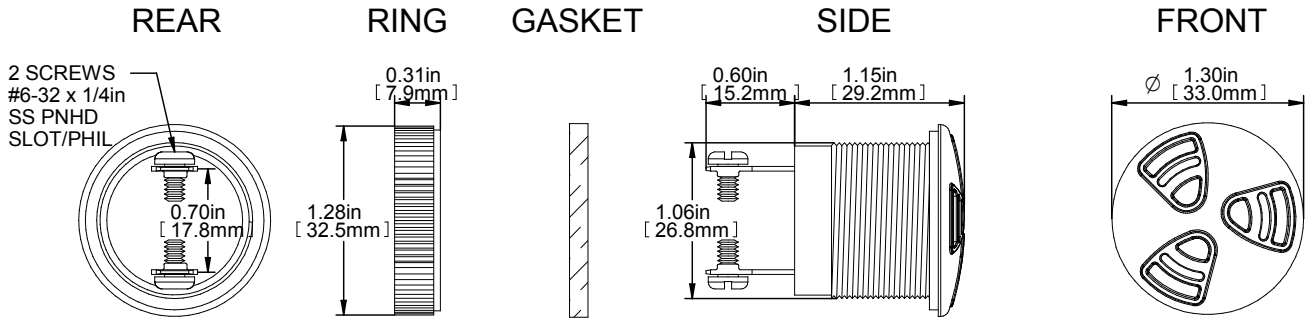
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88R-930-SS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

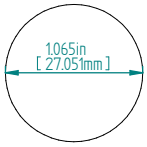
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

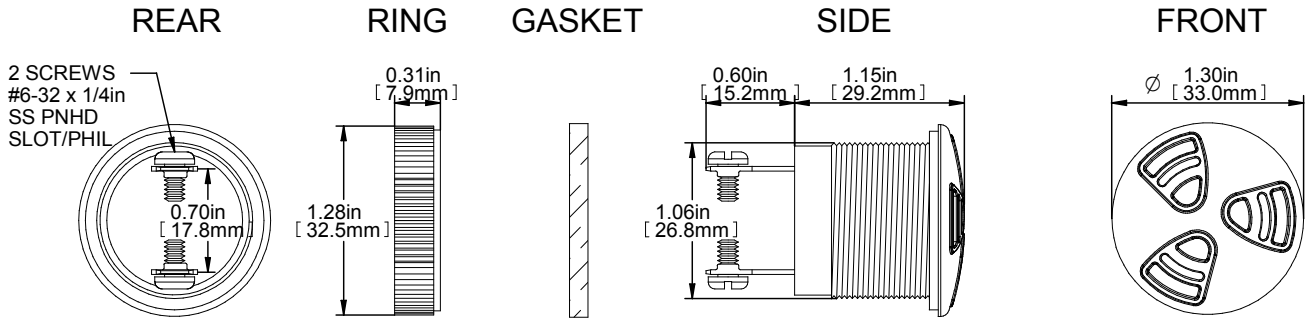
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

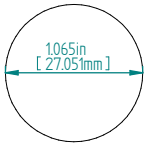
TLHW-88R-930-WF

Made in USA

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- RoHS Compliant

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

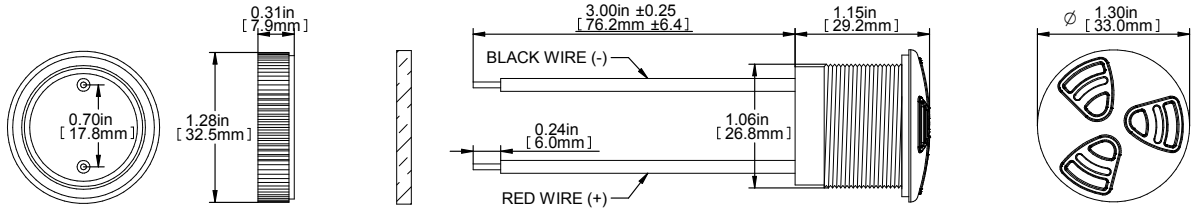
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88R-930-WS

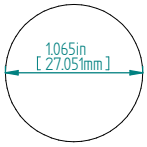
Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

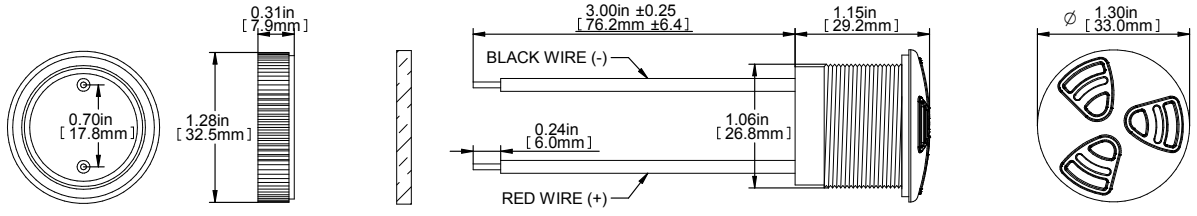
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 8.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88W-930-QF

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

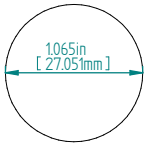
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

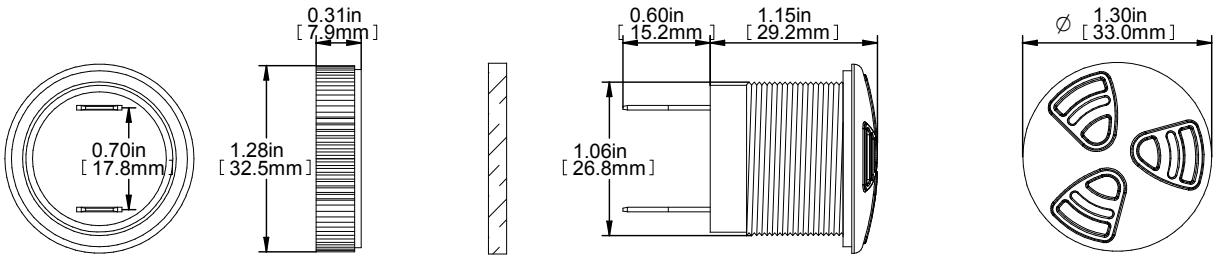
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88W-930-QS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

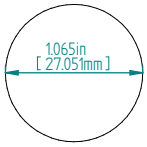
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

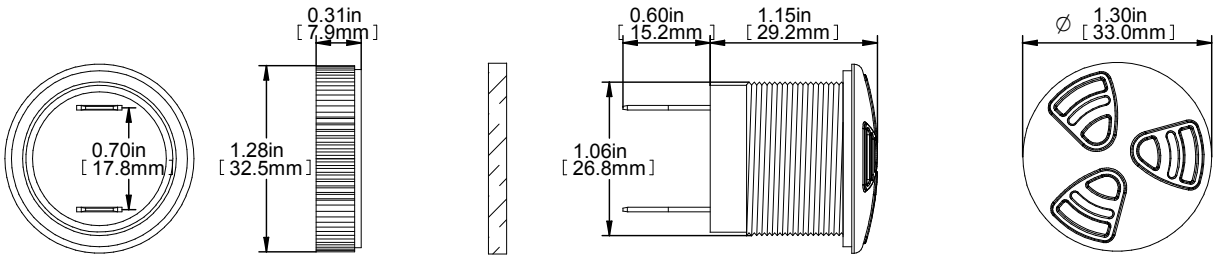
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88W-930-SF

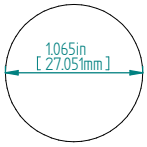
Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

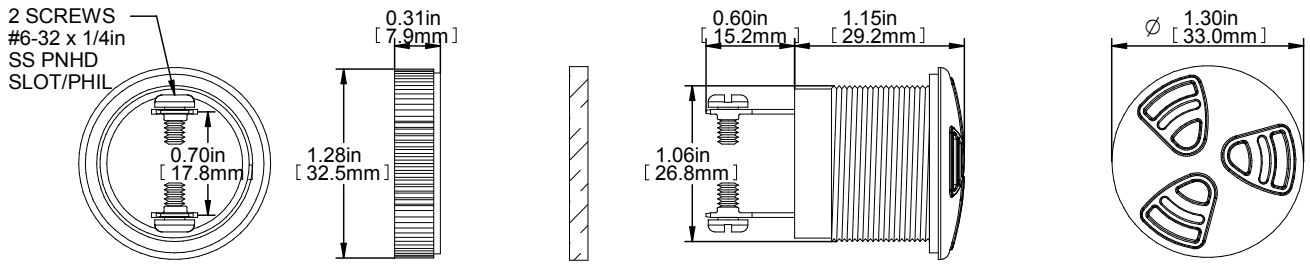
Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88W-930-SS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

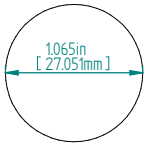
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

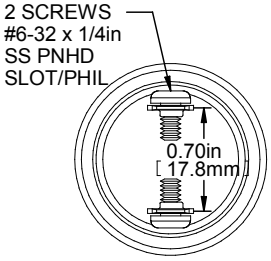
PANEL MOUNTING



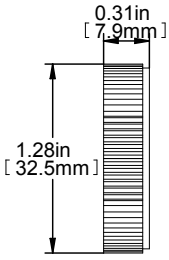
FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

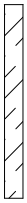
REAR



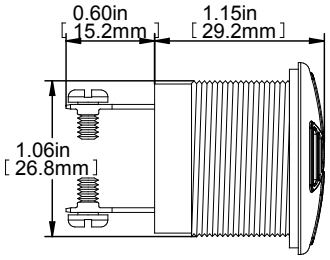
RING



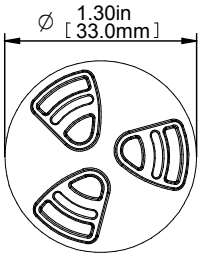
GASKET



SIDE



FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88W-930-WF

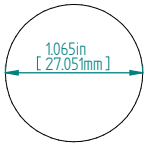
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

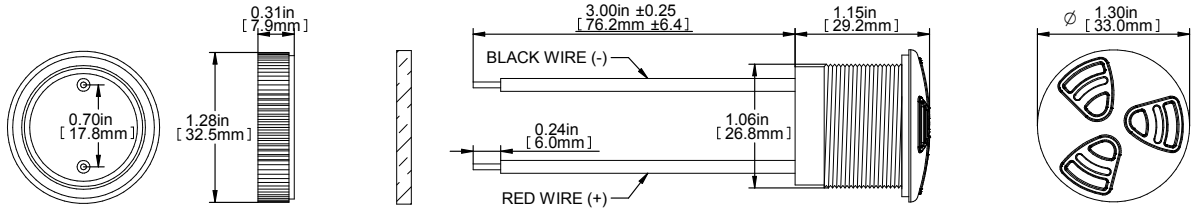
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88W-930-WS

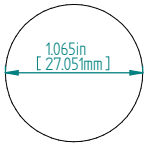
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright White light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

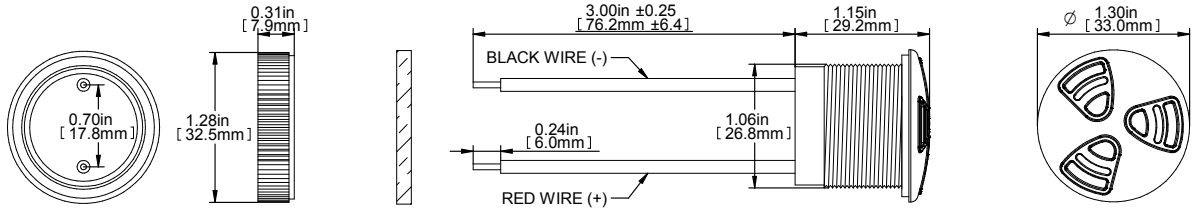
Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

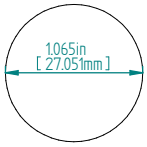
TLHW-88Y-930-QF

Made in USA



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

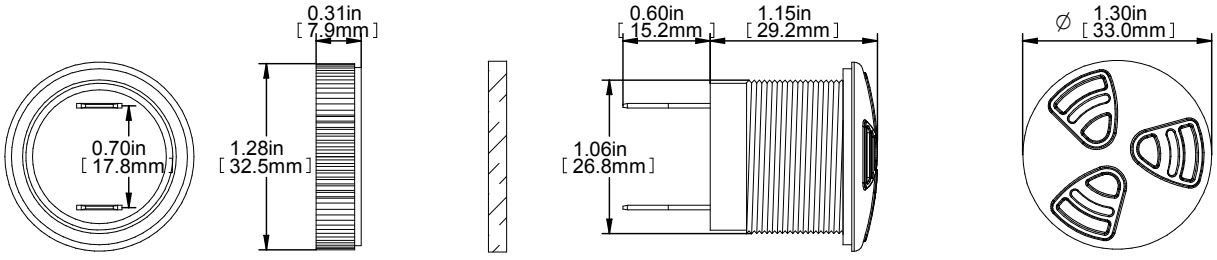
Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88Y-930-QS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

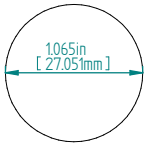
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

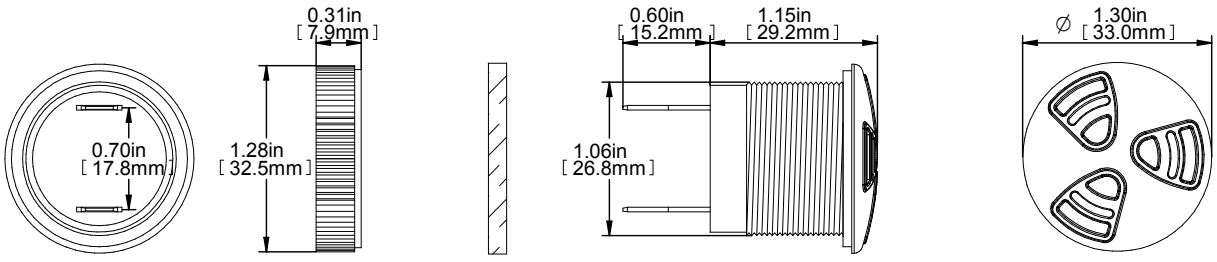
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88Y-930-SF

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

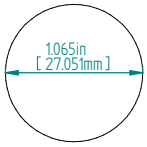
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

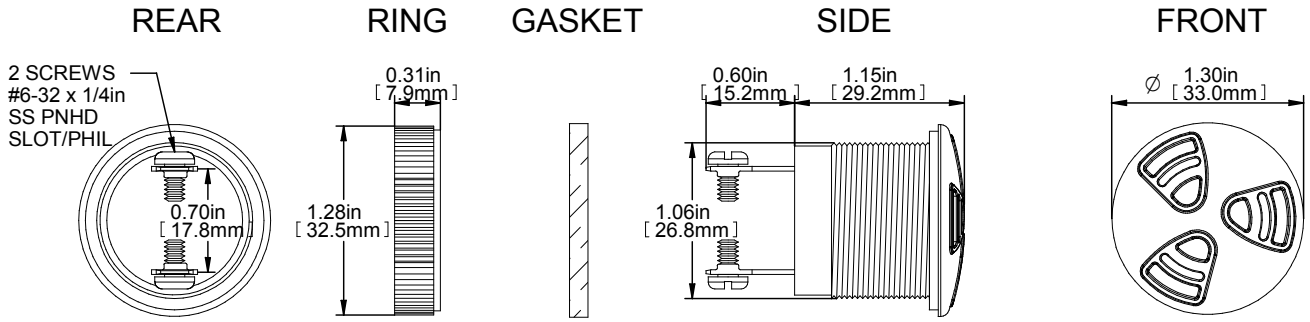
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88Y-930-SS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

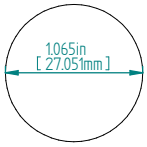
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

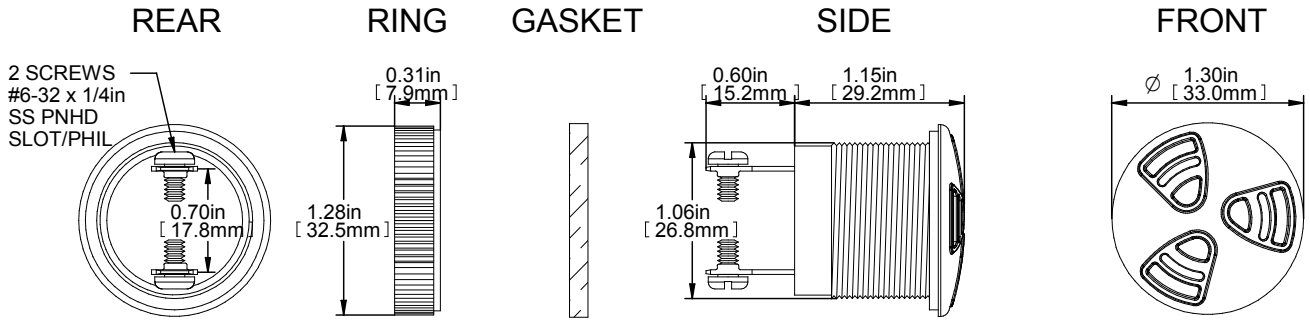
PRELIMINARY

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88Y-930-WF

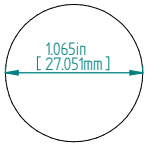
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

SPECIFICATIONS

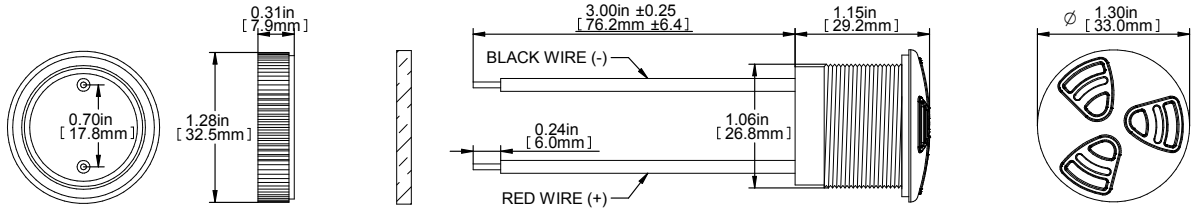
Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-88Y-930-WS

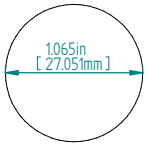
Made in USA

RoHS

Image Not Available

- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright Yellow light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

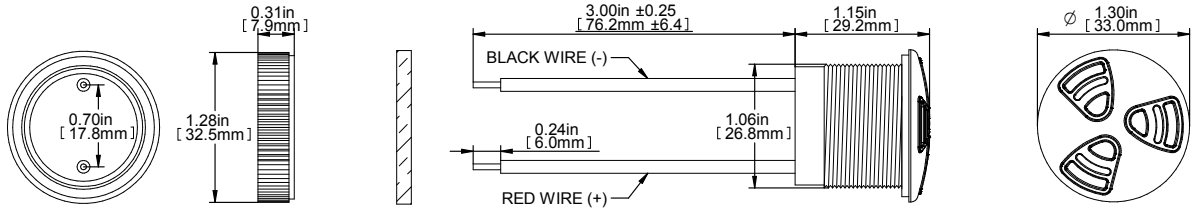
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3", 18AWG, GXL, Red and Black Wires
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

*Not Evaluated by UL

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.

TLHW-V88R-930-QS

Made in USA

RoHS



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Floyd Bell's ground-breaking new Twin Turbo™ Lighted Alarm is a panel-mount piezoelectric alert that emits a bright red light when activated, effectively combining Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators into one convenient multi-sensory alarm device.

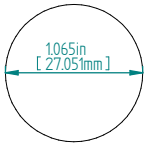
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	110 mA at 9 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	*85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C (with volume control open) *103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C. (with volume control open)
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours *IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

**Not Evaluated by UL*

PRELIMINARY

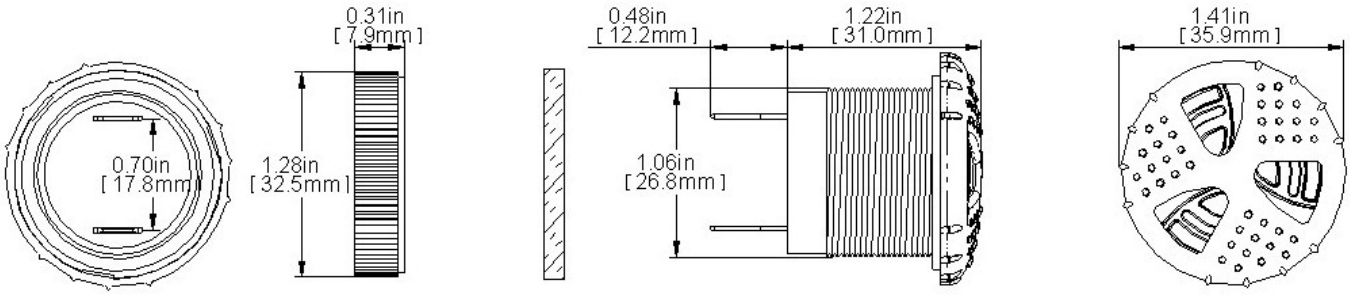
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED
Dimensions shown with volume control installed on unit.

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.11

Copyright © 2011 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87B-12V-Q

Made in USA



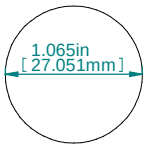
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Blue
Operating Voltage:	12 Vdc ± 20%
Nominal Operating Voltage:	12 Vdc
Typical Brightness:	250 cd/m^2 ± 20% at 12 Vdc
Max. Operating Current:	80 mA at 12 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Blue Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

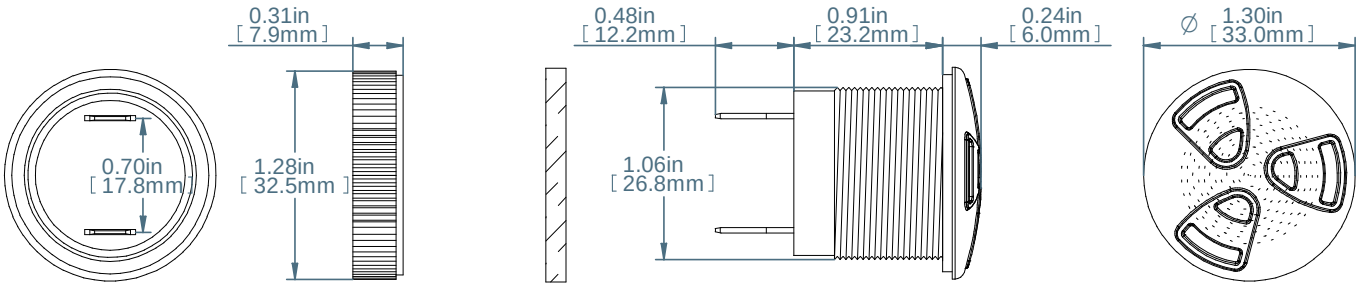
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87B-12V-S

Made in USA



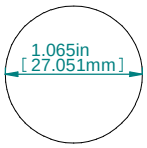
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Blue
Operating Voltage:	12 Vdc ± 20%
Nominal Operating Voltage:	12 Vdc
Typical Brightness:	250 cd/m^2 ± 20% at 12 Vdc
Max. Operating Current:	80 mA at 12 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Blue Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

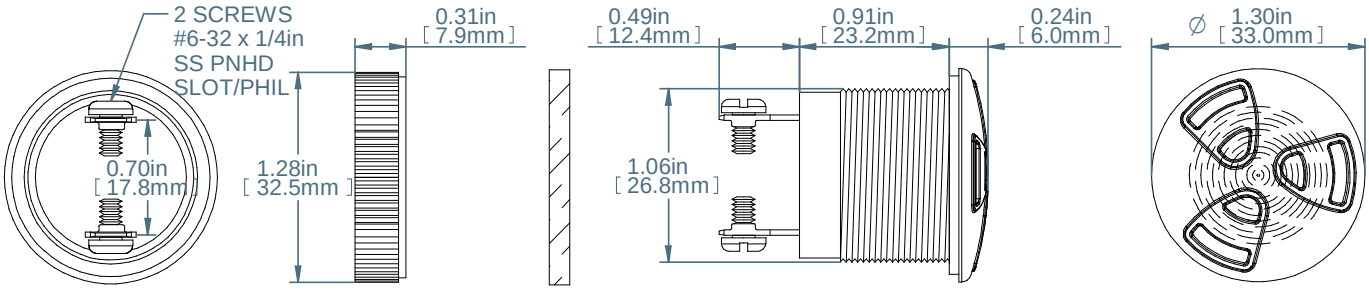
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87B-24V-Q

Made in USA



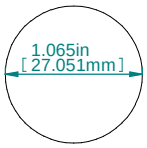
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Blue
Operating Voltage:	24 Vdc ± 20%
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	250 cd/m^2 ± 20% at 24 Vdc
Max. Operating Current:	80 mA at 24 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Blue Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

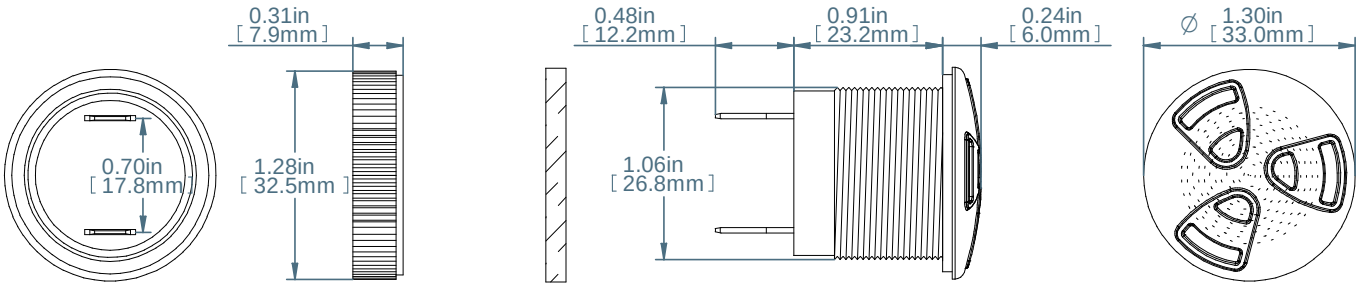
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87B-24V-S

Made in USA



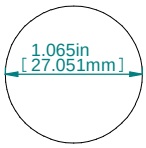
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Blue
Operating Voltage:	24 Vdc ± 20%
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	250 cd/m^2 ± 20% at 24 Vdc
Max. Operating Current:	80 mA at 24 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Blue Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

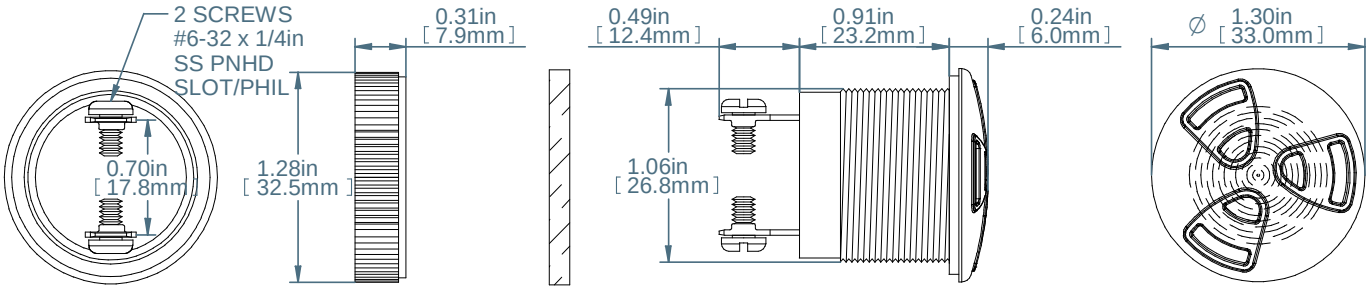
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87G-12V-Q

Made in USA



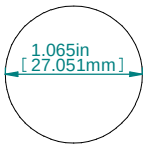
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Green
Operating Voltage:	12 Vdc ± 20%
Nominal Operating Voltage:	12 Vdc
Typical Brightness:	350 cd/m^2 ± 20% at 12 Vdc
Max. Operating Current:	80 mA at 12 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Green Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

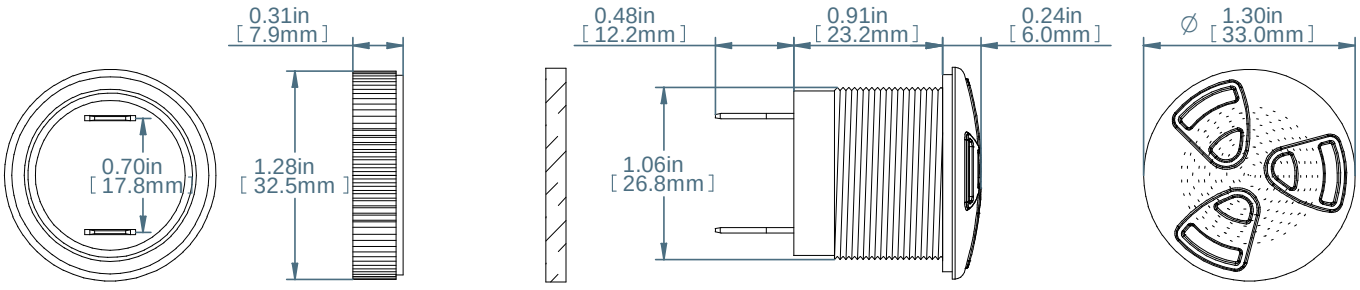
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87G-12V-S

Made in USA



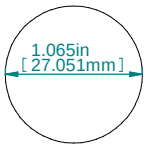
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Green
Operating Voltage:	12 Vdc ± 20%
Nominal Operating Voltage:	12 Vdc
Typical Brightness:	350 cd/m^2 ± 20% at 12 Vdc
Max. Operating Current:	80 mA at 12 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Green Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

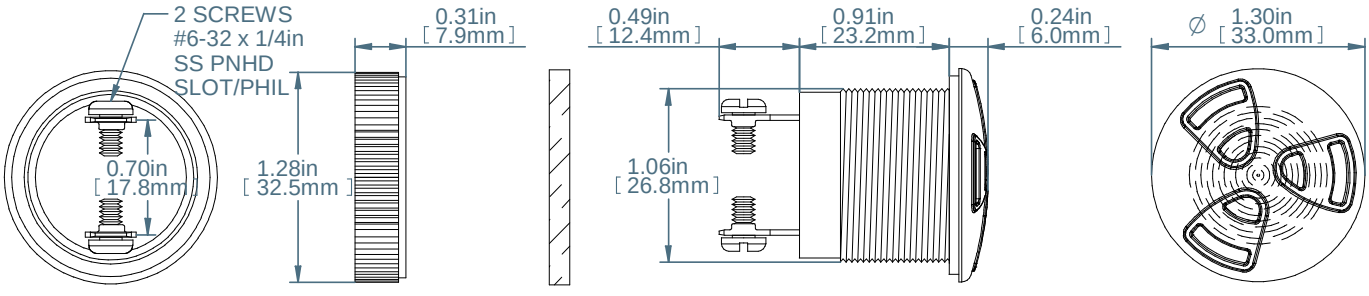
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87G-24V-Q

Made in USA



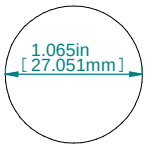
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Green
Operating Voltage:	24 Vdc ± 20%
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	350 cd/m^2 ± 20% at 24 Vdc
Max. Operating Current:	80 mA at 24 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Green Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

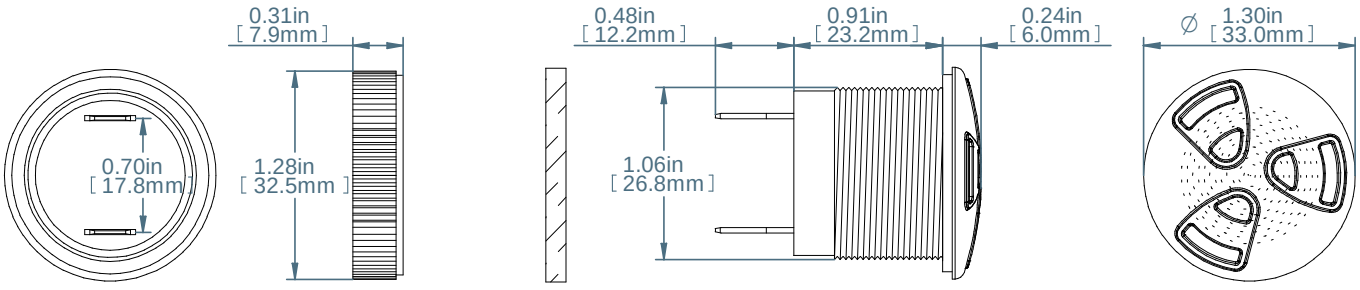
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87G-24V-S

Made in USA



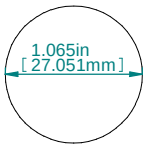
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Green
Operating Voltage:	24 Vdc ± 20%
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	350 cd/m^2 ± 20% at 24 Vdc
Max. Operating Current:	80 mA at 24 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Green Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

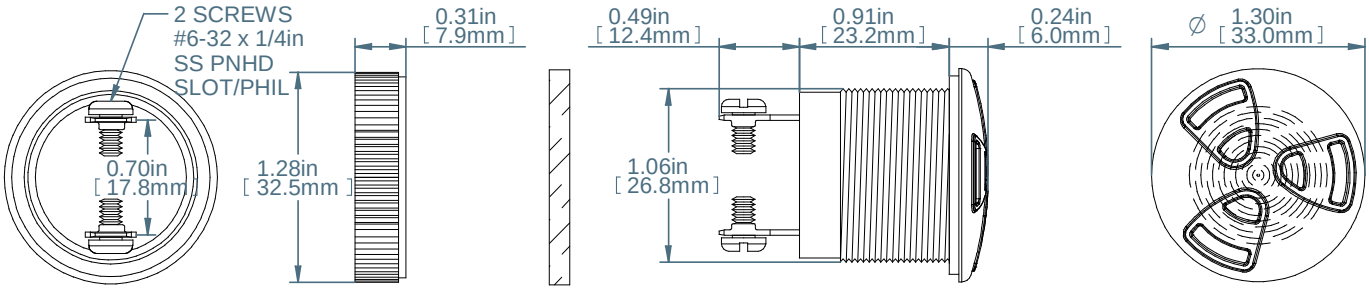
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87R-12V-Q

Made in USA



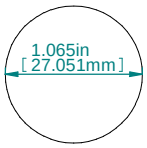
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Red
Operating Voltage:	12 Vdc ± 20%
Nominal Operating Voltage:	12 Vdc
Typical Brightness:	1000 cd/m^2 ± 20% at 12 Vdc
Max. Operating Current:	80 mA at 12 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

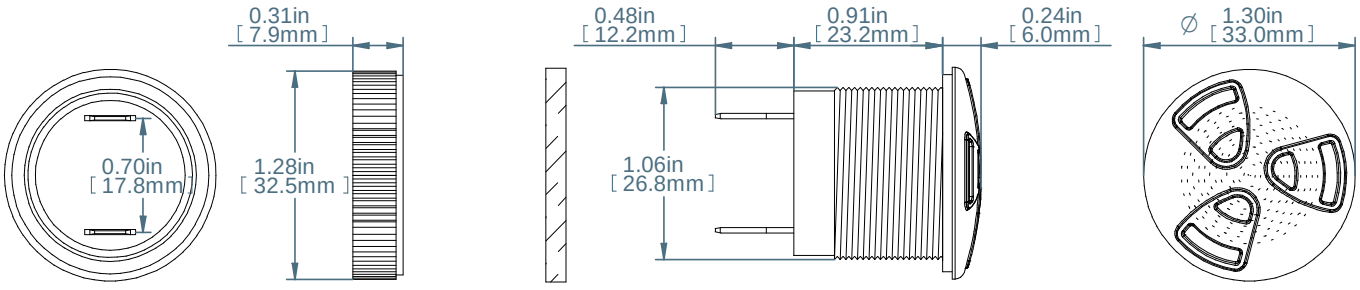
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87R-12V-S

Made in USA



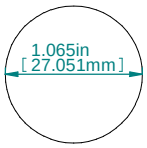
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Red
Operating Voltage:	12 Vdc ± 20%
Nominal Operating Voltage:	12 Vdc
Typical Brightness:	1000 cd/m^2 ± 20% at 12 Vdc
Max. Operating Current:	80 mA at 12 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

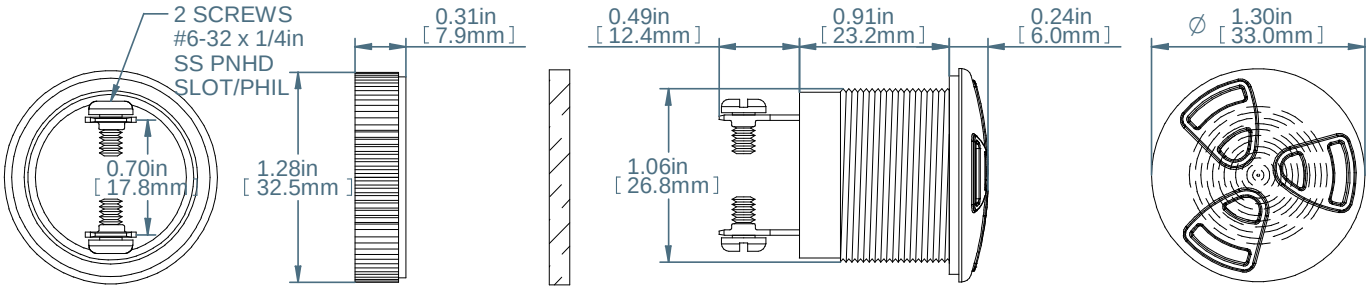
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87R-24V-Q

Made in USA



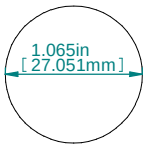
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Red
Operating Voltage:	24 Vdc ± 20%
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	1000 cd/m^2 ± 20% at 24 Vdc
Max. Operating Current:	80 mA at 24 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

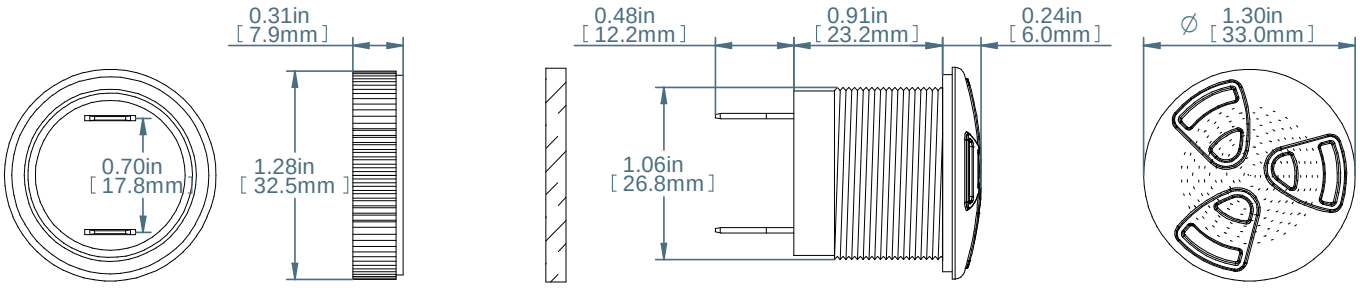
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87R-24V-S

Made in USA



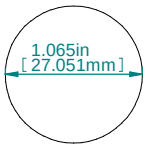
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Red
Operating Voltage:	24 Vdc ± 20%
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	1000 cd/m^2 ± 20% at 24 Vdc
Max. Operating Current:	80 mA at 24 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

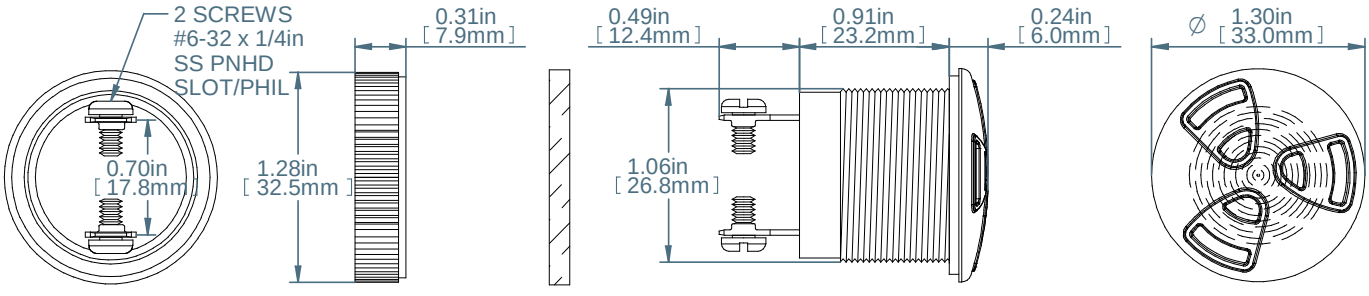
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87W-12V-Q

Made in USA



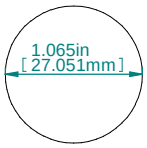
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	White
Operating Voltage:	12 Vdc ± 20%
Nominal Operating Voltage:	12 Vdc
Typical Brightness:	900 cd/m^2 ± 20% at 12 Vdc
Max. Operating Current:	80 mA at 12 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

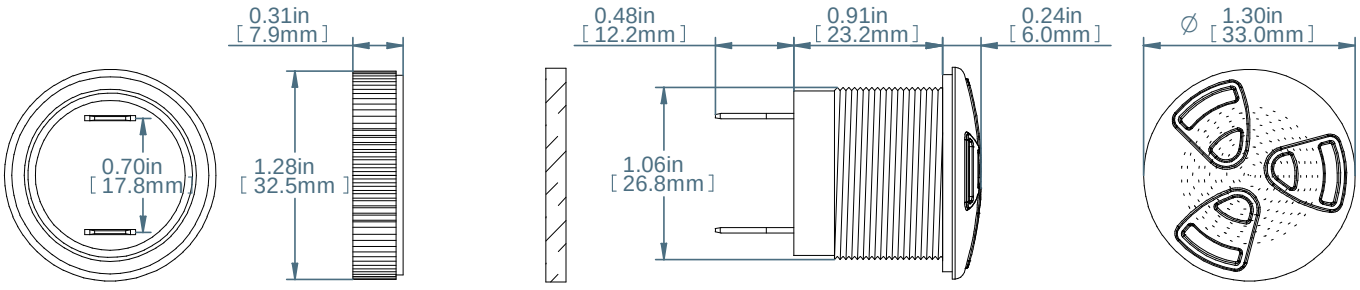
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87W-12V-S

Made in USA



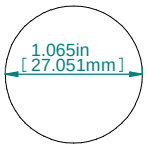
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	White
Operating Voltage:	12 Vdc ± 20%
Nominal Operating Voltage:	12 Vdc
Typical Brightness:	900 cd/m^2 ± 20% at 12 Vdc
Max. Operating Current:	80 mA at 12 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

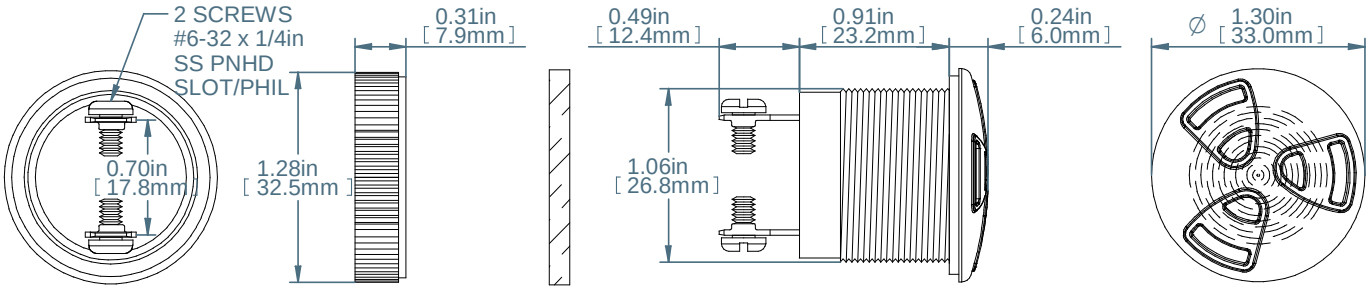
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87W-24V-Q

Made in USA



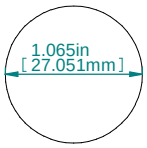
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	White
Operating Voltage:	24 Vdc ± 20%
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	900 cd/m^2 ± 20% at 24 Vdc
Max. Operating Current:	80 mA at 24 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

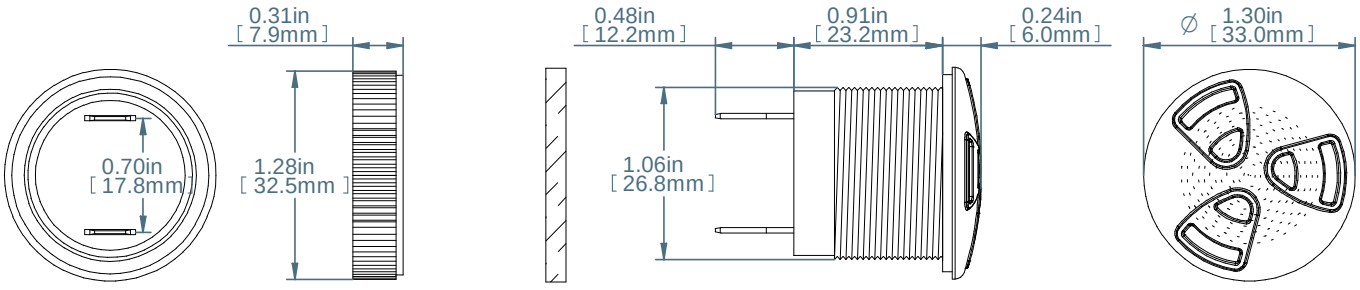
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87W-24V-S

Made in USA



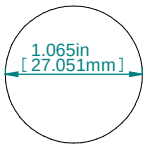
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	White
Operating Voltage:	24 Vdc ± 20%
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	900 cd/m^2 ± 20% at 24 Vdc
Max. Operating Current:	80 mA at 24 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

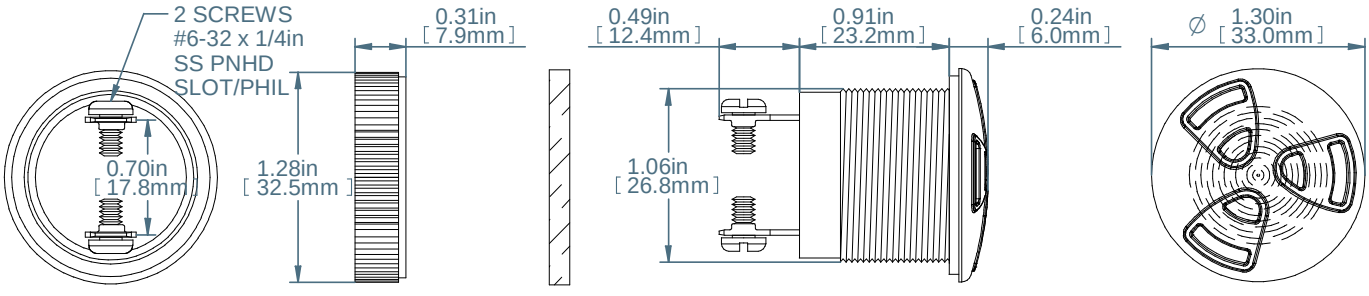
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87Y-12V-Q

Made in USA



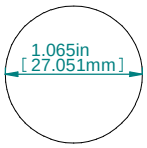
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Yellow
Operating Voltage:	12 Vdc ± 20%
Nominal Operating Voltage:	12 Vdc
Typical Brightness:	750 cd/m^2 ± 20% at 12 Vdc
Max. Operating Current:	80 mA at 12 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Yellow Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

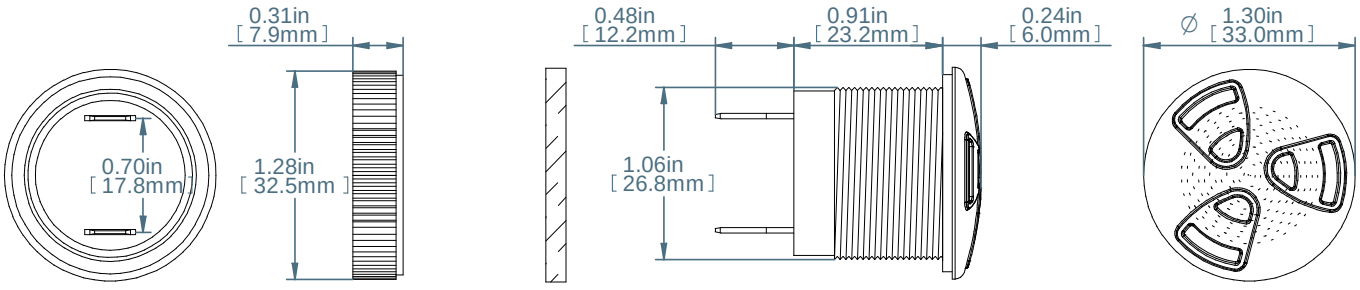
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87Y-12V-S

Made in USA



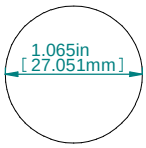
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Yellow
Operating Voltage:	12 Vdc ± 20%
Nominal Operating Voltage:	12 Vdc
Typical Brightness:	750 cd/m^2 ± 20% at 12 Vdc
Max. Operating Current:	80 mA at 12 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Yellow Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

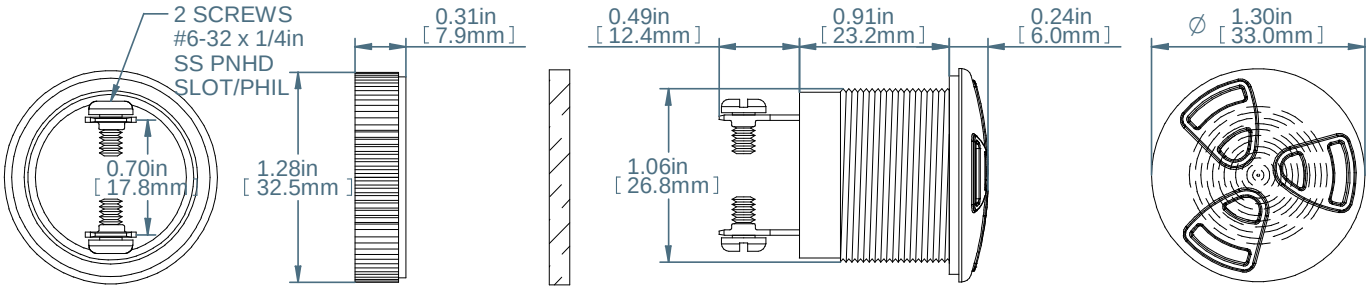
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87Y-24V-Q

Made in USA



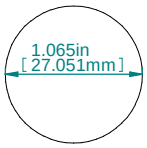
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Yellow
Operating Voltage:	24 Vdc ± 20%
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	750 cd/m^2 ± 20% at 24 Vdc
Max. Operating Current:	80 mA at 24 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Yellow Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

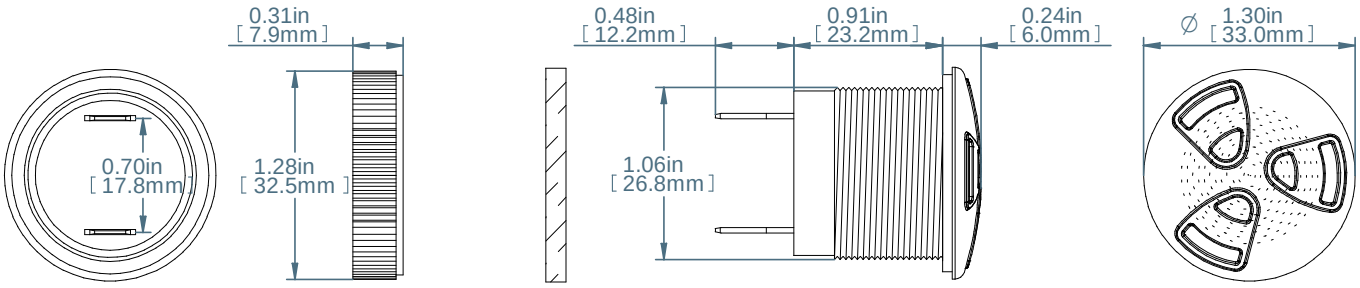
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLL-87Y-24V-S

Made in USA



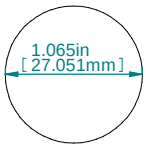
- 180° Viewable LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLL Series are continuous output LED panel indicators. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	LED Panel Indicator
Color:	Yellow
Operating Voltage:	24 Vdc ± 20%
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	750 cd/m^2 ± 20% at 24 Vdc
Max. Operating Current:	80 mA at 24 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30℃ to +80℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Yellow Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

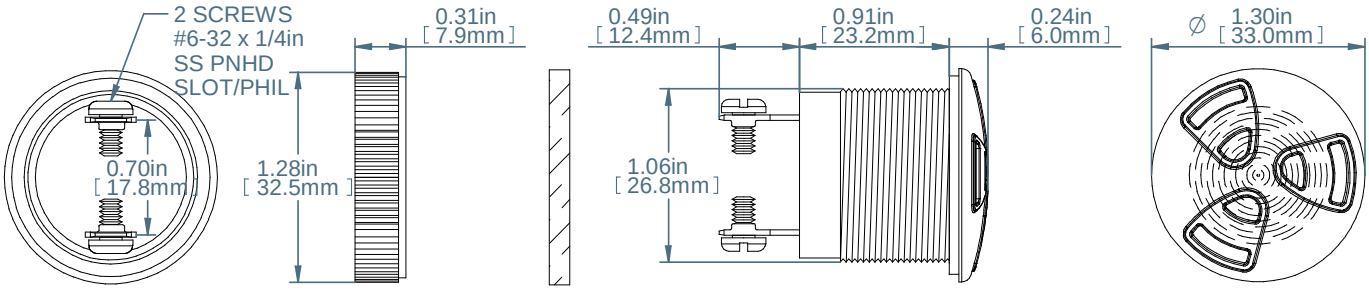
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 10.10

Copyright © 2010 Floyd Bell Inc.

All specifications subject to change without notice.

TLM-87B-930-Q

Made in USA



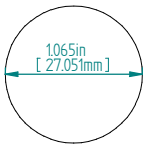
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLM Series are bright, continuous output, LED panel indicators for operating voltages of 9-30VDC. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	Bright Continuous Output LED Panel Indicator
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	900 cd/m^2 ± 20% at 9 Vdc 1000 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	80 mA at 9 Vdc 40 mA at 30 vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Blue Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

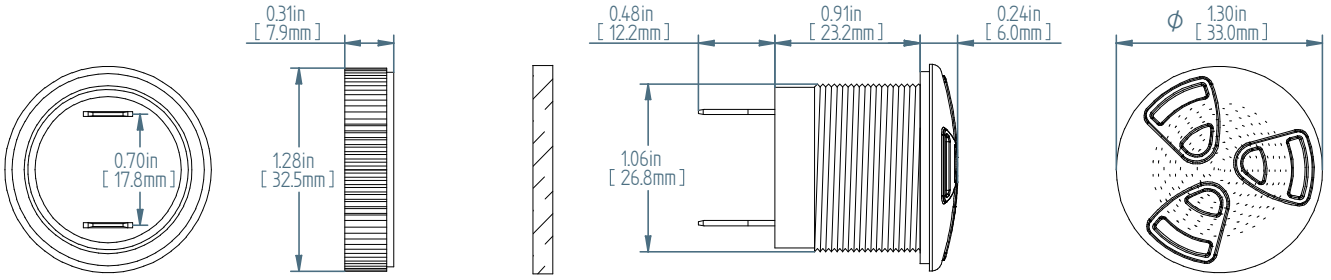
PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLM-87B-930-S

Made in USA



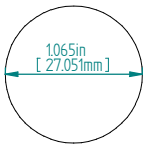
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLM Series are bright, continuous output, LED panel indicators for operating voltages of 9-30VDC. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	Bright Continuous Output LED Panel Indicator
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	900 cd/m^2 ± 20% at 9 Vdc 1000 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	80 mA at 9 Vdc 40 mA at 30 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Blue Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

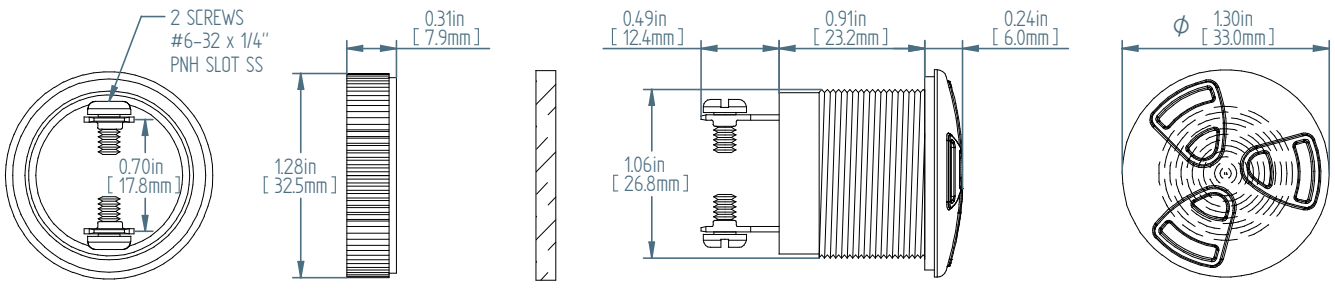
PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLM-87G-930-Q

Made in USA



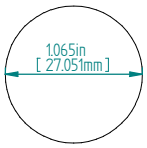
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLM Series are bright, continuous output, LED panel indicators for operating voltages of 9-30VDC. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

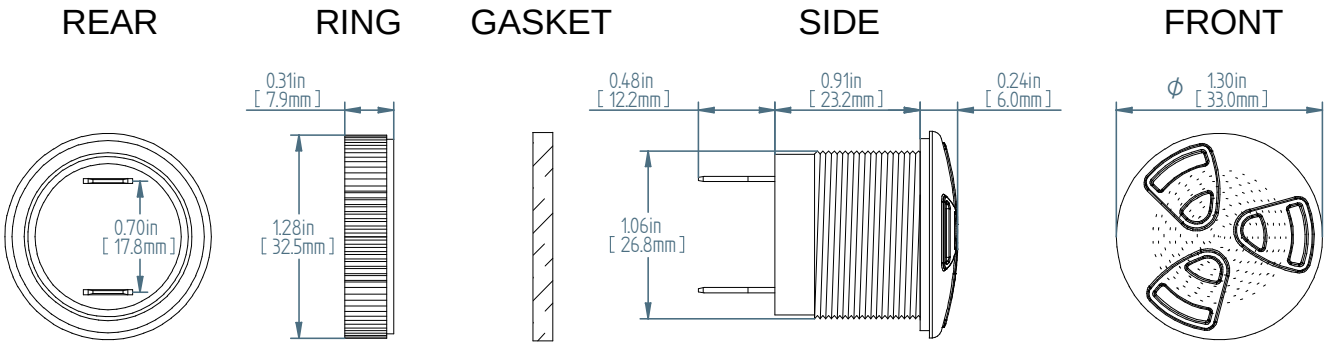
Operating Mode:	Bright Continuous Output LED Panel Indicator
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	900 cd/m^2 ± 20% at 9 Vdc 1000 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	80 mA at 9 Vdc 40 mA at 30 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Green Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLM-87G-930-S

Made in USA



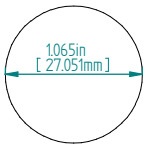
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLM Series are bright, continuous output, LED panel indicators for operating voltages of 9-30VDC. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

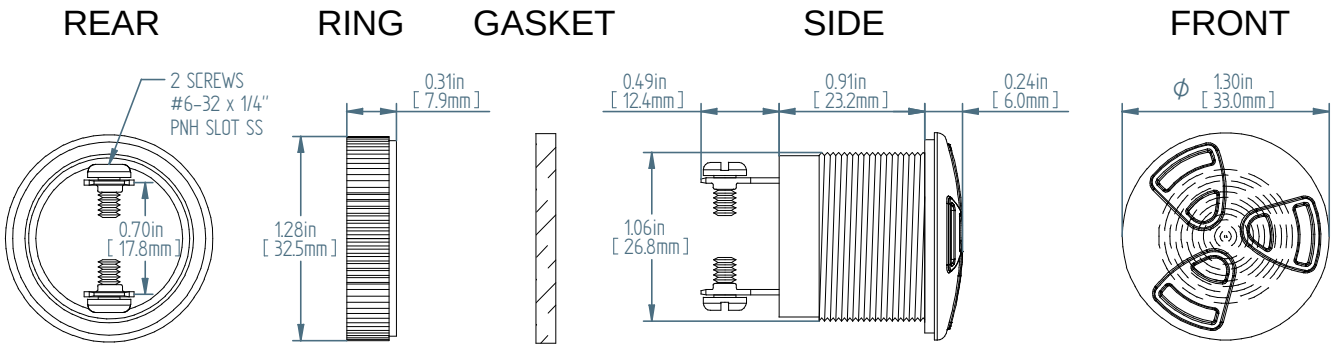
Operating Mode:	Bright Continuous Output LED Panel Indicator
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	900 cd/m^2 ± 20% at 9 Vdc 1000 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	80 mA at 9 Vdc 40 mA at 30 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Green Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

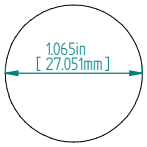
TLM-87R-930-Q

Made in USA



- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



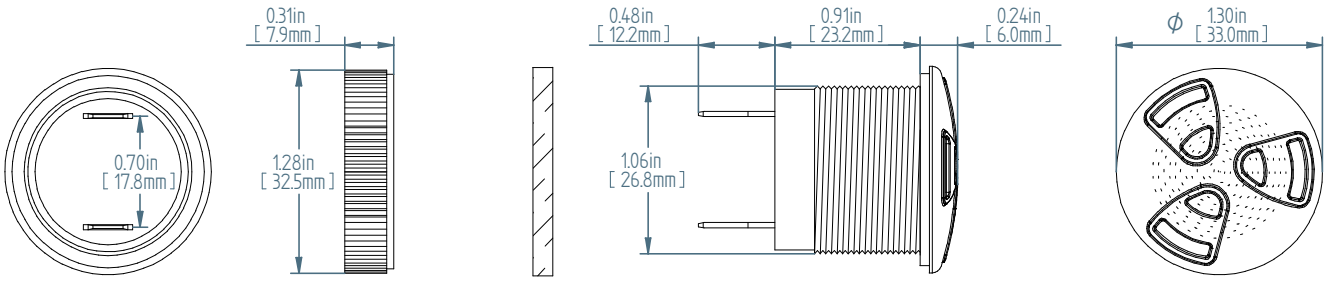
FITS PANELS UP TO
0.60in [15.2mm] THICK

The Turbo Light TLM Series are bright, continuous output, LED panel indicators for operating voltages of 9-30VDC. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	Bright Continuous Output LED Panel Indicator
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	2000 cd/m^2 ± 20% at 9 Vdc 2200 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	80 mA at 9 Vdc 40 mA at 30 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLM-87R-930-S

Made in USA



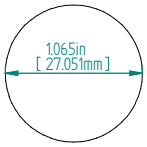
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLM Series are bright, continuous output, LED panel indicators for operating voltages of 9-30VDC. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

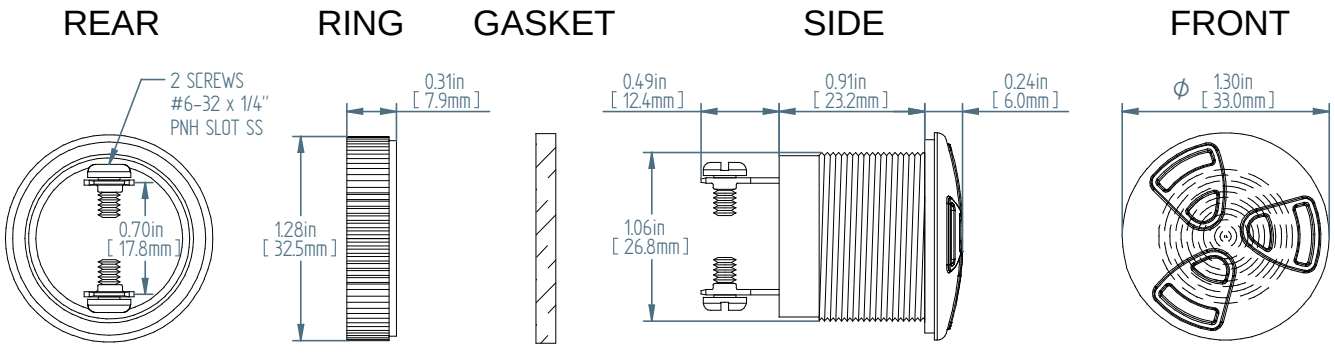
Operating Mode:	Bright Continuous Output LED Panel Indicator
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	2000 cd/m^2 ± 20% at 9 Vdc 2200 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	80 mA at 9 Vdc 40 mA at 30 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

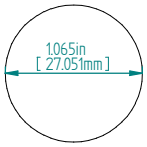
TLM-87W-930-Q

Made in USA



- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



FITS PANELS UP TO
0.60in [15.2mm] THICK

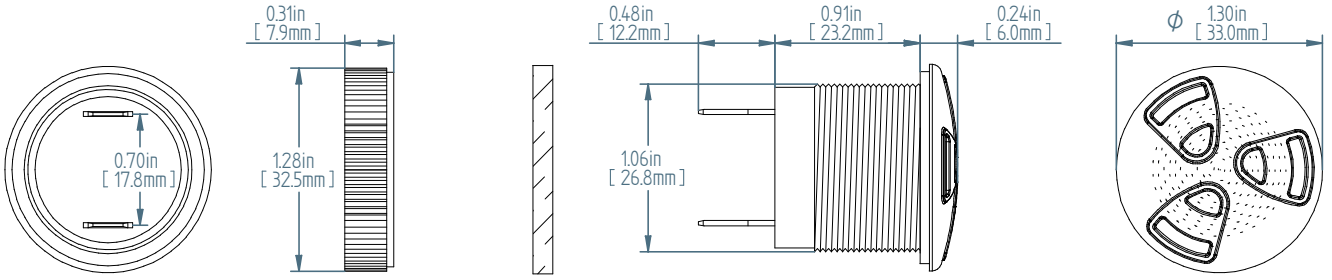
The Turbo Light TLM Series are bright, continuous output, LED panel indicators for operating voltages of 9-30VDC. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	Bright Continuous Output LED Panel Indicator
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	2500 cd/m^2 ± 20% at 9 Vdc 3000 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	80 mA at 9 Vdc 40 mA at 30 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLM-87W-930-S

Made in USA



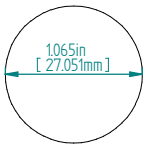
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLM Series are bright, continuous output, LED panel indicators for operating voltages of 9-30VDC. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

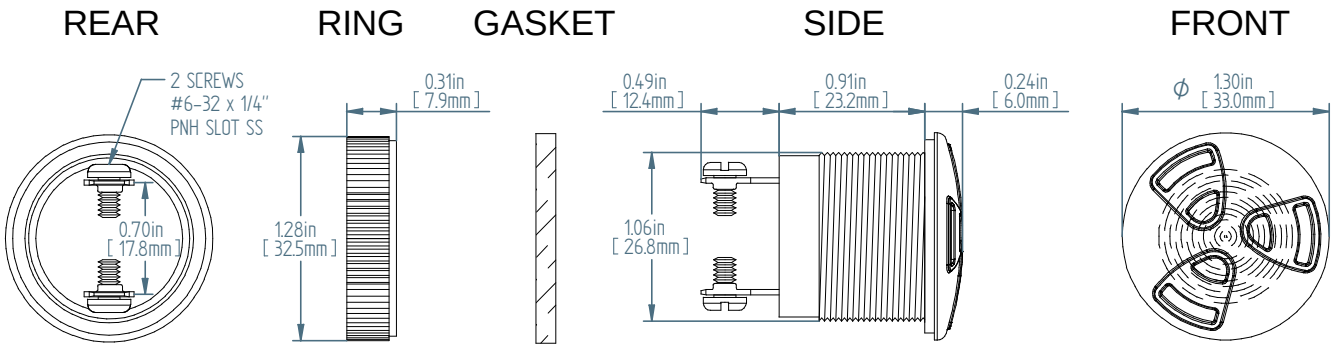
Operating Mode:	Bright Continuous Output LED Panel Indicator
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	2500 cd/m^2 ± 20% at 9 Vdc 3000 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	80 mA at 9 Vdc 40 mA at 30 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

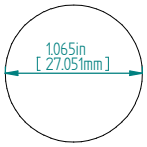
TLM-87Y-930-Q

Made in USA



- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

PANEL MOUNTING



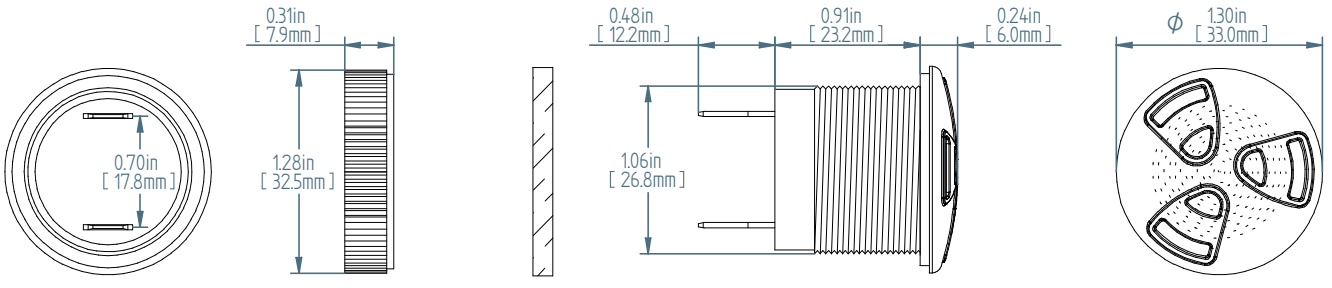
FITS PANELS UP TO
0.60in [15.2mm] THICK

The Turbo Light TLM Series are bright, continuous output, LED panel indicators for operating voltages of 9-30VDC. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	Bright Continuous Output LED Panel Indicator
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	1800 cd/m^2 ± 20% at 9 Vdc 2000 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	80 mA at 9 Vdc 40 mA at 30 Vdc
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Yellow Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLM-87Y-930-S

Made in USA



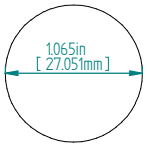
- High Intensity LED light
- Indoor or Outdoor Use
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light TLM Series are bright, continuous output, LED panel indicators for operating voltages of 9-30VDC. The Turbo Light design features a regulated power supply and a low profile, tamper resistant case. This rugged panel light is ideal for indoor and outdoor industrial applications.

SPECIFICATIONS

Operating Mode:	Bright Continuous Output LED Panel Indicator
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	1800 cd/m^2 ± 20% at 9 Vdc 2000 cd/m^2 ± 20% at 30 Vdc
Max. Operating Current:	80 mA at 9 Vdc 40 mA at 30 Vdc
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Yellow Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

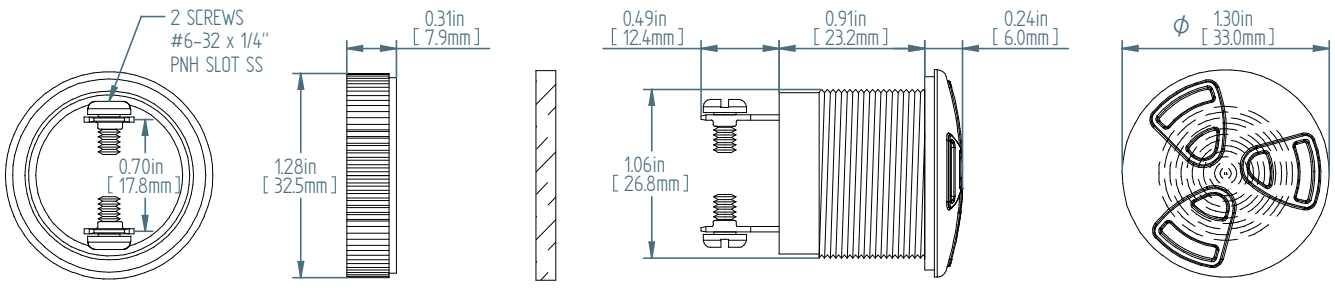
PANEL MOUNTING



FITS PANELS UP TO 0.60in [15.2mm] THICK

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 6.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLSH-87B-12V-Q

Made in USA

Pending



- Emits BRIGHT strobe flash
- Indoor or Outdoor Use
- Viewable in Direct Sunlight
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light Strobe TLSH-12V Series are extra-bright Strobe Output LED panel indicators for nominal operating voltage of 12VDC. The Turbo Light Strobe design features 180° viewing range and high intensity Strobe Output. The Turbo Light Strobe includes tamper resistant case and polycarbonate housing with quick connect (.25") for ease of installation in your application.

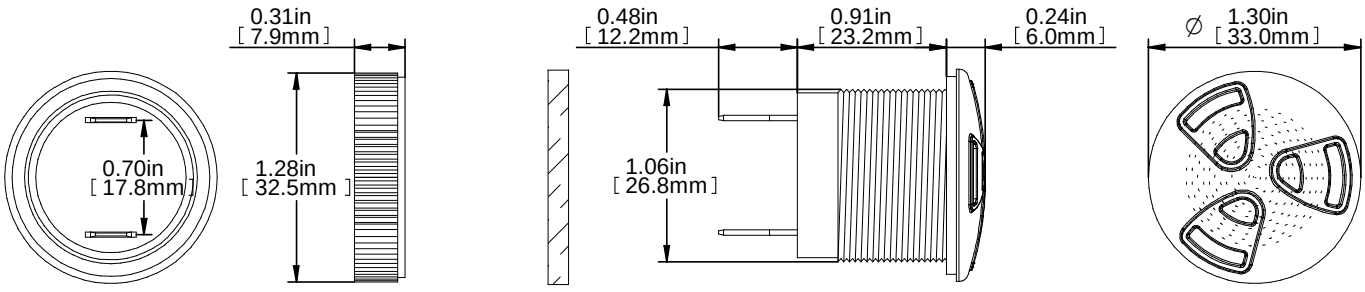
SPECIFICATIONS

Operating Mode:	Extra-Bright Strobe LED Panel Indicator
Color:	Emits Blue Light
Operating Voltage:	5-12Vdc
Nominal Operating Voltage:	12Vdc
Typical Brightness:	4000 cd/m^2 Red ± 20% at 12Vdc
Typical Flash Rate:	1 pulse per second ± 20%
Typical Operating Current:	110mA at 12Vdc Note: These are typical of measurements taken with a standard DMM. Peak current at 12Vdc can be near 700mA.
Termination:	2 Quick Connect Blades, 0.25" (6.3mm) Width, 0.032" (0.8mm) Thickness.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40℃ to +85℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

Preliminary

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 04.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TLSH-87B-24V-Q

Made in USA

Pending



- Emits BRIGHT strobe flash
- Indoor or Outdoor Use
- Viewable in Direct Sunlight
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light Strobe TLSH-24V Series are extra-bright Strobe Output LED panel indicators for nominal operating voltage of 24VDC. The Turbo Light Strobe design features 180° viewing range and high intensity Strobe Output. The Turbo Light Strobe includes tamper resistant case and polycarbonate housing with quick connect (.25") for ease of installation in your application.

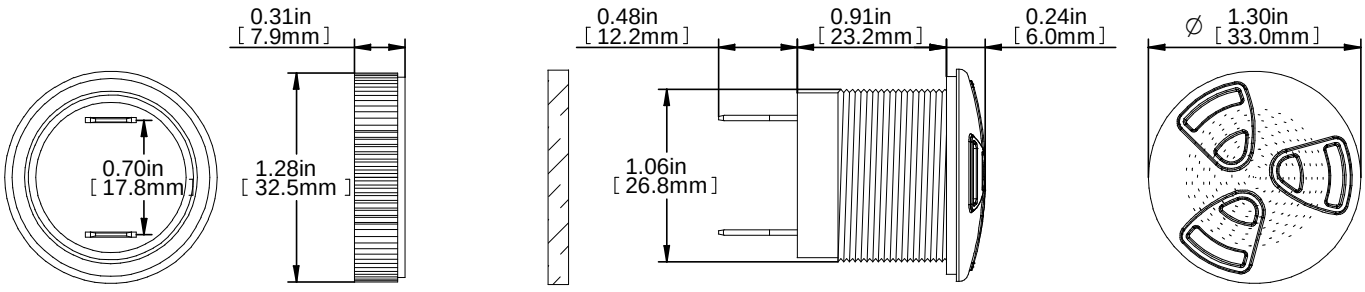
SPECIFICATIONS

Operating Mode:	Extra-Bright Strobe LED Panel Indicator
Color:	Emits Blue Light
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	4000 cd/m^2 Red ± 20% at 24 Vdc
Typical Flash Rate:	1 pulse per second ± 20%
Typical Operating Current:	170mA at 24 Vdc Note: These are typical of measurements taken with a standard DMM. Peak current at 24Vdc can be near 1A.
Termination:	2 Quick Connect Blades, 0.25" (6.3mm) Width, 0.032" (0.8mm) Thickness.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40℃ to +85℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

Preliminary

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 04.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TLSH-87G-12V-Q

Made in USA

Pending



- Emits BRIGHT strobe flash
- Indoor or Outdoor Use
- Viewable in Direct Sunlight
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light Strobe TLSH-12V Series are extra-bright Strobe Output LED panel indicators for nominal operating voltage of 12VDC. The Turbo Light Strobe design features 180° viewing range and high intensity Strobe Output. The Turbo Light Strobe includes tamper resistant case and polycarbonate housing with quick connect (.25") for ease of installation in your application.

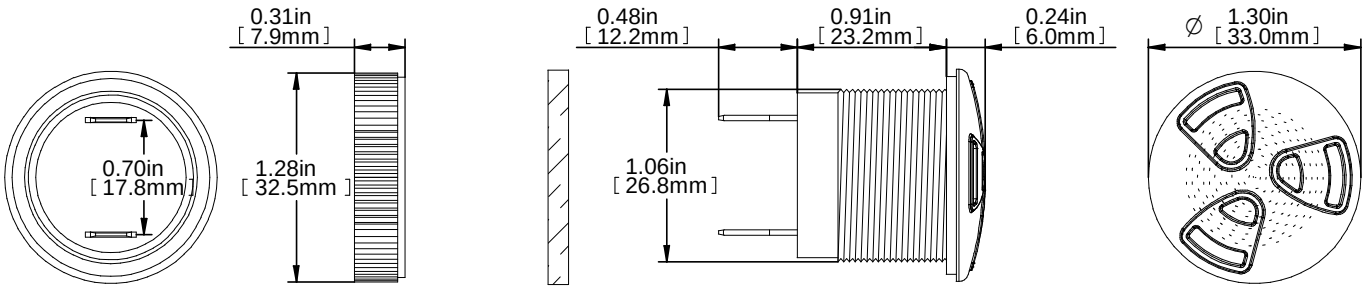
SPECIFICATIONS

Operating Mode:	Extra-Bright Strobe LED Panel Indicator
Color:	Emits Green Light
Operating Voltage:	5-12Vdc
Nominal Operating Voltage:	12Vdc
Typical Brightness:	12000 cd/m^2 Red ± 20% at 12Vdc
Typical Flash Rate:	1 pulse per second ± 20%
Typical Operating Current:	110mA at 12Vdc Note: These are typical of measurements taken with a standard DMM. Peak current at 12Vdc can be near 700mA.
Termination:	2 Quick Connect Blades, 0.25" (6.3mm) Width, 0.032" (0.8mm) Thickness.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40℃ to +85℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

Preliminary

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 04.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TLSH-87G-24V-Q

Made in USA

Pending



- Emits BRIGHT strobe flash
- Indoor or Outdoor Use
- Viewable in Direct Sunlight
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light Strobe TLSH-24V Series are extra-bright Strobe Output LED panel indicators for nominal operating voltage of 24VDC. The Turbo Light Strobe design features 180° viewing range and high intensity Strobe Output. The Turbo Light Strobe includes tamper resistant case and polycarbonate housing with quick connect (.25") for ease of installation in your application.

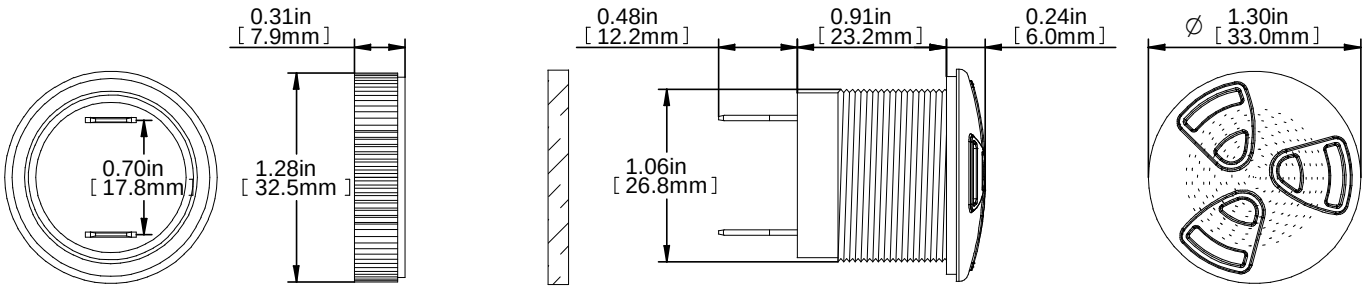
SPECIFICATIONS

Operating Mode:	Extra-Bright Strobe LED Panel Indicator
Color:	Emits Green Light
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	12000 cd/m^2 Red ± 20% at 24 Vdc
Typical Flash Rate:	1 pulse per second ± 20%
Typical Operating Current:	170mA at 24 Vdc Note: These are typical of measurements taken with a standard DMM. Peak current at 24Vdc can be near 1A.
Termination:	2 Quick Connect Blades, 0.25" (6.3mm) Width, 0.032" (0.8mm) Thickness.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40℃ to +85℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

Preliminary

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 04.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TLSH-87R-12V-Q

Made in USA

Pending



- Emits BRIGHT strobe flash
- Indoor or Outdoor Use
- Viewable in Direct Sunlight
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light Strobe TLSH-12V Series are extra-bright Strobe Output LED panel indicators for nominal operating voltage of 12VDC. The Turbo Light Strobe design features 180° viewing range and high intensity Strobe Output. The Turbo Light Strobe includes tamper resistant case and polycarbonate housing with quick connect (.25") for ease of installation in your application.

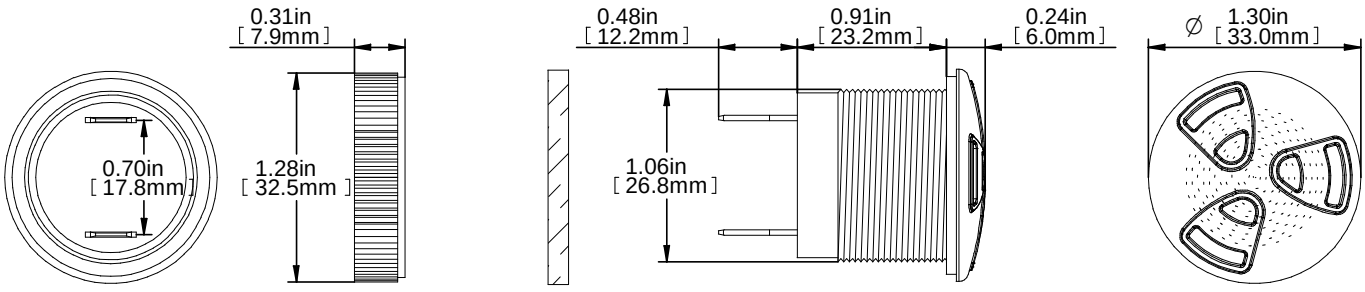
SPECIFICATIONS

Operating Mode:	Extra-Bright Strobe LED Panel Indicator
Color:	Emits Red Light
Operating Voltage:	5-12Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	15000 cd/m^2 Red ± 20% at 12Vdc
Typical Flash Rate:	1 pulse per second ± 20%
Typical Operating Current:	110mA at 12Vdc Note: These are typical of measurements taken with a standard DMM. Peak current at 12Vdc can be near 700mA.
Termination:	2 Quick Connect Blades, 0.25" (6.3mm) Width, 0.032" (0.8mm) Thickness.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40℃ to +85℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

Preliminary

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 08.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLSH-87R-24V-Q

Made in USA

Pending



- Emits BRIGHT strobe flash
- Indoor or Outdoor Use
- Viewable in Direct Sunlight
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light Strobe TLSH-24V Series are extra-bright Strobe Output LED panel indicators for nominal operating voltage of 24VDC. The Turbo Light Strobe design features 180° viewing range and high intensity Strobe Output. The Turbo Light Strobe includes tamper resistant case and polycarbonate housing with quick connect (.25") for ease of installation in your application.

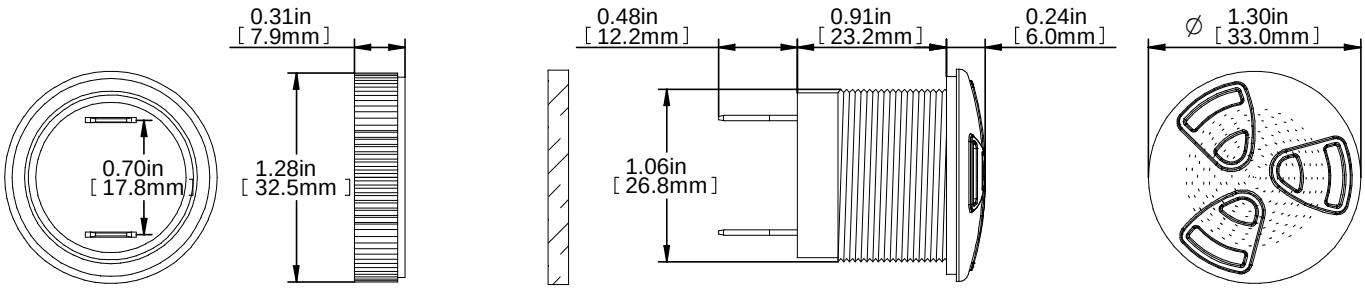
SPECIFICATIONS

Operating Mode:	Extra-Bright Strobe LED Panel Indicator
Color:	Emits Red Light
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	15000 cd/m^2 Red ± 20% at 24 Vdc
Typical Flash Rate:	1 pulse per second ± 20%
Typical Operating Current:	170mA at 24 Vdc Note: These are typical of measurements taken with a standard DMM. Peak current at 24Vdc can be near 1A.
Termination:	2 Quick Connect Blades, 0.25" (6.3mm) Width, 0.032" (0.8mm) Thickness.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40℃ to +85℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

Preliminary

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 08.13

Copyright © 2013 Floyd Bell Inc.

All specifications subject to change without notice.

TLSH-87W-12V-Q

Made in USA

Pending



- Emits BRIGHT strobe flash
- Indoor or Outdoor Use
- Viewable in Direct Sunlight
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light Strobe TLSH-12V Series are extra-bright Strobe Output LED panel indicators for nominal operating voltage of 12VDC. The Turbo Light Strobe design features 180° viewing range and high intensity Strobe Output. The Turbo Light Strobe includes tamper resistant case and polycarbonate housing with quick connect (.25") for ease of installation in your application.

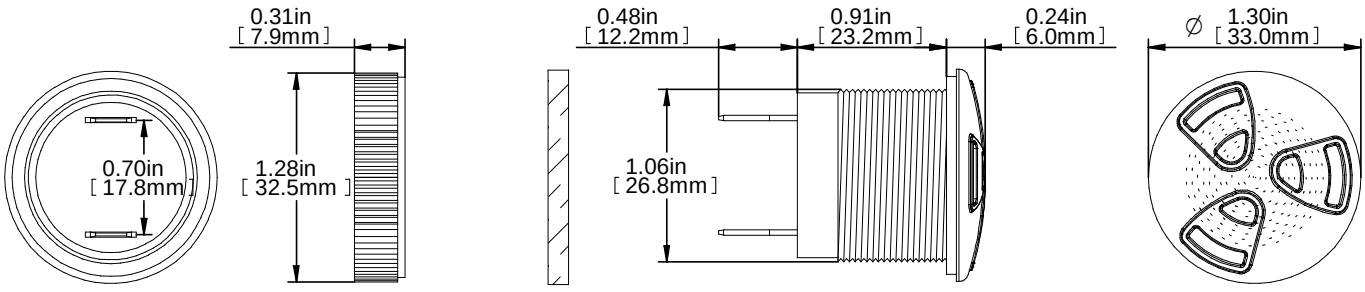
SPECIFICATIONS

Operating Mode:	Extra-Bright Strobe LED Panel Indicator
Color:	Emits White Light
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Typical Brightness:	25000 cd/m^2 Red ± 20% at 12 Vdc
Typical Flash Rate:	1 pulse per second ± 20%
Typical Operating Current:	110mA at 12 Vdc Note: These are typical of measurements taken with a standard DMM. Peak current at 12Vdc can be near 700mA.
Termination:	2 Quick Connect Blades, 0.25" (6.3mm) Width, 0.032" (0.8mm) Thickness.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40℃ to +85℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

Preliminary

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 04.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TLSH-87W-24V-Q

Made in USA

Pending



- Emits BRIGHT strobe flash
- Indoor or Outdoor Use
- Viewable in Direct Sunlight
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light Strobe TLSH-24V Series are extra-bright Strobe Output LED panel indicators for nominal operating voltage of 24VDC. The Turbo Light Strobe design features 180° viewing range and high intensity Strobe Output. The Turbo Light Strobe includes tamper resistant case and polycarbonate housing with quick connect (.25") for ease of installation in your application.

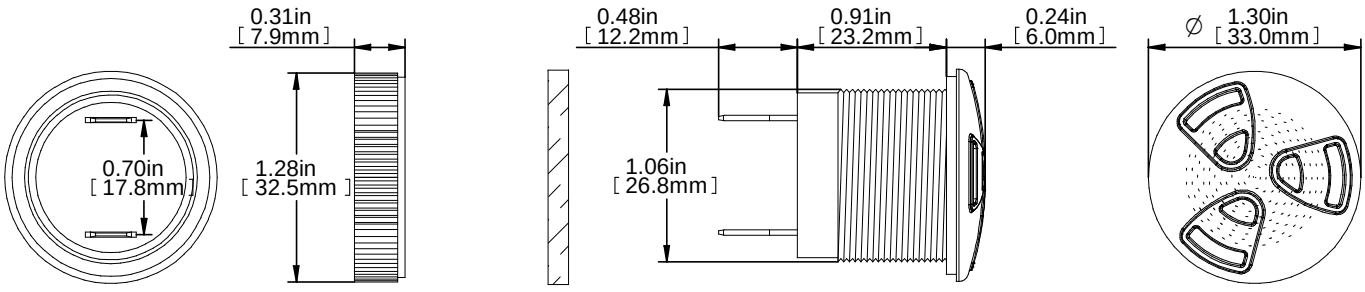
SPECIFICATIONS

Operating Mode:	Extra-Bright Strobe LED Panel Indicator
Color:	Emits White Light
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	25000 cd/m^2 Red ± 20% at 24 Vdc
Typical Flash Rate:	1 pulse per second ± 20%
Typical Operating Current:	170mA at 24 Vdc Note: These are typical of measurements taken with a standard DMM. Peak current at 24Vdc can be near 1A.
Termination:	2 Quick Connect Blades, 0.25" (6.3mm) Width, 0.032" (0.8mm) Thickness.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40℃ to +85℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

Preliminary

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 04.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TLSH-87Y-12V-Q

Made in USA

Pending



- Emits BRIGHT strobe flash
- Indoor or Outdoor Use
- Viewable in Direct Sunlight
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light Strobe TLSH-12V Series are extra-bright Strobe Output LED panel indicators for nominal operating voltage of 12VDC. The Turbo Light Strobe design features 180° viewing range and high intensity Strobe Output. The Turbo Light Strobe includes tamper resistant case and polycarbonate housing with quick connect (.25") for ease of installation in your application.

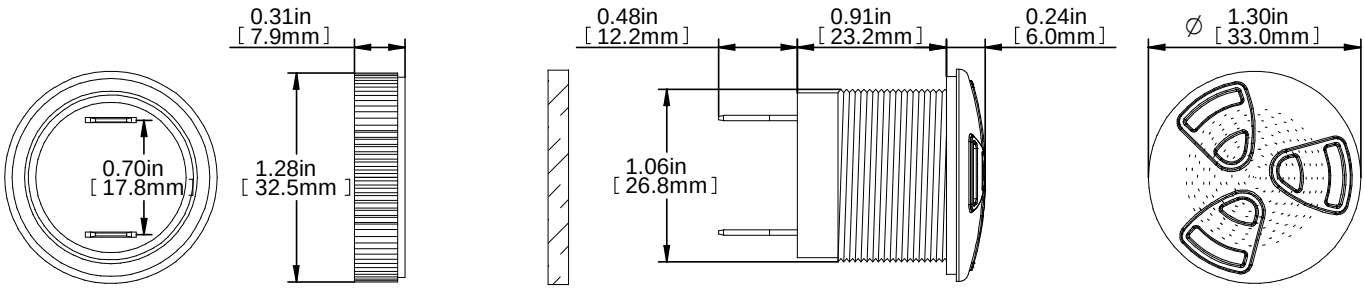
SPECIFICATIONS

Operating Mode:	Extra-Bright Strobe LED Panel Indicator
Color:	Emits Yellow Light
Operating Voltage:	5-12Vdc
Nominal Operating Voltage:	12Vdc
Typical Brightness:	25000 cd/m^2 Red ± 20% at 12Vdc
Typical Flash Rate:	1 pulse per second ± 20%
Typical Operating Current:	110mA at 12Vdc Note: These are typical of measurements taken with a standard DMM. Peak current at 12Vdc can be near 700mA.
Termination:	2 Quick Connect Blades, 0.25" (6.3mm) Width, 0.032" (0.8mm) Thickness.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40℃ to +85℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

Preliminary

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 04.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TLSH-87Y-24V-Q

Made in USA

Pending



- Emits BRIGHT strobe flash
- Indoor or Outdoor Use
- Viewable in Direct Sunlight
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

The Turbo Light Strobe TLSH-24V Series are extra-bright Strobe Output LED panel indicators for nominal operating voltage of 24VDC. The Turbo Light Strobe design features 180° viewing range and high intensity Strobe Output. The Turbo Light Strobe includes tamper resistant case and polycarbonate housing with quick connect (.25") for ease of installation in your application.

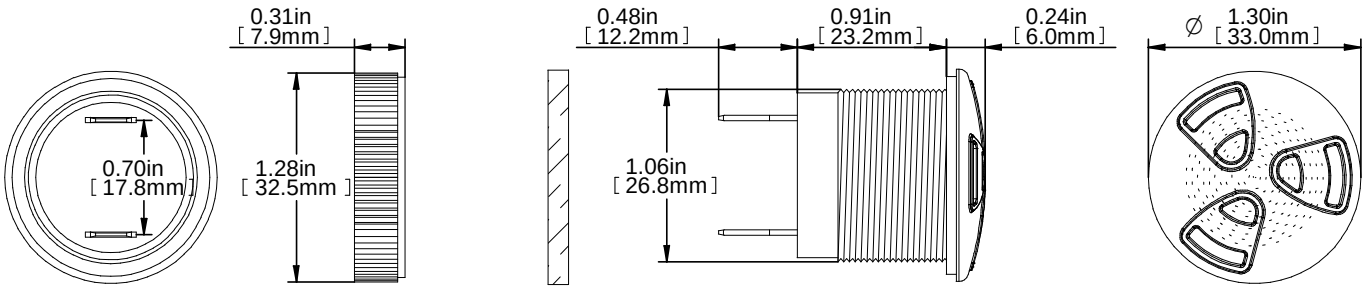
SPECIFICATIONS

Operating Mode:	Extra-Bright Strobe LED Panel Indicator
Color:	Emits Yellow Light
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	25000 cd/m^2 Red ± 20% at 24 Vdc
Typical Flash Rate:	1 pulse per second ± 20%
Typical Operating Current:	170mA at 24 Vdc Note: These are typical of measurements taken with a standard DMM. Peak current at 24Vdc can be near 1A.
Termination:	2 Quick Connect Blades, 0.25" (6.3mm) Width, 0.032" (0.8mm) Thickness.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40℃ to +85℃.
Storage Temperature:	-40℃ to +100℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40℃ continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

Preliminary

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 04.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TLTH-87RYG-930-Q

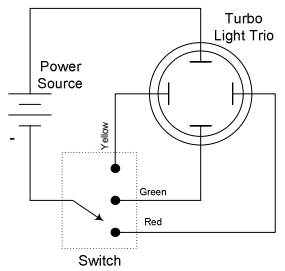
Made in USA

Pending



- Emits BRIGHT Green, Yellow or Red Light
- Indoor or Outdoor Use
- Viewable in Direct Sunlight
- NEMA 4X and IP68
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuit



The Turbo Light Trio TLTH Series are continuous, multi-color, extra-bright output LED panel indicators for operating voltages of 9-30VDC. The Turbo Light Trio design features a regulated power supply, 3 light colors, low profile, tamper resistant case and easy to use active low switch inputs. This clear-lens polycarbonate panel light is rugged and ideal for indoor and outdoor industrial applications.

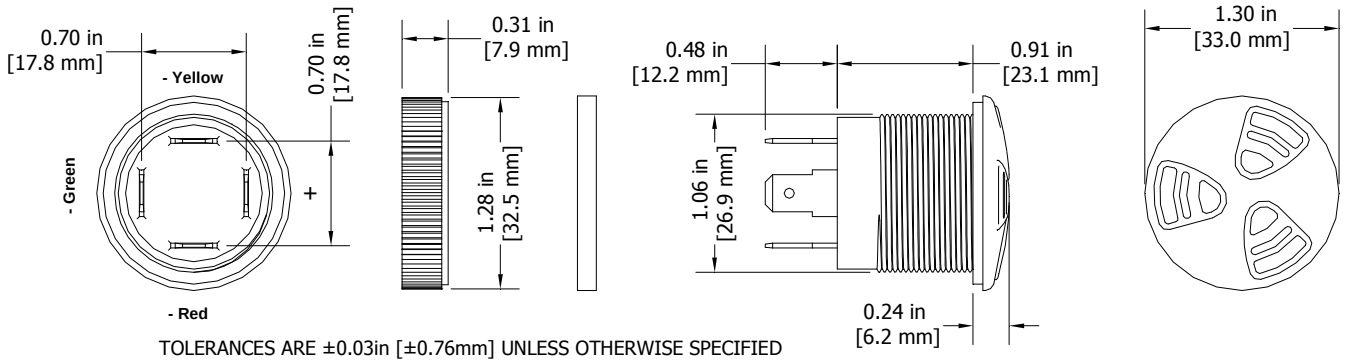
SPECIFICATIONS

Operating Mode:	Extra-Bright Continuous Output LED Panel Indicator
Color:	Emits Red, Yellow or Green Light (Individually)
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Typical Brightness:	(8000 cd/m^2 Red) (2000 cd/m^2 Yellow) (9000 cd/m^2 Green) ± 20% at 30 Vdc
Max. Operating Current:	145 mA at 9 Vdc 50 mA at 30 Vdc
Termination:	4 Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness, One positive Blade and three negative Blades for color select.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40°C to +85°C.
Storage Temperature:	-40°C to +100°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Lens/Case– Clear Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

Preliminary

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 08.13

Copyright © 2013 Floyd Bell Inc.

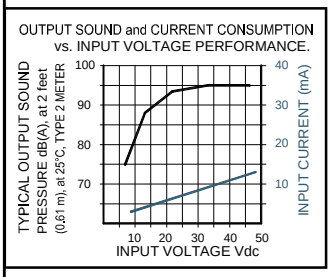
All specifications subject to change without notice.

TMB-82-948-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

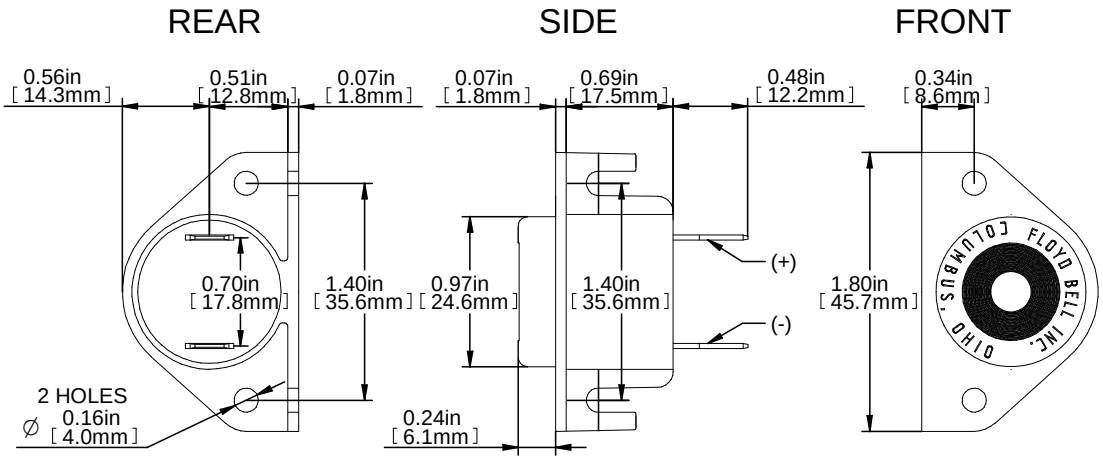


The Turbo TMB-82-948-Q(F) is a medium loud output, flange mounted alarm for operating voltages of 9-48VDC.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.14

Copyright © 2014 Floyd Bell Inc.

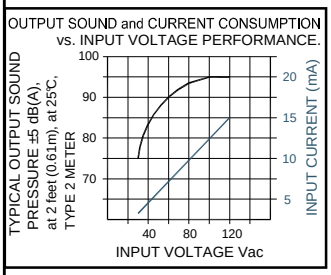
All specifications subject to change without notice.

TMB-86-201-Q(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

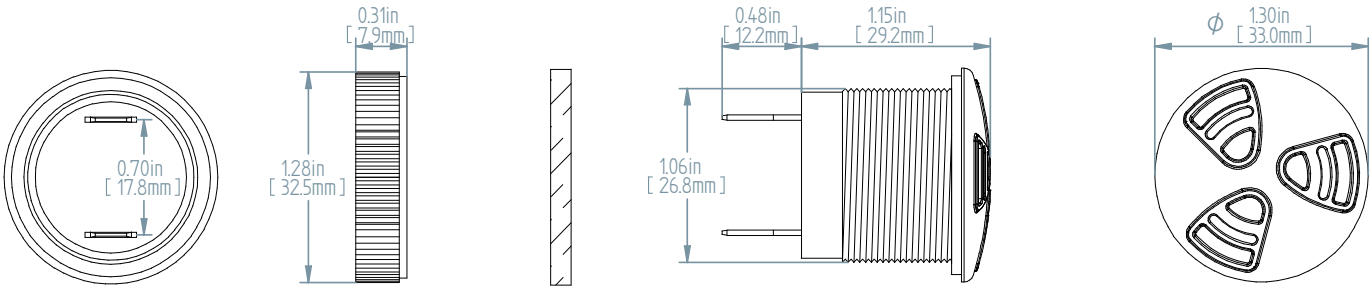


The Turbo TMB-86-201-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

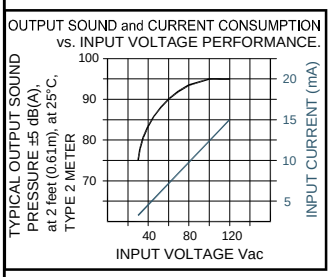
All specifications subject to change without notice.

TMB-86-201-Q(M)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



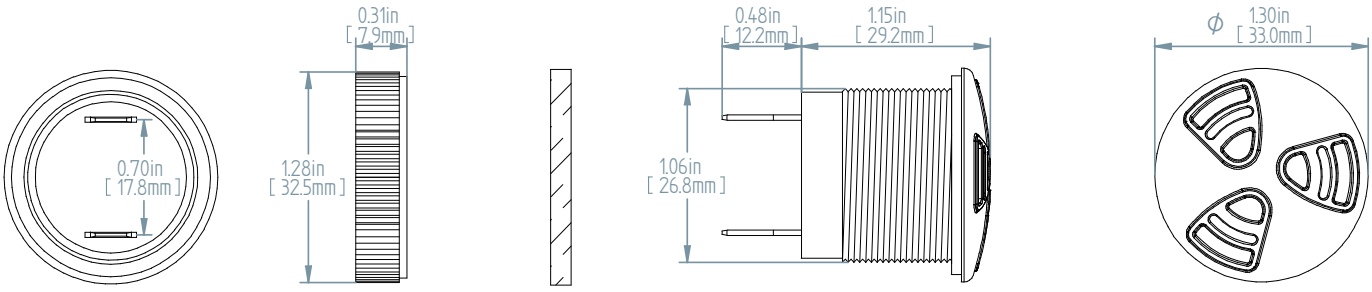
The Turbo TMB-86-201-Q(M) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 2±25% Beeps per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.14

Copyright © 2014 Floyd Bell Inc.

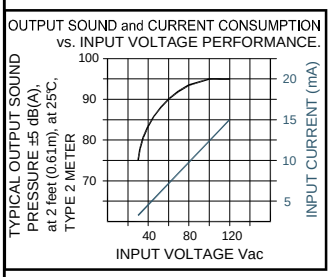
All specifications subject to change without notice.

TMB-86-201-Q(S)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



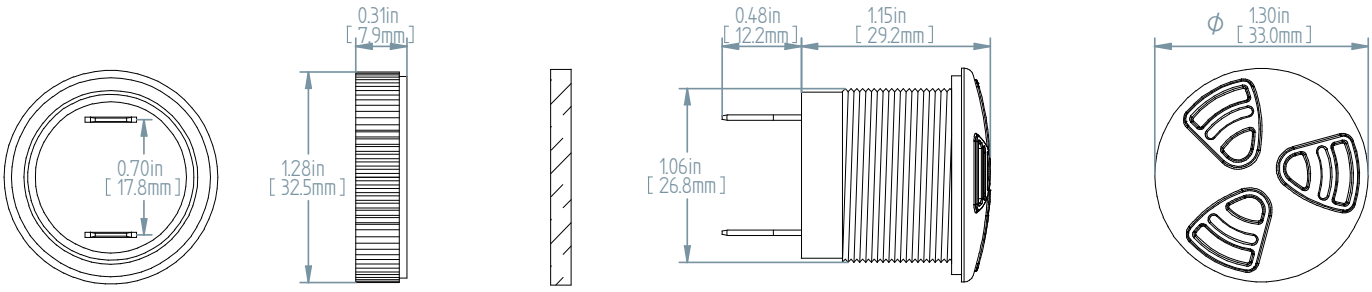
The Turbo TMB-86-201-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

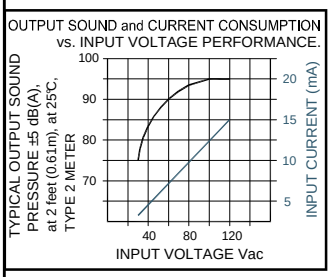
All specifications subject to change without notice.

TMB-86-201-S(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

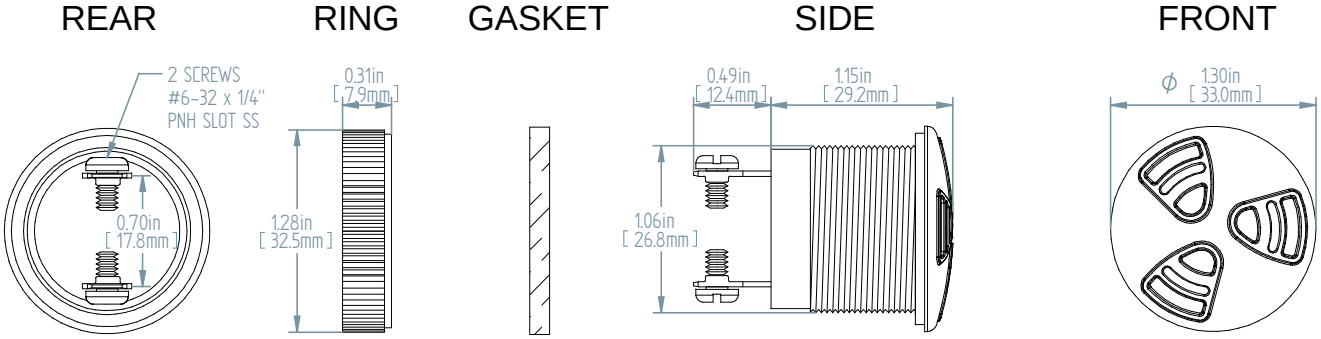


The Turbo TMB-86-201-S(F) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

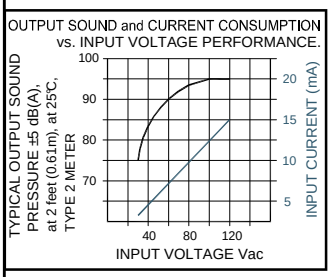
All specifications subject to change without notice.

TMB-86-201-S(S)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

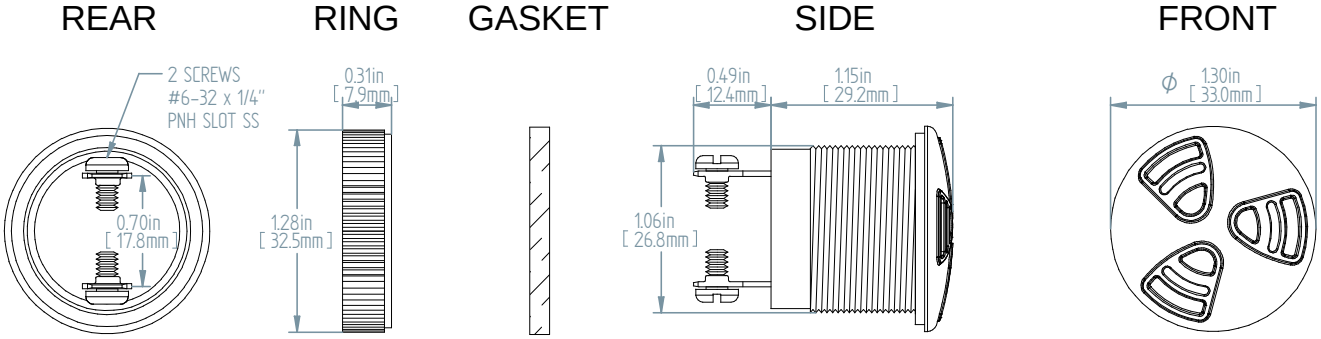


The Turbo TMB-86-201-S(S) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

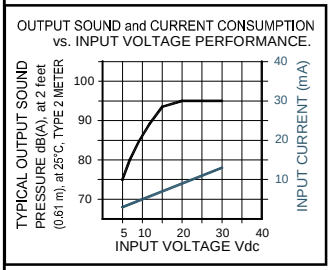
All specifications subject to change without notice.

TMB-86-530-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



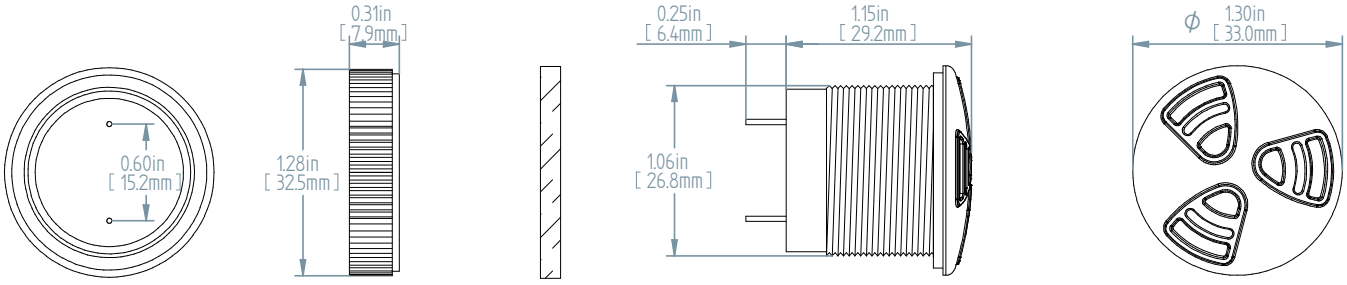
The Turbo TMB-86-530-P(F) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

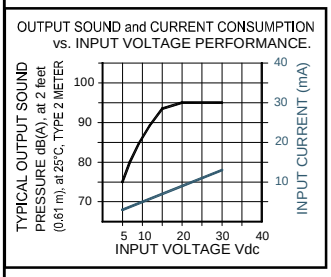
All specifications subject to change without notice.

TMB-86-530-P(S)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



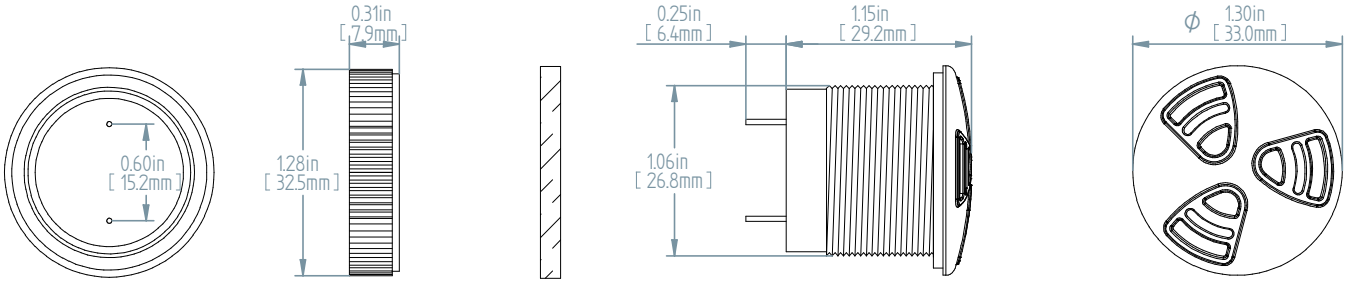
The Turbo TMB-86-530-P(S) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

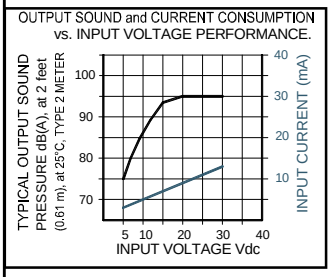
All specifications subject to change without notice.

TMB-86-530-Q(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



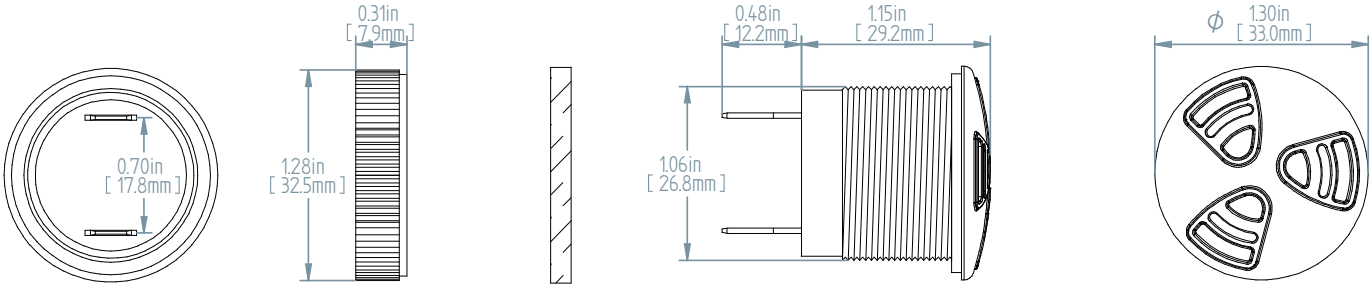
The Turbo TMB-86-530-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

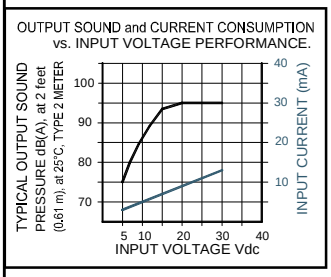
All specifications subject to change without notice.

TMB-86-530-Q(S)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



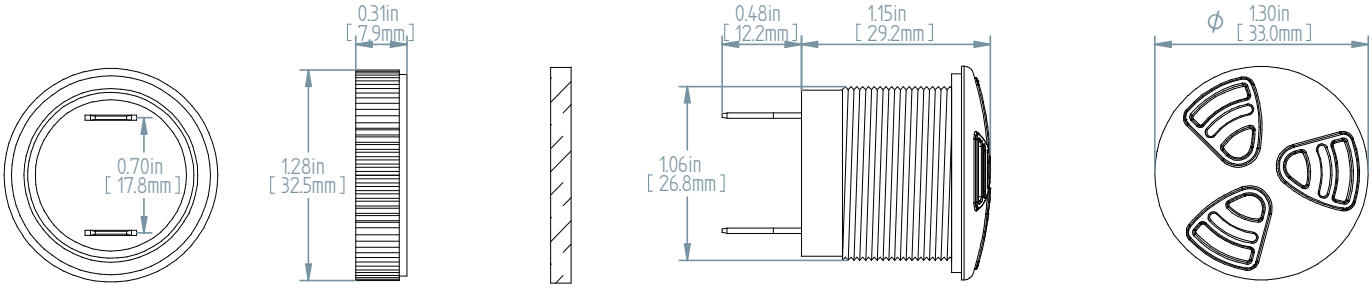
The Turbo TMB-86-530-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

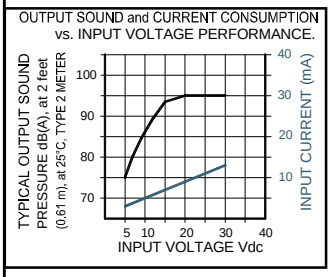
All specifications subject to change without notice.

TMB-86-530-S(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



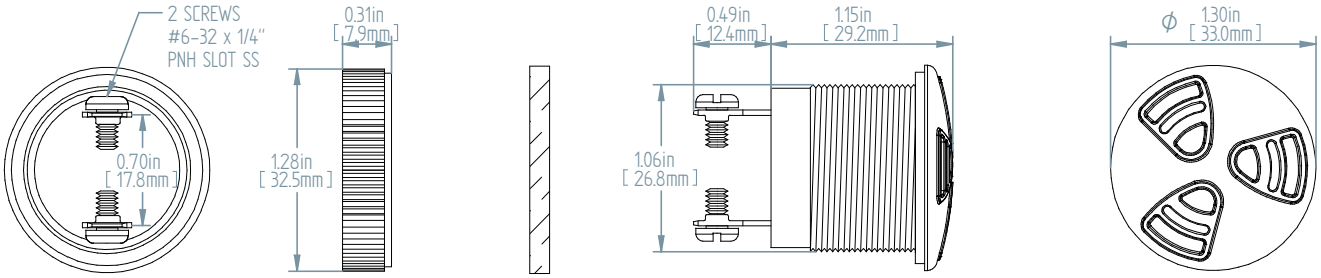
The Turbo TMB-86-530-S(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

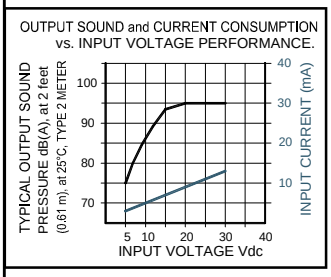
All specifications subject to change without notice.

TMB-86-530-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

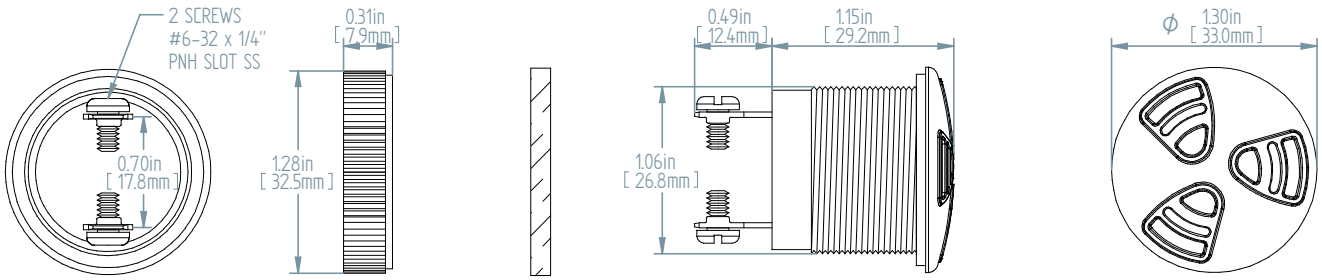


The Turbo TMB-86-530-S(S) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

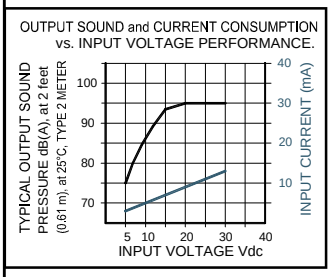
All specifications subject to change without notice.

TMB-86-530-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

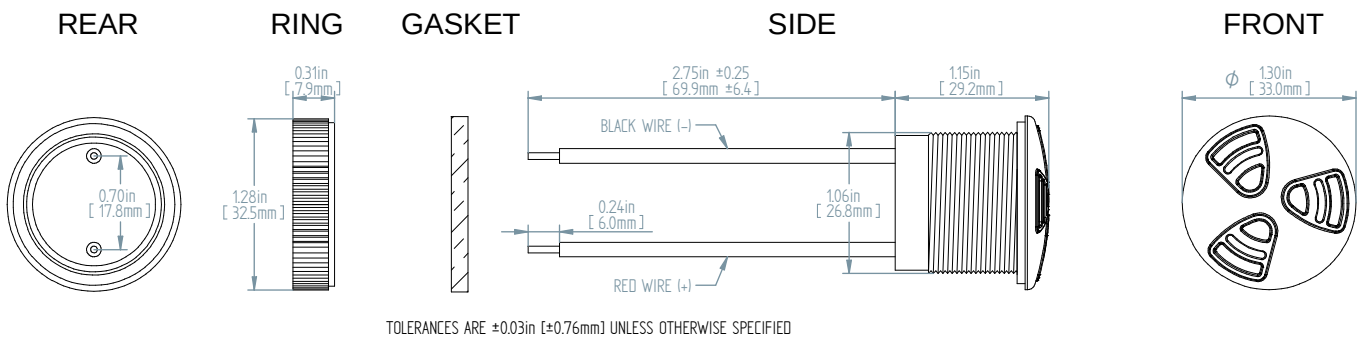


The Turbo TMB-86-530-W(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

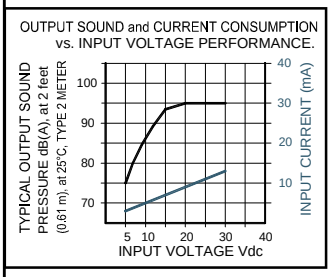
All specifications subject to change without notice.

TMB-86-530-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



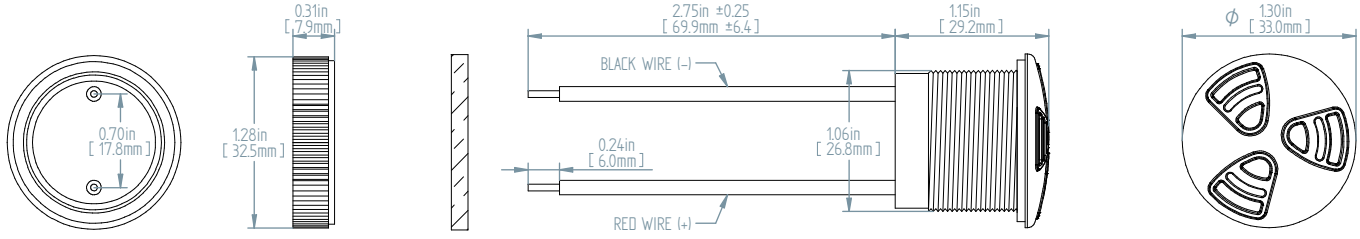
The Turbo TMB-86-530-W(S) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

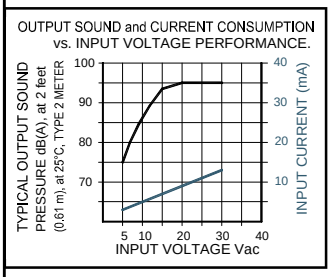
All specifications subject to change without notice.

TMB-86-531-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



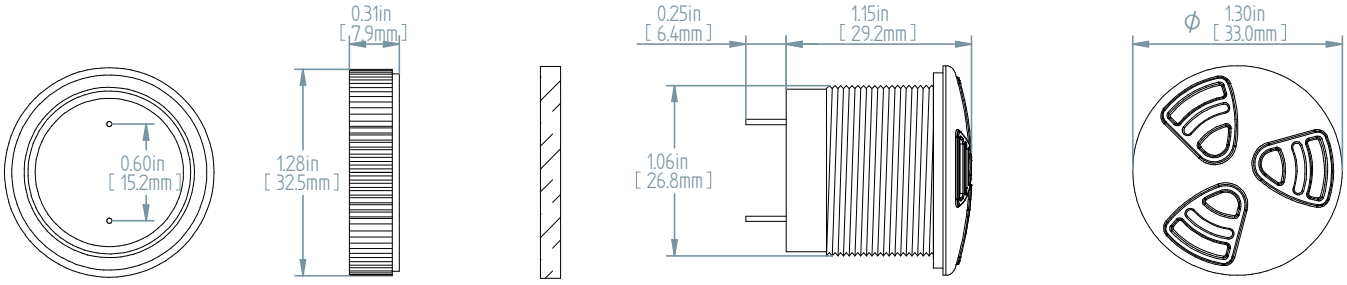
The Turbo TMB-86-531-P(F) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

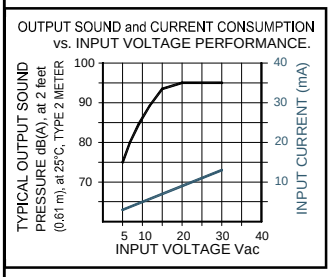
All specifications subject to change without notice.

TMB-86-531-P(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



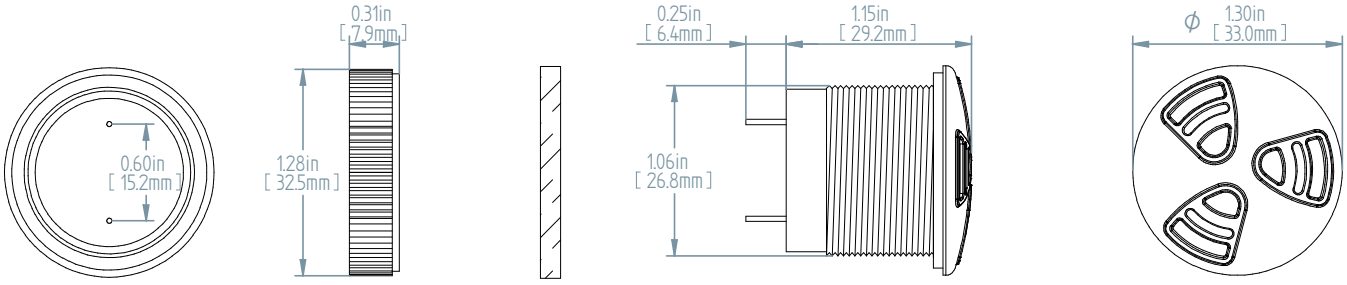
The Turbo TMB-86-531-P(S) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

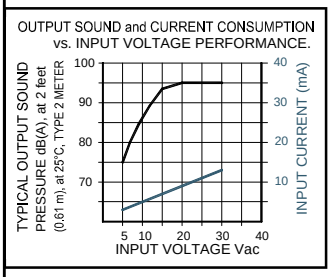
All specifications subject to change without notice.

TMB-86-531-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



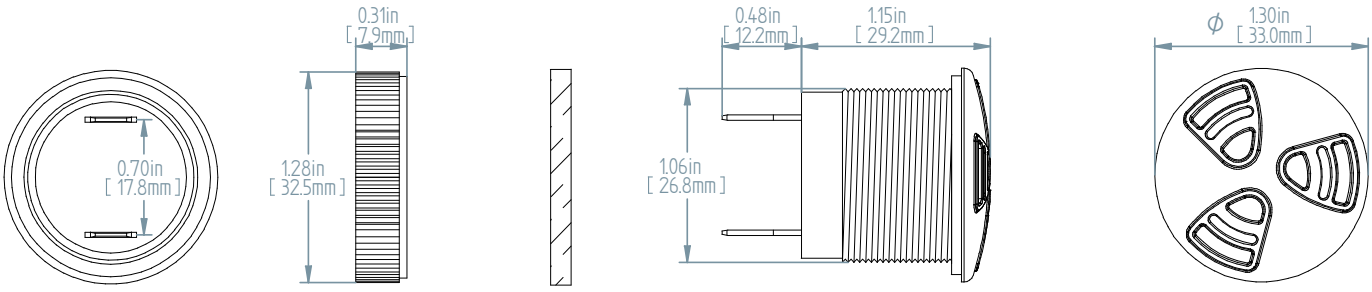
The Turbo TMB-86-531-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

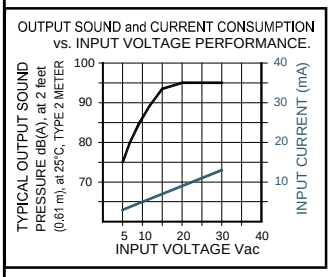
All specifications subject to change without notice.

TMB-86-531-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



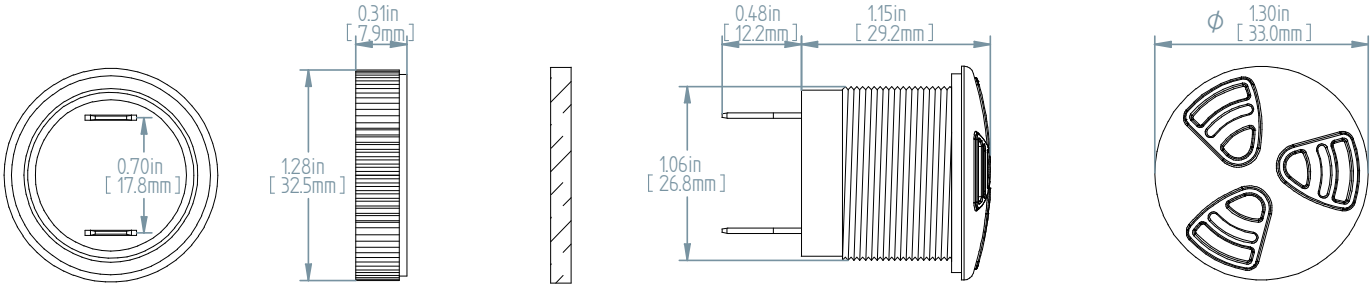
The Turbo TMB-86-531-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

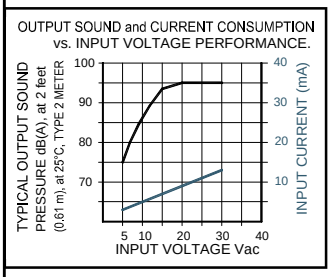
All specifications subject to change without notice.

TMB-86-531-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

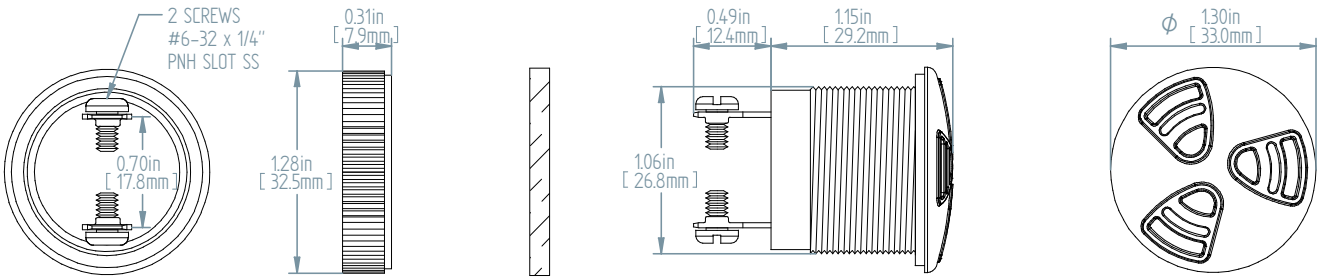


The Turbo TMB-86-531-S(F) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

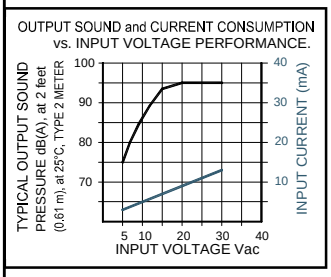
All specifications subject to change without notice.

TMB-86-531-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

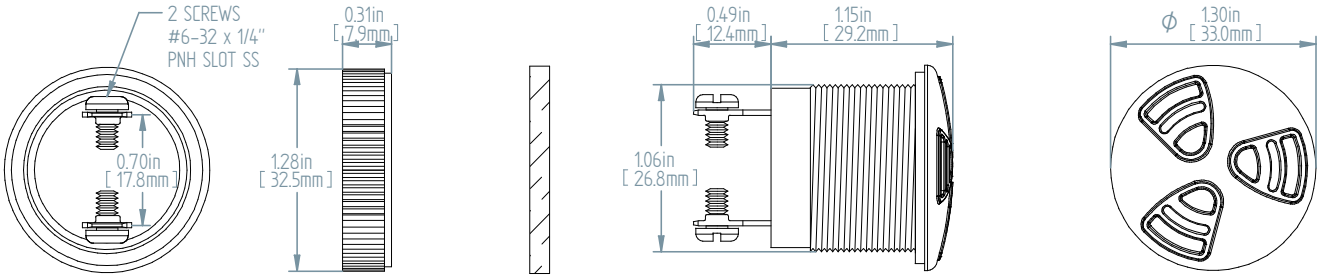


The Turbo TMB-86-531-S(S) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

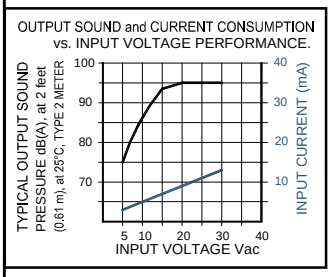
All specifications subject to change without notice.

TMB-86-531-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

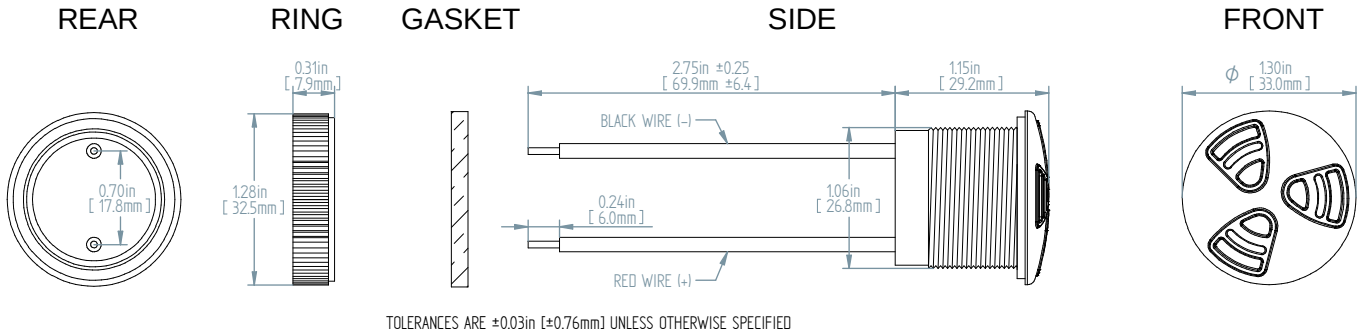


The Turbo TMB-86-531-W(F) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

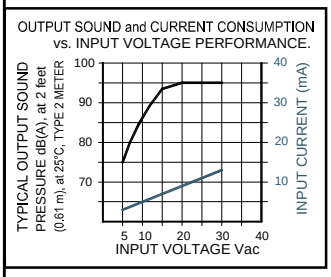
All specifications subject to change without notice.

TMB-86-531-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

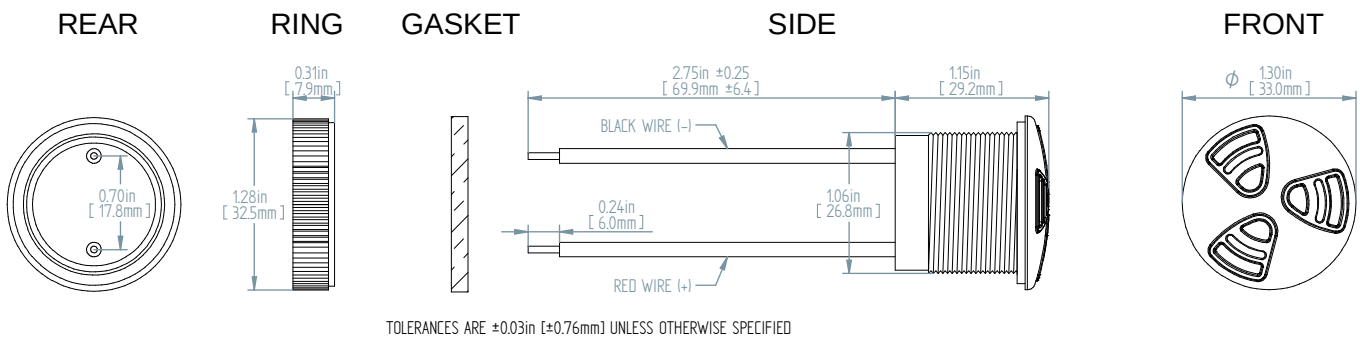


The Turbo TMB-86-531-W(S) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

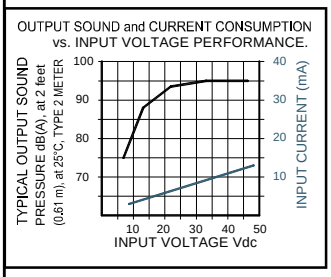
All specifications subject to change without notice.

TMB-86-948-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



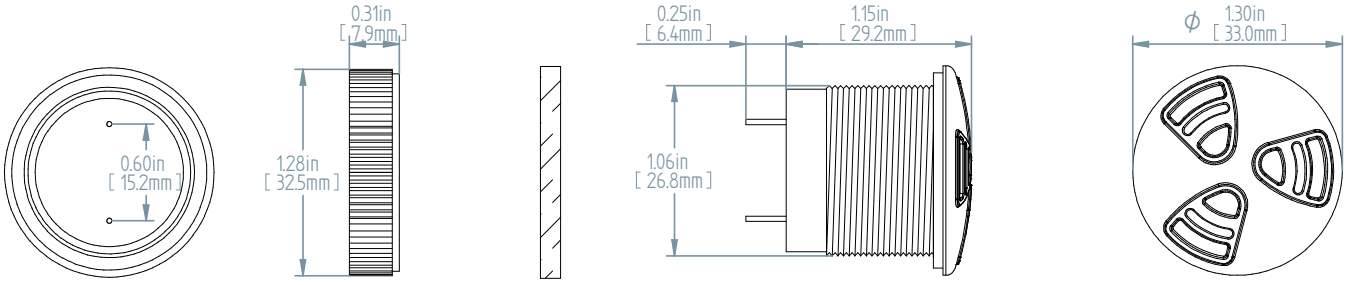
The Turbo TMB-86-948-P(F) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

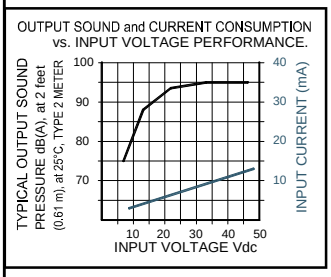
All specifications subject to change without notice.

TMB-86-948-P(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



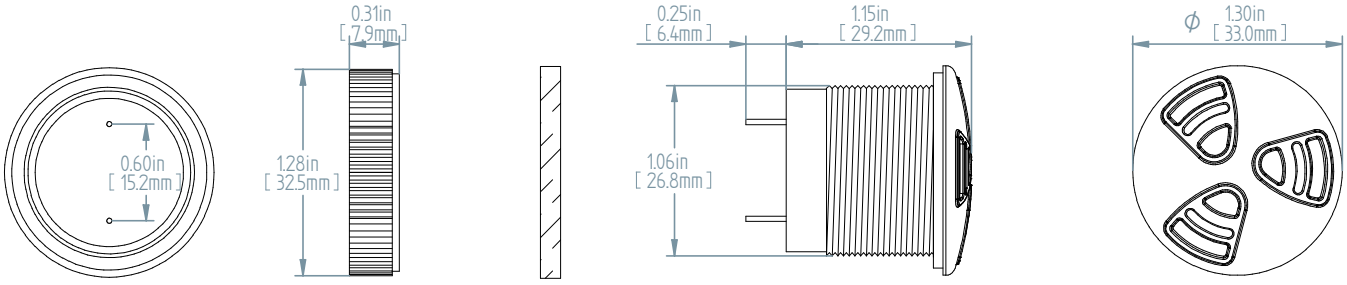
The Turbo TMB-86-948-P(S) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

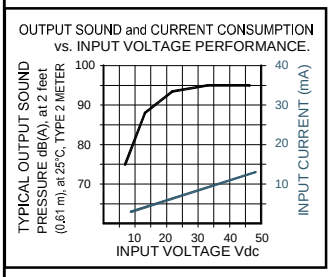
All specifications subject to change without notice.

TMB-86-948-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



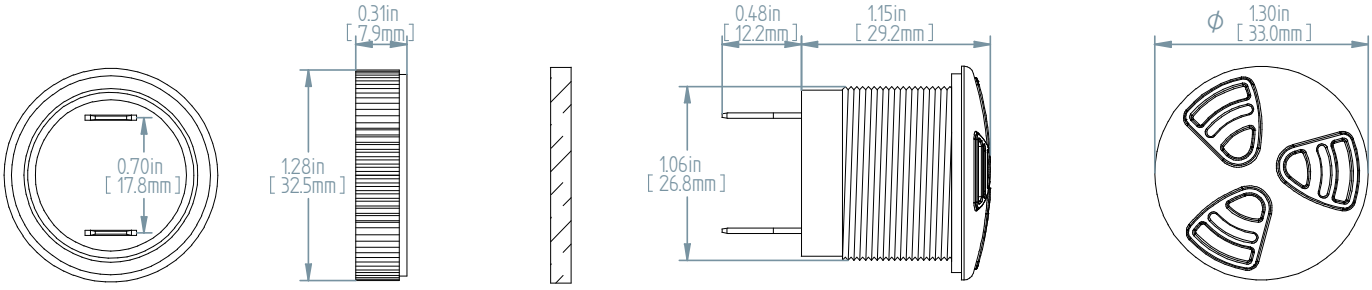
The Turbo TMB-86-948-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

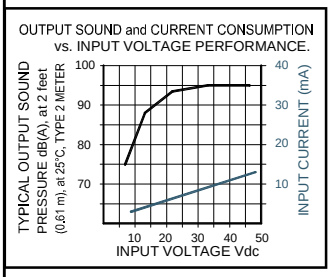
All specifications subject to change without notice.

TMB-86-948-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



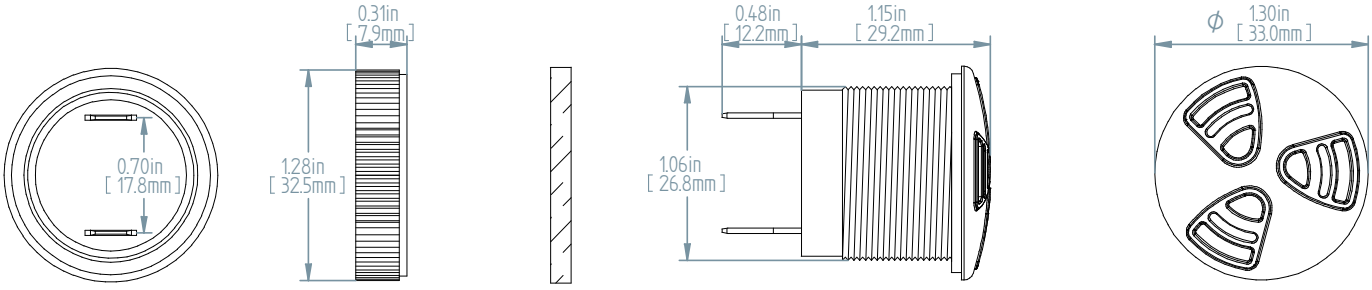
The Turbo TMB-86-948-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

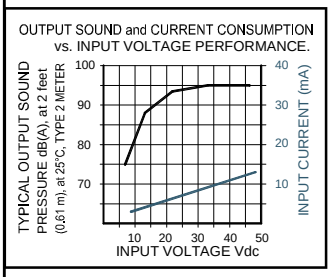
All specifications subject to change without notice.

TMB-86-948-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

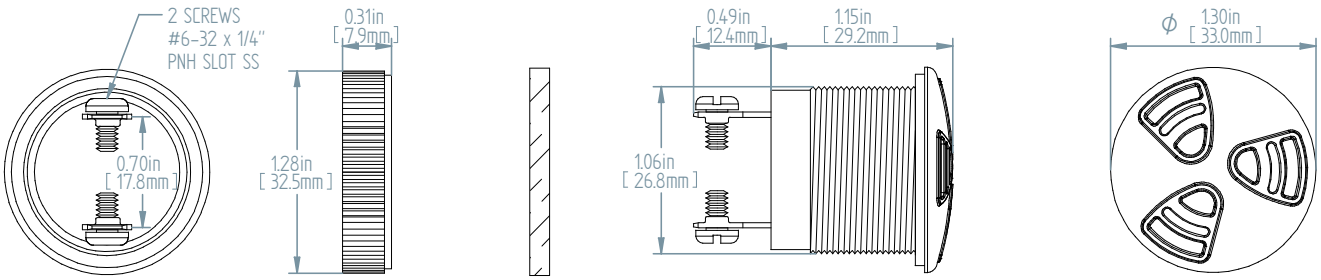


The Turbo TMB-86-948-S(F) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

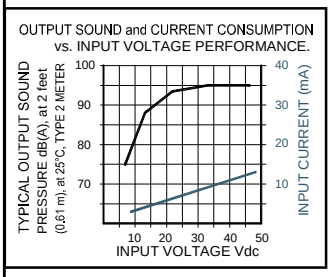
All specifications subject to change without notice.

TMB-86-948-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

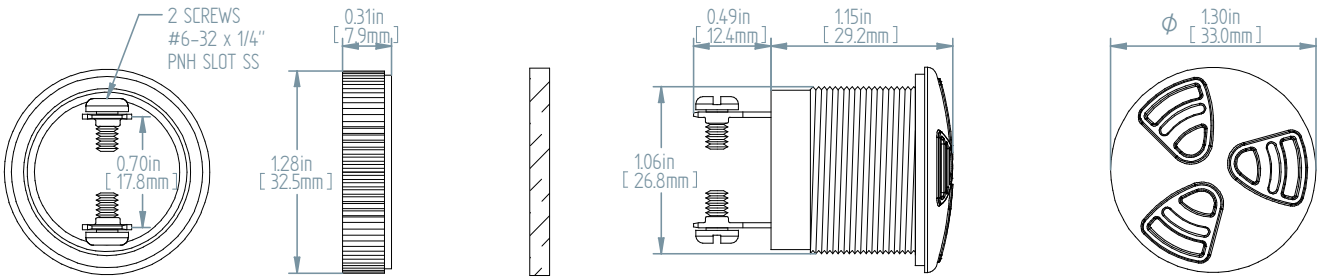


The Turbo TMB-86-948-S(S) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

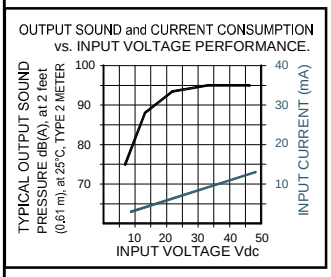
All specifications subject to change without notice.

TMB-86-948-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



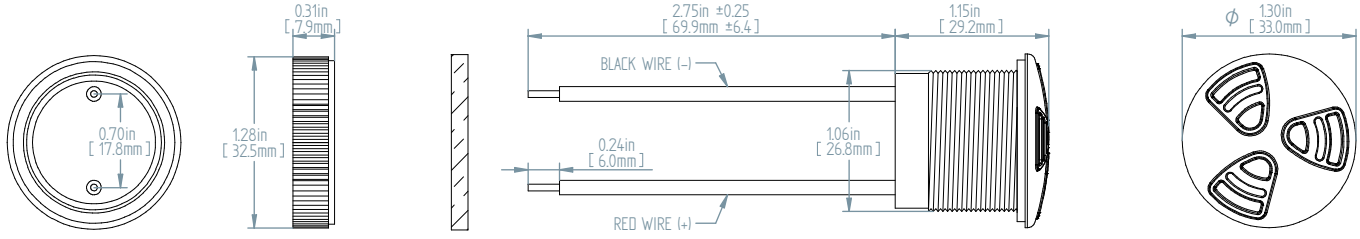
The Turbo TMB-86-948-W(F) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

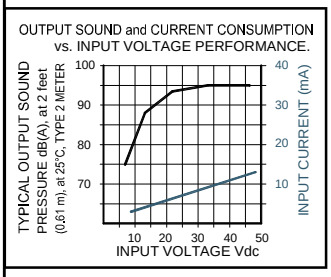
All specifications subject to change without notice.

TMB-86-948-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



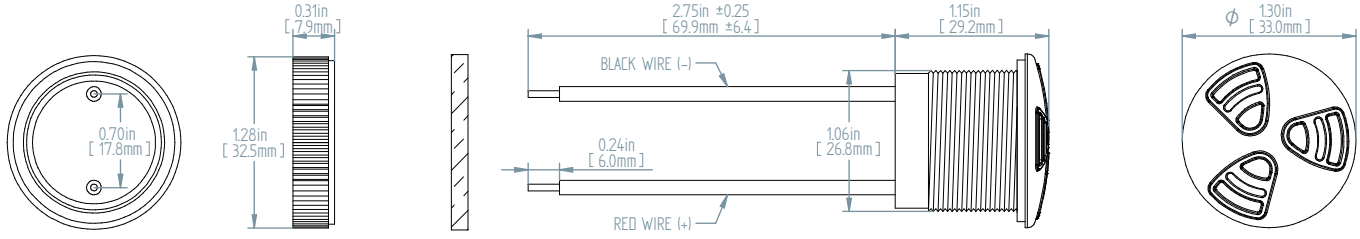
The Turbo TMB-86-948-W(S) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

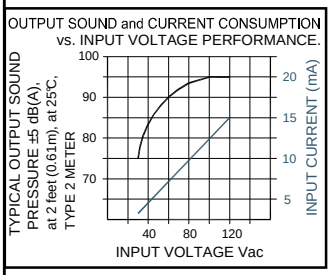
All specifications subject to change without notice.

TMB-V86-201-Q(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



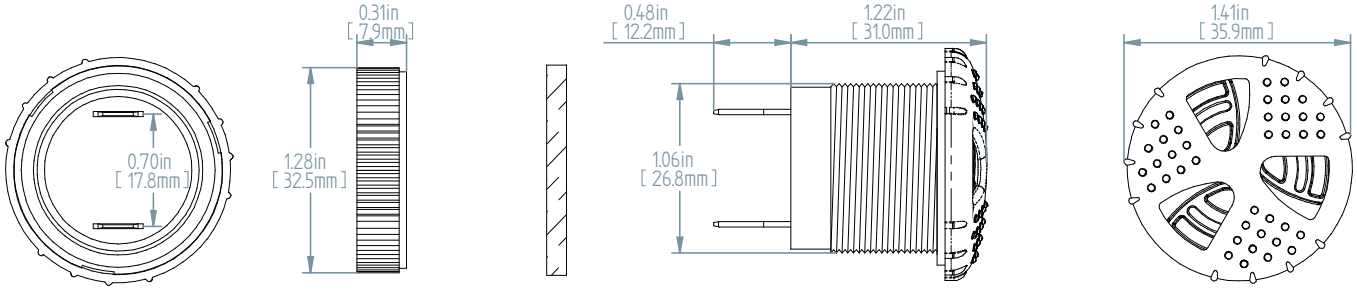
The Turbo TMB-V86-201-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

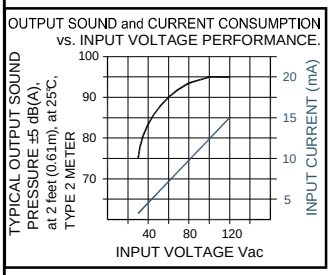
All specifications subject to change without notice.

TMB-V86-201-Q(S)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



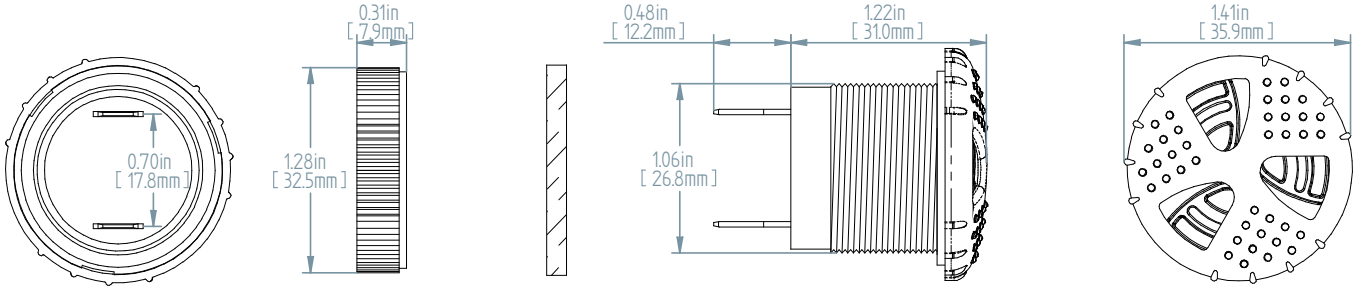
The Turbo TMB-V86-201-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

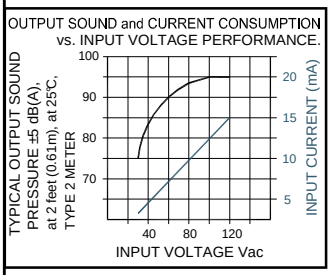
All specifications subject to change without notice.

TMB-V86-201-S(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



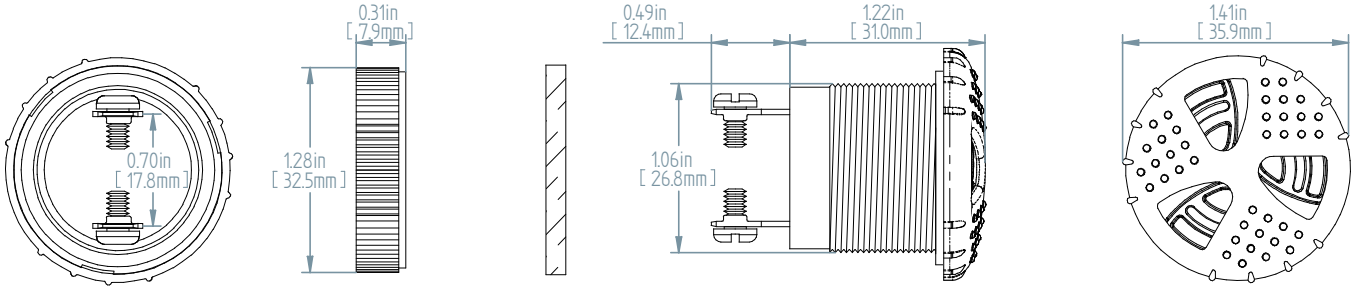
The Turbo TMB-V86-201-S(F) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

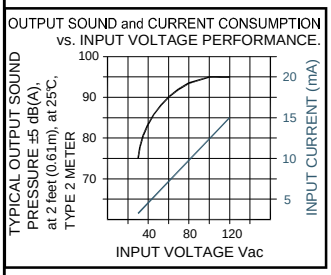
All specifications subject to change without notice.

TMB-V86-201-S(S)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



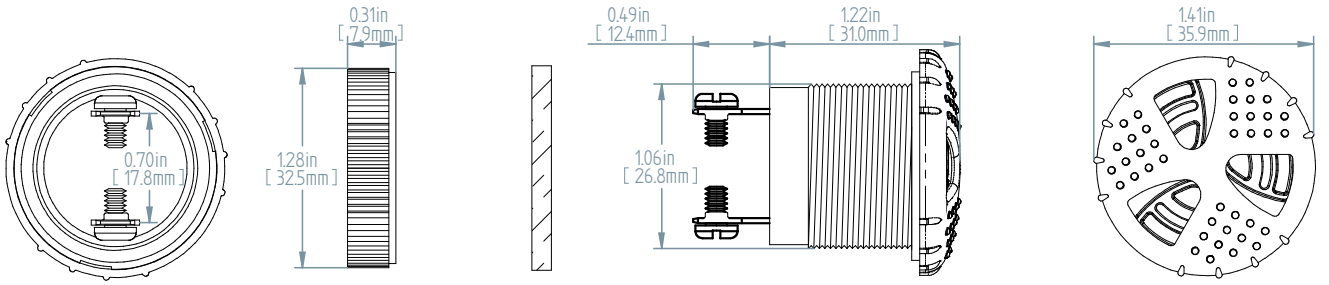
The Turbo TMB-V86-201-S(S) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

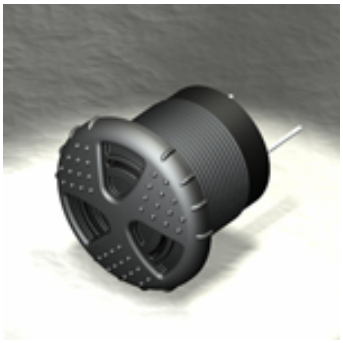
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

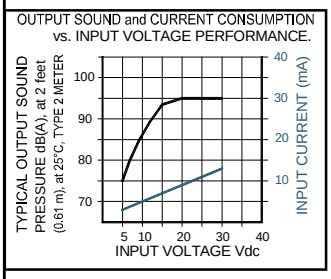
All specifications subject to change without notice.

TMB-V86-530-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



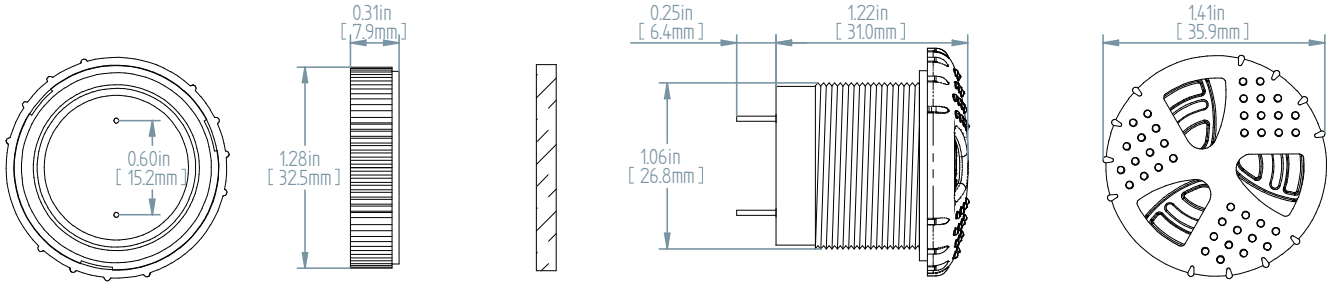
The Turbo TMB-V86-530-P(F) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

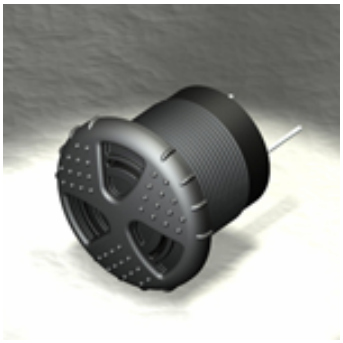
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

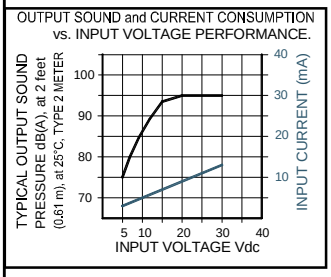
All specifications subject to change without notice.

TMB-V86-530-P(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

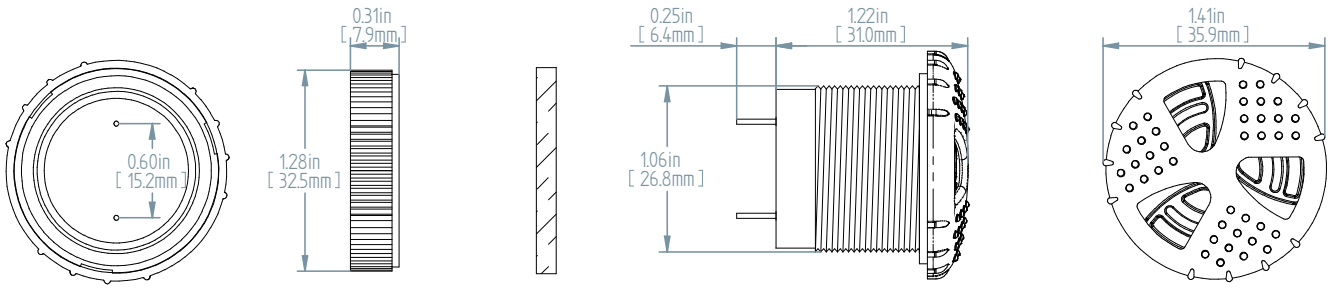


The Turbo TMB-V86-530-P(S) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

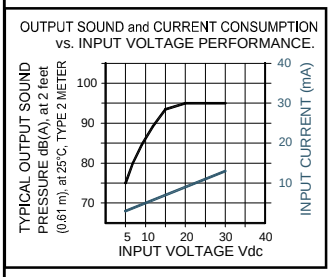
All specifications subject to change without notice.

TMB-V86-530-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



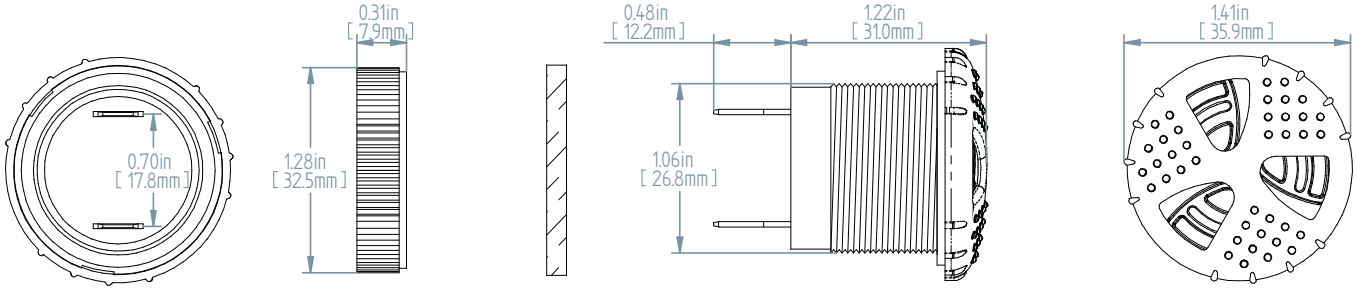
The Turbo TMB-V86-530-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

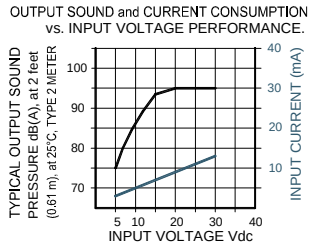
All specifications subject to change without notice.

TMB-V86-530-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

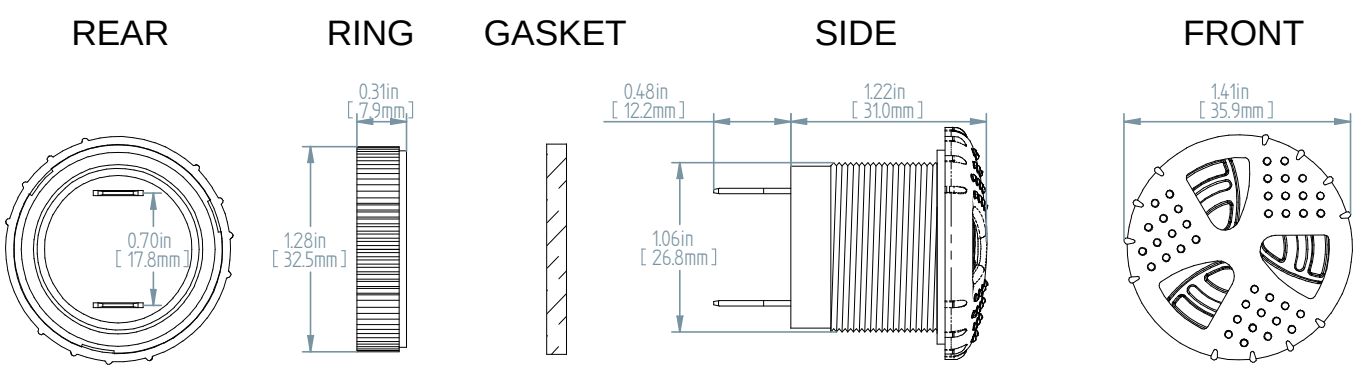


The Turbo TMB-V86-530-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

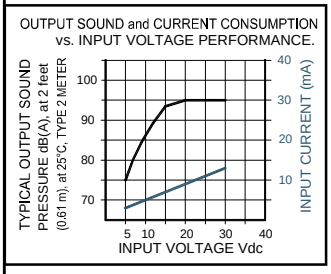
All specifications subject to change without notice.

TMB-V86-530-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



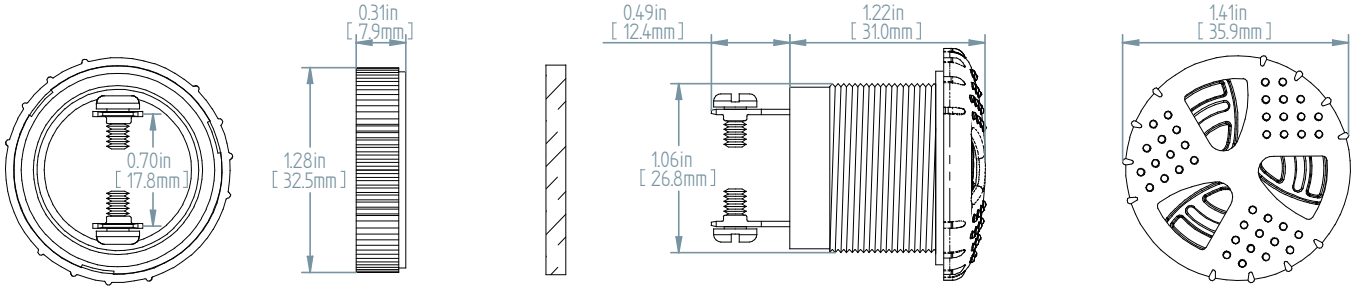
The Turbo TMB-V86-530-S(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

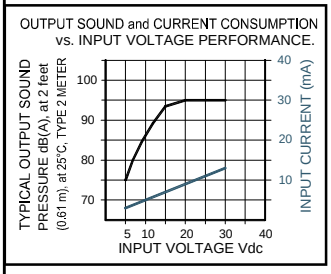
All specifications subject to change without notice.

TMB-V86-530-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

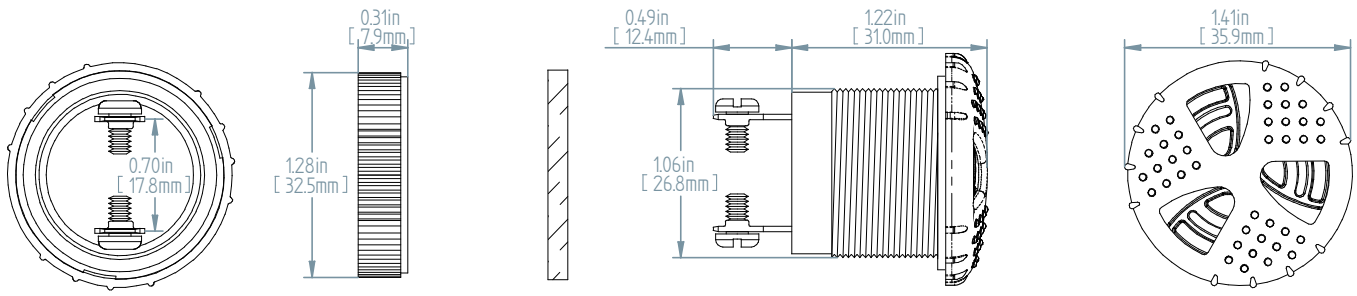


The Turbo TMB-V86-530-S(S) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

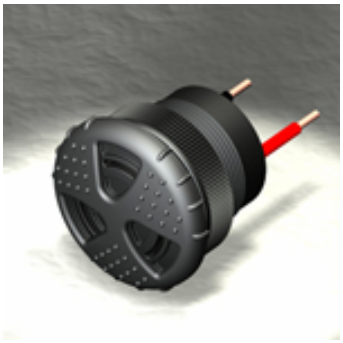
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

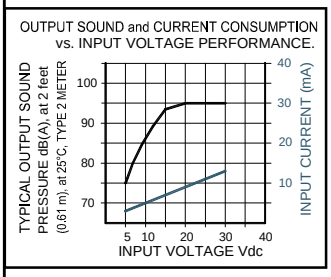
All specifications subject to change without notice.

TMB-V86-530-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

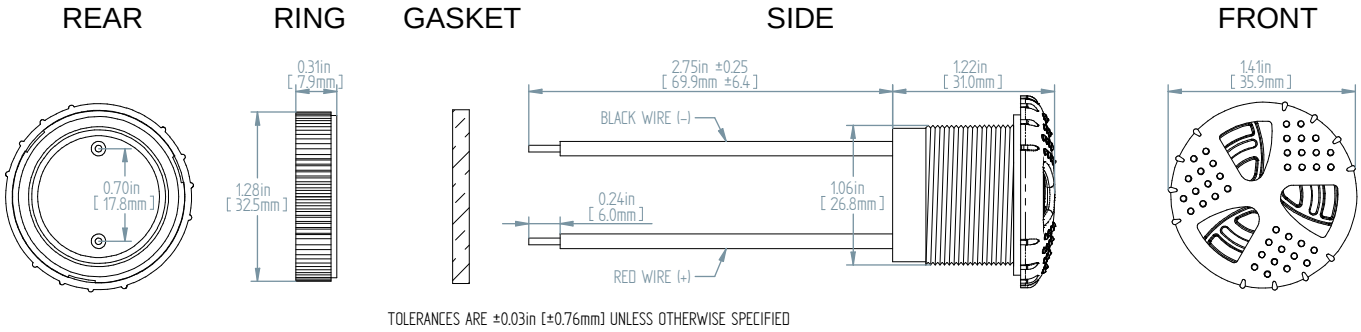


The Turbo TMB-V86-530-W(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

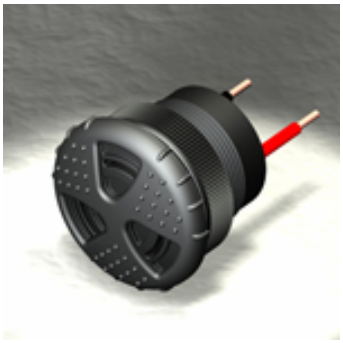
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

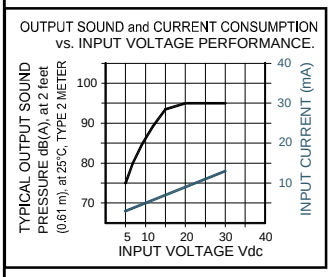
All specifications subject to change without notice.

TMB-V86-530-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

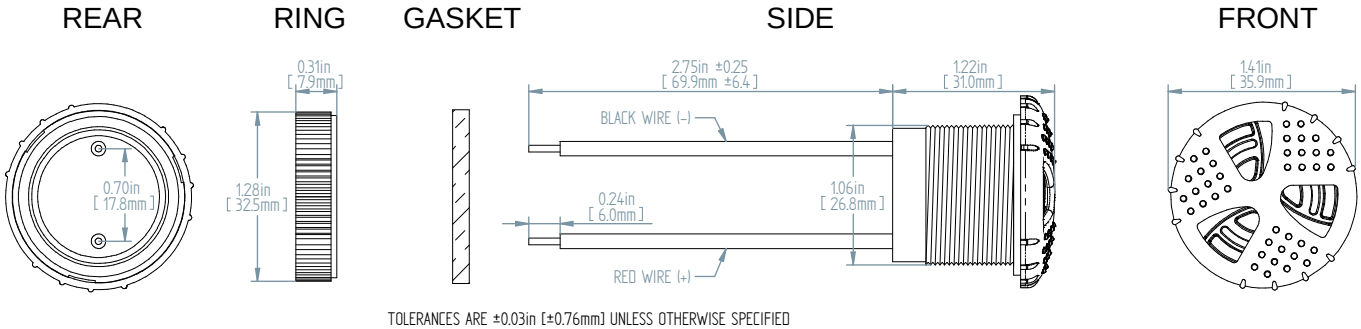


The Turbo TMB-V86-530-W(S) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

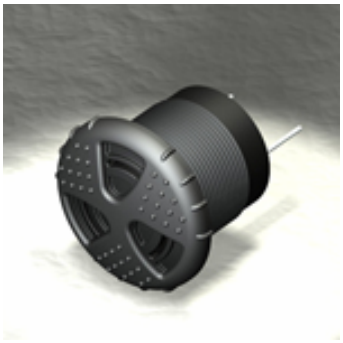
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

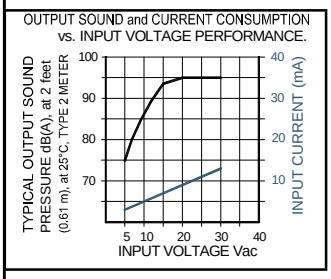
All specifications subject to change without notice.

TMB-V86-531-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



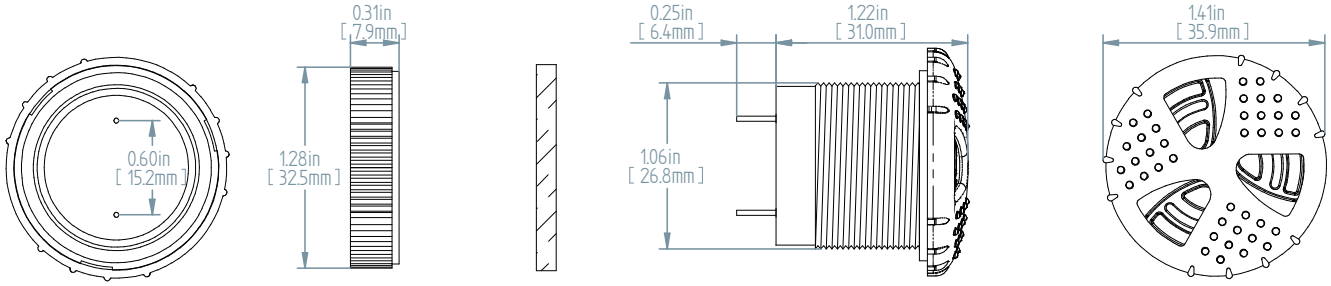
The Turbo TMB-V86-531-P(F) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

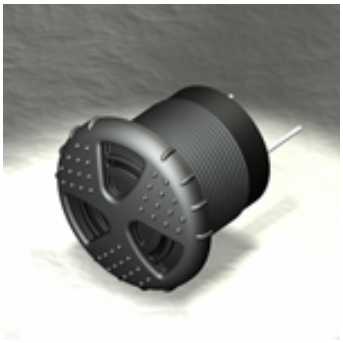
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

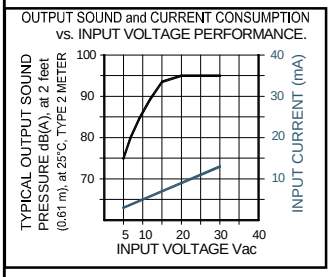
All specifications subject to change without notice.

TMB-V86-531-P(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

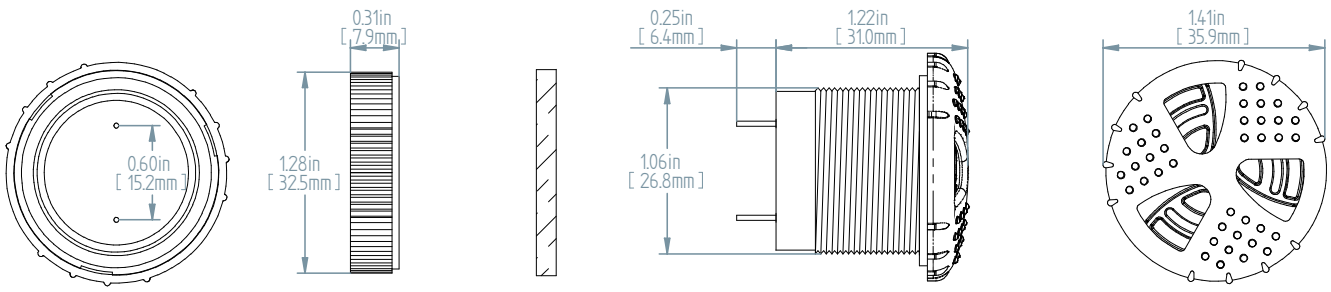


The Turbo TMB-V86-531-P(S) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

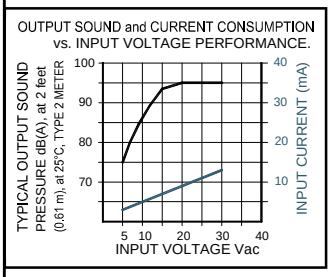
All specifications subject to change without notice.

TMB-V86-531-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



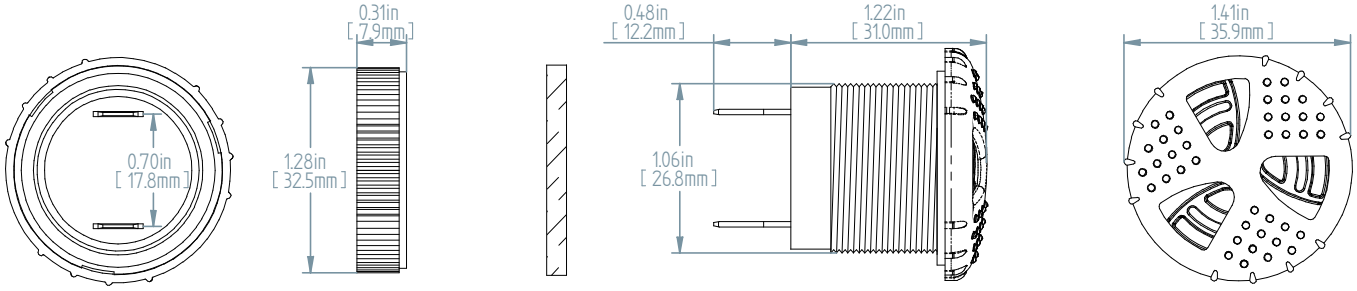
The Turbo TMB-V86-531-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

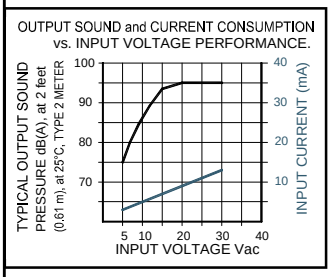
All specifications subject to change without notice.

TMB-V86-531-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



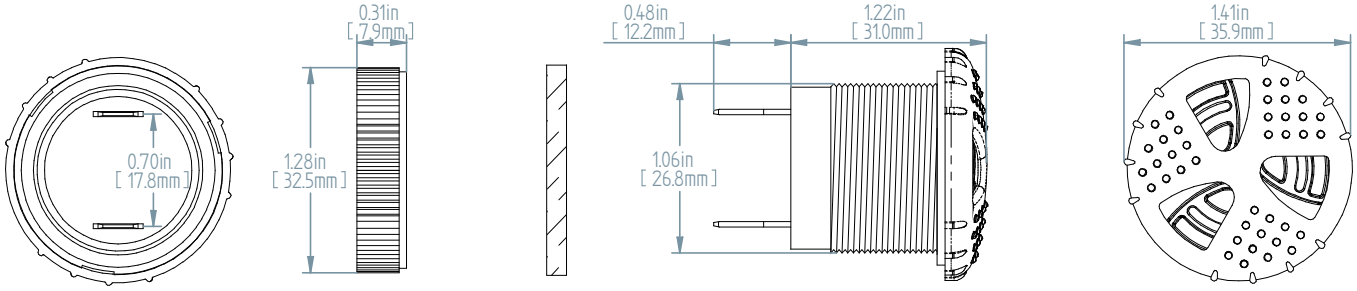
The Turbo TMB-V86-531-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

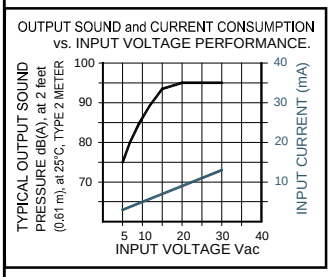
All specifications subject to change without notice.

TMB-V86-531-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



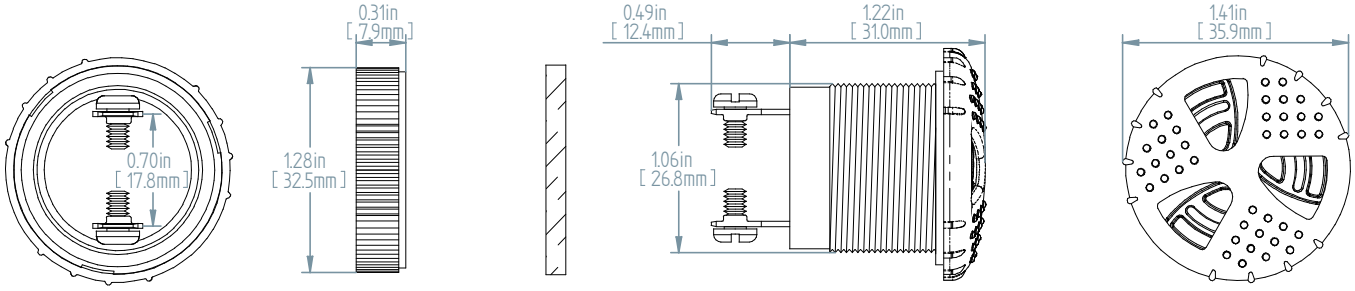
The Turbo TMB-V86-531-S(F) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic “NORYL® N-190”, Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125” Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

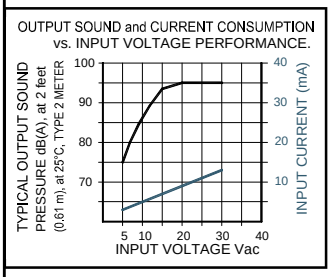
All specifications subject to change without notice.

TMB-V86-531-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



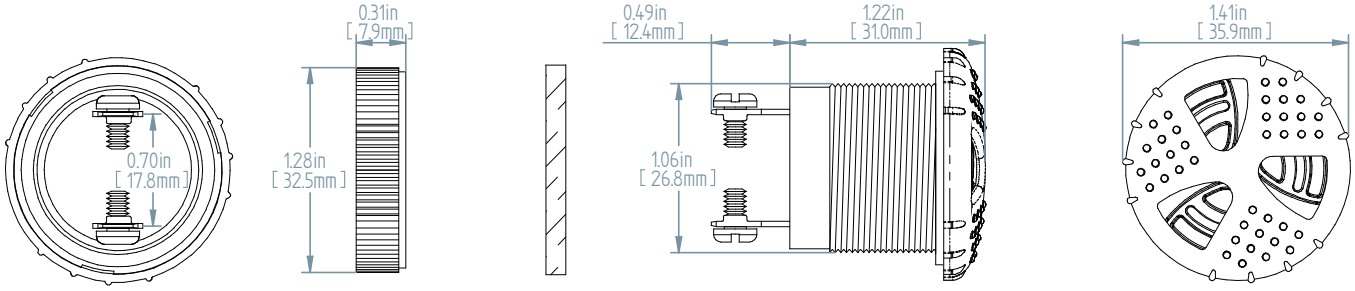
The Turbo TMB-V86-531-S(S) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

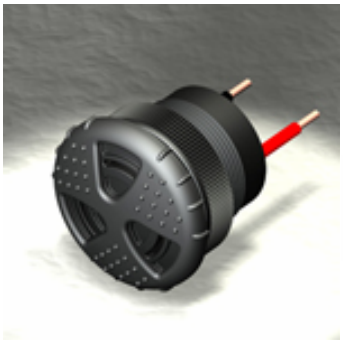
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

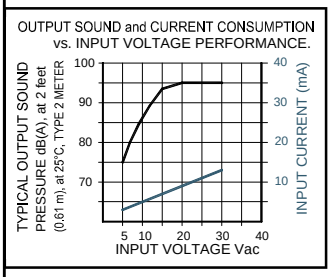
All specifications subject to change without notice.

TMB-V86-531-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



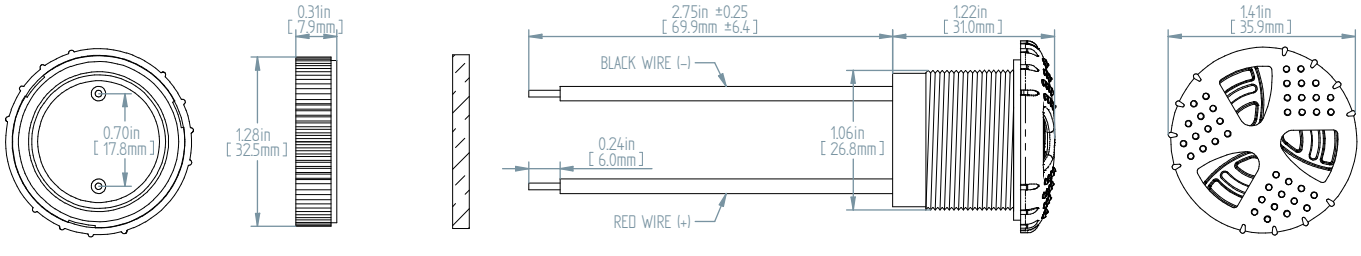
The Turbo TMB-V86-531-W(F) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

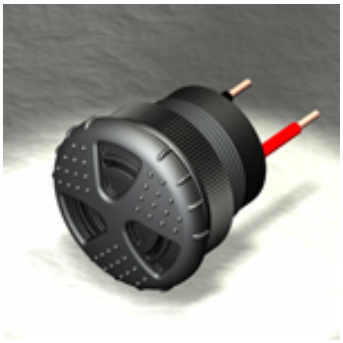
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

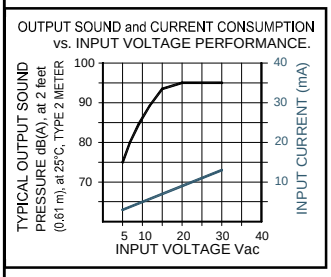
All specifications subject to change without notice.

TMB-V86-531-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



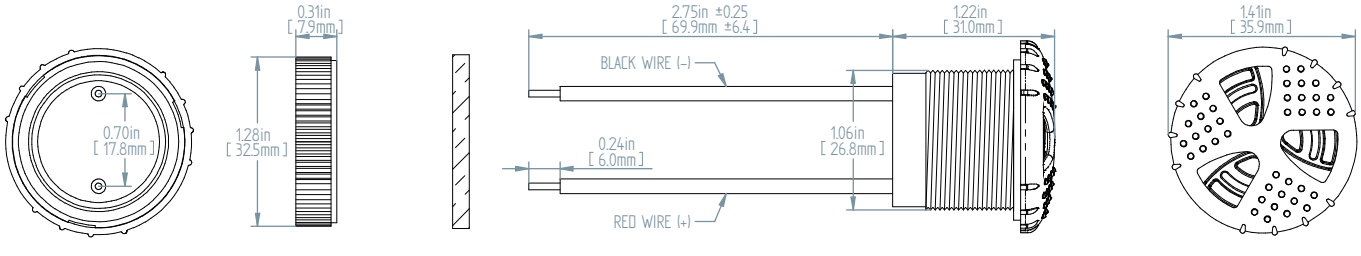
The Turbo TMB-V86-531-W(S) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

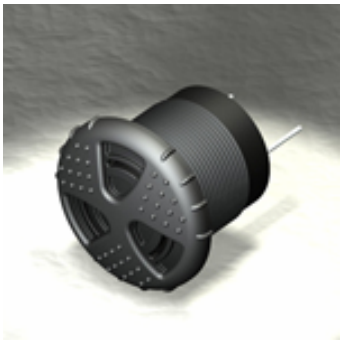
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

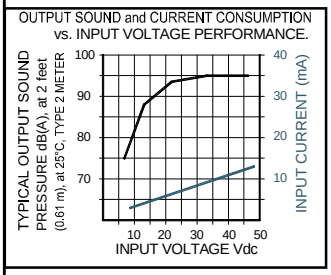
All specifications subject to change without notice.

TMB-V86-948-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



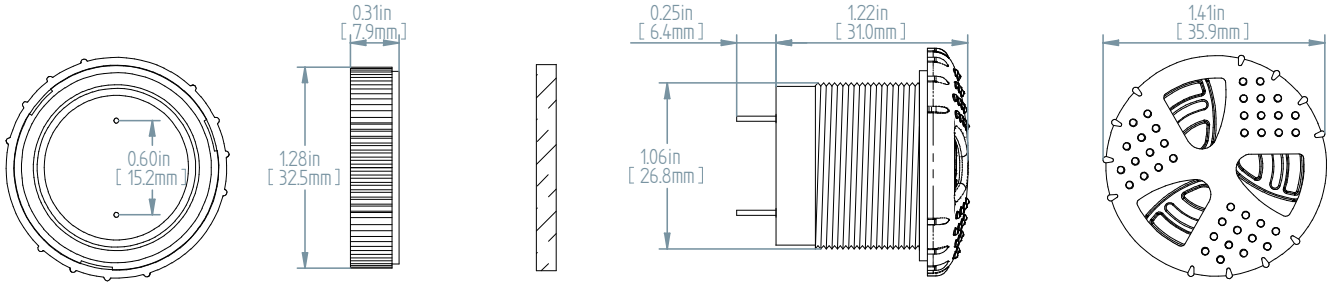
The Turbo TMB-V86-948-P(F) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

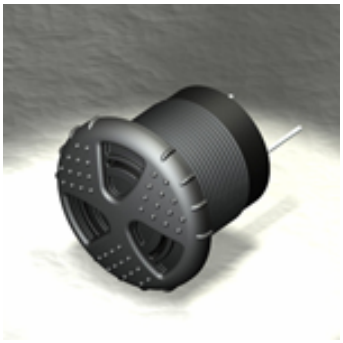
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

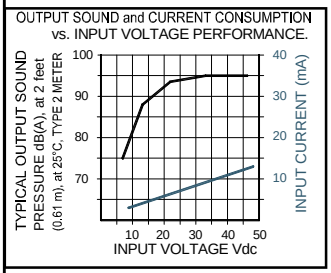
All specifications subject to change without notice.

TMB-V86-948-P(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



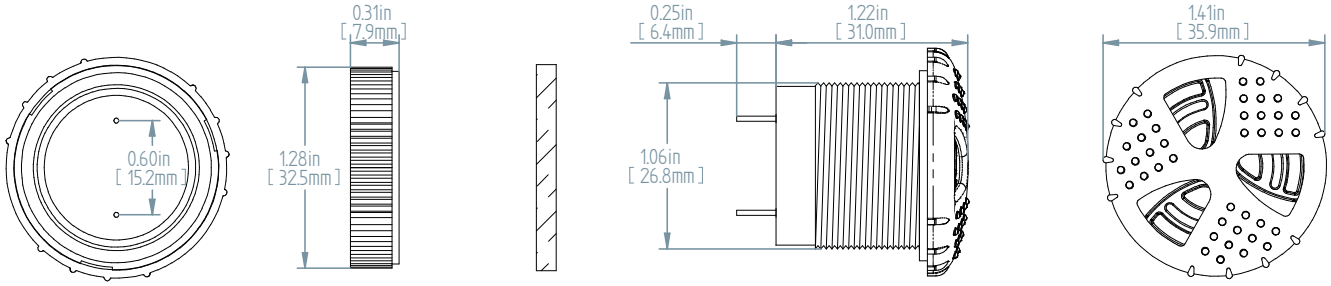
The Turbo TMB-V86-948-P(S) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

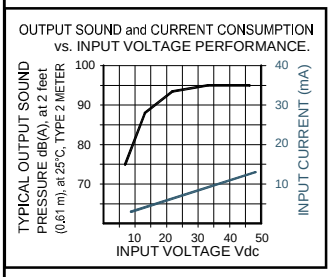
All specifications subject to change without notice.

TMB-V86-948-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



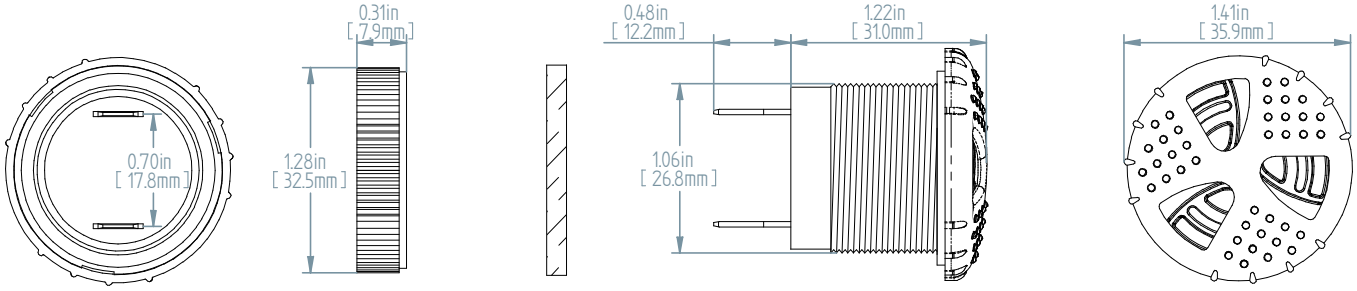
The Turbo TMB-V86-948-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

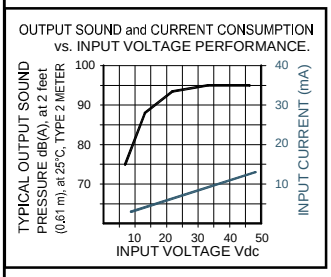
All specifications subject to change without notice.

TMB-V86-948-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



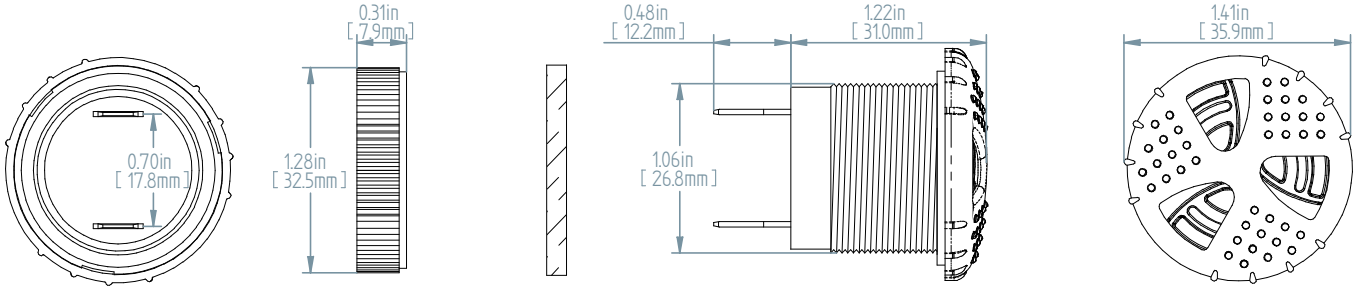
The Turbo TMB-V86-948-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

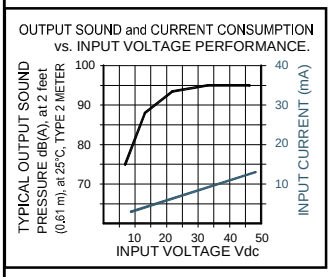
All specifications subject to change without notice.

TMB-V86-948-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

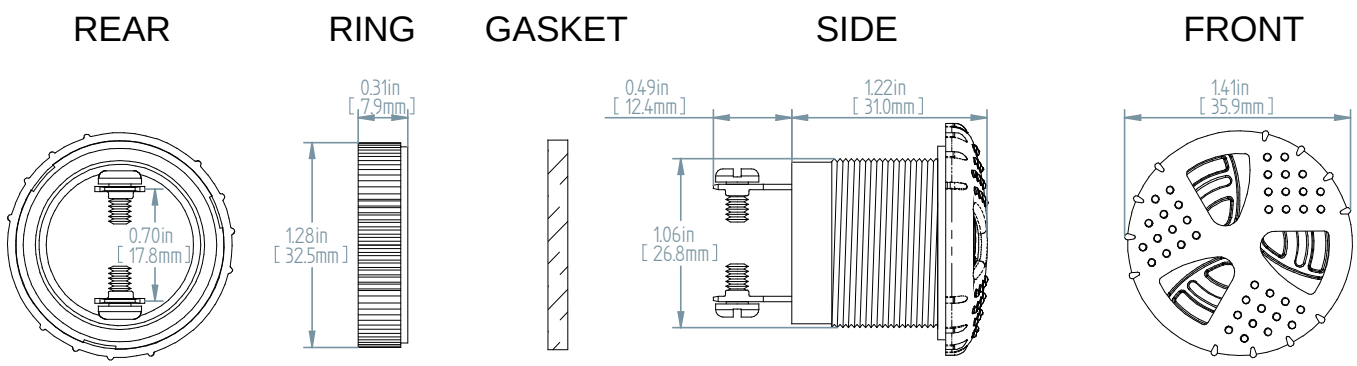


The Turbo TMB-V86-948-S(F) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

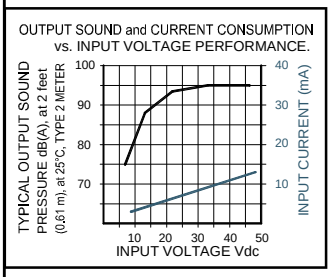
All specifications subject to change without notice.

TMB-V86-948-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

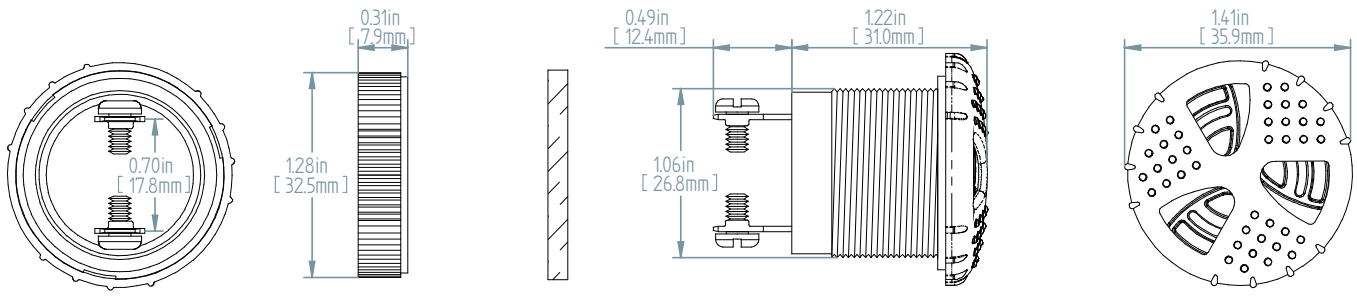


The Turbo TMB-V86-948-S(S) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

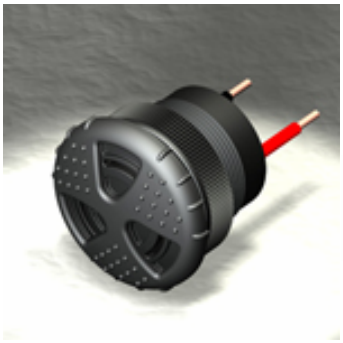
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

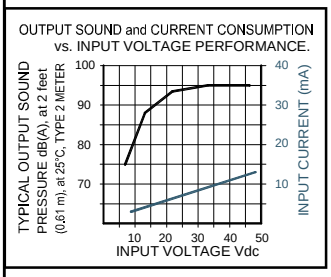
All specifications subject to change without notice.

TMB-V86-948-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



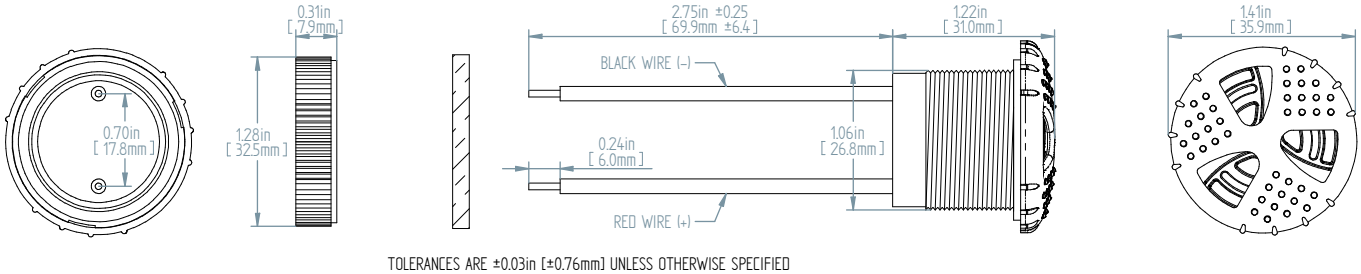
The Turbo TMB-V86-948-W(F) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

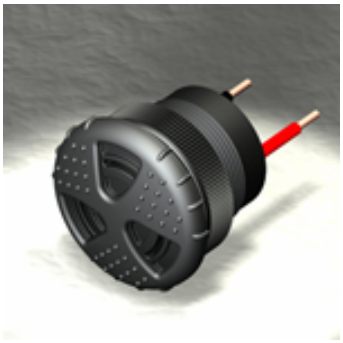
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

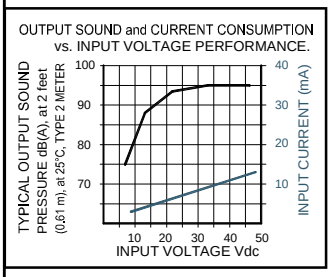
All specifications subject to change without notice.

TMB-V86-948-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



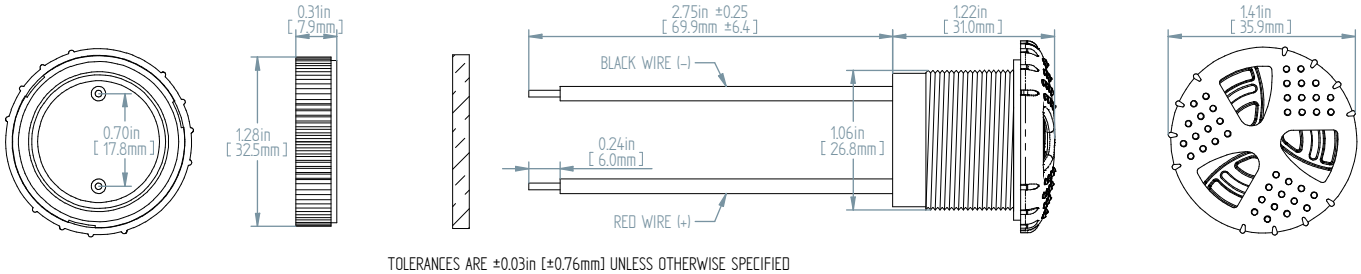
The Turbo TMB-V86-948-W(S) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Beep Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

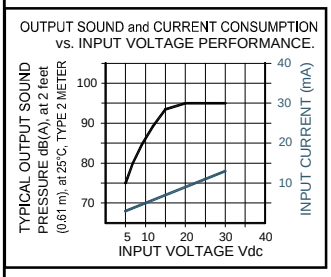
All specifications subject to change without notice.

TMC-80-530-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TMC-80-530-W is a medium loud output, M-80 style alarm for operating voltages of 5-30VDC. The Turbo circuit design features wide operating voltage range and low input current consumption.

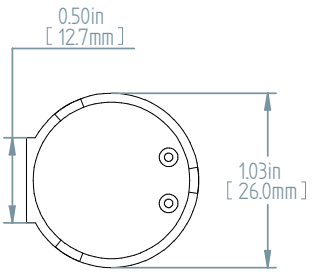
SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

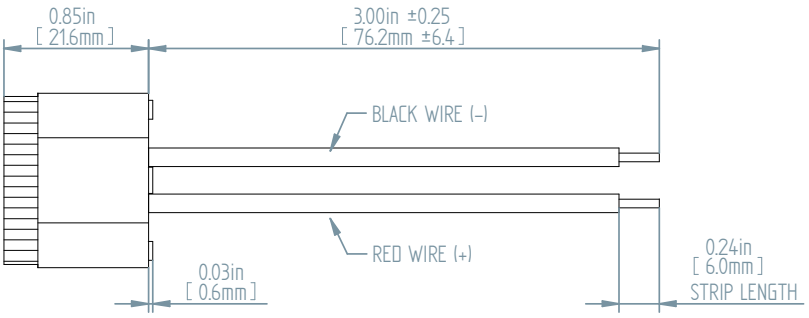
RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS

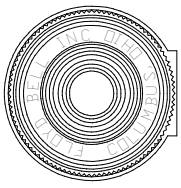
REAR



SIDE



FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 8.12

Copyright © 20012Floyd Bell Inc.

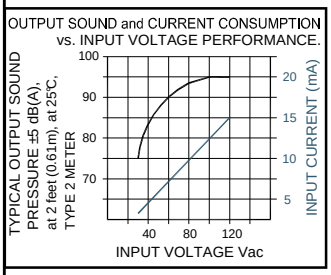
All specifications subject to change without notice.

TMC-86-201-Q

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



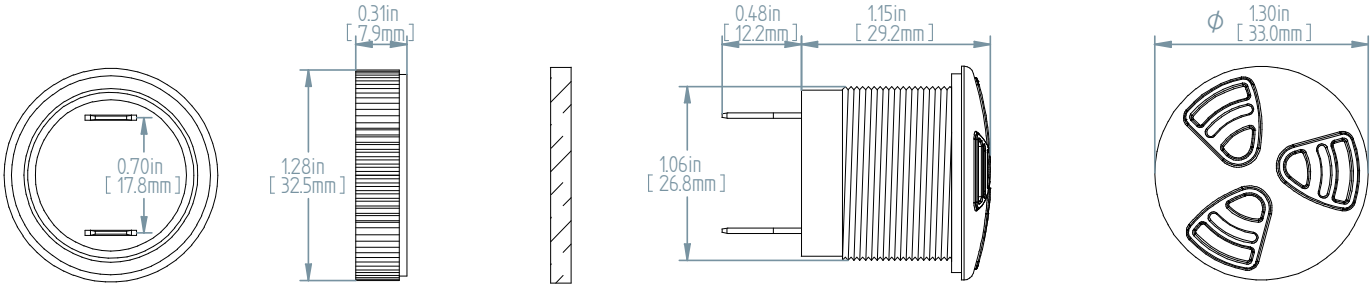
The Turbo TMC-86-201-Q is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

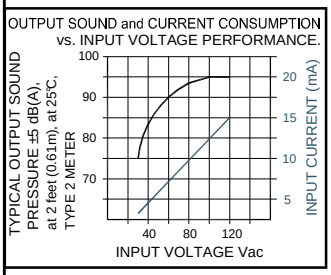
All specifications subject to change without notice.

TMC-86-201-S

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



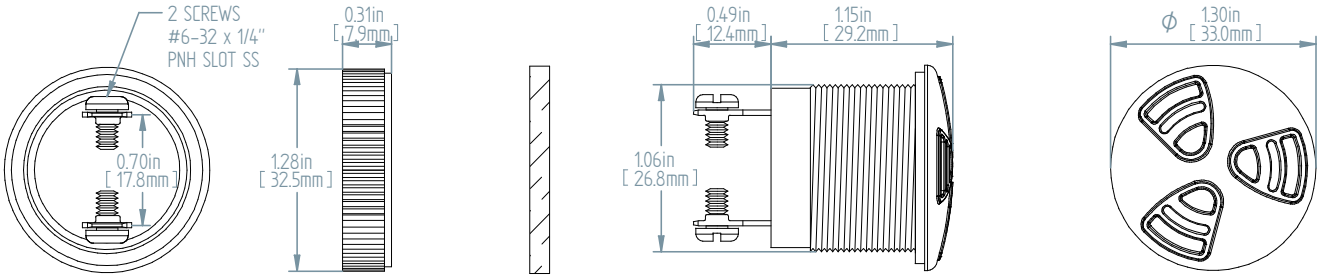
The Turbo TMC-86-201-S is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

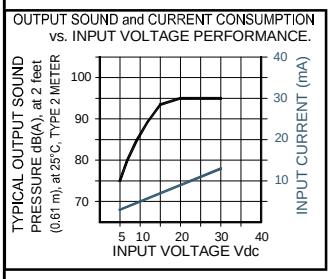
All specifications subject to change without notice.

TMC-86-530-P

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



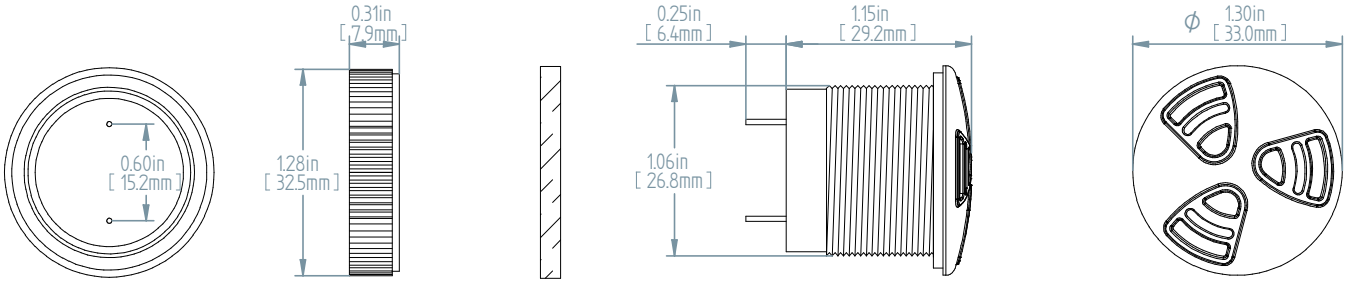
The Turbo TMC-86-530-P is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

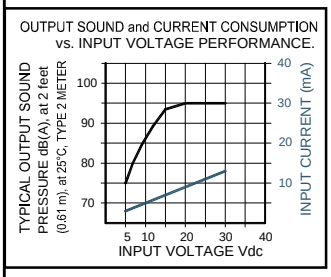
All specifications subject to change without notice.

TMC-86-530-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



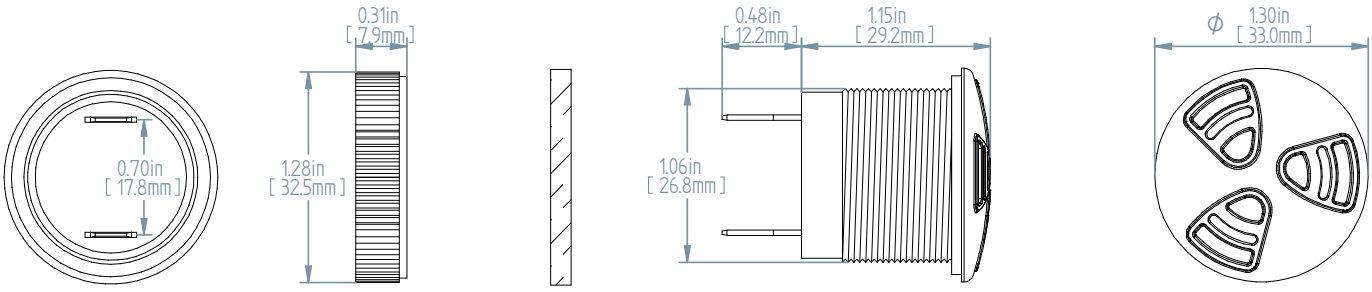
The Turbo TMC-86-530-Q is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

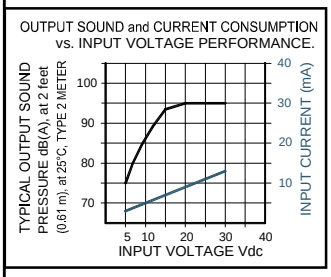
All specifications subject to change without notice.

TMC-86-530-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

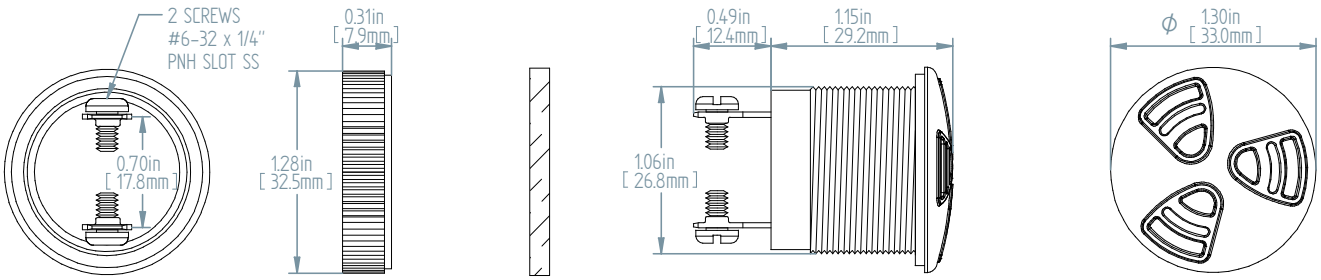


The Turbo TMC-86-530-S is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

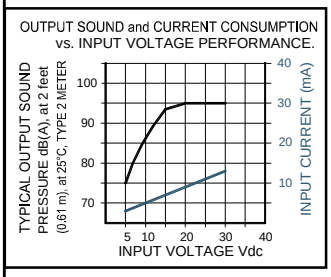
All specifications subject to change without notice.

TMC-86-530-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



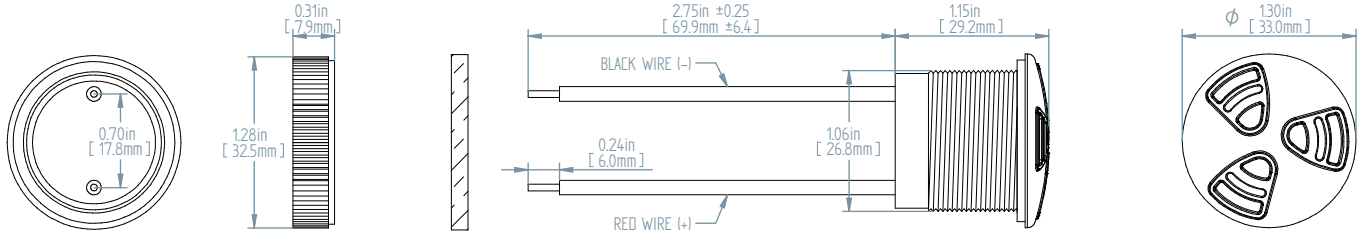
The Turbo TMC-86-530-W is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

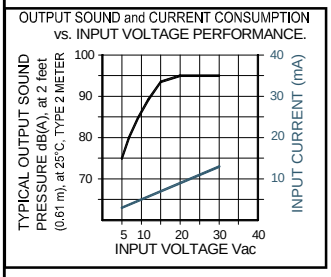
All specifications subject to change without notice.

TMC-86-531-P

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



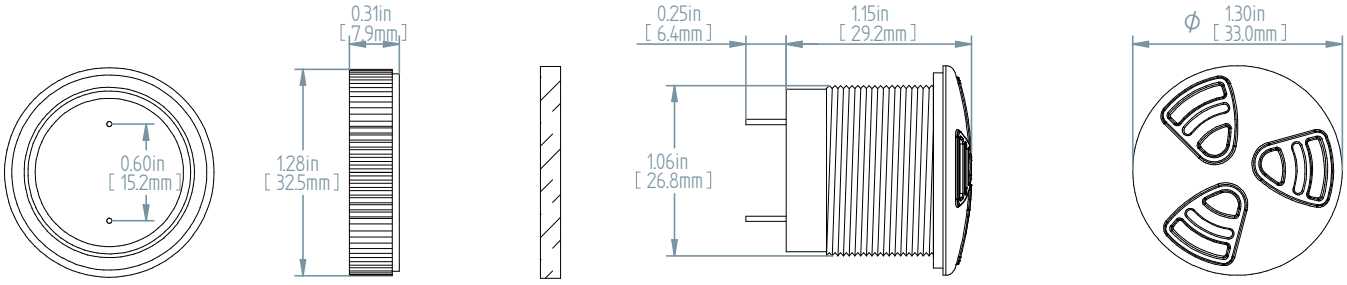
The Turbo TMC-86-531-P is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

All specifications subject to change without notice.

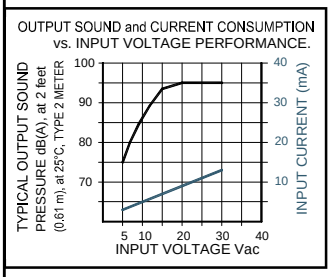
TMC-86-531-Q

Made in USA



The Turbo TMC-86-531-Q is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

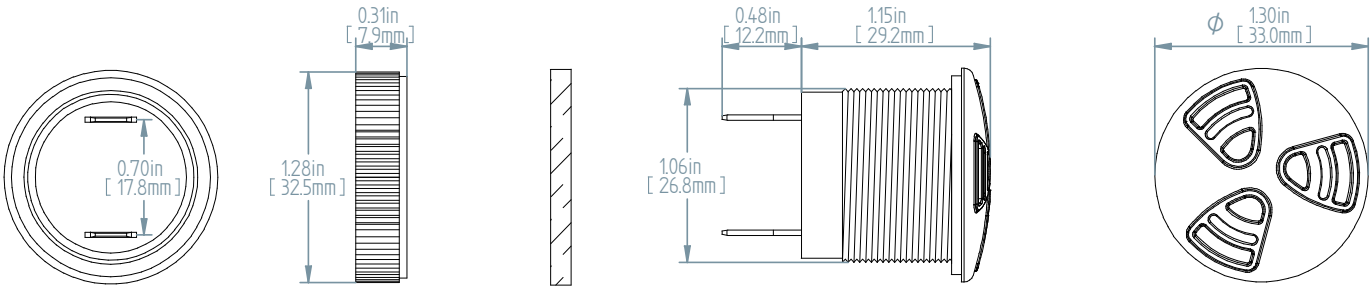


SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

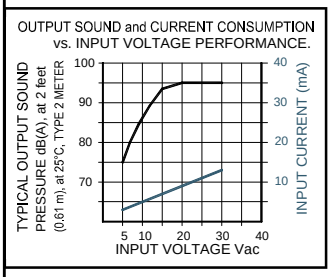
All specifications subject to change without notice.

TMC-86-531-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

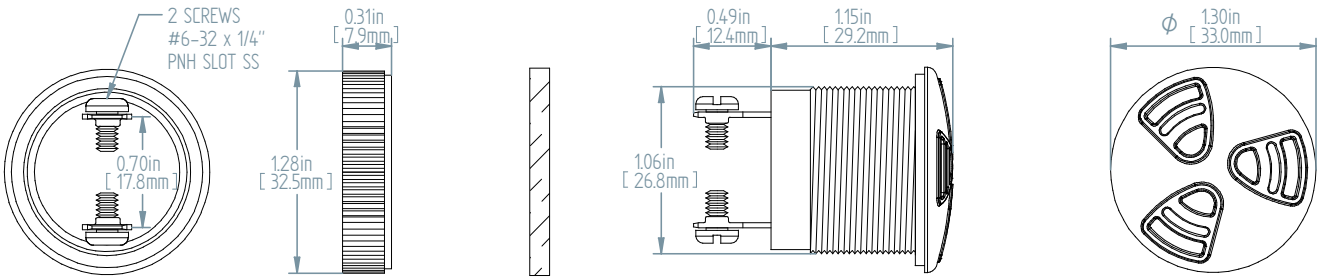


The Turbo TMC-86-531-S is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

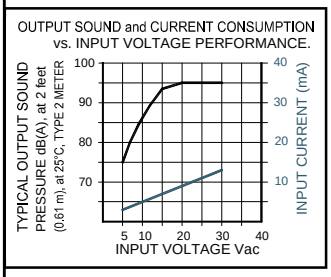
All specifications subject to change without notice.

TMC-86-531-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



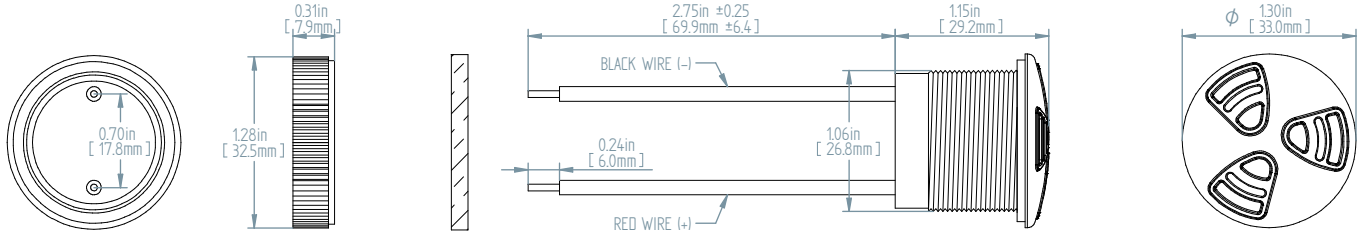
The Turbo TMC-86-531-W is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

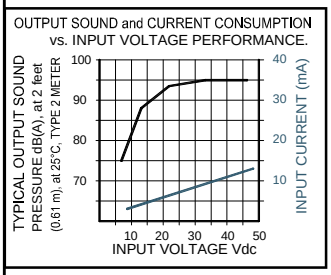
All specifications subject to change without notice.

TMC-86-948-P

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



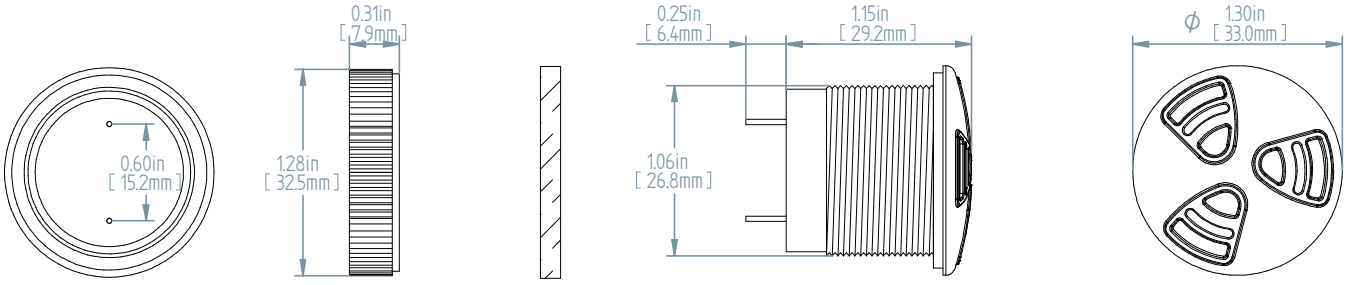
The Turbo TMC-86-948-P is a medium loud output, panel or circuit board mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

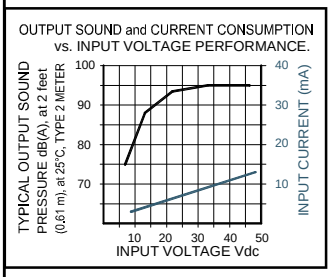
All specifications subject to change without notice.

TMC-86-948-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



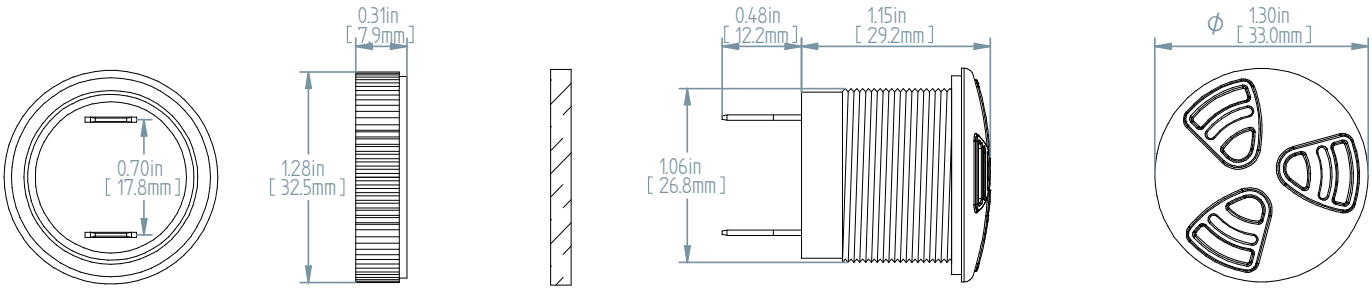
The Turbo TMC-86-948-Q is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

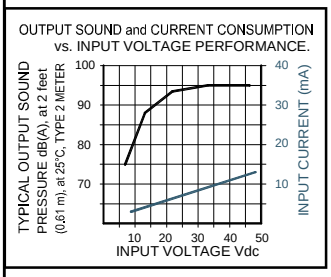
All specifications subject to change without notice.

TMC-86-948-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

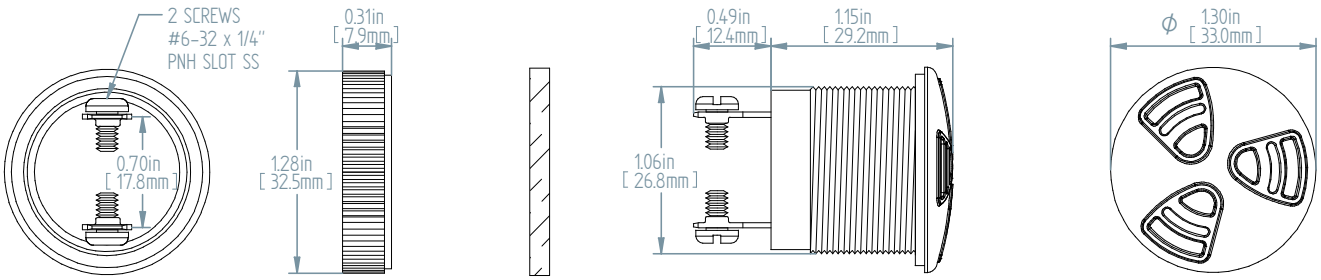


The Turbo TMC-86-948-S is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

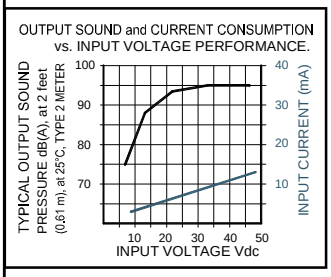
All specifications subject to change without notice.

TMC-86-948-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



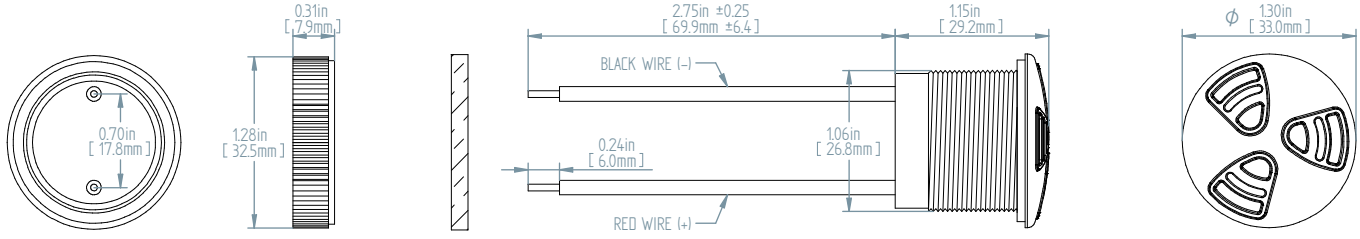
The Turbo TMC-86-948-W is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

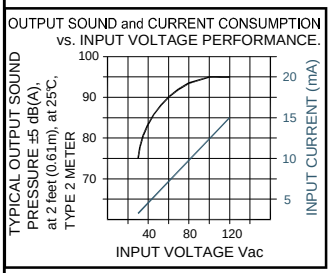
All specifications subject to change without notice.

TMC-V86-201-Q

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



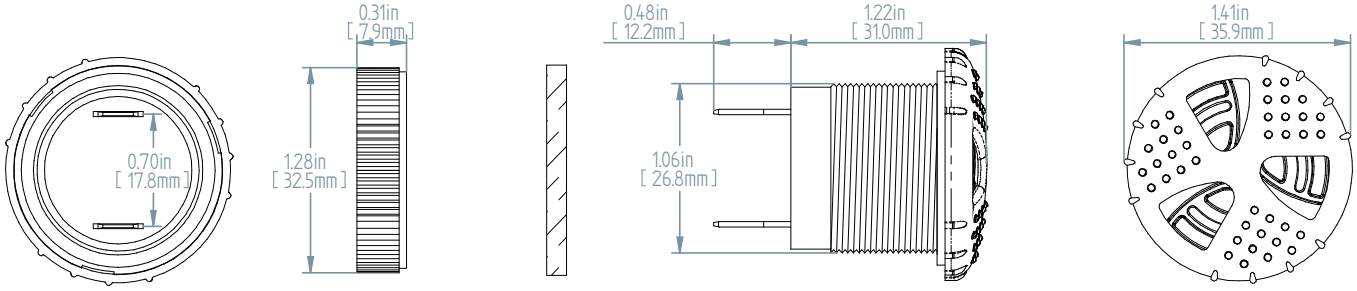
The Turbo TMC-V86-201-Q is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

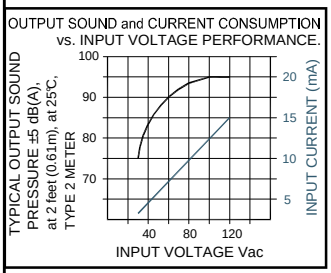
All specifications subject to change without notice.

TMC-V86-201-S

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



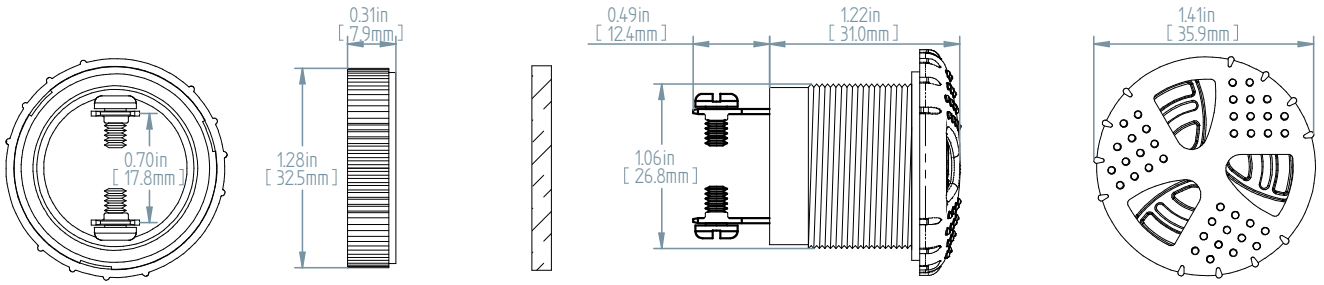
The Turbo TMC-V86-201-S is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

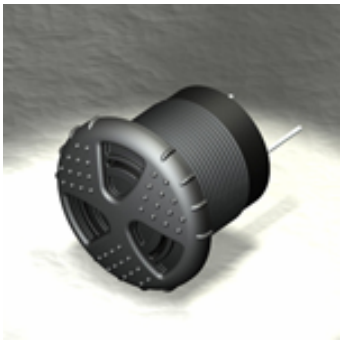
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

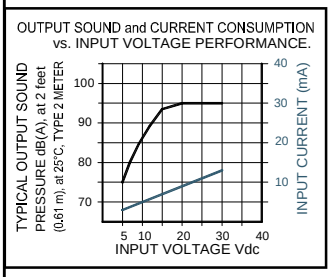
All specifications subject to change without notice.

TMC-V86-530-P

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

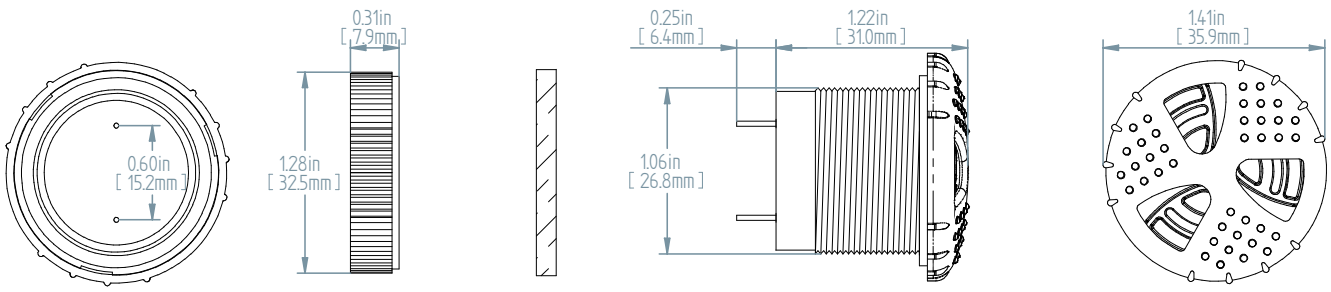


The Turbo TMC-V86-530-P is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

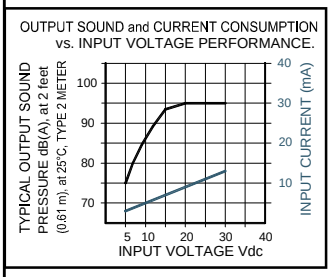
All specifications subject to change without notice.

TMC-V86-530-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



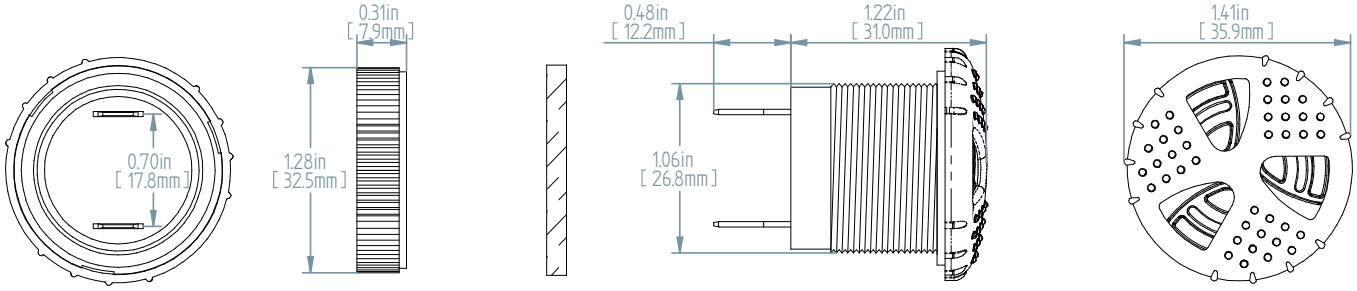
The Turbo TMC-V86-530-Q is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

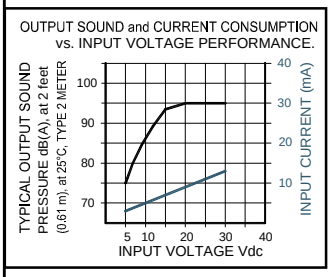
All specifications subject to change without notice.

TMC-V86-530-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



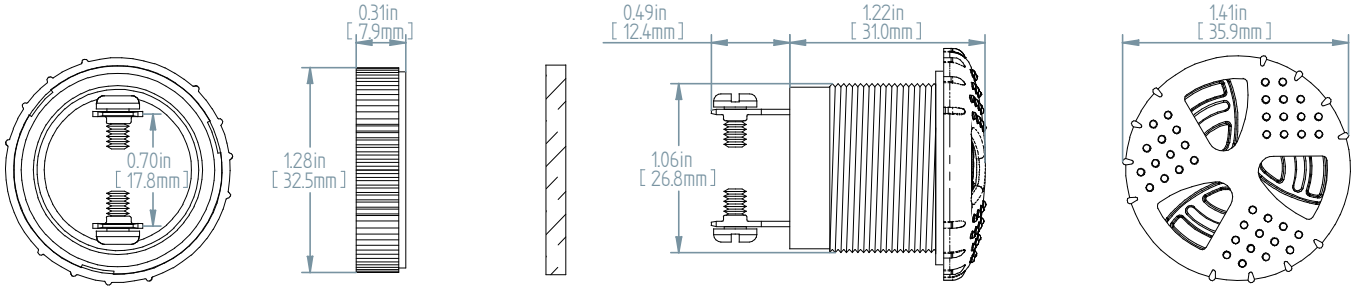
The Turbo TMC-V86-530-S is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

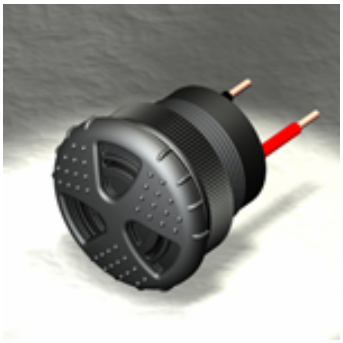
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

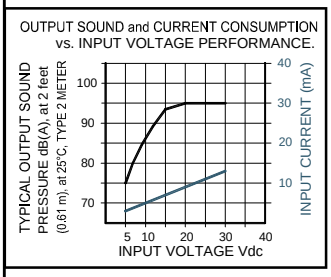
All specifications subject to change without notice.

TMC-V86-530-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

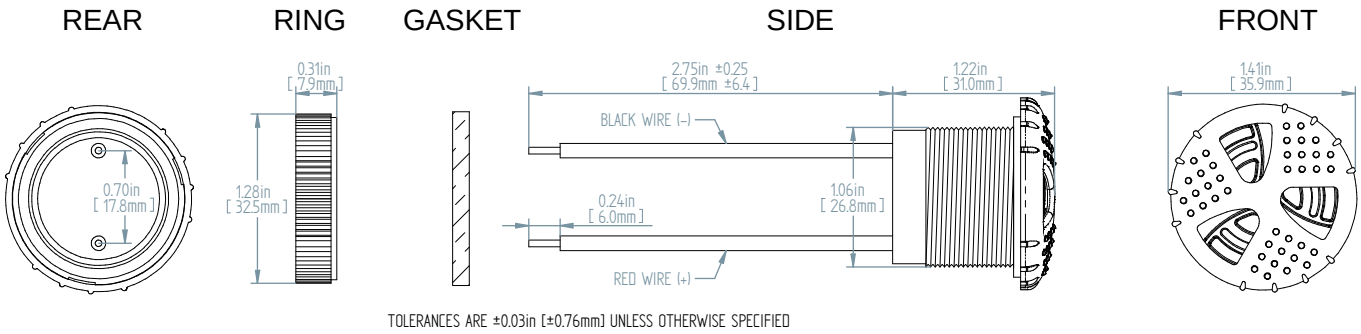


The Turbo TMC-V86-530-W is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

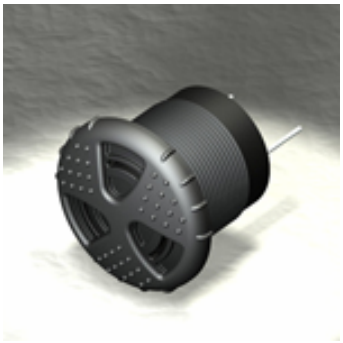
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

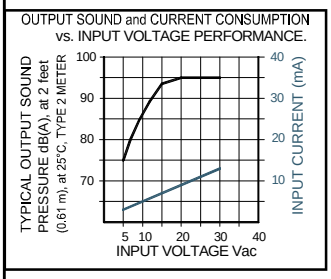
All specifications subject to change without notice.

TMC-V86-531-P

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



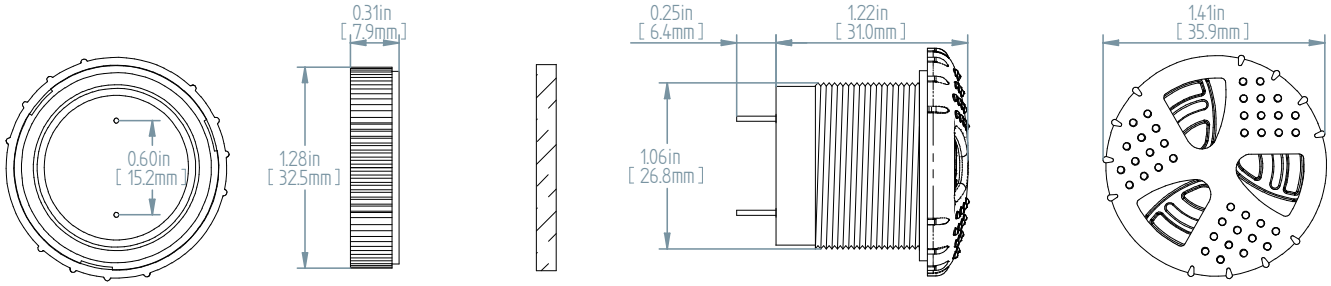
The Turbo TMC-V86-531-P is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

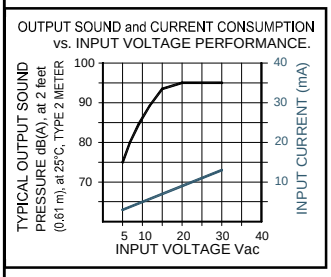
All specifications subject to change without notice.

TMC-V86-531-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



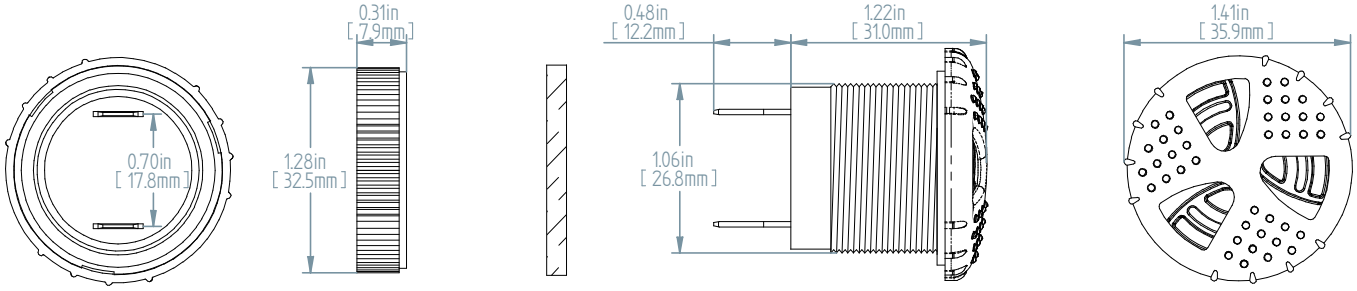
The Turbo TMC-V86-531-Q is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

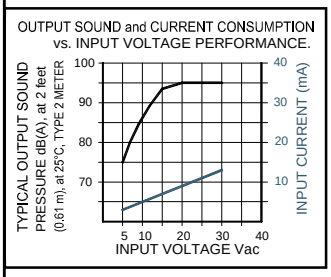
All specifications subject to change without notice.

TMC-V86-531-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

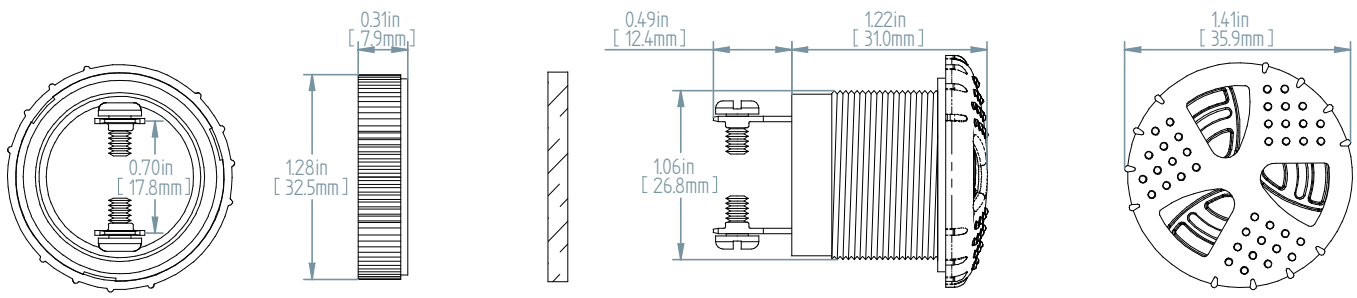


The Turbo TMC-V86-531-S is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

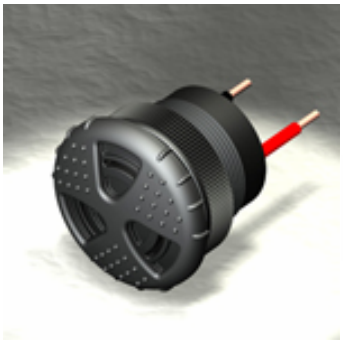
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

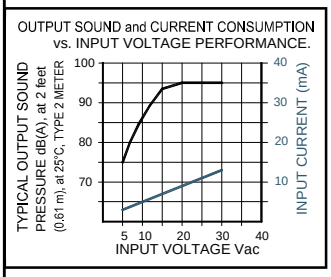
All specifications subject to change without notice.

TMC-V86-531-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



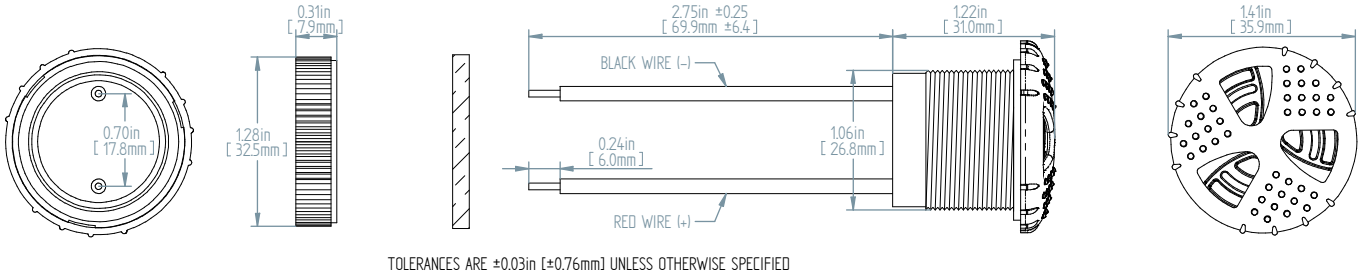
The Turbo TMC-V86-531-W is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic “NORYL® N-190”, Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125” Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

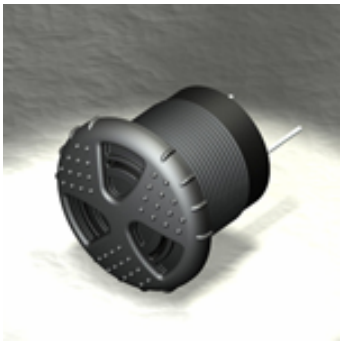
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

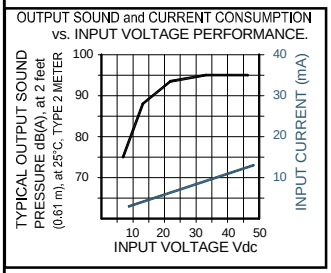
All specifications subject to change without notice.

TMC-V86-948-P

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

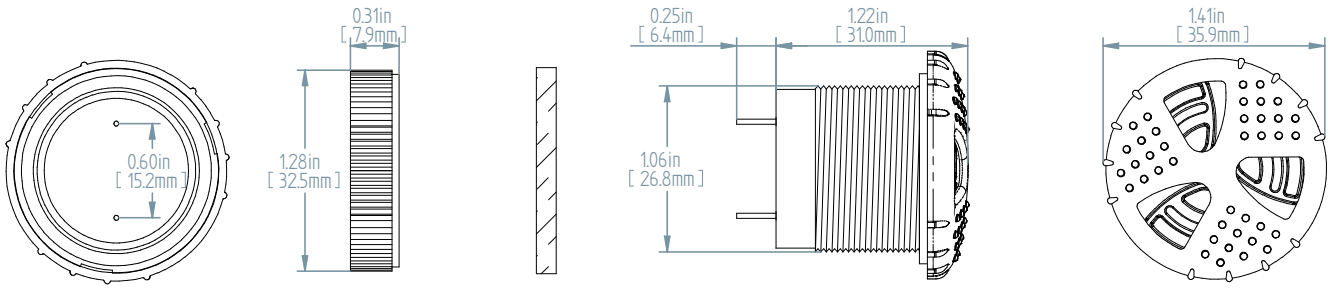


The Turbo TMC-V86-948-P is a medium loud output, panel or circuit board mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

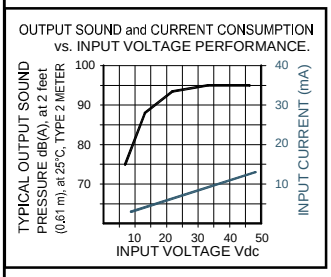
All specifications subject to change without notice.

TMC-V86-948-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



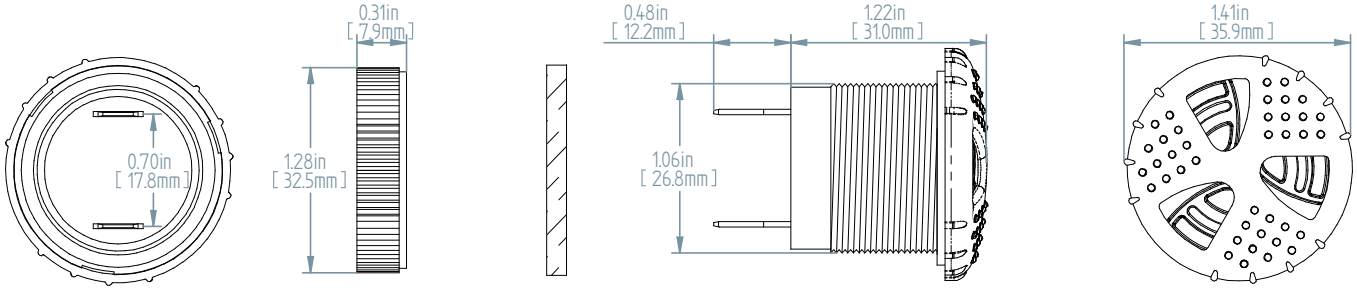
The Turbo TMC-V86-948-Q is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

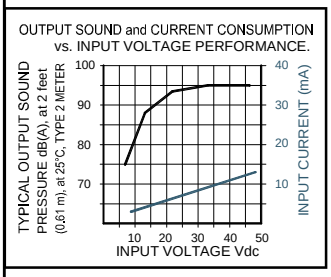
All specifications subject to change without notice.

TMC-V86-948-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

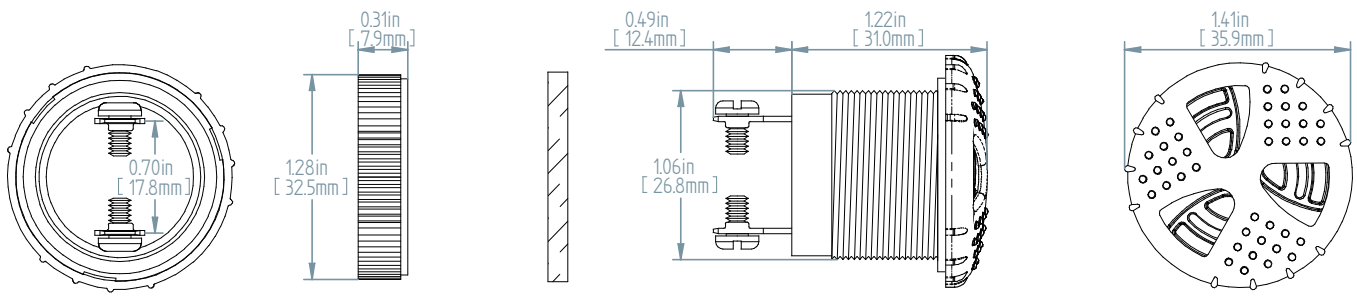


The Turbo TMC-V86-948-S is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

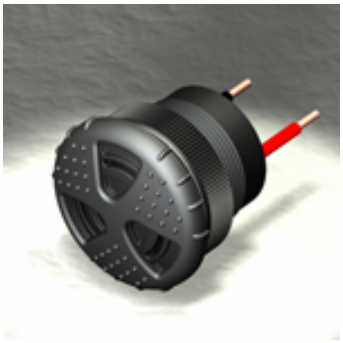
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

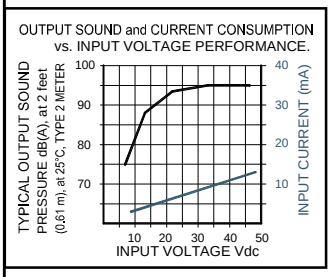
All specifications subject to change without notice.

TMC-V86-948-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

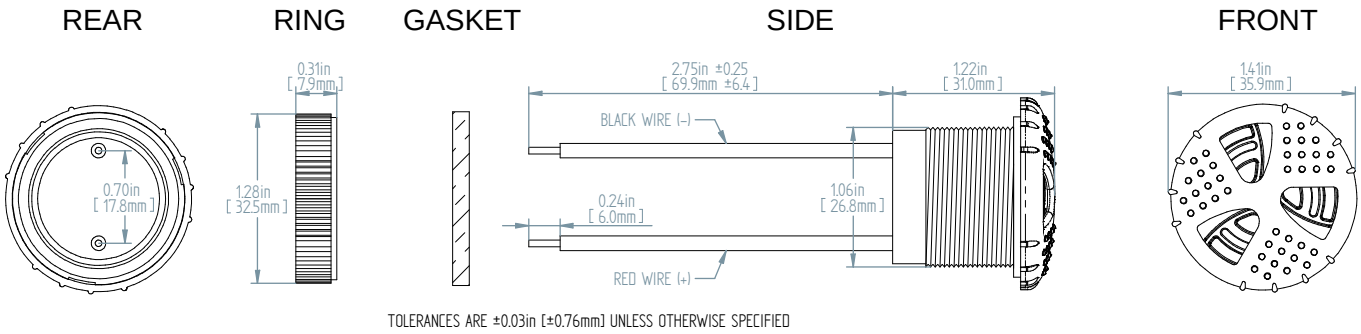


The Turbo TMC-V86-948-W is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Continuous Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

All specifications subject to change without notice.

TMS-86-948-S(F)

Made in USA



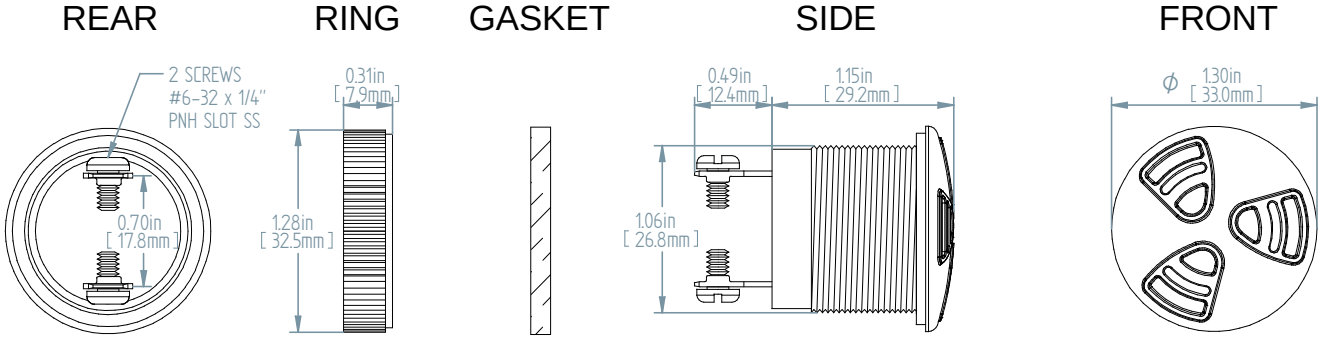
- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

The Turbo TMS-86-948-S(F) is an medium loud output, panel mounted alarm for operating voltages of 9-50VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Siren Tone
Operating Voltage:	9-50 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	Sweep 2.7Khz ± 250Hz -to- 3.5Khz ± 250Hz (3.1Khz Center)
Typical Sweep Rate:	5±25% Cycles per second (Fast Rate)
Typical Operating Current:	30 mA at 48 Vdc
Typical Sound Pressure:	80 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.13

Copyright © 2013 Floyd Bell Inc.

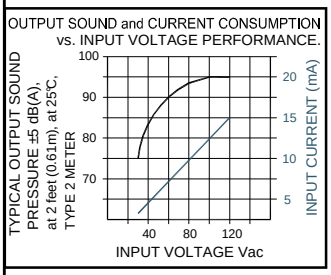
All specifications subject to change without notice.

TMW-86-201-Q(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



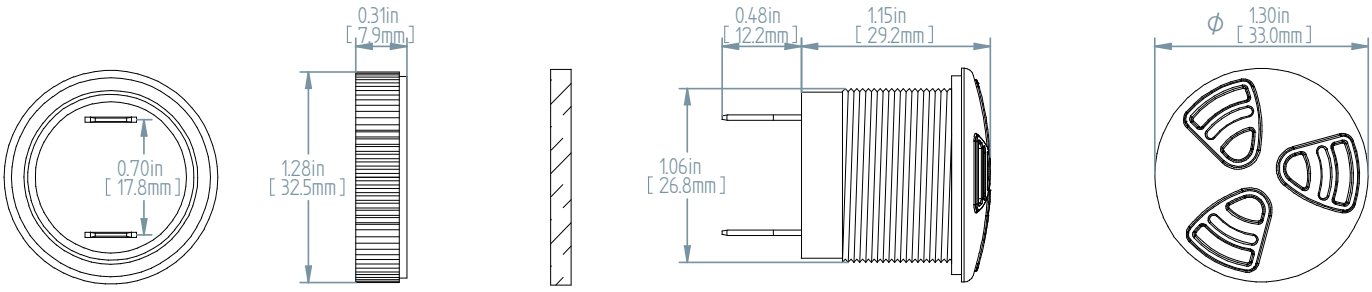
The Turbo TMW-86-201-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

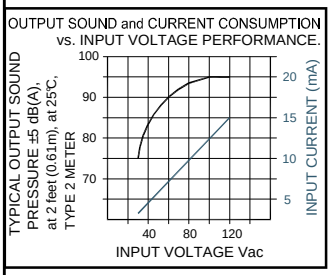
All specifications subject to change without notice.

TMW-86-201-Q(S)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



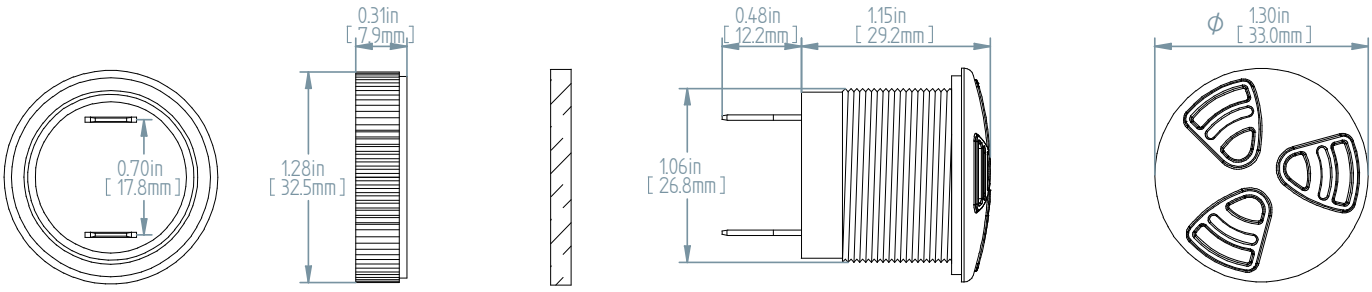
The Turbo TMW-86-201-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

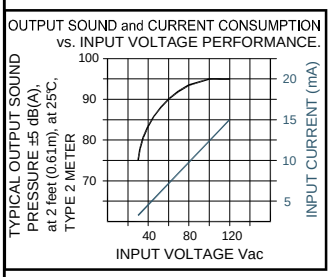
All specifications subject to change without notice.

TMW-86-201-S(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

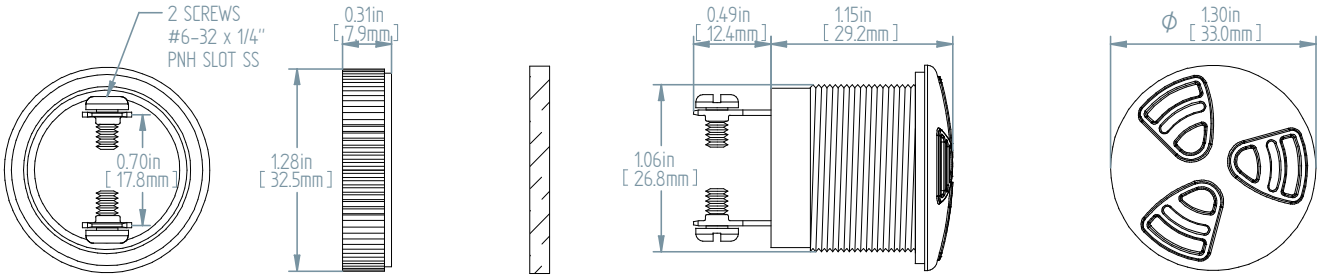


The Turbo TMW-86-201-S(F) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

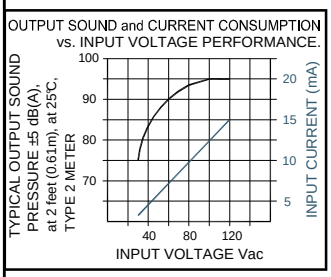
All specifications subject to change without notice.

TMW-86-201-S(S)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

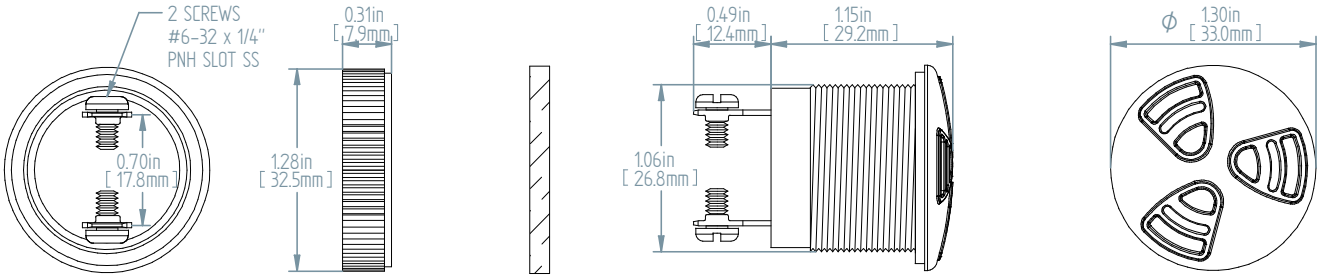


The Turbo TMW-86-201-S(S) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

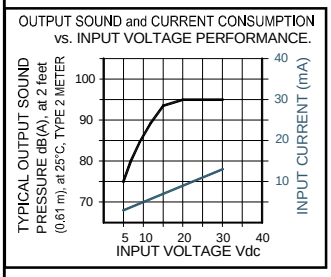
All specifications subject to change without notice.

TMW-86-530-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



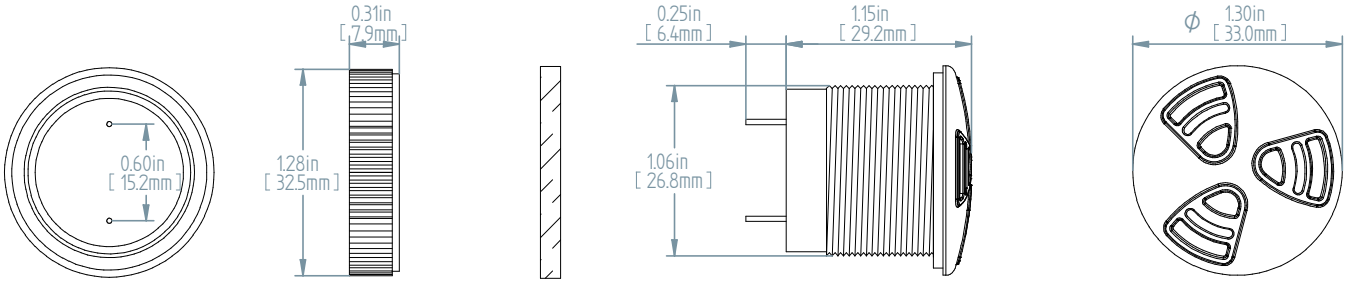
The Turbo TMW-86-530-P(F) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

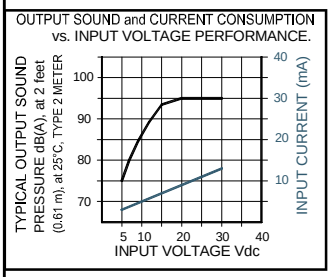
All specifications subject to change without notice.

TMW-86-530-P(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



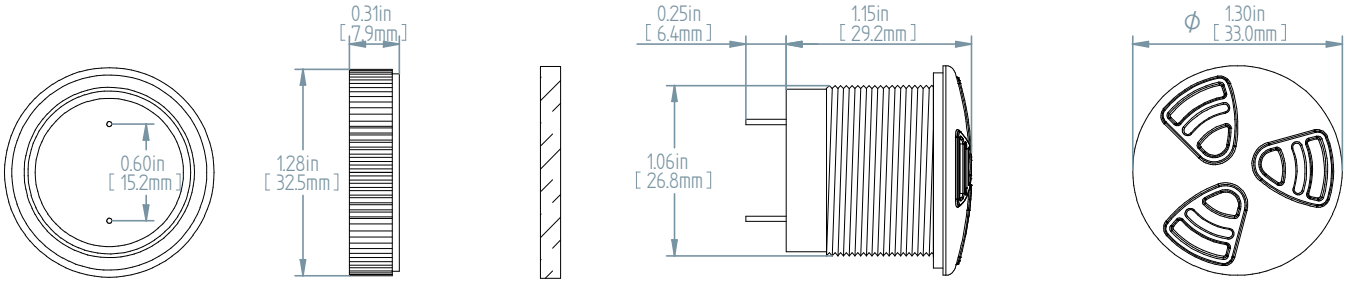
The Turbo TMW-86-530-P(S) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

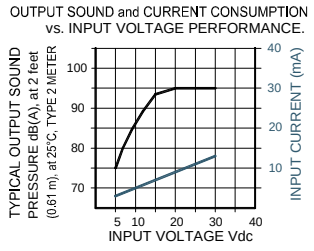
All specifications subject to change without notice.

TMW-86-530-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



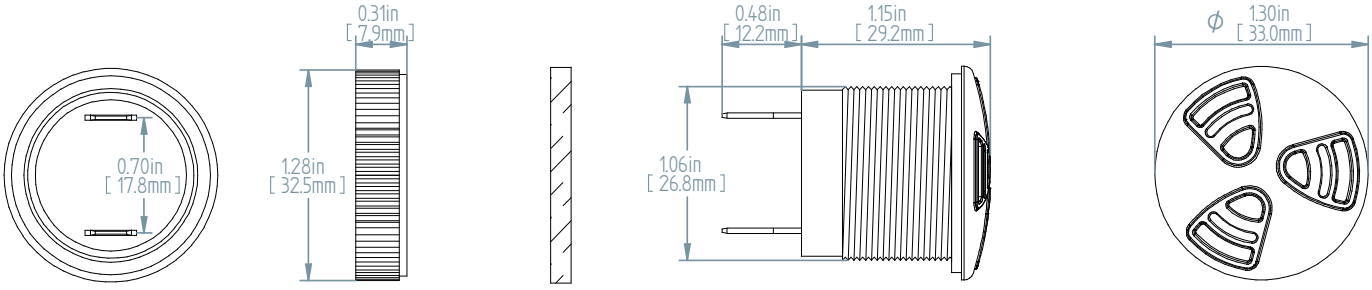
The Turbo TMW-86-530-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

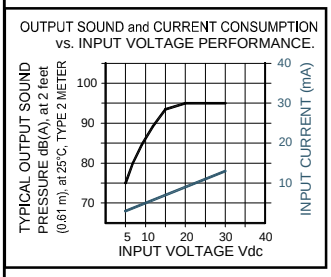
All specifications subject to change without notice.

TMW-86-530-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



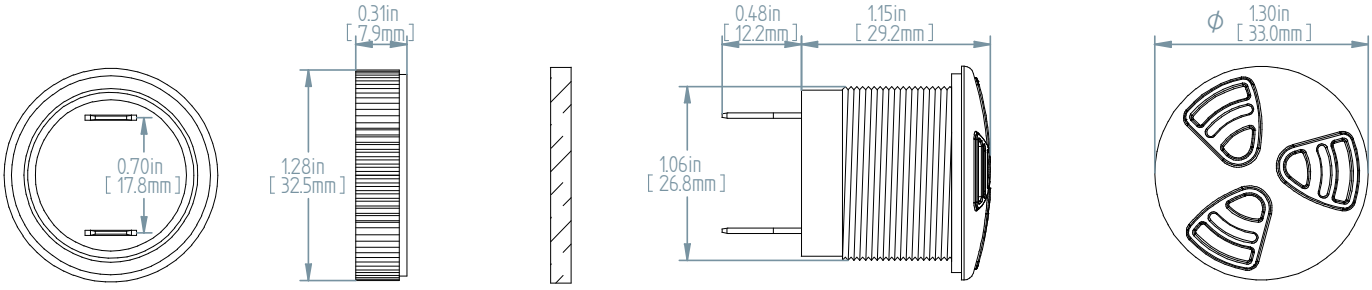
The Turbo TMW-86-530-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

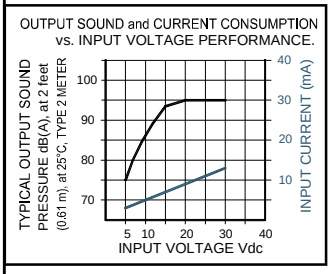
All specifications subject to change without notice.

TMW-86-530-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



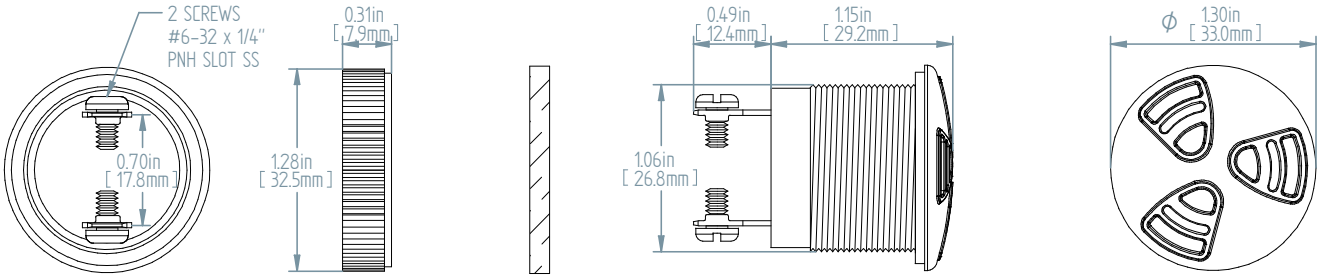
The Turbo TMW-86-530-S(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

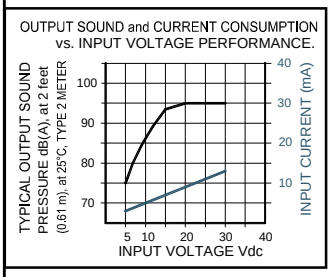
All specifications subject to change without notice.

TMW-86-530-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

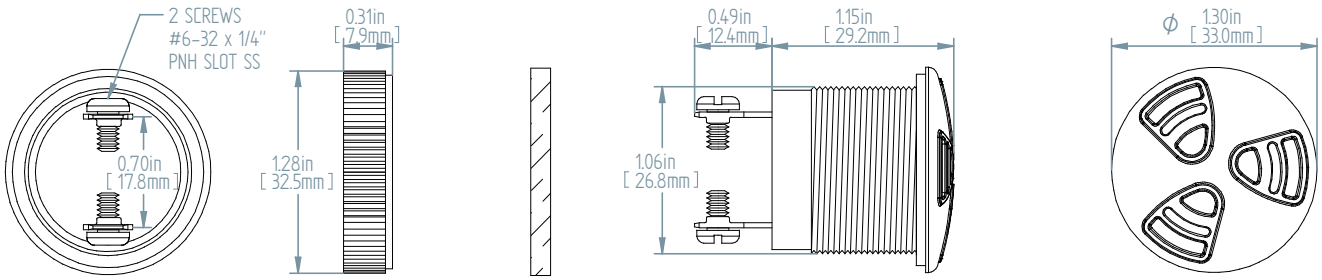


The Turbo TMW-86-530-S(S) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

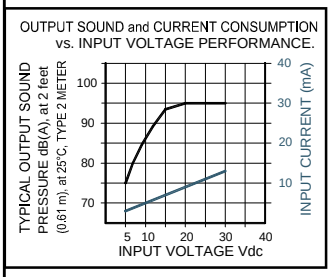
All specifications subject to change without notice.

TMW-86-530-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



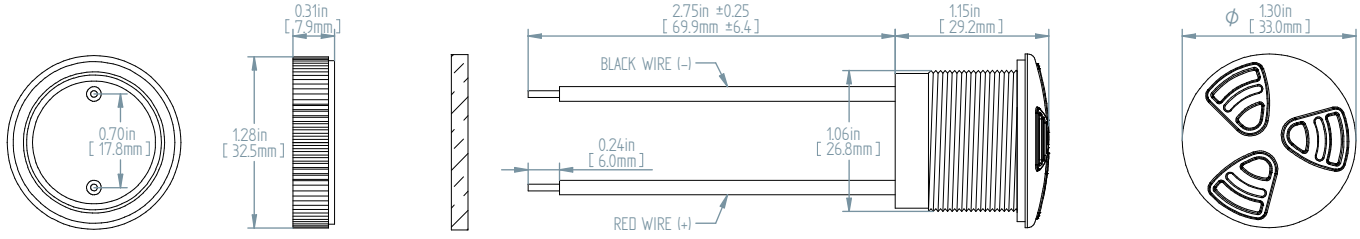
The Turbo TMW-86-530-W(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

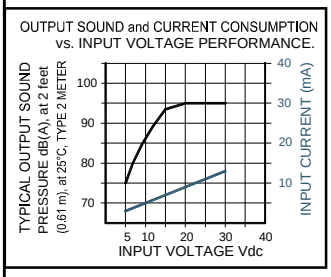
All specifications subject to change without notice.

TMW-86-530-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



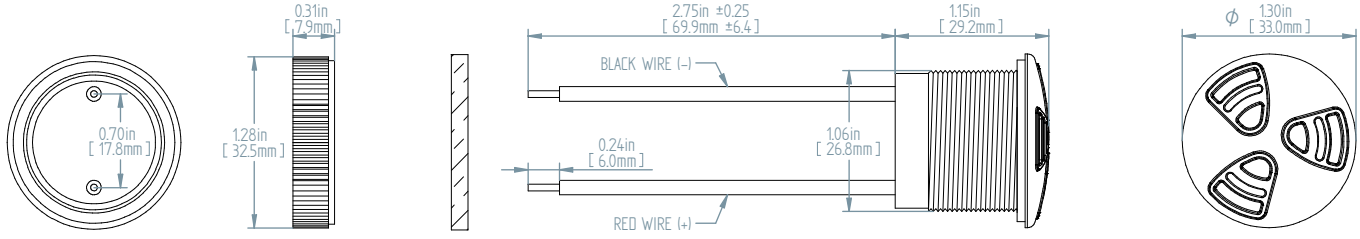
The Turbo TMW-86-530-W(S) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

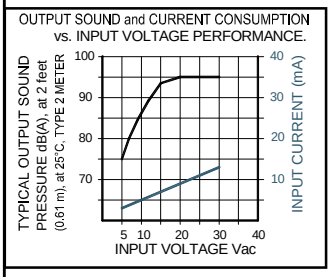
All specifications subject to change without notice.

TMW-86-531-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



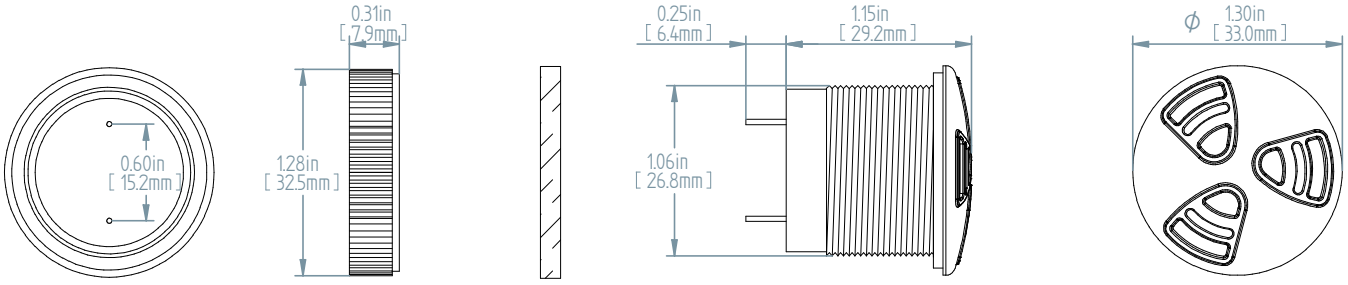
The Turbo TMW-86-531-P(F) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

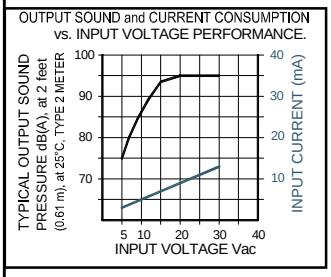
All specifications subject to change without notice.

TMW-86-531-P(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



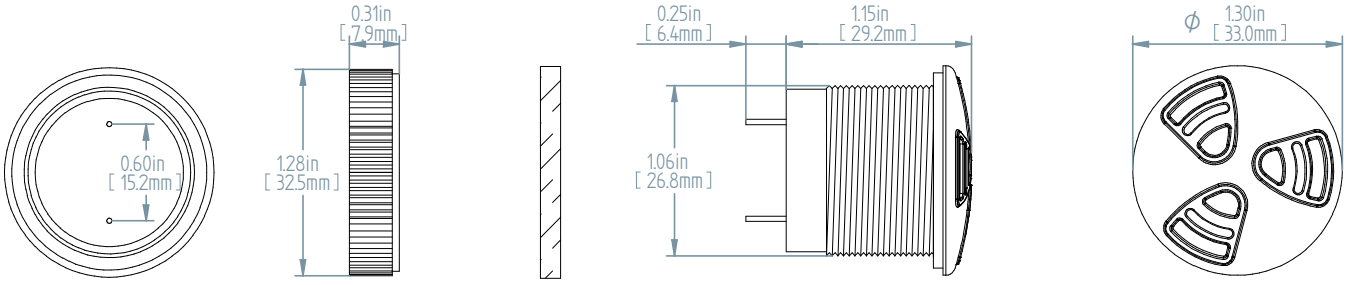
The Turbo TMW-86-531-P(S) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

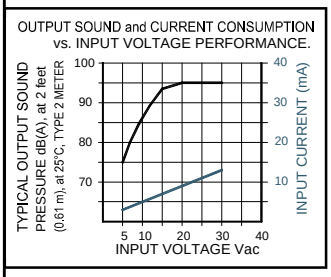
All specifications subject to change without notice.

TMW-86-531-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



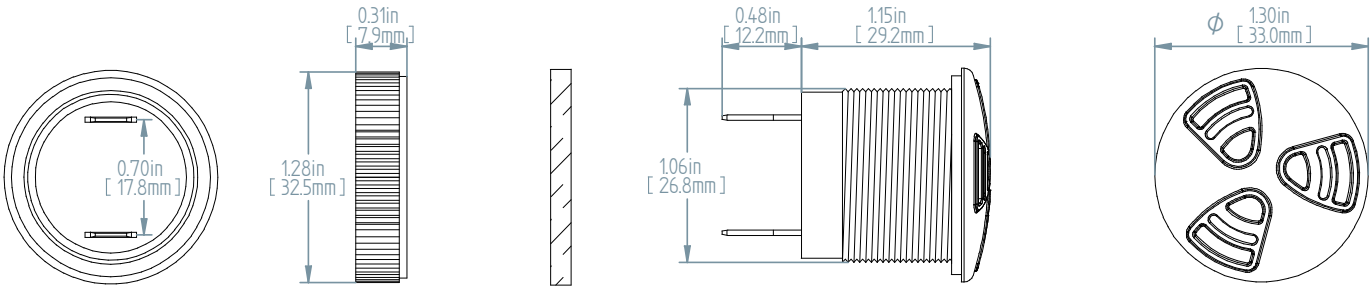
The Turbo TMW-86-531-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

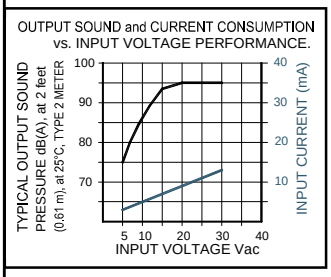
All specifications subject to change without notice.

TMW-86-531-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



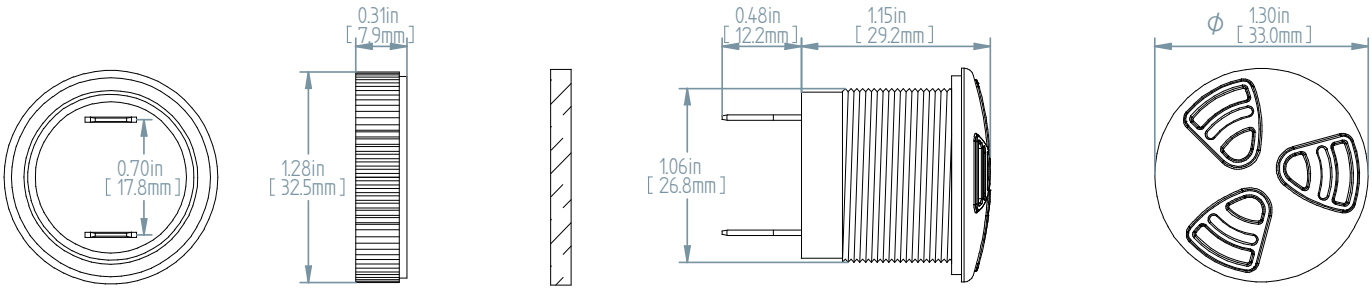
The Turbo TMW-86-531-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

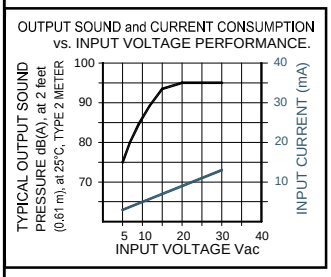
All specifications subject to change without notice.

TMW-86-531-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

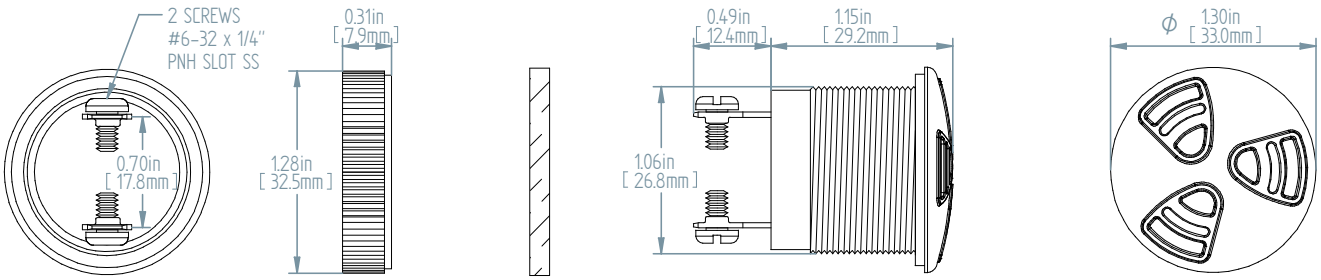


The Turbo TMW-86-531-S(F) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

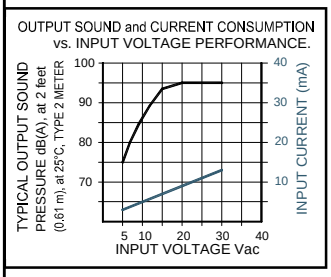
All specifications subject to change without notice.

TMW-86-531-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

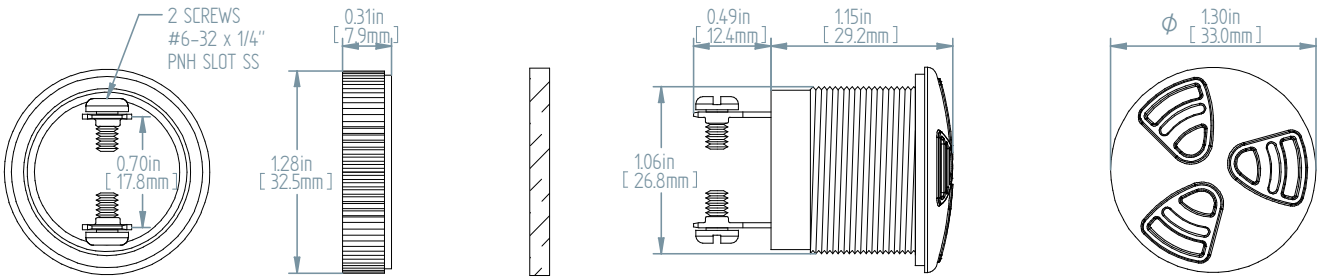


The Turbo TMW-86-531-S(S) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

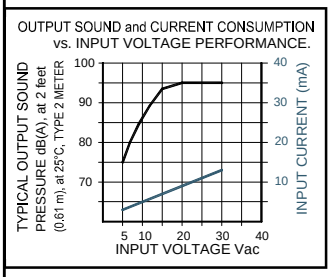
All specifications subject to change without notice.

TMW-86-531-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



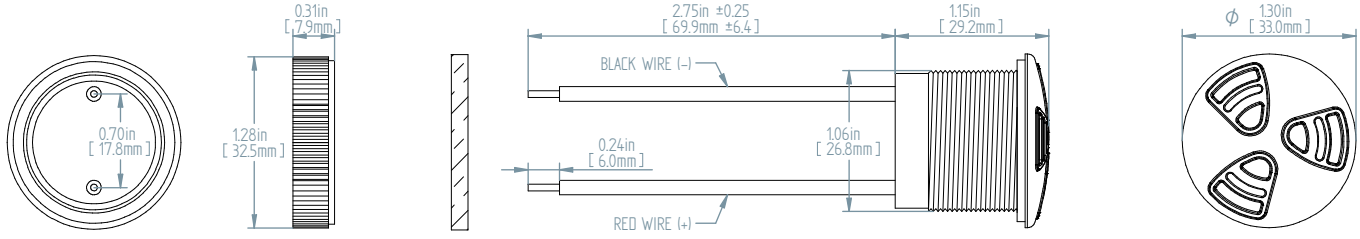
The Turbo TMW-86-531-W(F) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

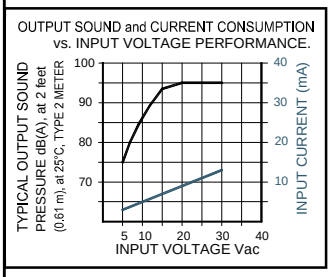
All specifications subject to change without notice.

TMW-86-531-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



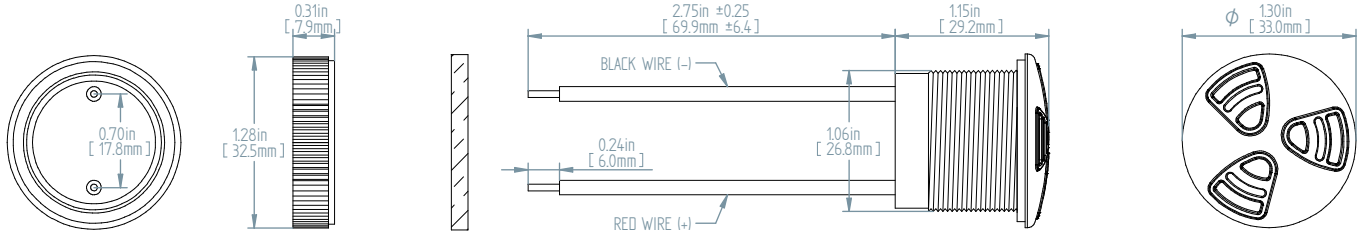
The Turbo TMW-86-531-W(S) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

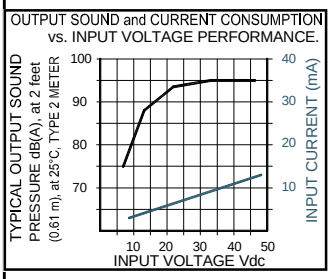
All specifications subject to change without notice.

TMW-86-948-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



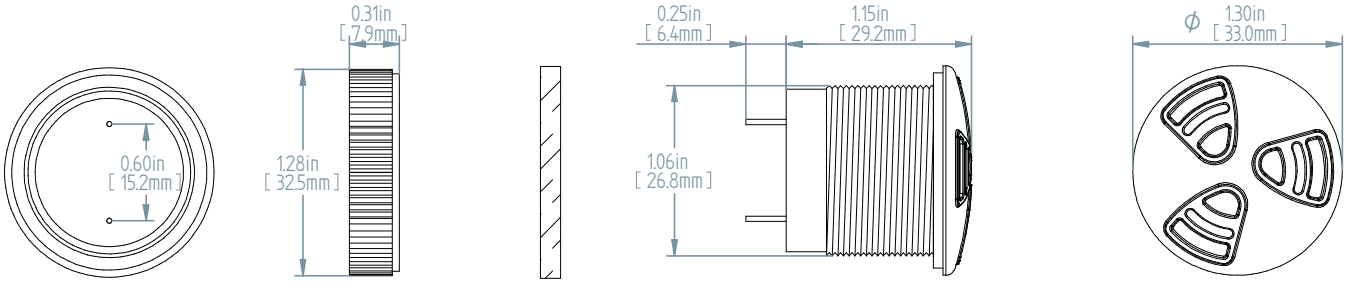
The Turbo TMW-86-948-P(F) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

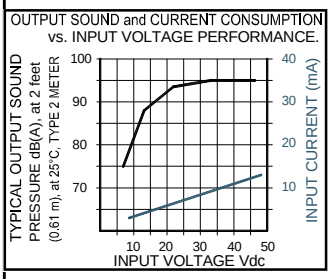
All specifications subject to change without notice.

TMW-86-948-P(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



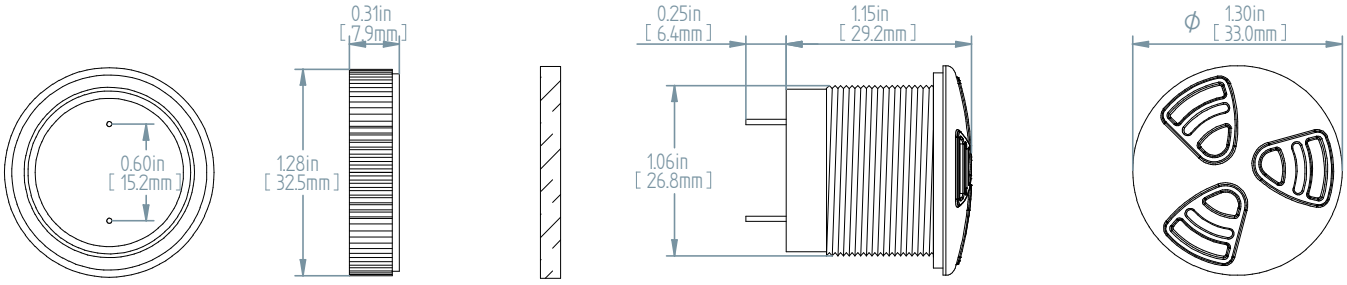
The Turbo TMW-86-948-P(S) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

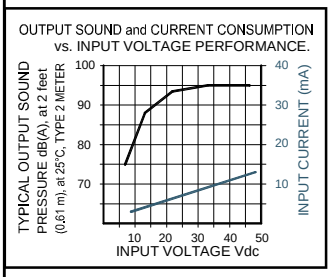
All specifications subject to change without notice.

TMW-86-948-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



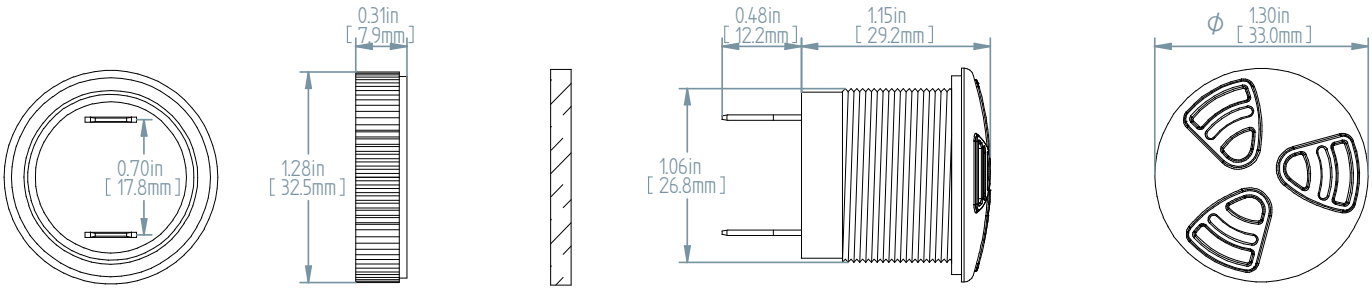
The Turbo TMW-86-948-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

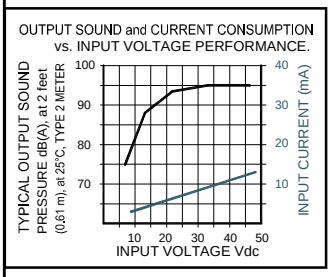
All specifications subject to change without notice.

TMW-86-948-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



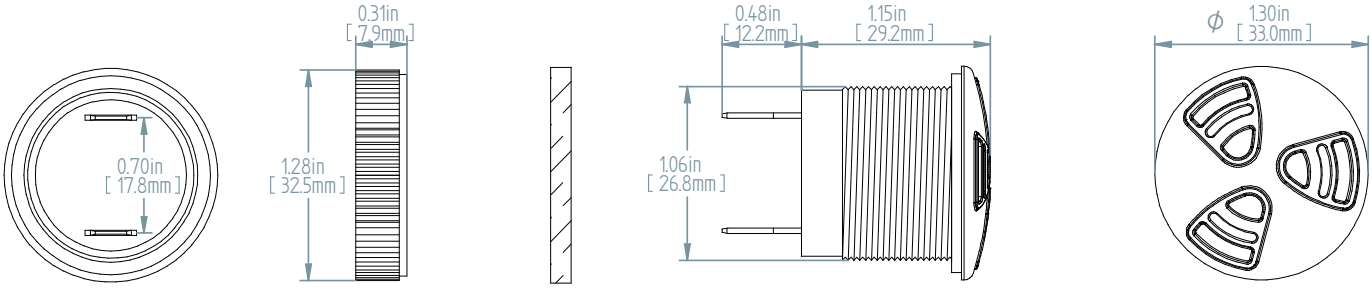
The Turbo TMW-86-948-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

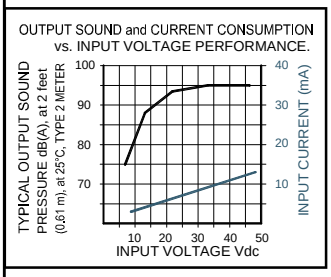
All specifications subject to change without notice.

TMW-86-948-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



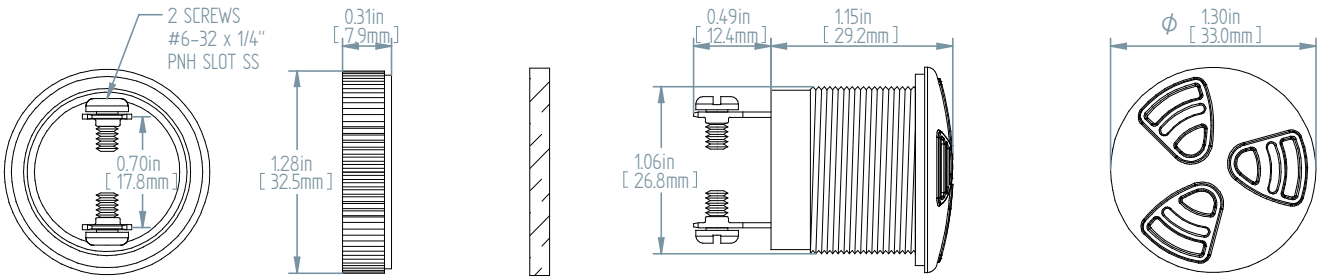
The Turbo TMW-86-948-S(F) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

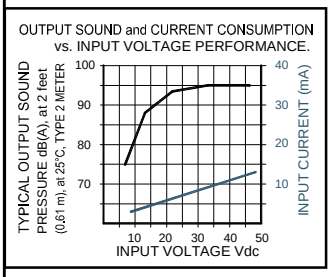
All specifications subject to change without notice.

TMW-86-948-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

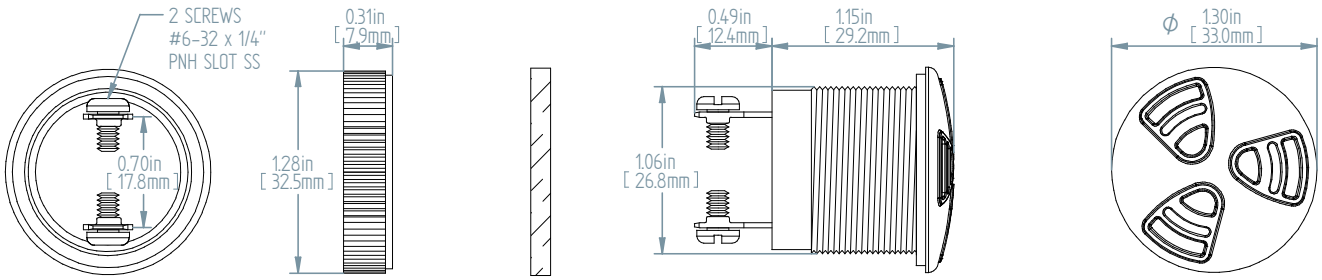


The Turbo TMW-86-948-S(S) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

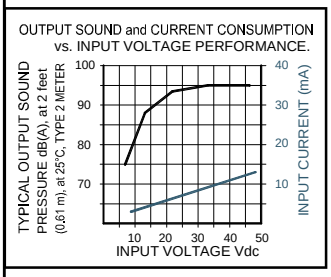
All specifications subject to change without notice.

TMW-86-948-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

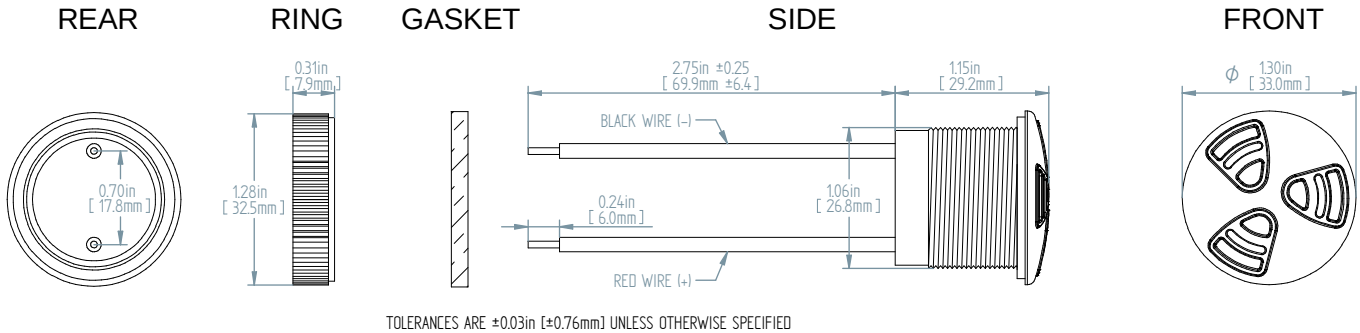


The Turbo TMW-86-948-W(F) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

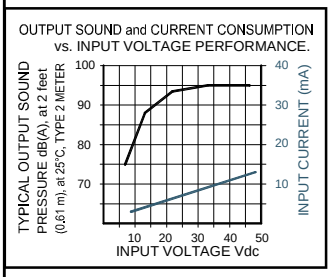
All specifications subject to change without notice.

TMW-86-948-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



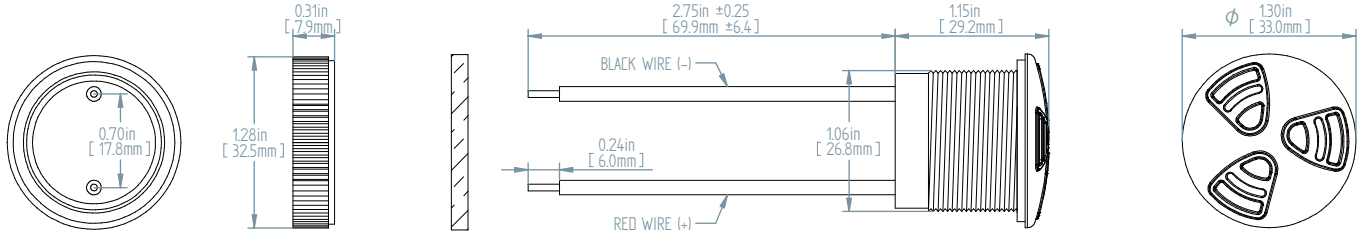
The Turbo TMW-86-948-W(S) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

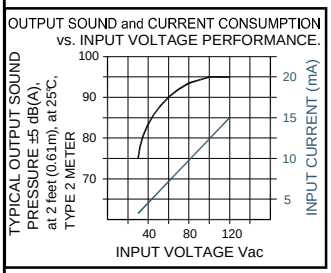
All specifications subject to change without notice.

TMW-V86-201-Q(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



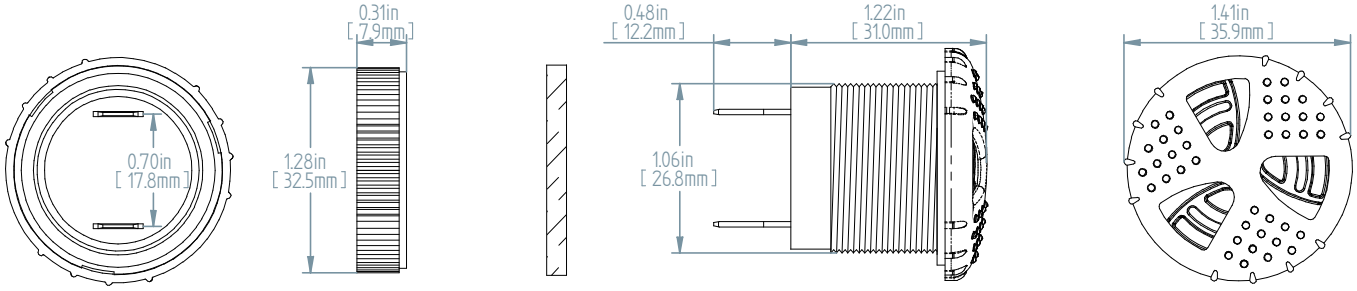
The Turbo TMW-V86-201-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

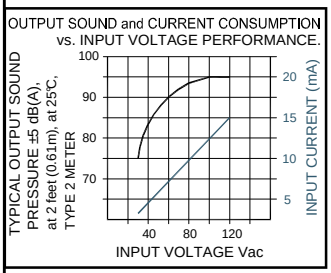
All specifications subject to change without notice.

TMW-V86-201-Q(S)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



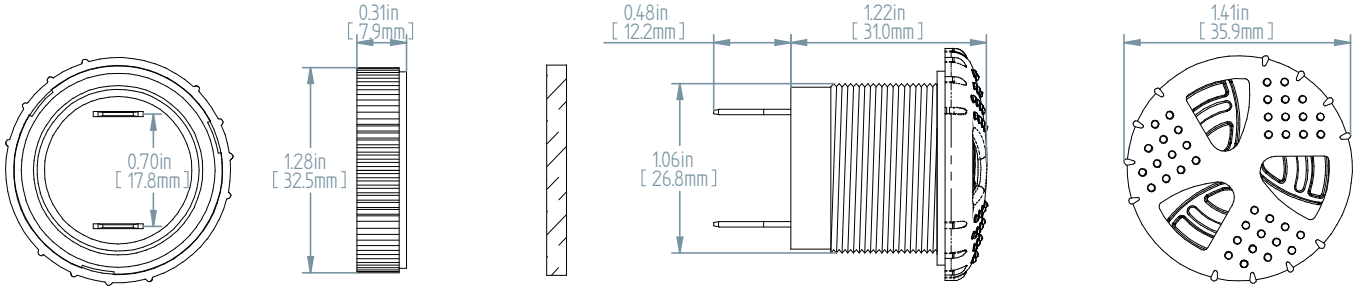
The Turbo TMW-V86-201-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

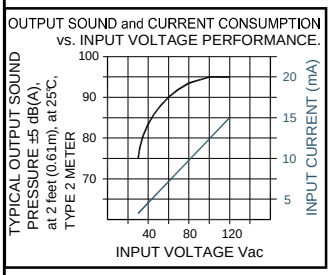
All specifications subject to change without notice.

TMW-V86-201-S(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



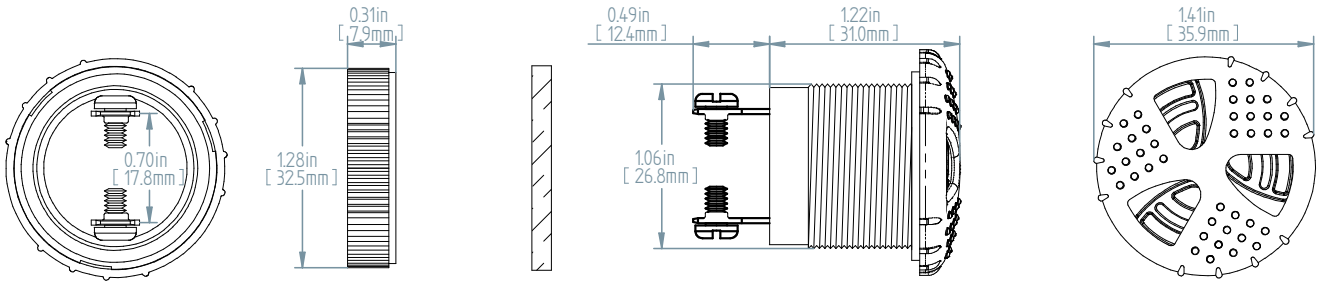
The Turbo TMW-V86-201-S(F) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

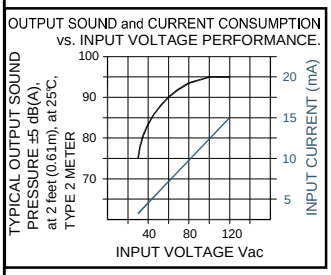
All specifications subject to change without notice.

TMW-V86-201-S(S)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



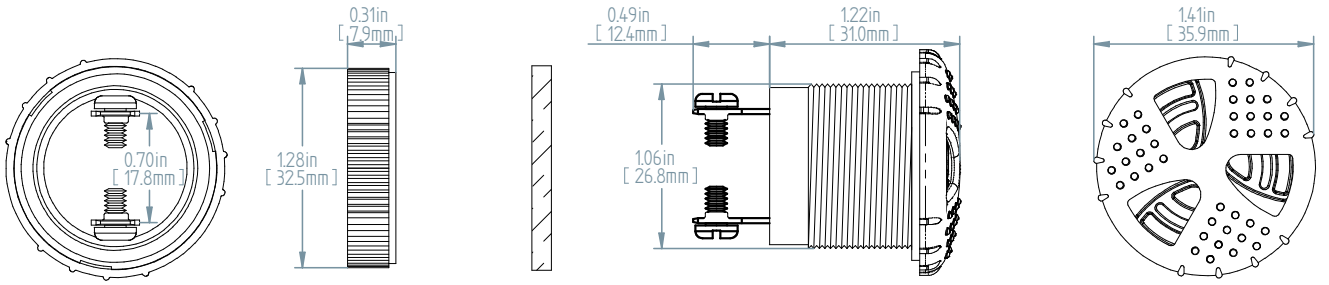
The Turbo TMW-V86-201-S(S) is a medium loud output, panel mounted alarm for operating voltages of 30-120VAC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 30 Vac 15 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

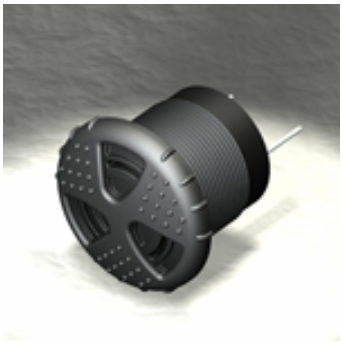
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

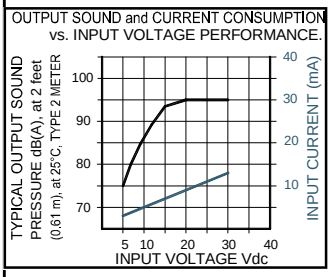
All specifications subject to change without notice.

TMW-V86-530-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

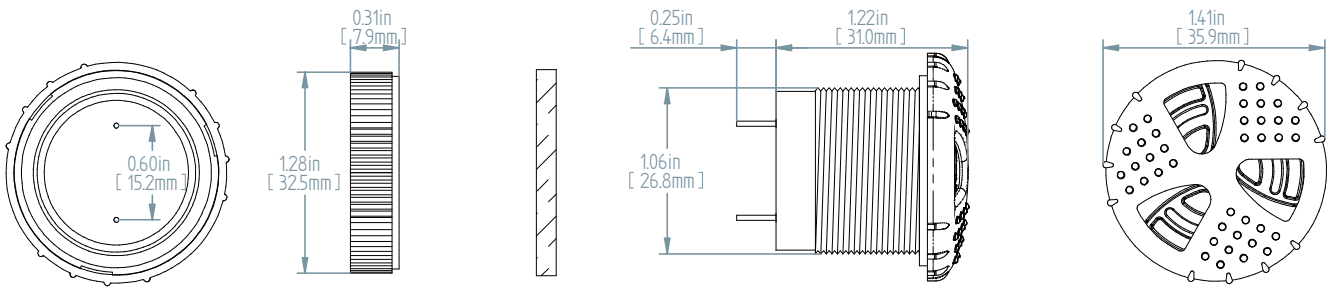


The Turbo TMW-V86-530-P(F) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

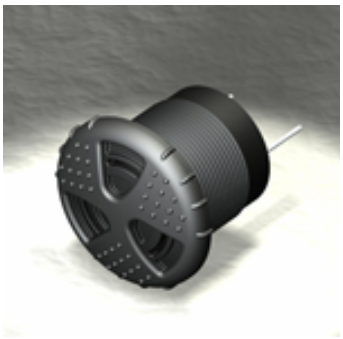
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

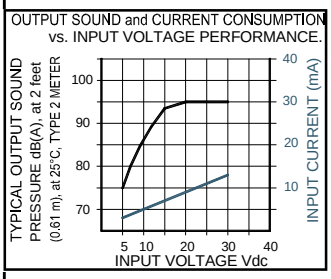
All specifications subject to change without notice.

TMW-V86-530-P(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



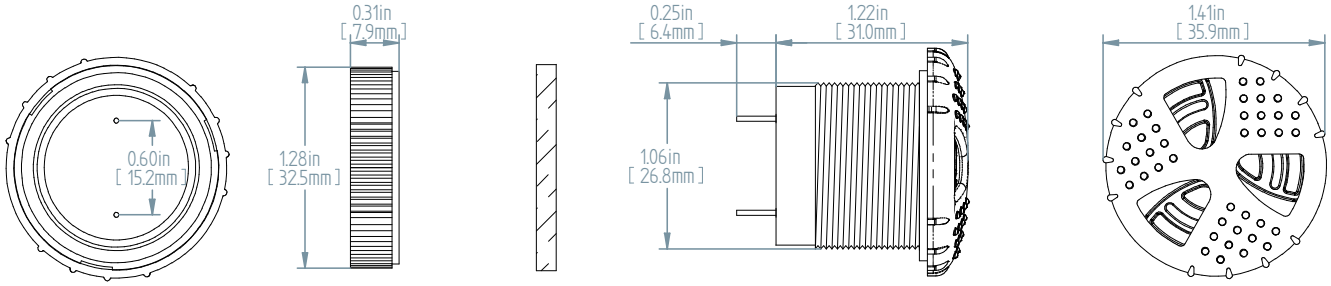
The Turbo TMW-V86-530-P(S) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

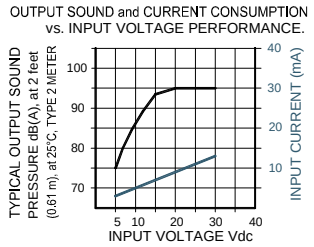
All specifications subject to change without notice.

TMW-V86-530-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

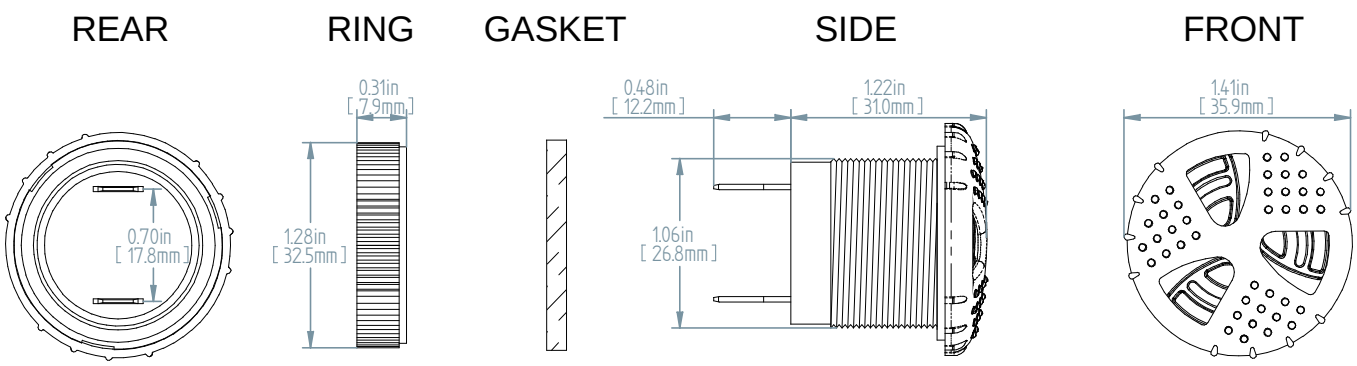


The Turbo TMW-V86-530-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

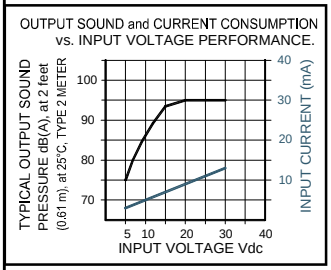
All specifications subject to change without notice.

TMW-V86-530-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



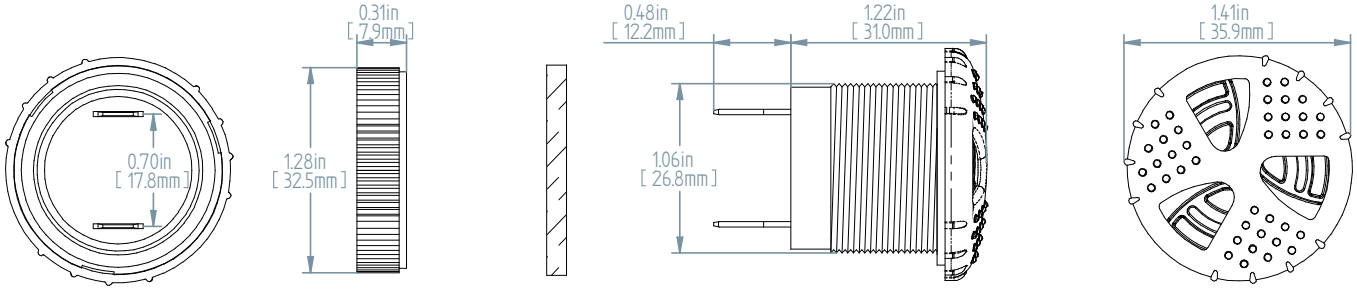
The Turbo TMW-V86-530-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

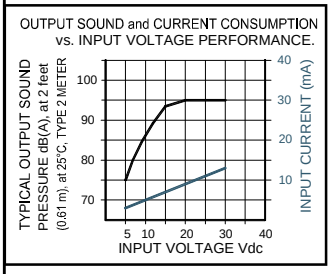
All specifications subject to change without notice.

TMW-V86-530-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



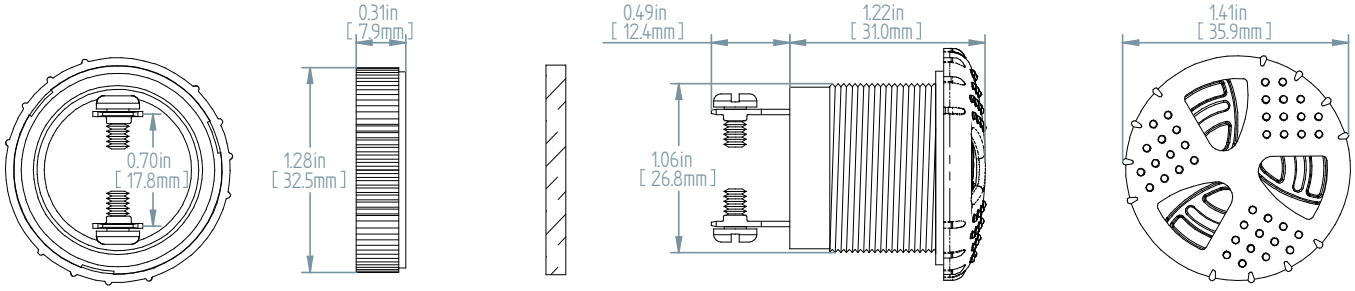
The Turbo TMW-V86-530-S(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

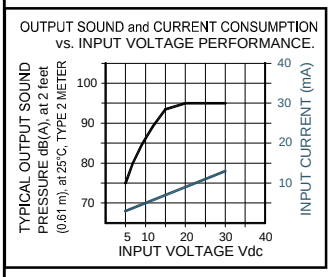
All specifications subject to change without notice.

TMW-V86-530-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



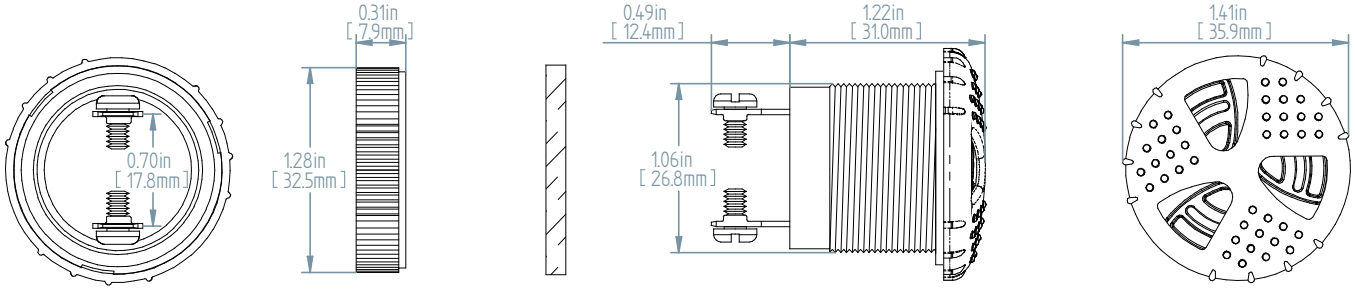
The Turbo TMW-V86-530-S(S) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

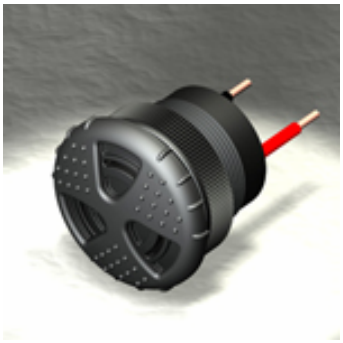
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

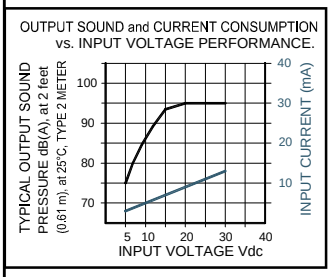
All specifications subject to change without notice.

TMW-V86-530-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



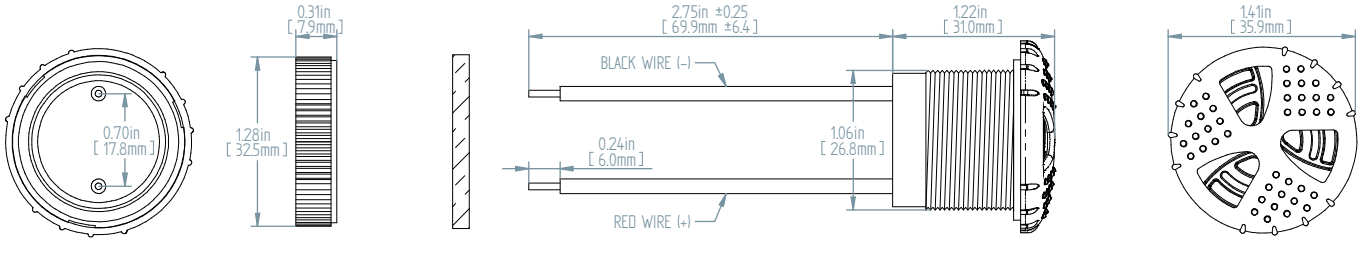
The Turbo TMW-V86-530-W(F) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

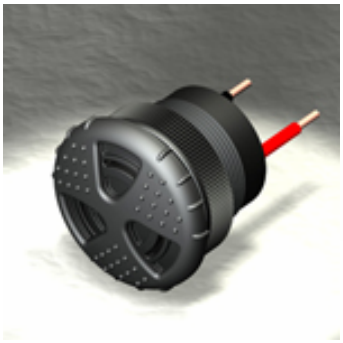
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

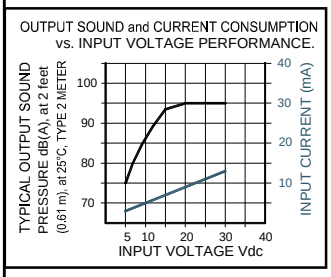
All specifications subject to change without notice.

TMW-V86-530-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



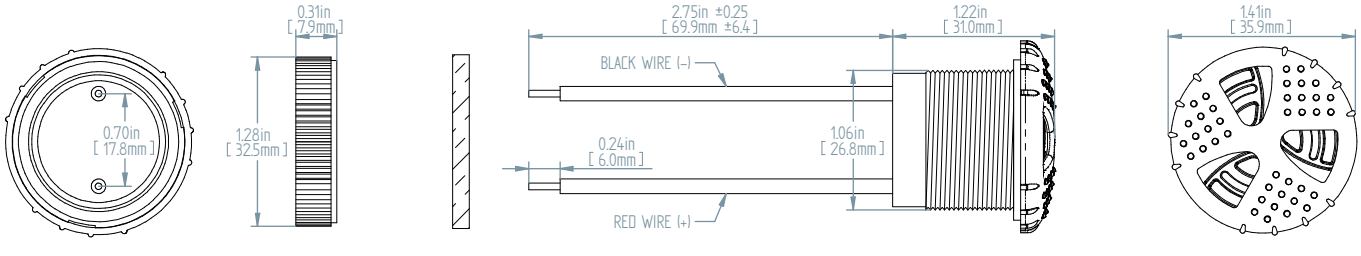
The Turbo TMW-V86-530-W(S) is a medium loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vdc 10 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

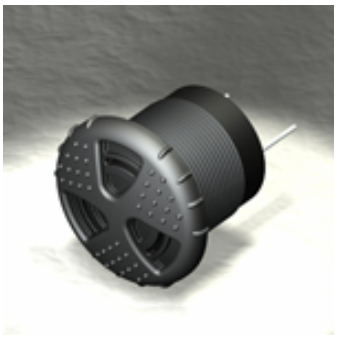
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

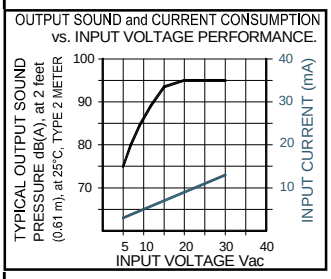
All specifications subject to change without notice.

TMW-V86-531-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



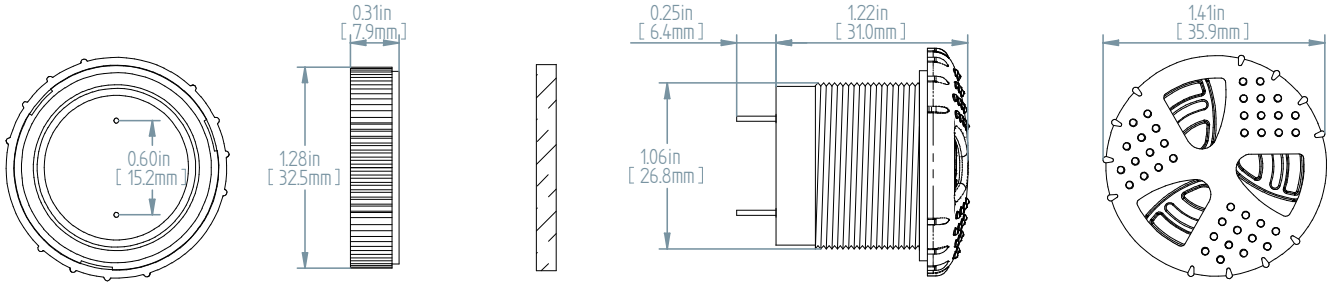
The Turbo TMW-V86-531-P(F) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

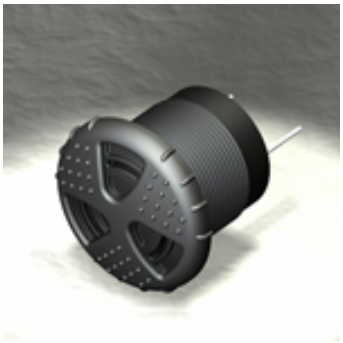
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

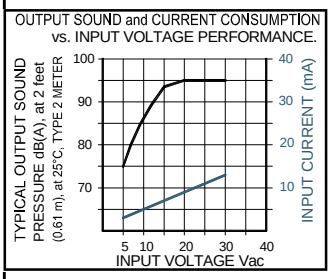
All specifications subject to change without notice.

TMW-V86-531-P(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



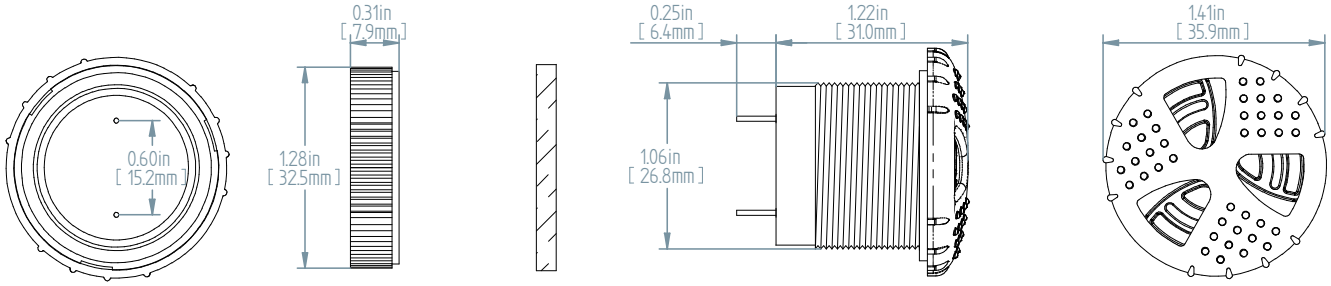
The Turbo TMW-V86-531-P(S) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

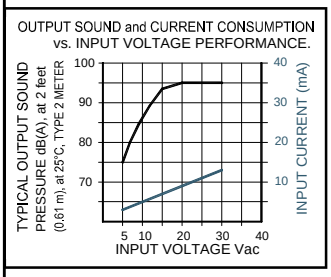
All specifications subject to change without notice.

TMW-V86-531-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



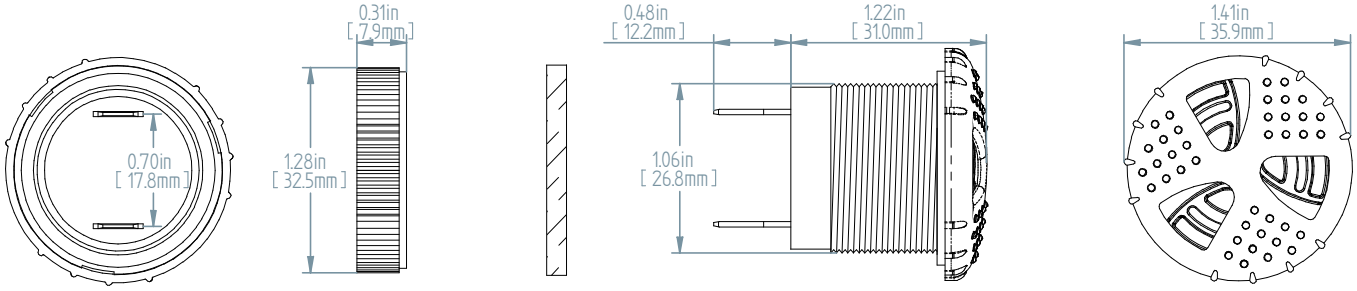
The Turbo TMW-V86-531-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

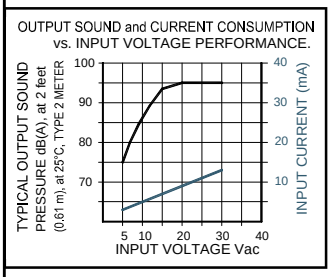
All specifications subject to change without notice.

TMW-V86-531-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



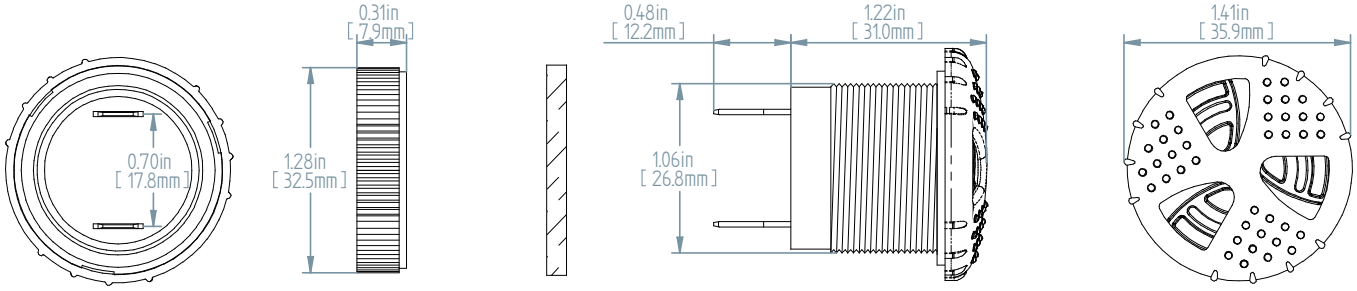
The Turbo TMW-V86-531-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

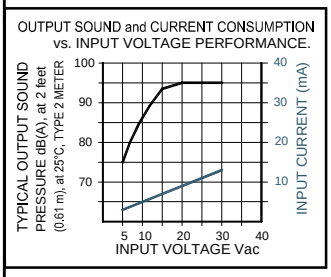
All specifications subject to change without notice.

TMW-V86-531-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



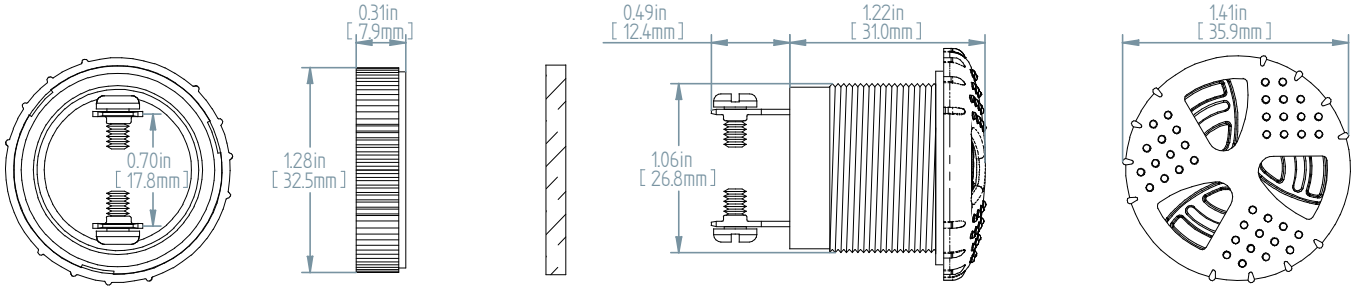
The Turbo TMW-V86-531-S(F) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

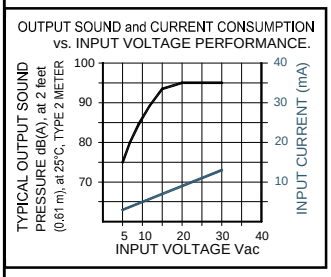
All specifications subject to change without notice.

TMW-V86-531-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



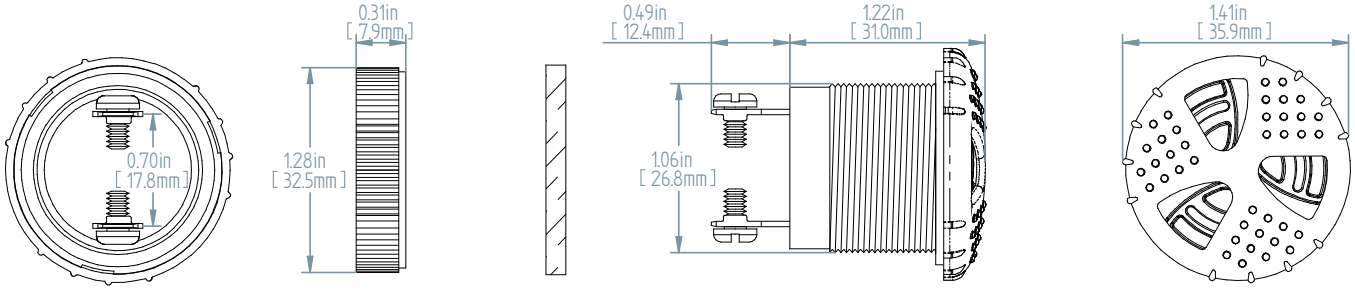
The Turbo TMW-V86-531-S(S) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

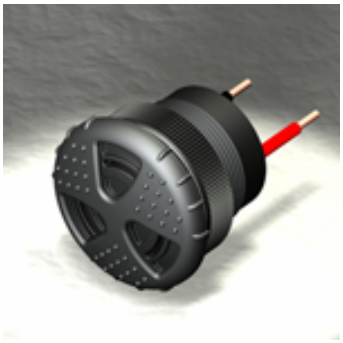
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

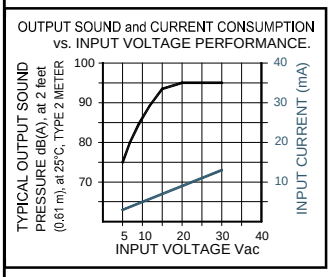
All specifications subject to change without notice.

TMW-V86-531-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



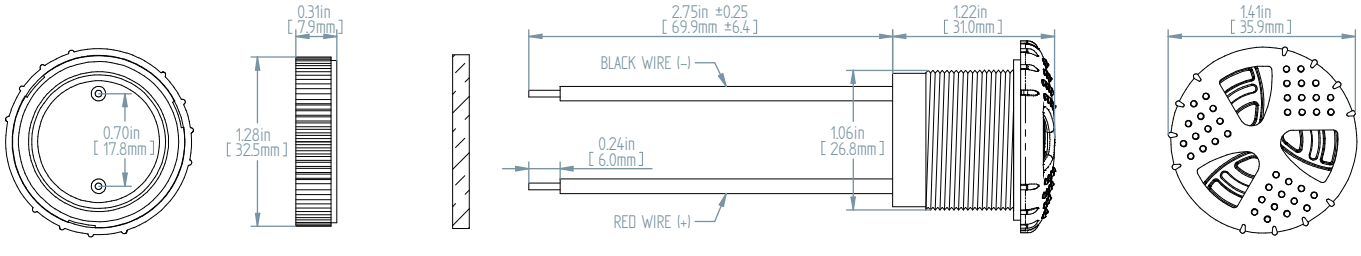
The Turbo TMW-V86-531-W(F) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

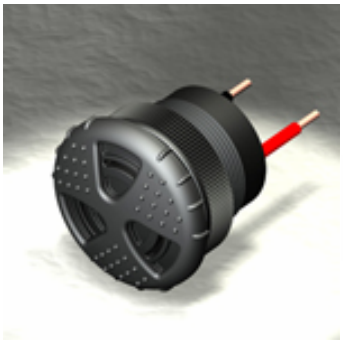
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

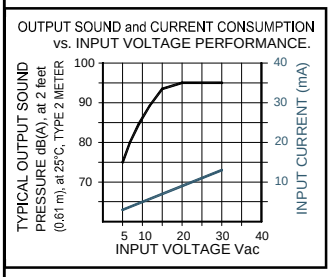
All specifications subject to change without notice.

TMW-V86-531-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



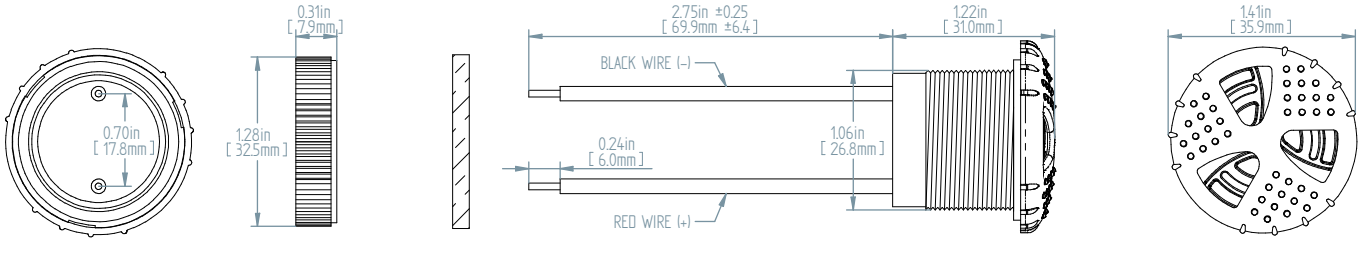
The Turbo TMW-V86-531-W(S) is a medium loud output, panel mounted alarm for operating voltages of 5-24VAC/DC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	5-24 Vac/dc
Nominal Operating Voltage:	24 Vac
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 5 Vac 15 mA at 24 Vac
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 5 Vac, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 24 Vac, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

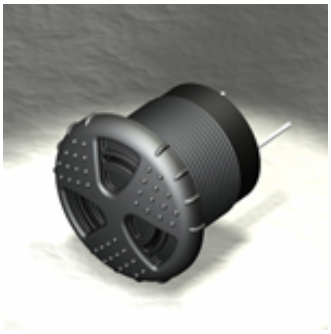
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

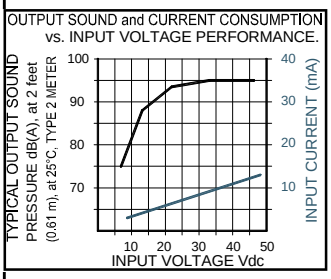
All specifications subject to change without notice.

TMW-V86-948-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



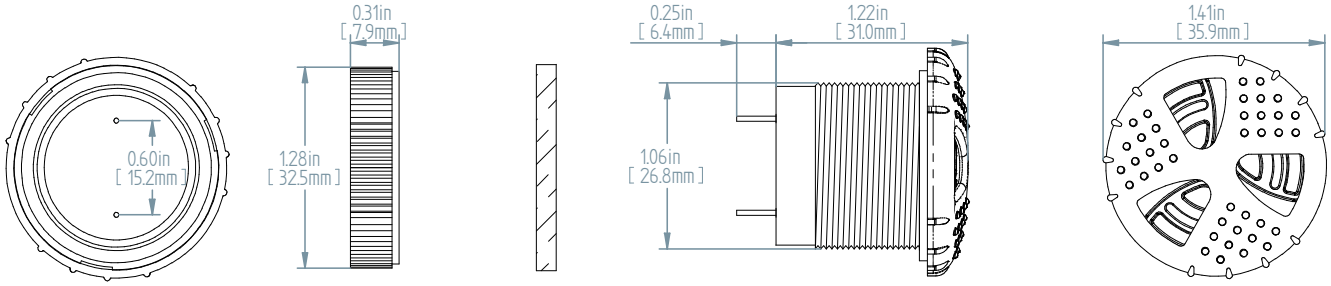
The Turbo TMW-V86-948-P(F) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

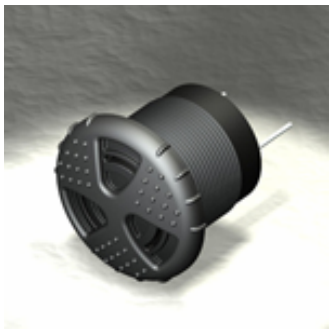
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

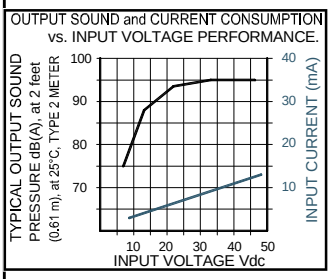
All specifications subject to change without notice.

TMW-V86-948-P(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



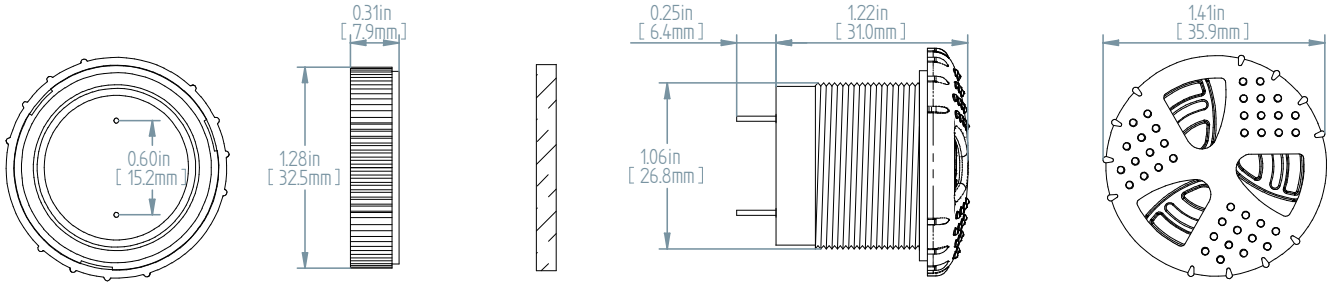
The Turbo TMW-V86-948-P(S) is a medium loud output, panel or circuit board mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

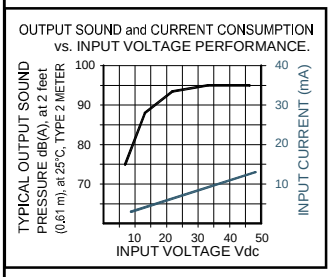
All specifications subject to change without notice.

TMW-V86-948-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



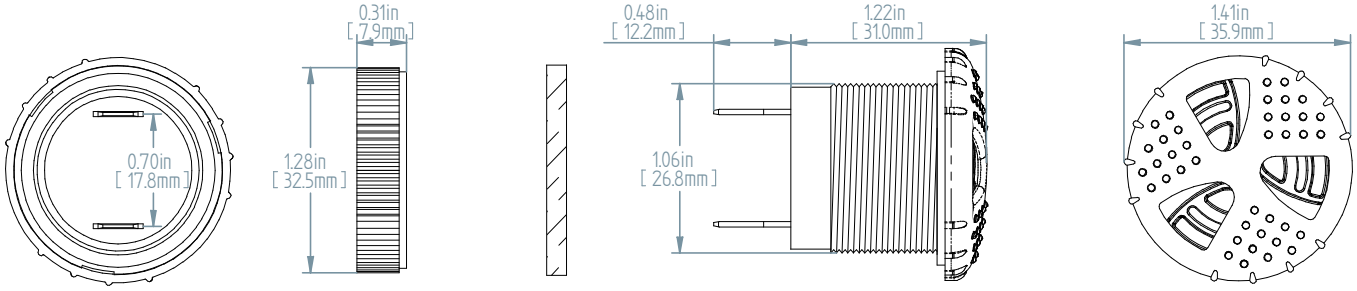
The Turbo TMW-V86-948-Q(F) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

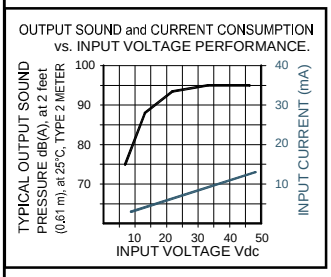
All specifications subject to change without notice.

TMW-V86-948-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



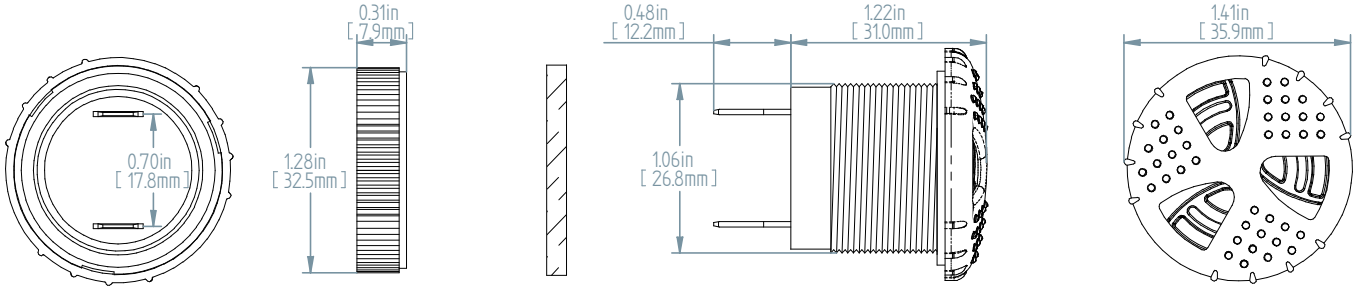
The Turbo TMW-V86-948-Q(S) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

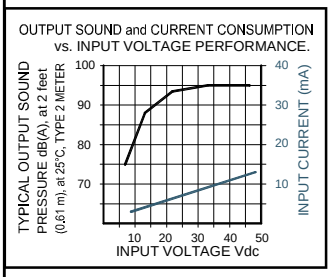
All specifications subject to change without notice.

TMW-V86-948-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



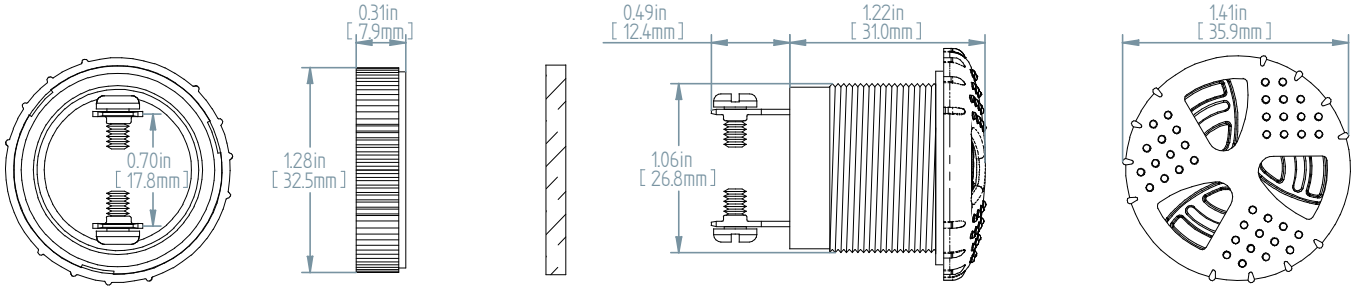
The Turbo TMW-V86-948-S(F) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

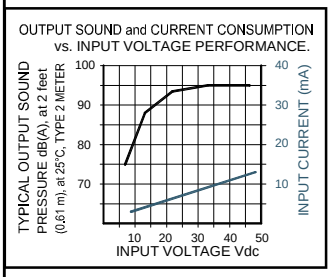
All specifications subject to change without notice.

TMW-V86-948-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

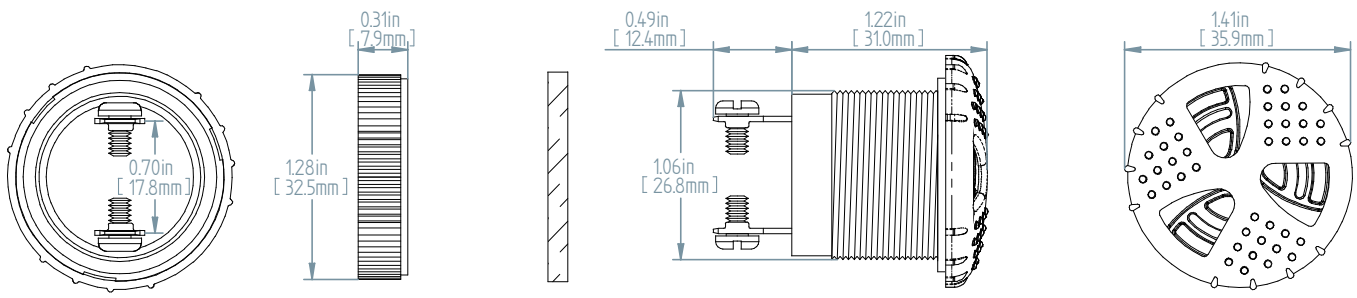


The Turbo TMW-V86-948-S(S) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

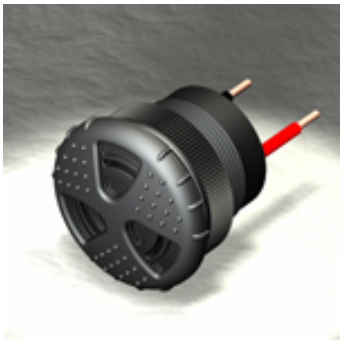
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

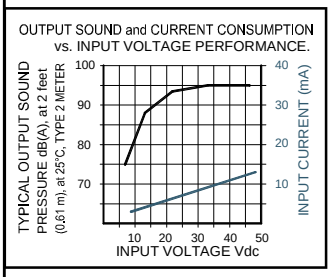
All specifications subject to change without notice.

TMW-V86-948-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

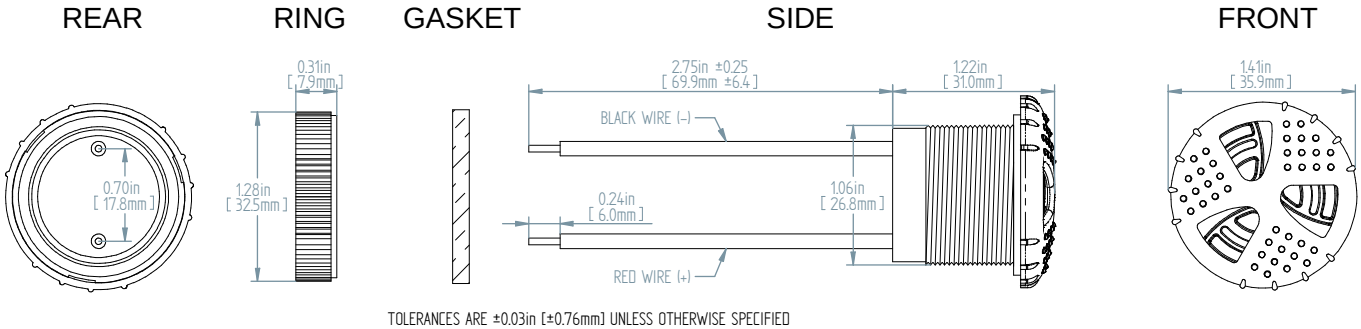


The Turbo TMW-V86-948-W(F) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 10±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

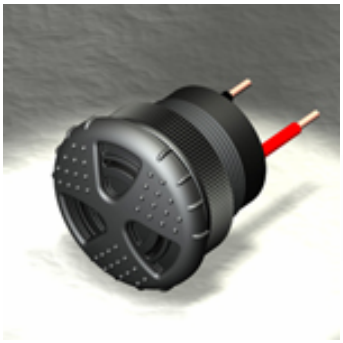
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

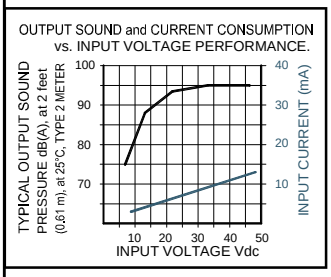
All specifications subject to change without notice.

TMW-V86-948-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



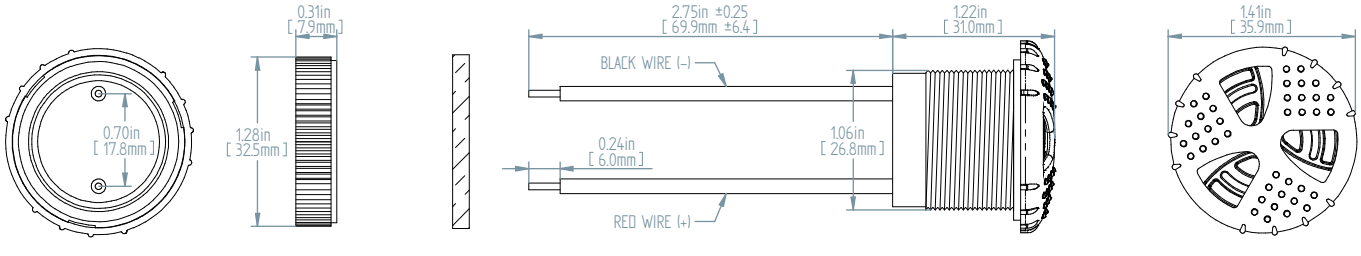
The Turbo TMW-V86-948-W(S) is a medium loud output, panel mounted alarm for operating voltages of 9-48VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	9-48 Vdc
Nominal Operating Voltage:	48 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	2 mA at 9 Vdc 10 mA at 48 Vdc
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25℃ 95±5 dB(A), at 48 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

All specifications subject to change without notice.

TT-I-39

Made in USA

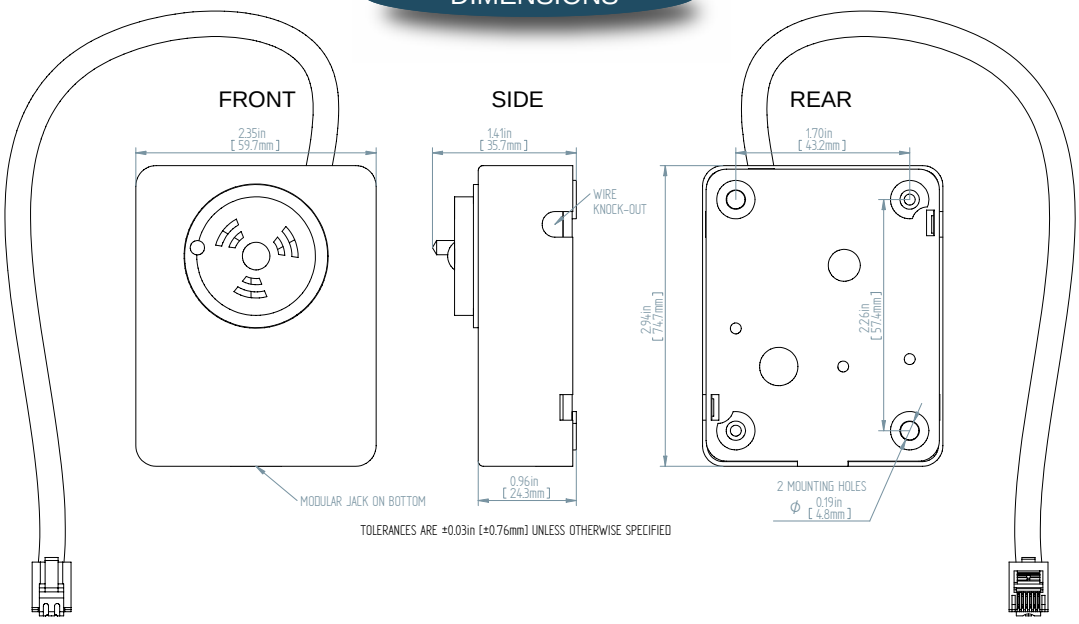
The TT-I-39 is a Tel-A-Tone™ remote extension ringer. Plug into any telephone extension outlet for a pleasant, distinctive ring.

- Durable Stainless Steel 304 Diaphragm
- Wide Range Volume Control
- Tough, High-Impact Plastic Case
- Standard Modular Connector
- Accesses for External Wire Runs
- Installs Easily
- Not intended for frequency selective ringing systems

SPECIFICATIONS

Operating Mode:	Medium Loud Warble Tone
Operating Voltage:	40-120 Vrms, 16-67 Hz
Nominal Operating Voltage:	90 Vrms, 20 to 30 Hz
Operating Frequency:	High Frequency Peak: 2900±250 Hz. Low Frequency Peak: 2200±250 Hz. (Dominant) 15±25% Cycles per second
Typical Operating Current:	5 mA at 90 Vrms at 20 Hz
Typical Sound Pressure:	85±5 dB(A), at 90 Vrms at 20 Hz, at 24 inches (61 cm), at 25°C.
Termination:	Telephone-standard Modular Jack and Plug, RJ-11
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Bell Tapping Suppression:	Dialing, hook switch, and random line impulses up to 800 V, 2 mS
Construction Materials:	Case- ABS or Norpex Plastic, Beige Internal Circuit- Audio-oscillator and piezoelectric driver Diaphragm- Stainless Steel 304
Environmental Durability:	Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibrations- Withstand vibrations between 0 and 55 Hz. on all axis.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.08

Copyright © 2008 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88B-930-Q(F)

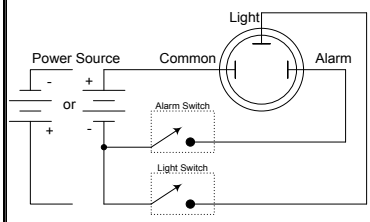
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

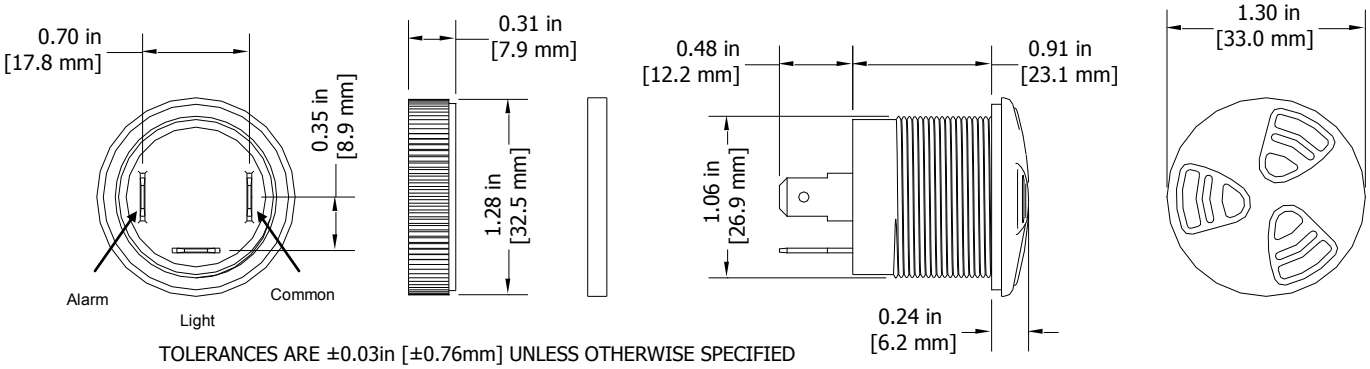
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88B-930-Q(M)

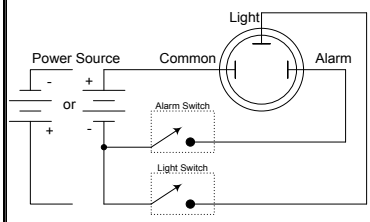
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

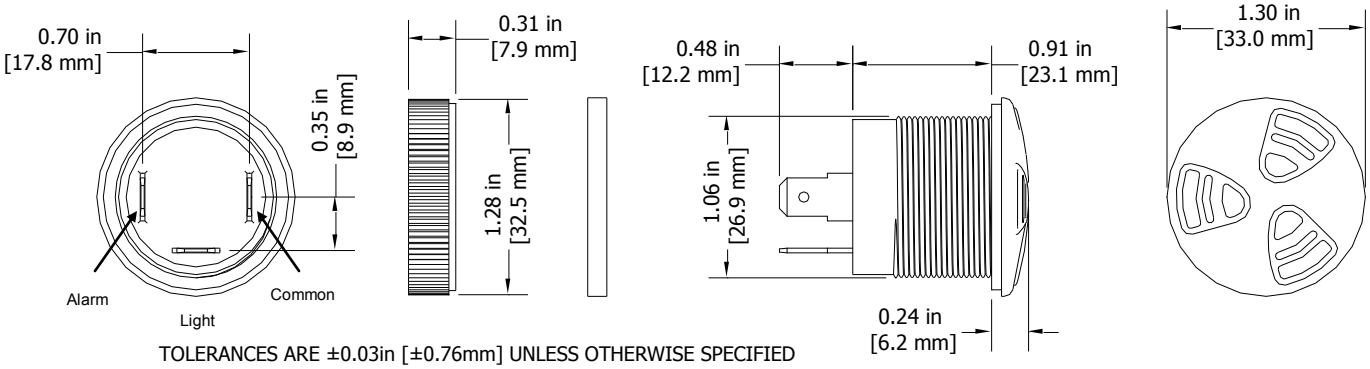
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	2±25% Cycles per second, Beep Tone
Light Flash Rate:	2±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88B-930-Q(S)

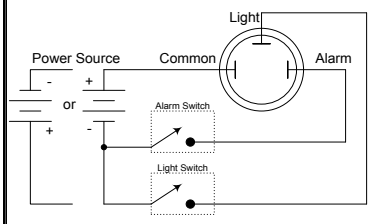
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

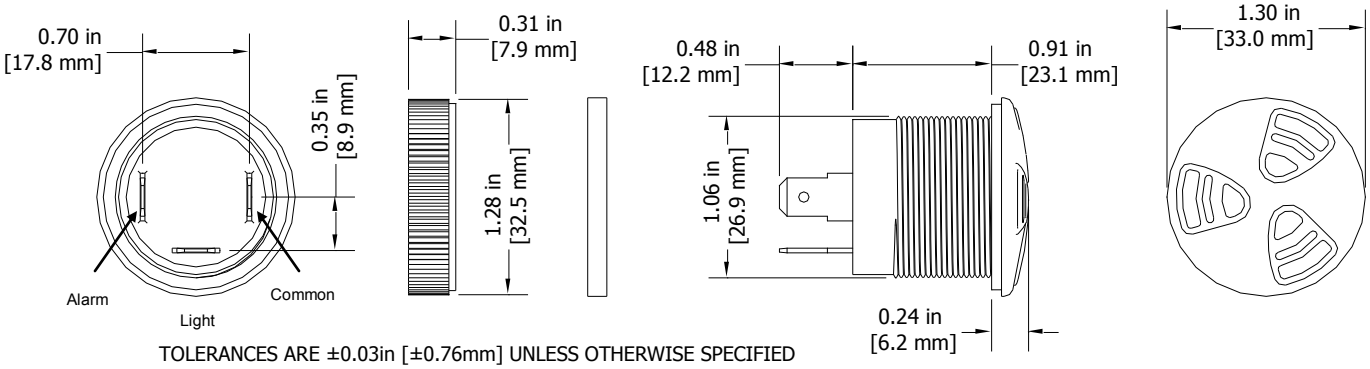
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	1±25% Cycles per second, Beep Tone
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88B-930-Q(U)

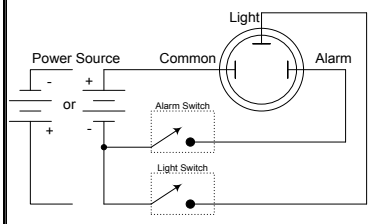
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

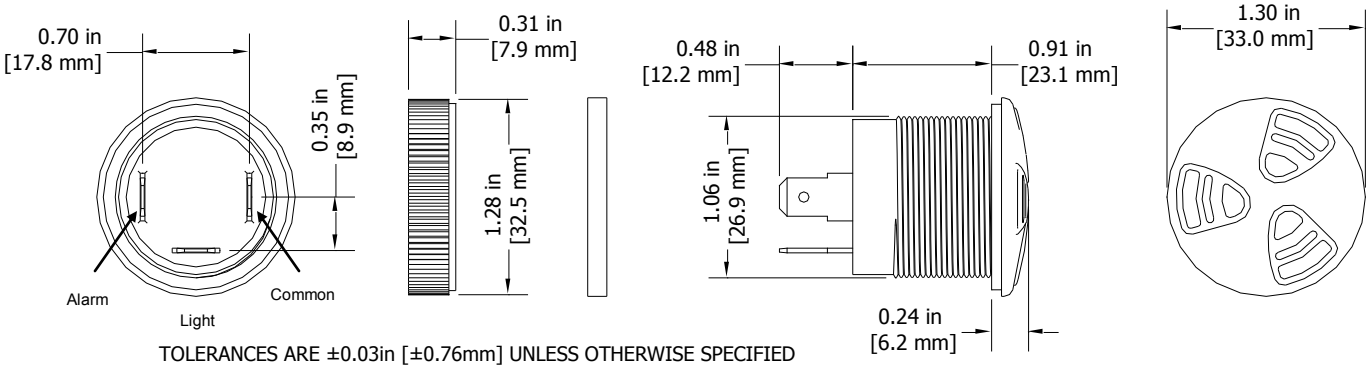
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	6±25% Cycles per second, Beep Tone
Light Flash Rate:	6±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88G-930-Q(F)

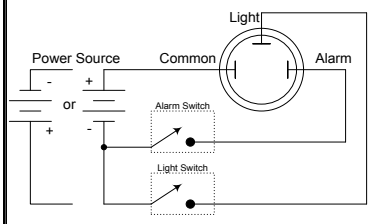
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

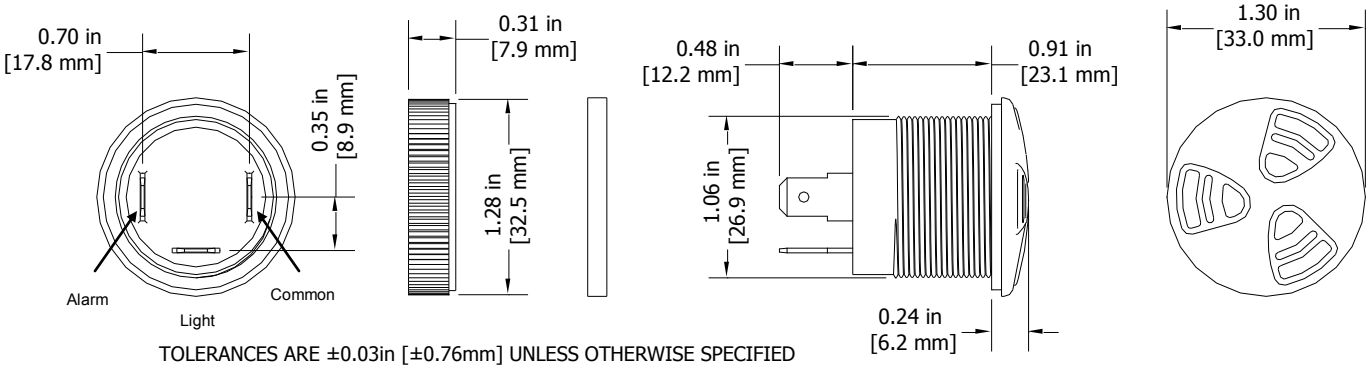
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88G-930-Q(M)

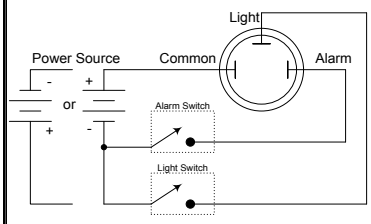
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

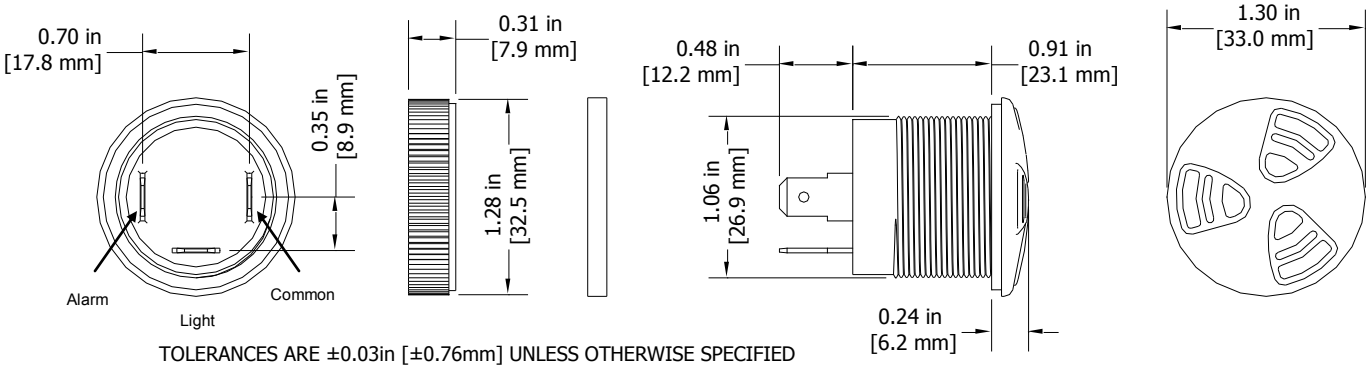
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	2±25% Cycles per second, Beep Tone
Light Flash Rate:	2±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88G-930-Q(S)

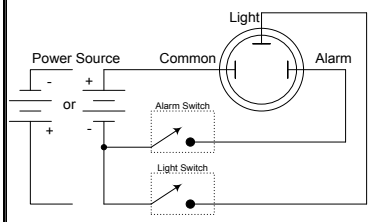
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

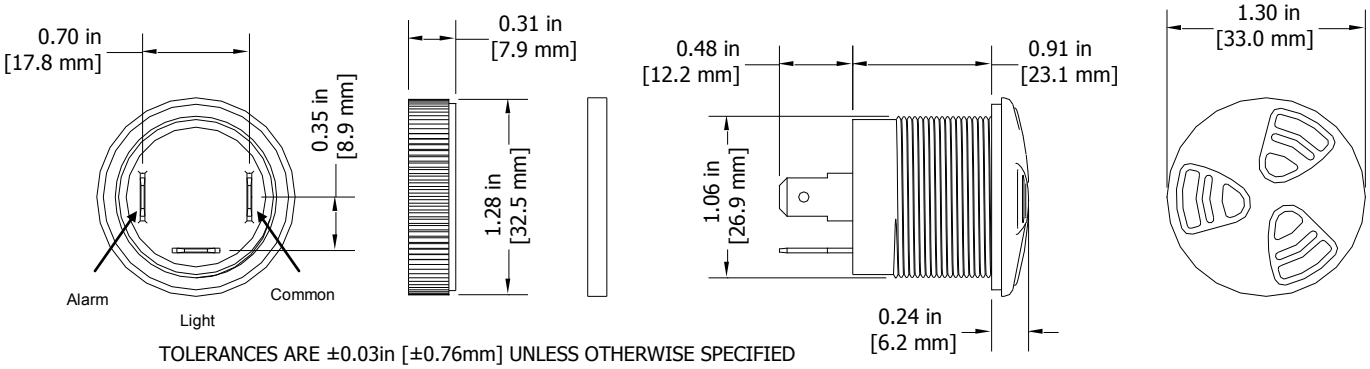
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	1±25% Cycles per second, Beep Tone
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88G-930-Q(U)

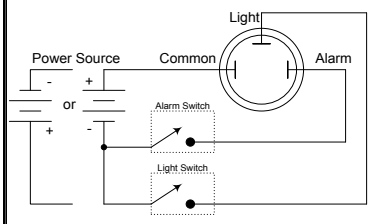
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

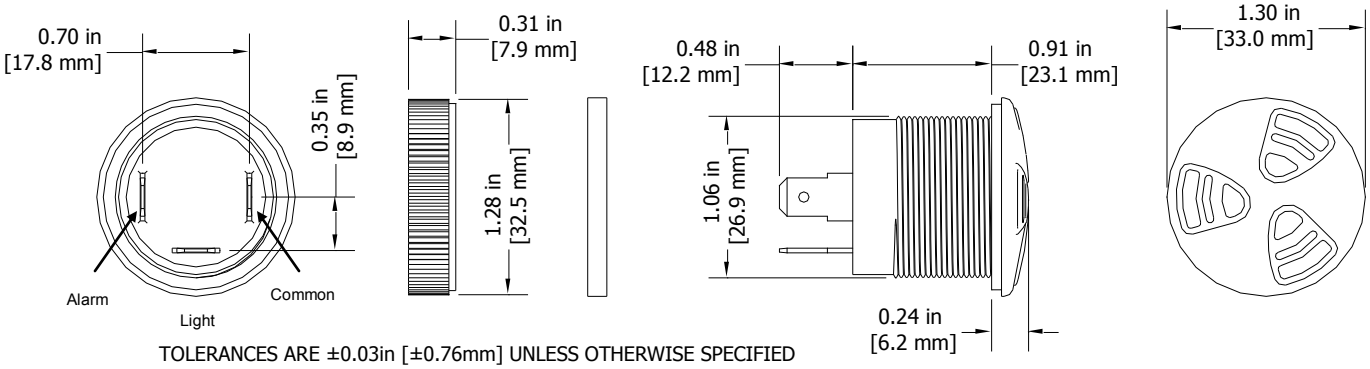
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	6±25% Cycles per second, Beep Tone
Light Flash Rate:	6±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88R-930-Q(F)

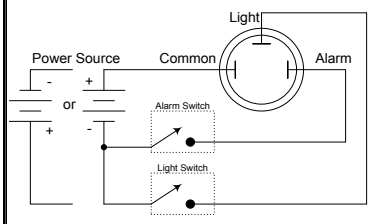
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

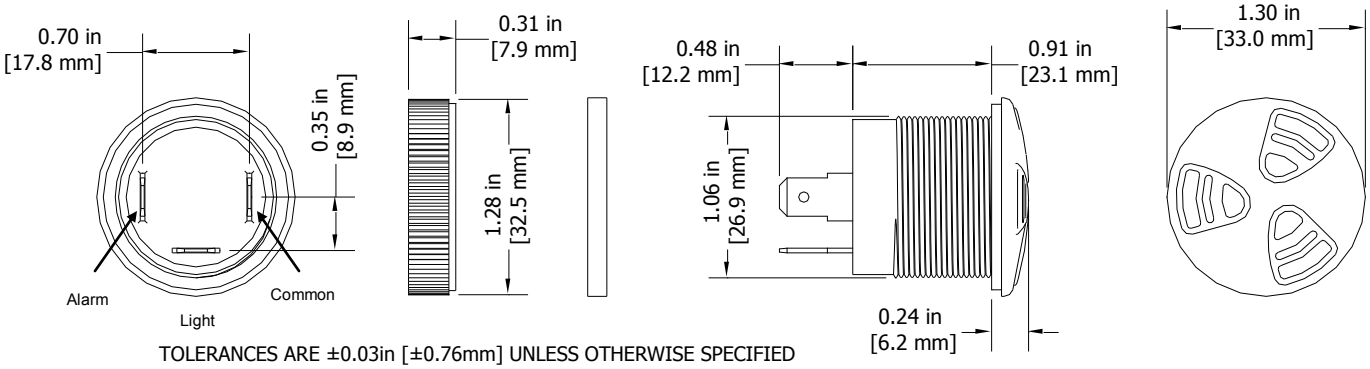
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88R-930-Q(M)

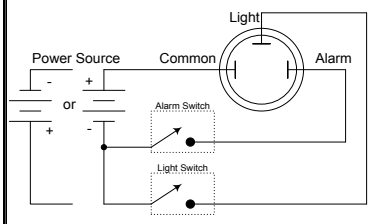
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

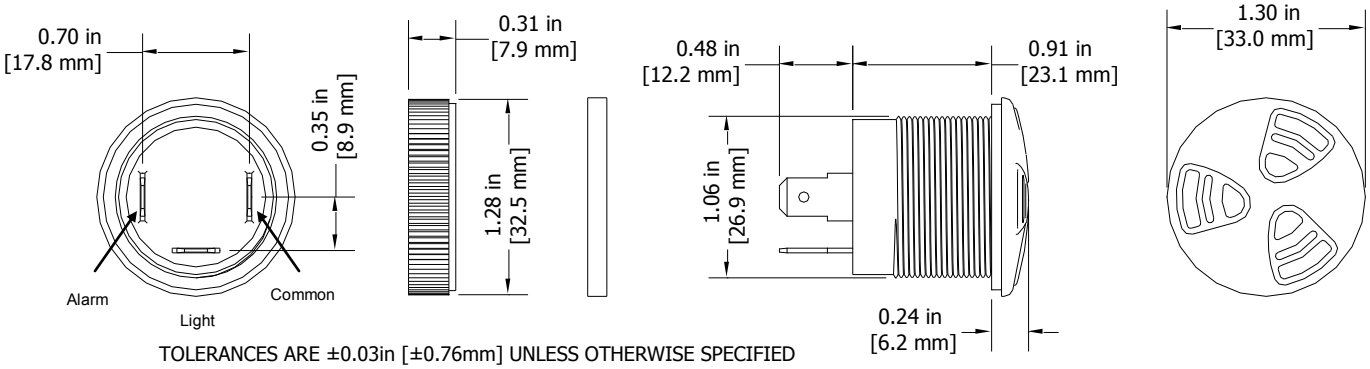
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	2±25% Cycles per second, Beep Tone
Light Flash Rate:	2±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88R-930-Q(S)

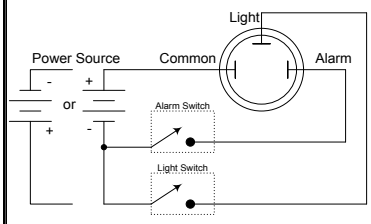
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

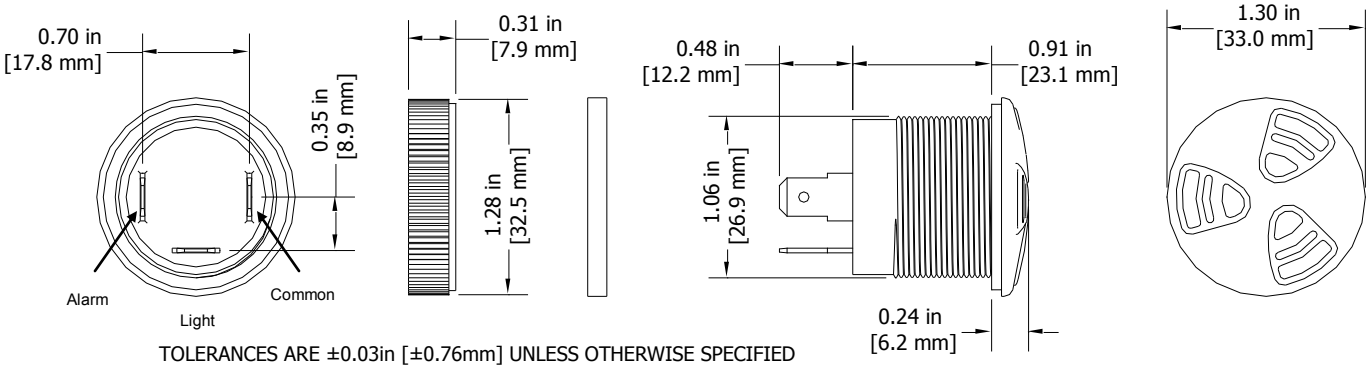
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	1±25% Cycles per second, Beep Tone
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 1.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88R-930-Q(F)

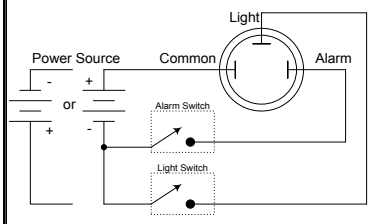
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

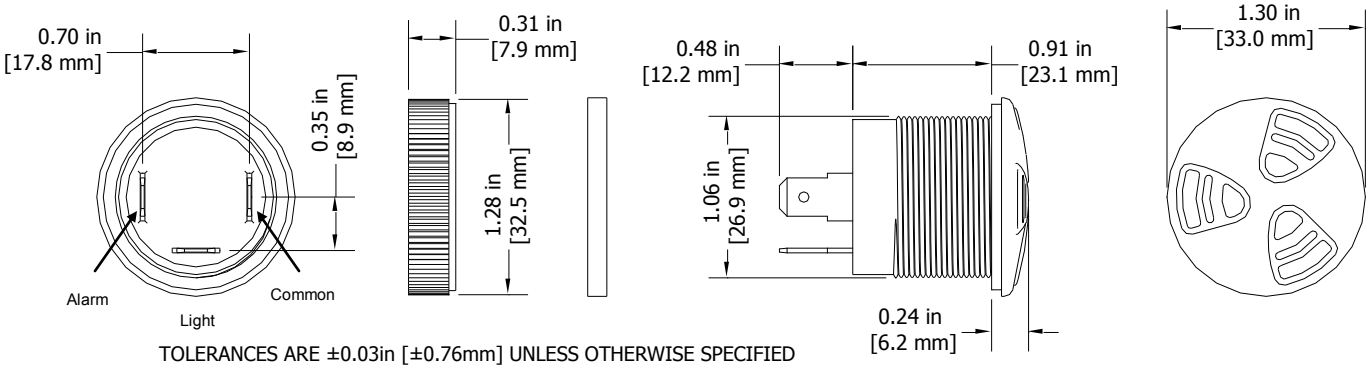
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	6±25% Cycles per second, Beep Tone
Light Flash Rate:	6±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88W-930-Q(F)

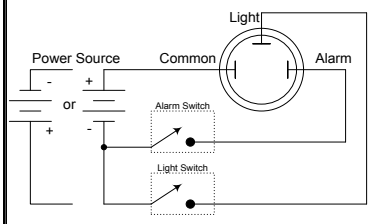
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

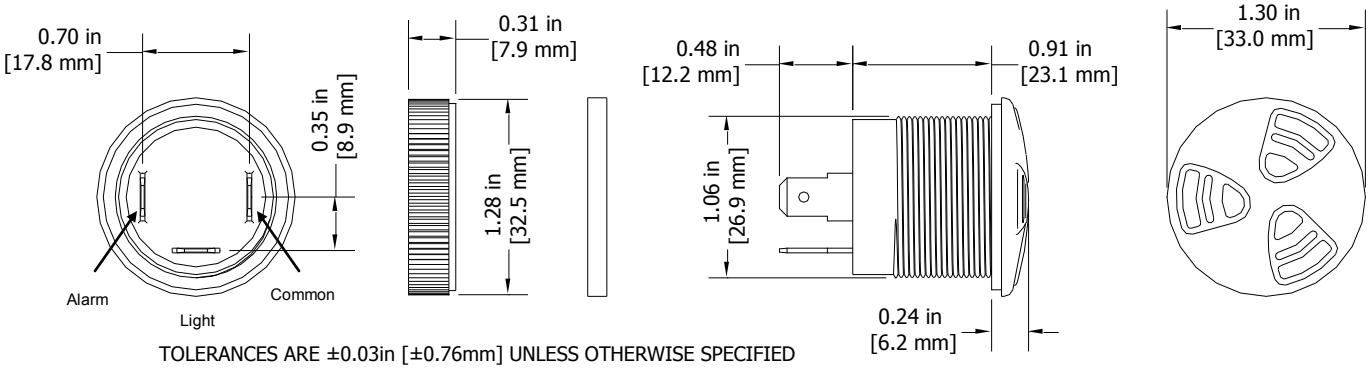
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88W-930-Q(M)

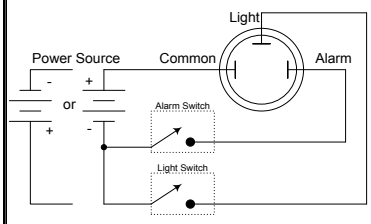
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

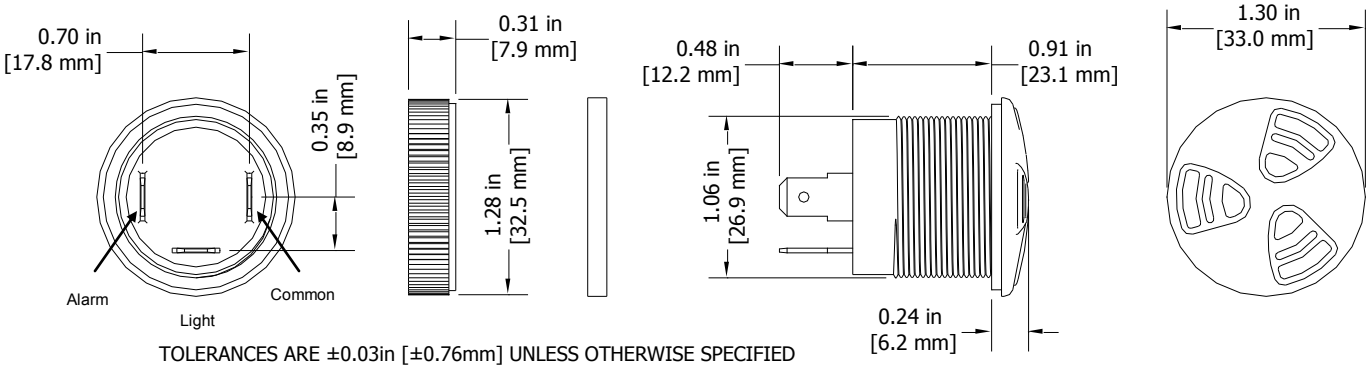
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	2±25% Cycles per second, Beep Tone
Light Flash Rate:	2±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88W-930-Q(S)

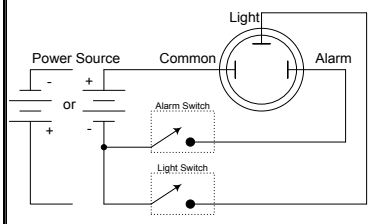
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

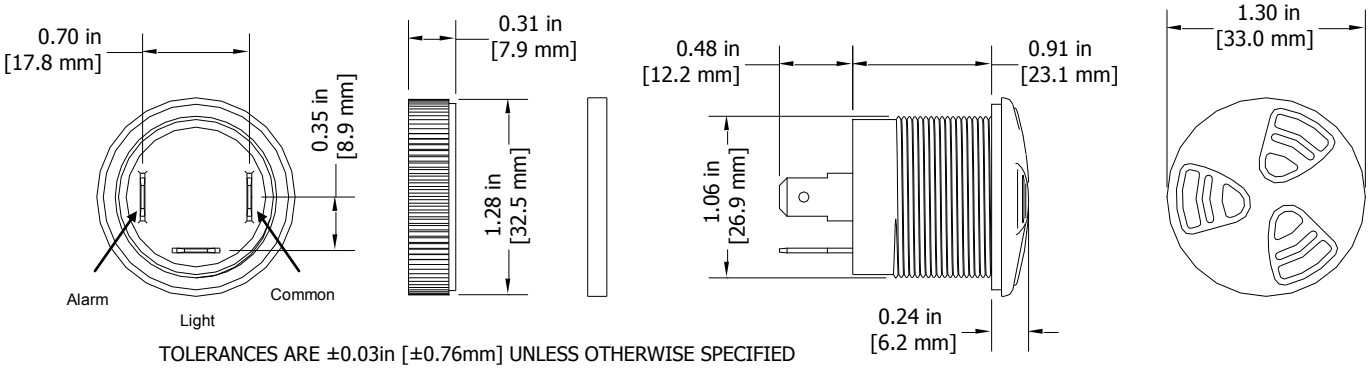
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	1±25% Cycles per second, Beep Tone
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88W-930-Q(U)

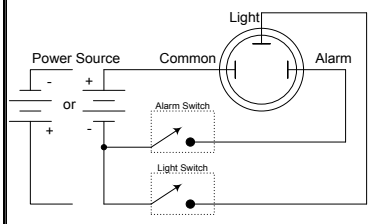
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

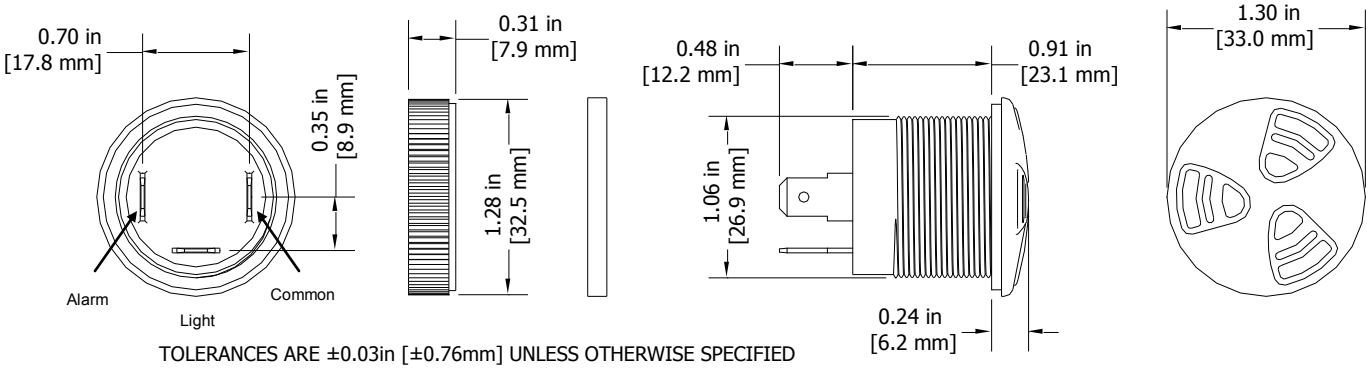
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	6±25% Cycles per second, Beep Tone
Light Flash Rate:	6±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88Y-930-Q(F)

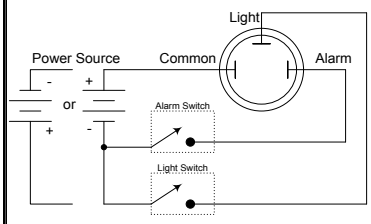
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

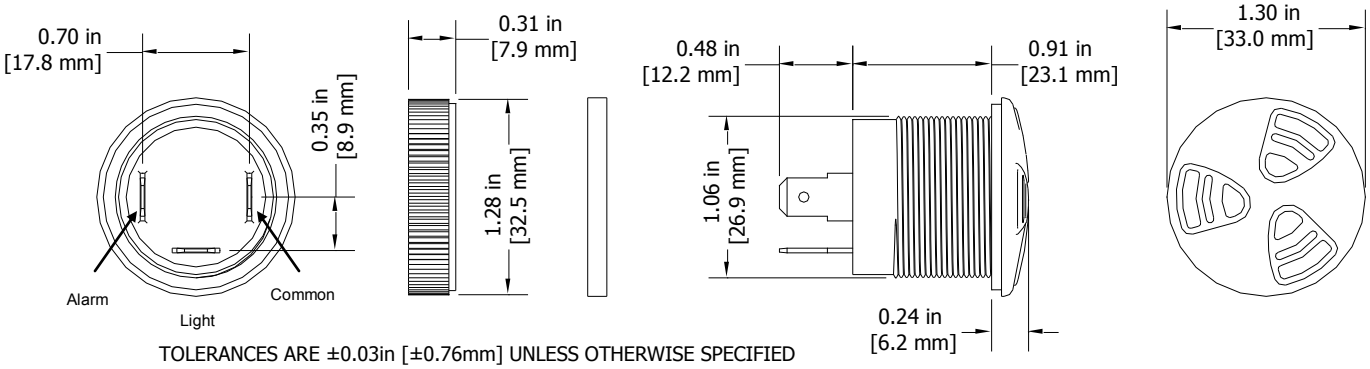
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88Y-930-Q(M)

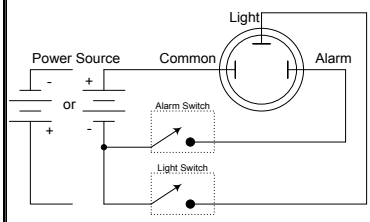
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

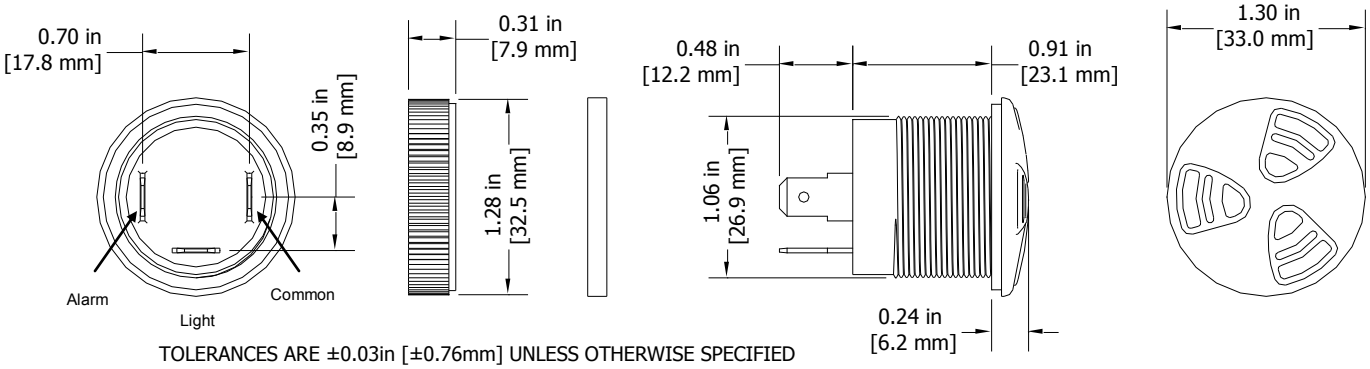
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	2±25% Cycles per second, Beep Tone
Light Flash Rate:	2±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88Y-930-Q(S)

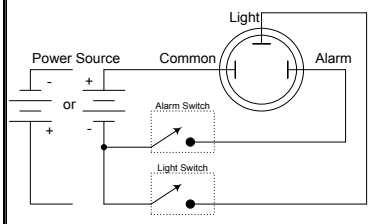
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

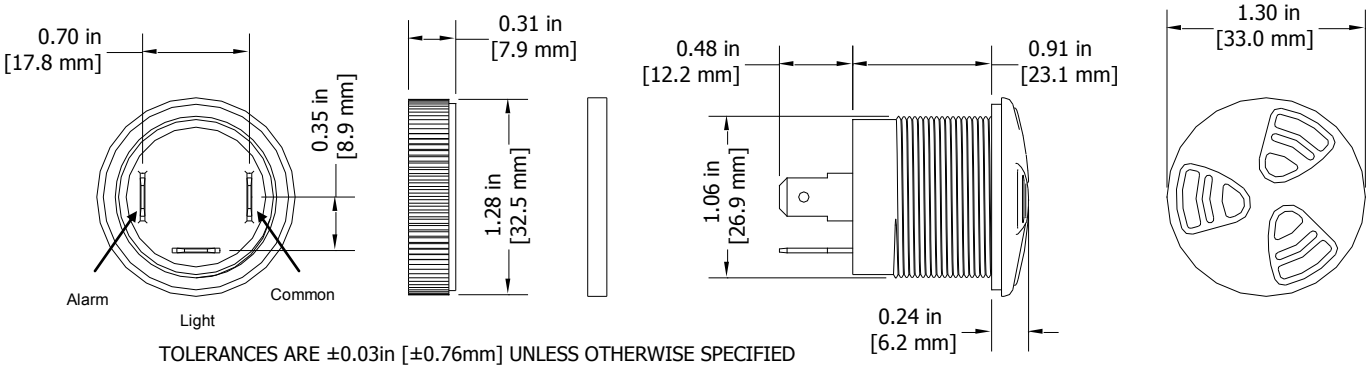
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	1±25% Cycles per second, Beep Tone
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHB-88Y-930-Q(U)

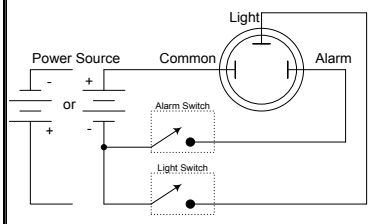
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

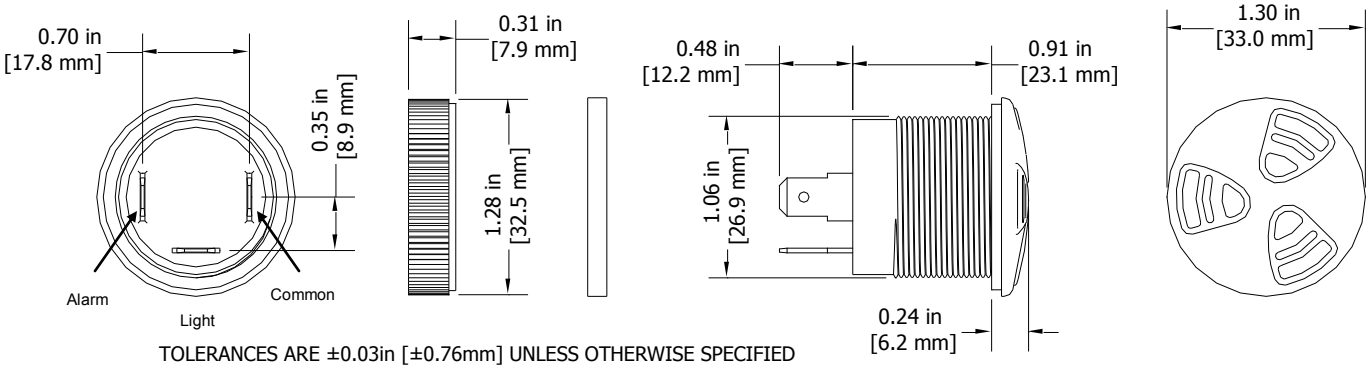
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Beep Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Beep Tone.
Tone Pulse Rate:	6±25% Cycles per second, Beep Tone
Light Flash Rate:	6±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHC-88B-930-Q

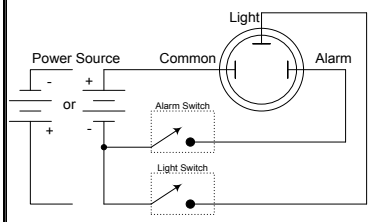
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

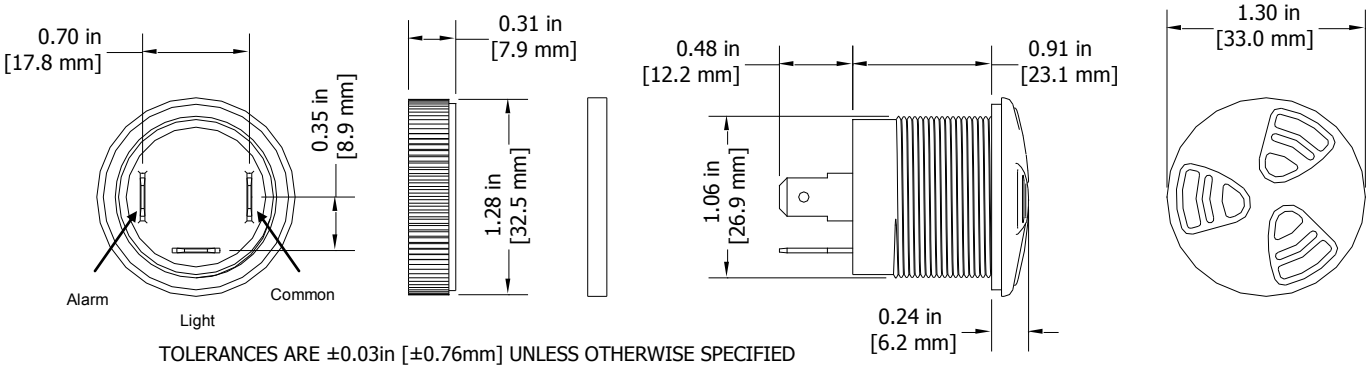
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. .
Tone Pulse Rate:	N/A
Light Flash Rate:	Constant
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHC-88G-930-Q

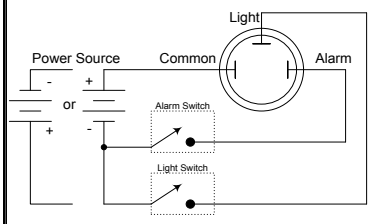
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

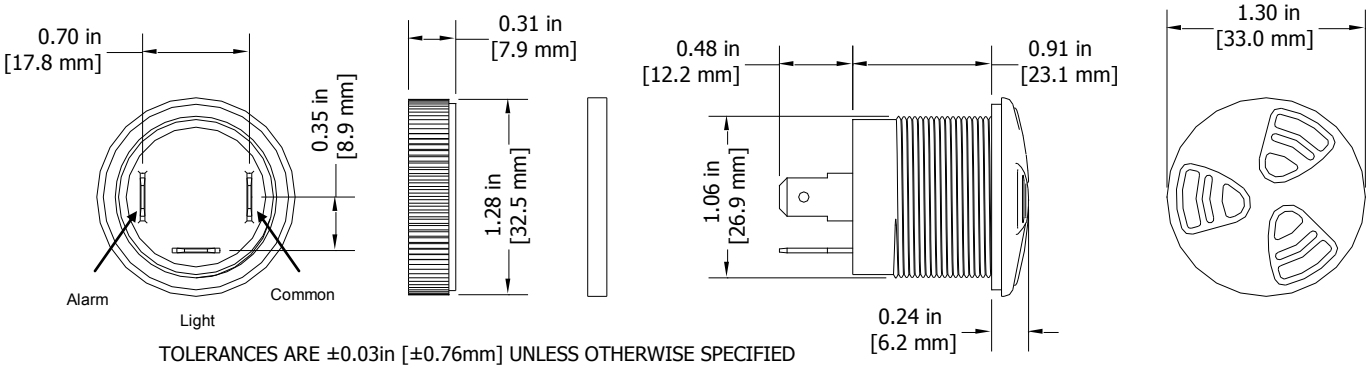
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz.
Tone Pulse Rate:	N/A
Light Flash Rate:	Constant
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHC-88R-930-Q

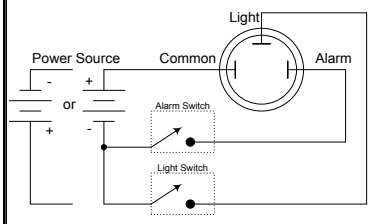
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

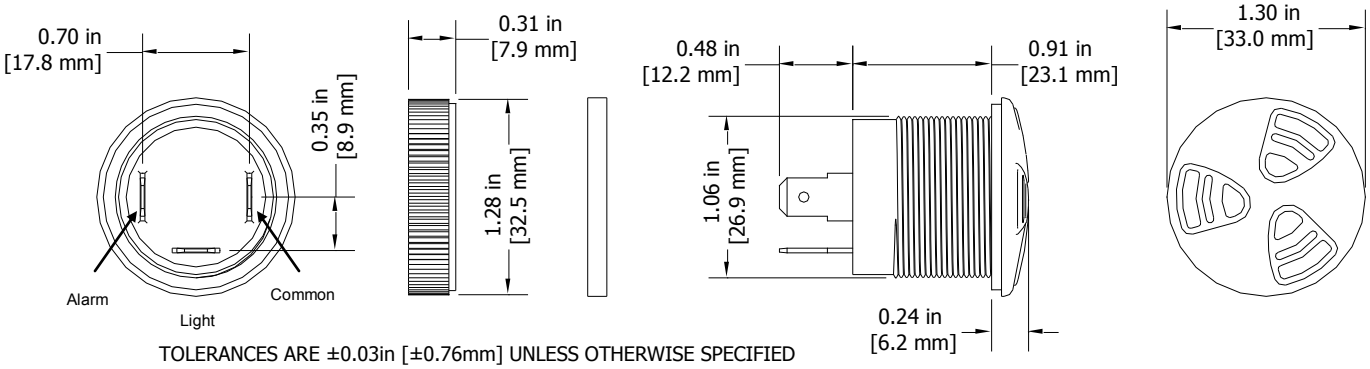
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz.
Tone Pulse Rate:	N/A
Light Flash Rate:	Constant
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHC-88W-930-Q

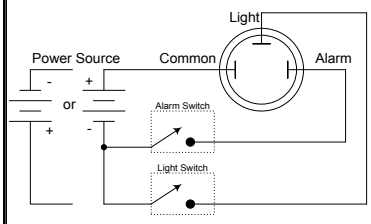
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

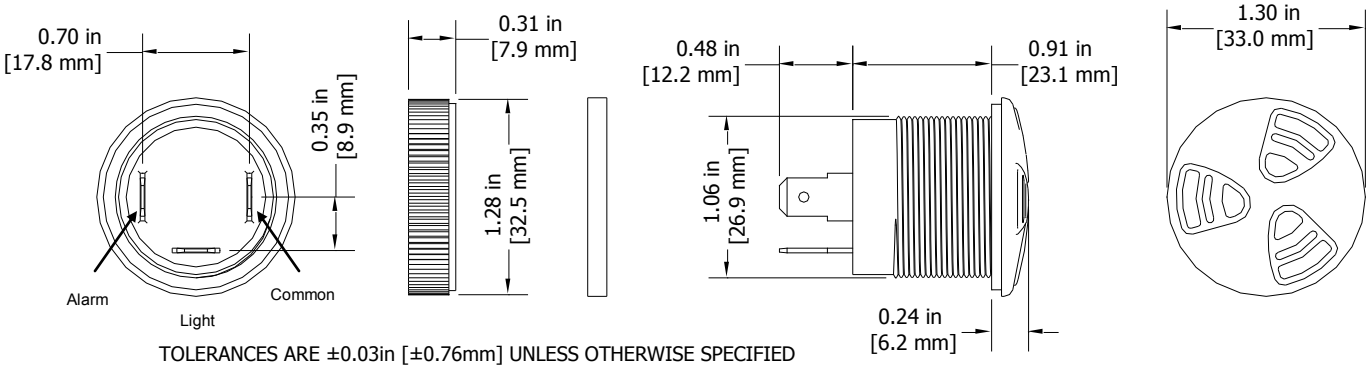
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz.
Tone Pulse Rate:	N/A
Light Flash Rate:	Continuous
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHC-88Y-930-Q

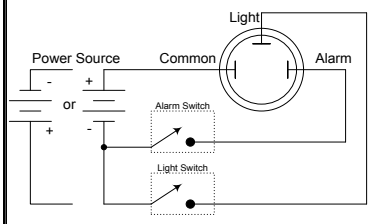
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

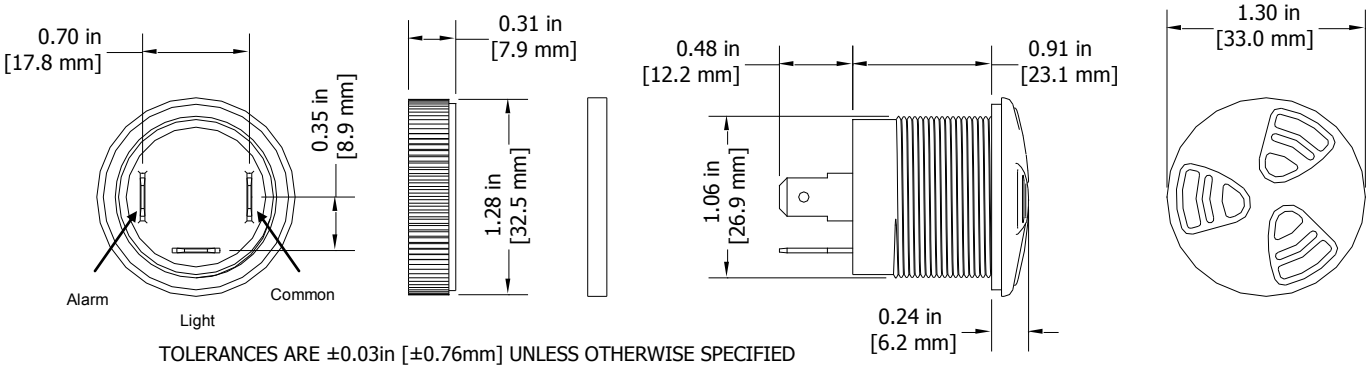
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Continuous Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz.
Tone Pulse Rate:	N/A
Light Flash Rate:	Constant
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHCH-88B-930-Q(F)

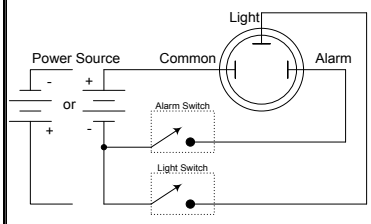
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

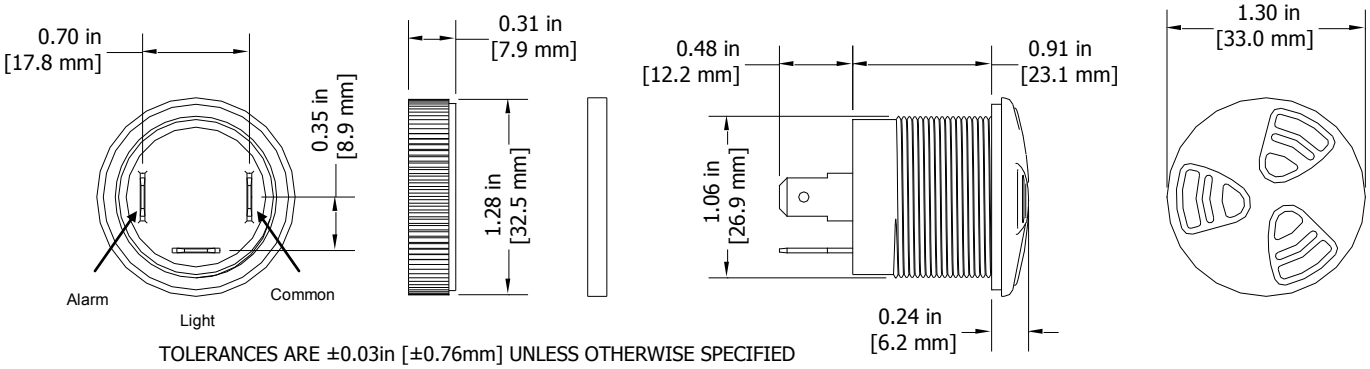
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Chime Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Chime Tone.
Tone Pulse Rate:	2±25% Cycles per second, Beep Tone
Light Flash Rate:	2±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHCH-88B-930-Q(M)

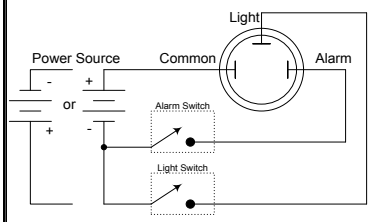
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

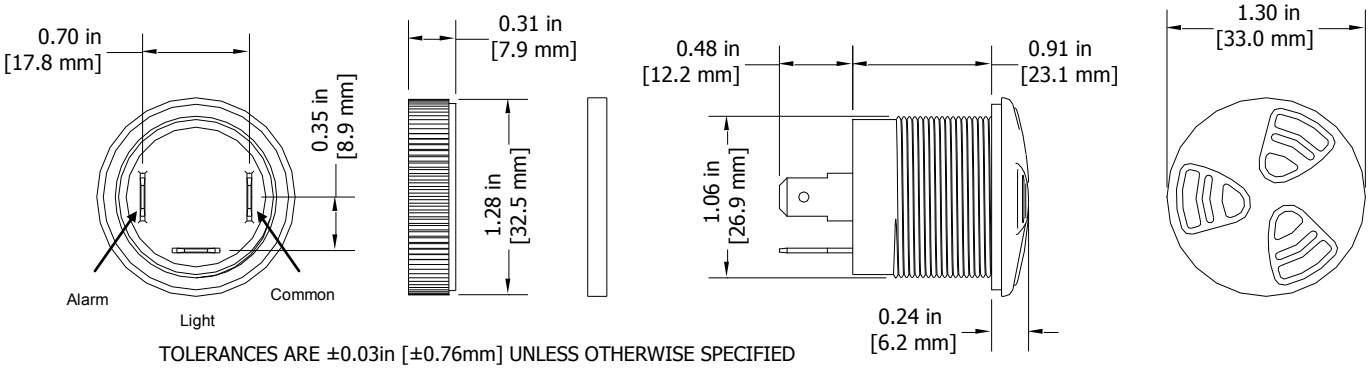
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Chime Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Chime Tone.
Tone Pulse Rate:	1±25% Cycles per second, Beep Tone
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHCH-88B-930-Q(S)

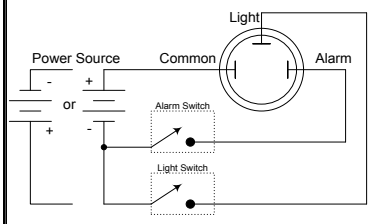
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

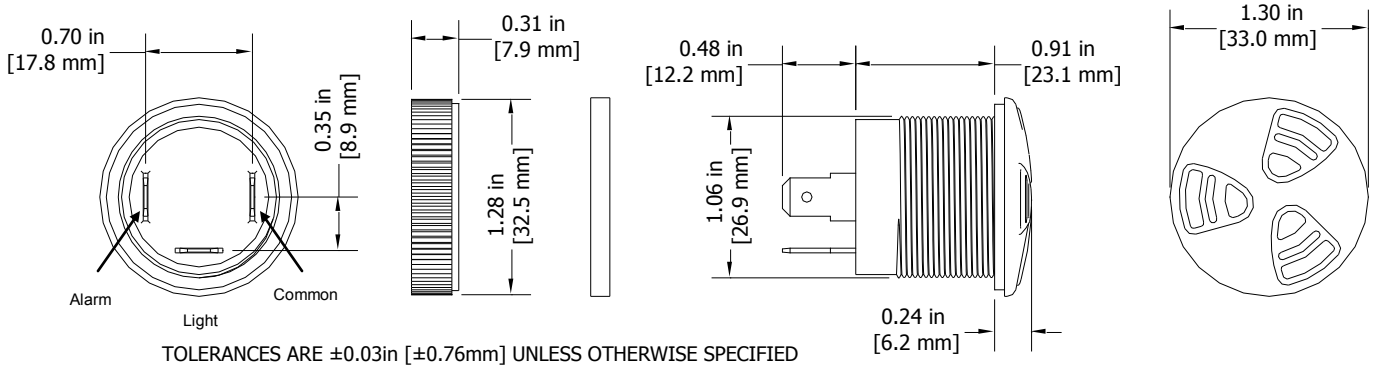
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Single Shot Chime Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Single Shot Chime Tone.
Tone Pulse Rate:	Single Shot, reset occurs when power is removed.
Light Flash Rate:	Constant "on"
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHCH-88G-930-Q(F)

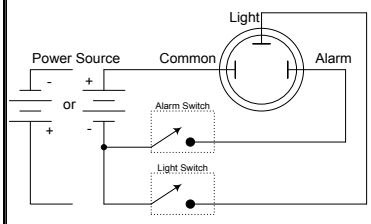
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

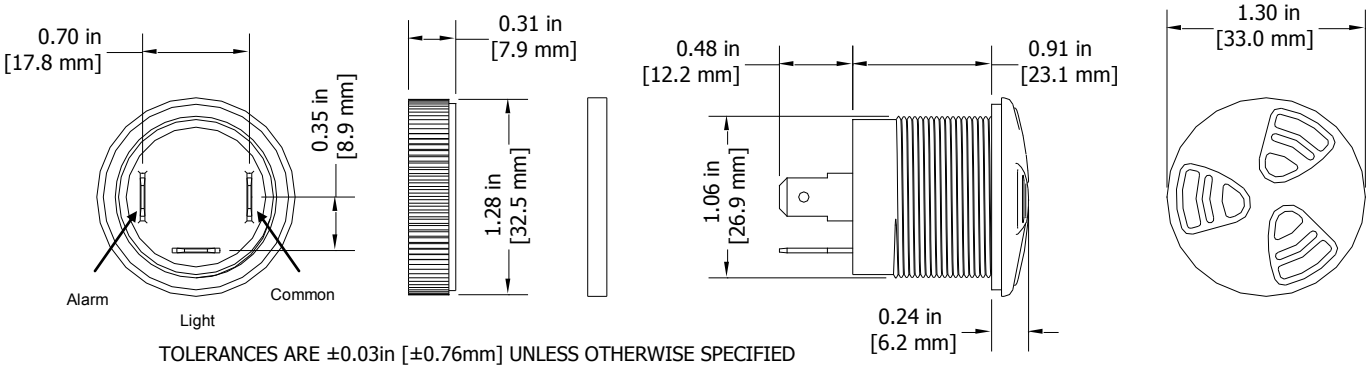
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Chime Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Chime Tone.
Tone Pulse Rate:	2±25% Cycles per second, Beep Tone
Light Flash Rate:	2±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHCH-88G-930-Q(M)

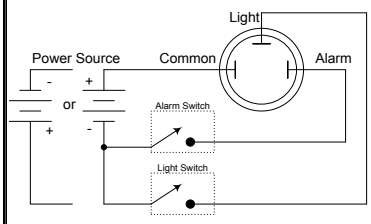
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

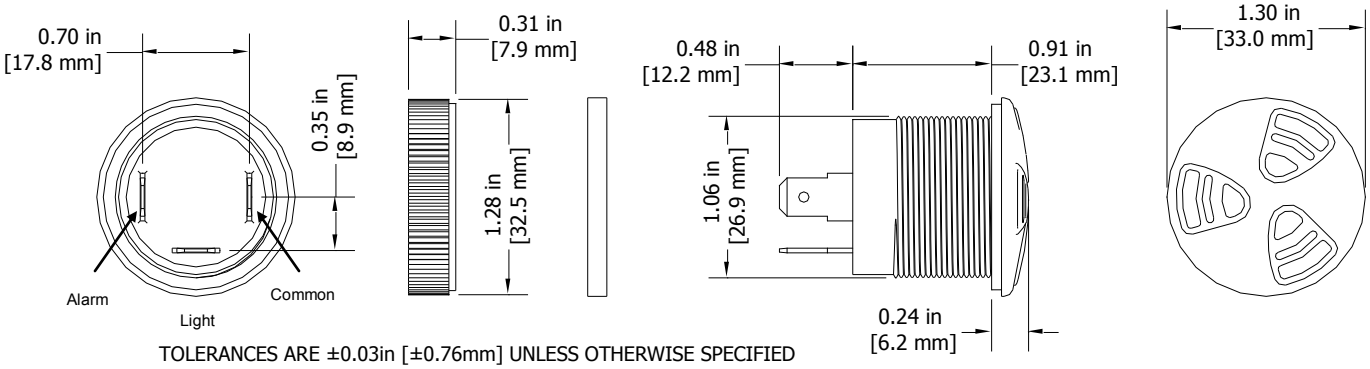
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Chime Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Chime Tone.
Tone Pulse Rate:	1±25% Cycles per second, Beep Tone
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHCH-88G-930-Q(S)

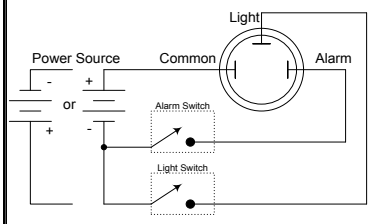
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

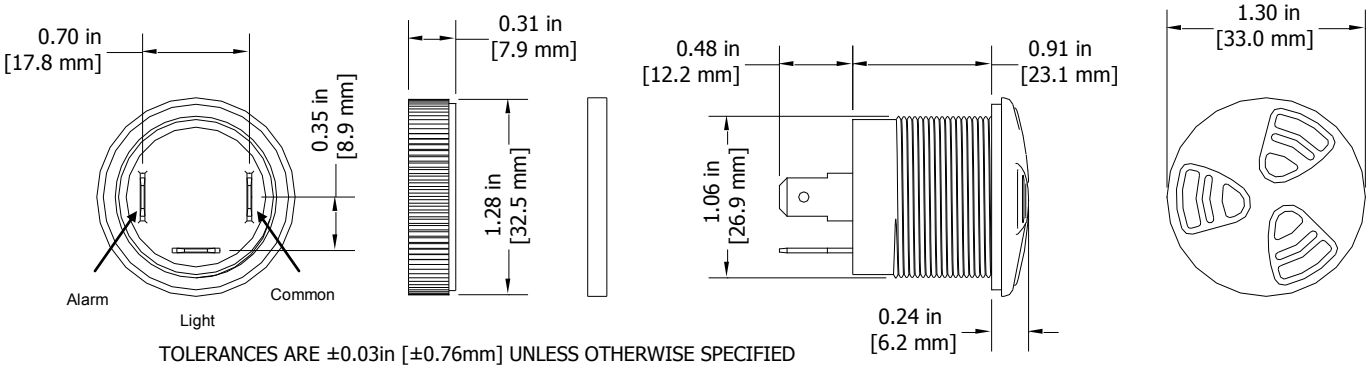
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Single Shot Chime Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Chime Tone.
Tone Pulse Rate:	Single Shot, reset occurs when power is removed.
Light Flash Rate:	Constant "on"
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHCH-88R-930-Q(F)

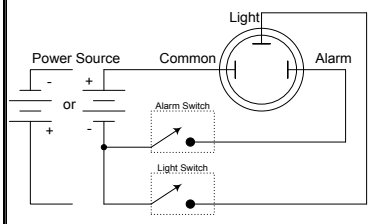
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

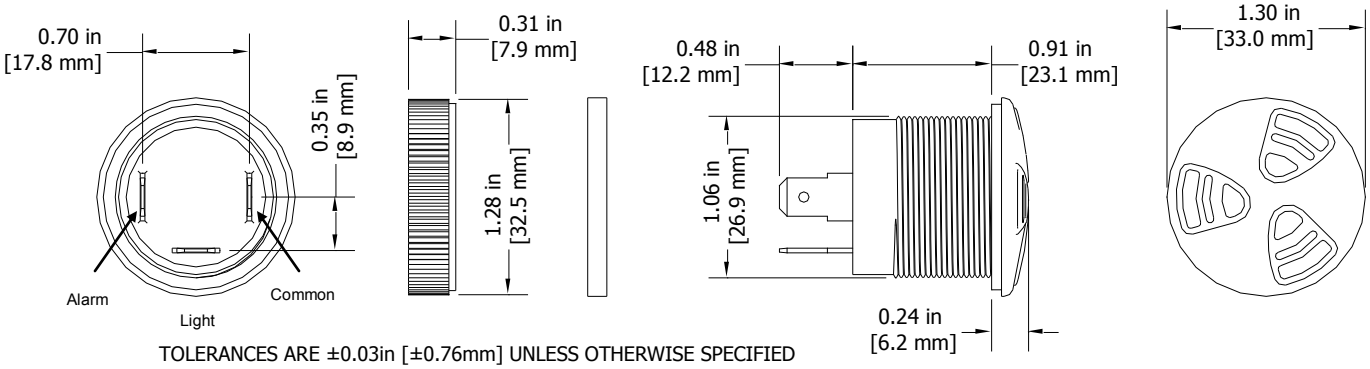
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Chime Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Chime Tone.
Tone Pulse Rate:	2±25% Cycles per second, Beep Tone
Light Flash Rate:	2±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHCH-88R-930-Q(M)

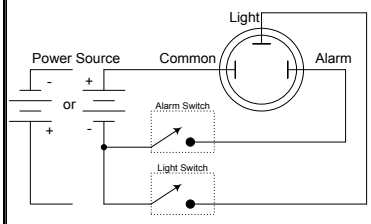
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

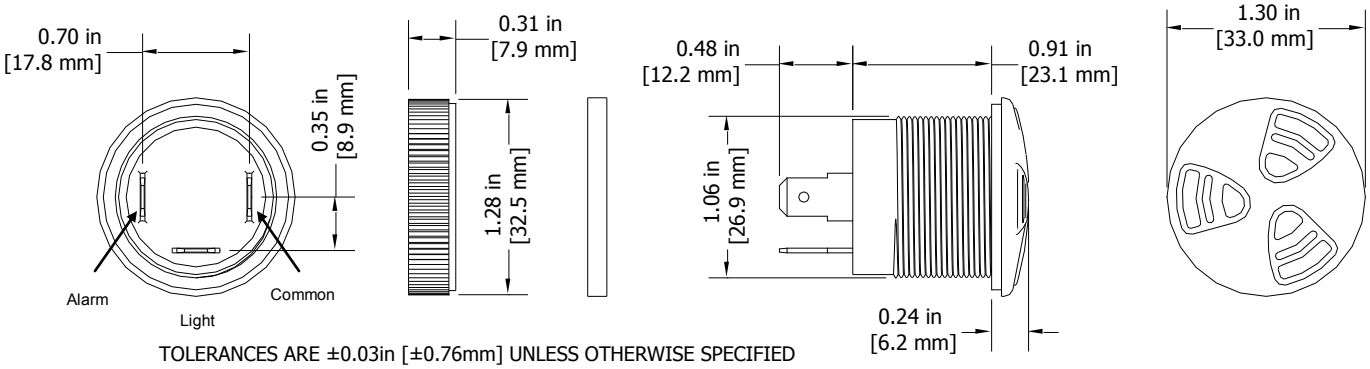
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Chime Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Chime Tone.
Tone Pulse Rate:	1±25% Cycles per second, Beep Tone
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHCH-88R-930-Q(S)

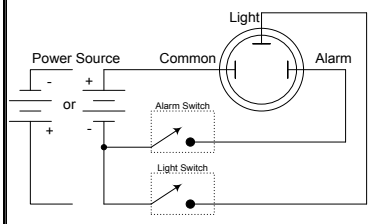
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

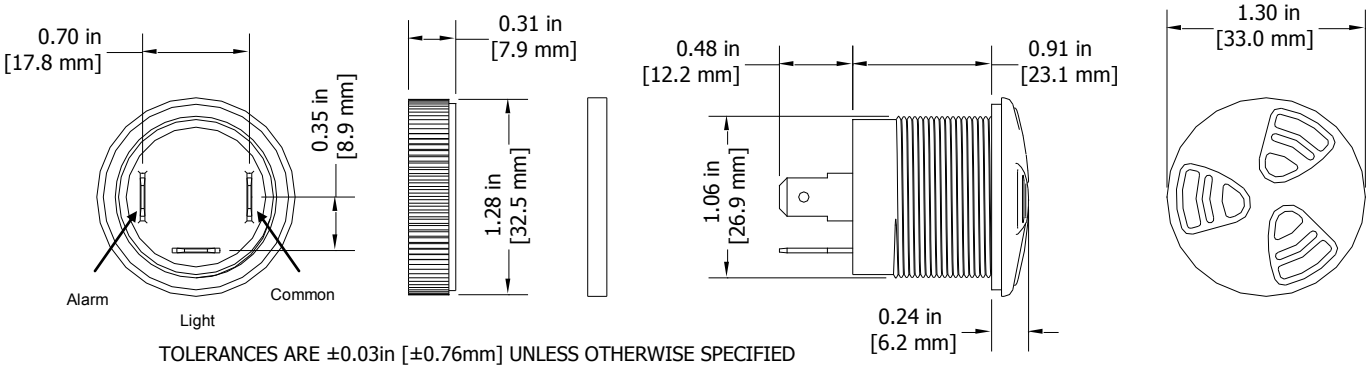
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Single Shot Chime Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Single Shot Chime Tone.
Tone Pulse Rate:	Single Shot, reset occurs when power is removed.
Light Flash Rate:	Constant "on"
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHCH-88W-930-Q(F)

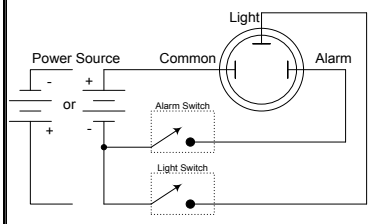
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

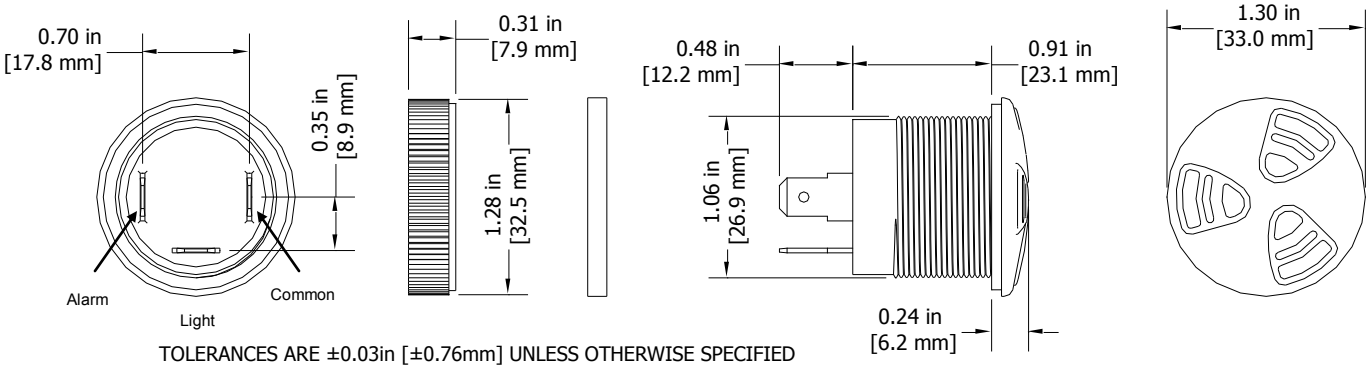
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Chime Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Chime Tone.
Tone Pulse Rate:	2±25% Cycles per second, Beep Tone
Light Flash Rate:	2±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHCH-88W-930-Q(M)

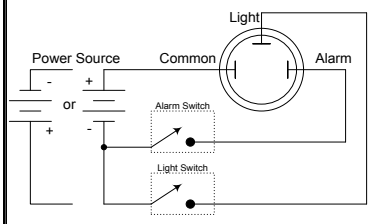
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

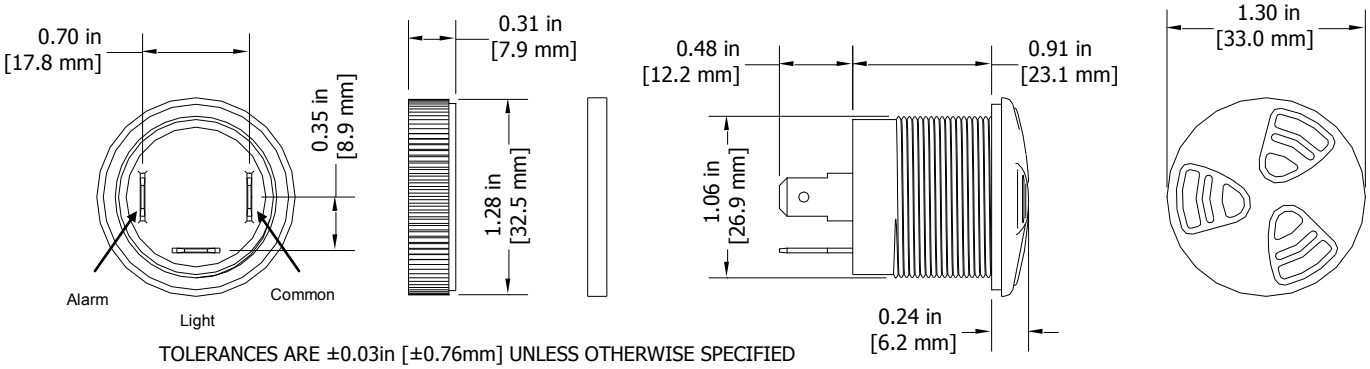
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Chime Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Chime Tone.
Tone Pulse Rate:	1±25% Cycles per second, Beep Tone
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHCH-88W-930-Q(S)

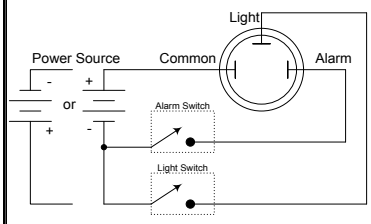
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

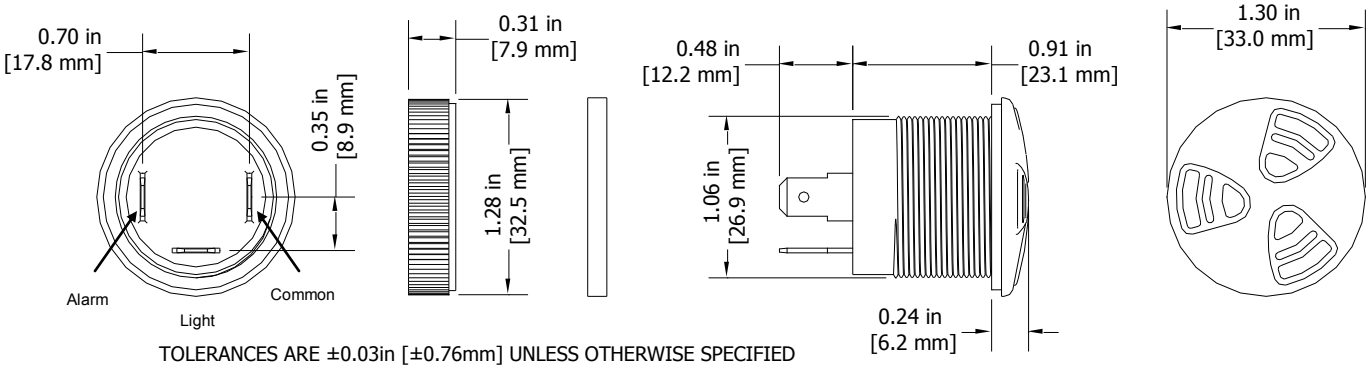
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Single Shot Chime Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Single Shot Chime Tone.
Tone Pulse Rate:	Single Shot, reset occurs when power is removed
Light Flash Rate:	Constant "on"
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHCH-88Y-930-Q(F)

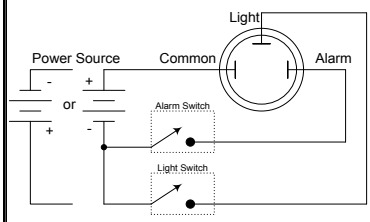
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

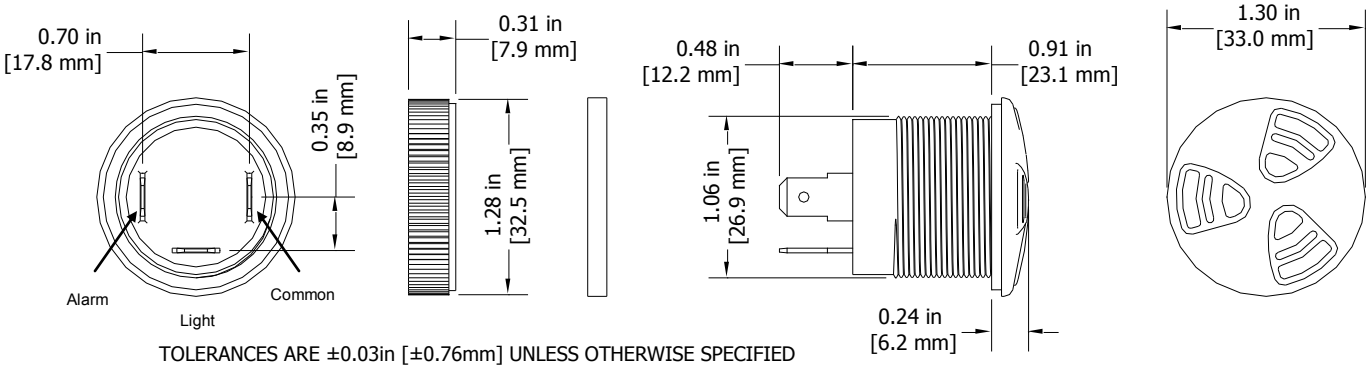
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Chime Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Chime Tone.
Tone Pulse Rate:	2±25% Cycles per second, Beep Tone
Light Flash Rate:	2±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHCH-88Y-930-Q(M)

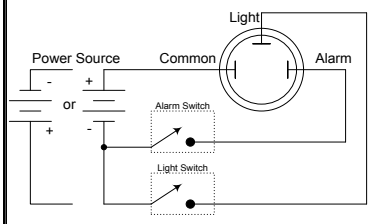
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

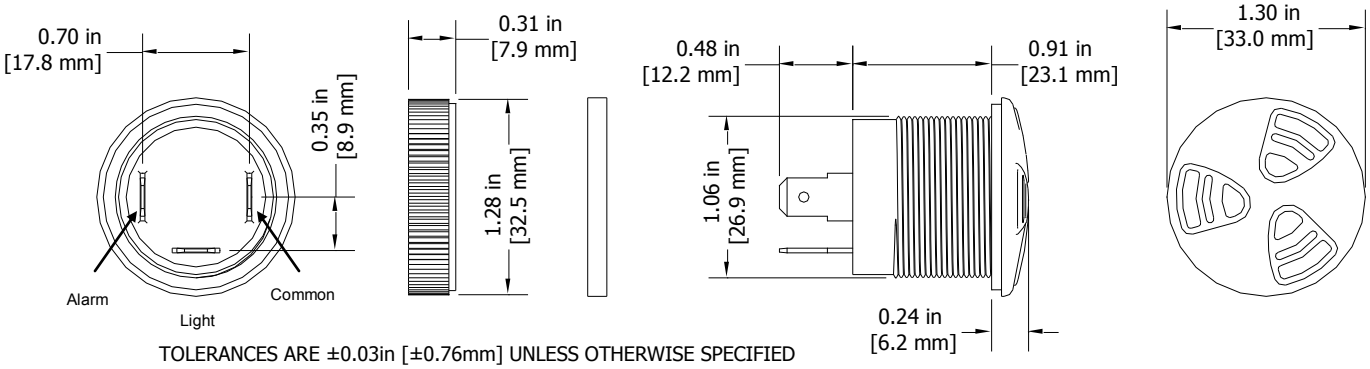
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Chime Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Chime Tone.
Tone Pulse Rate:	1±25% Cycles per second, Beep Tone
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHCH-88Y-930-Q(S)

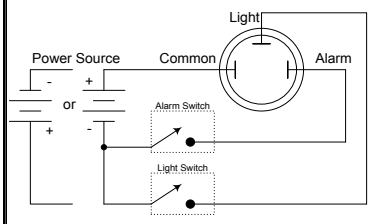
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

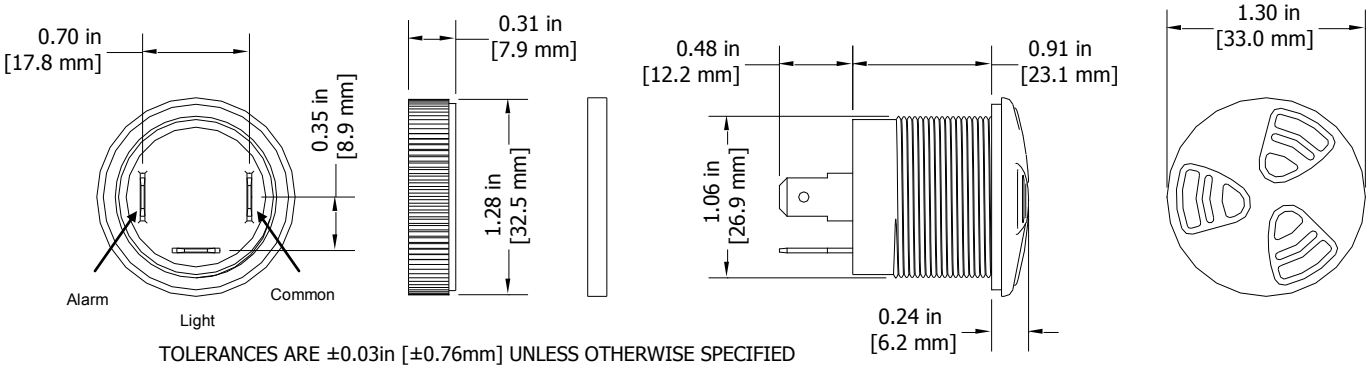
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Single Shot Chime Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±500 Hz. Single Shot Chime Tone.
Tone Pulse Rate:	Single Shot, reset occurs when power is removed
Light Flash Rate:	Constant "on"
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHO-88B-930-Q

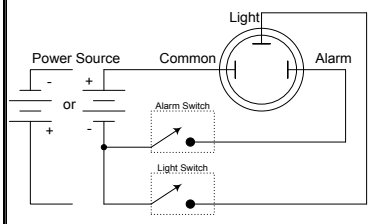
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

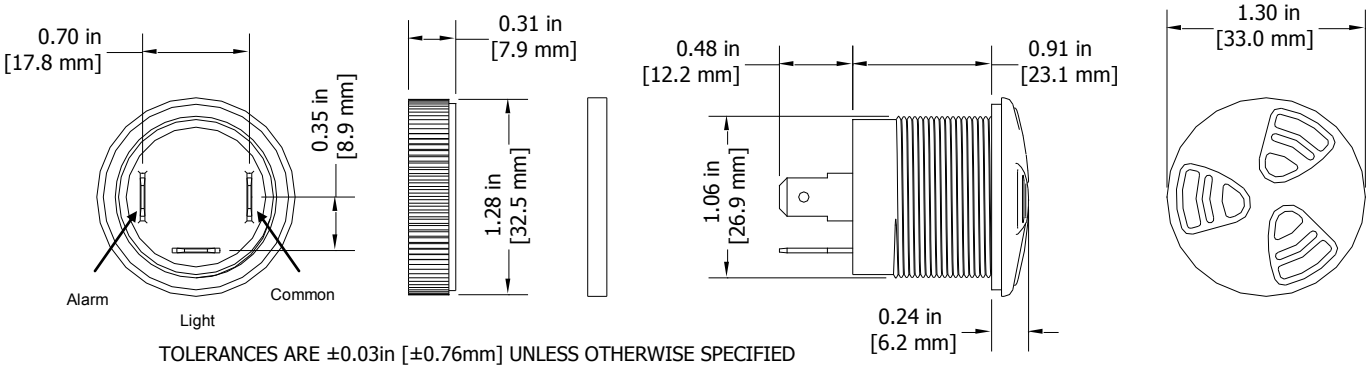
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz. Whoop Tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHO-88G-930-Q

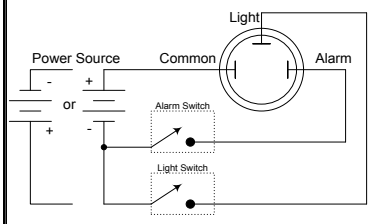
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

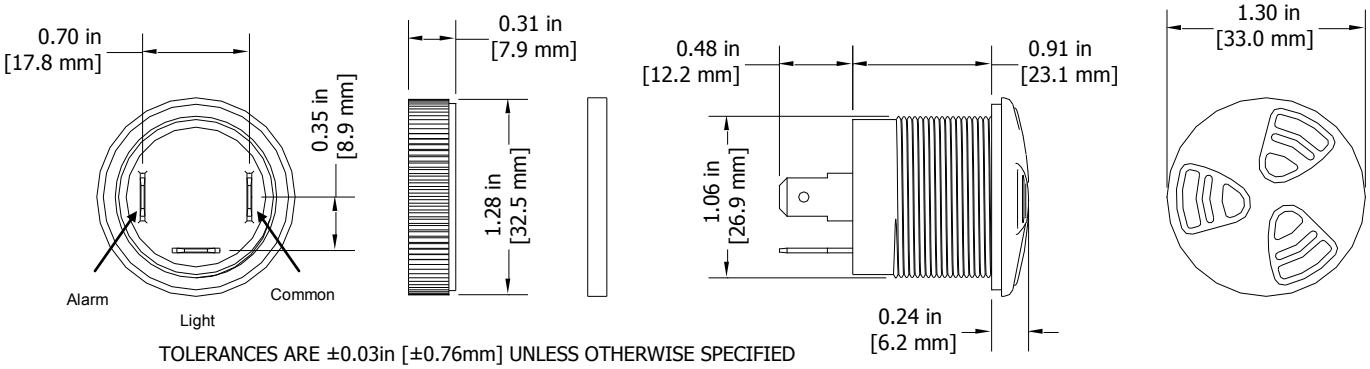
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz. Whoop Tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHO-88R-930-Q

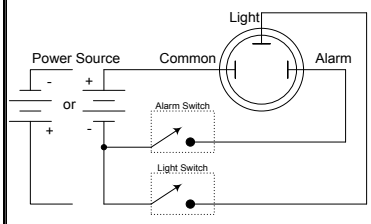
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

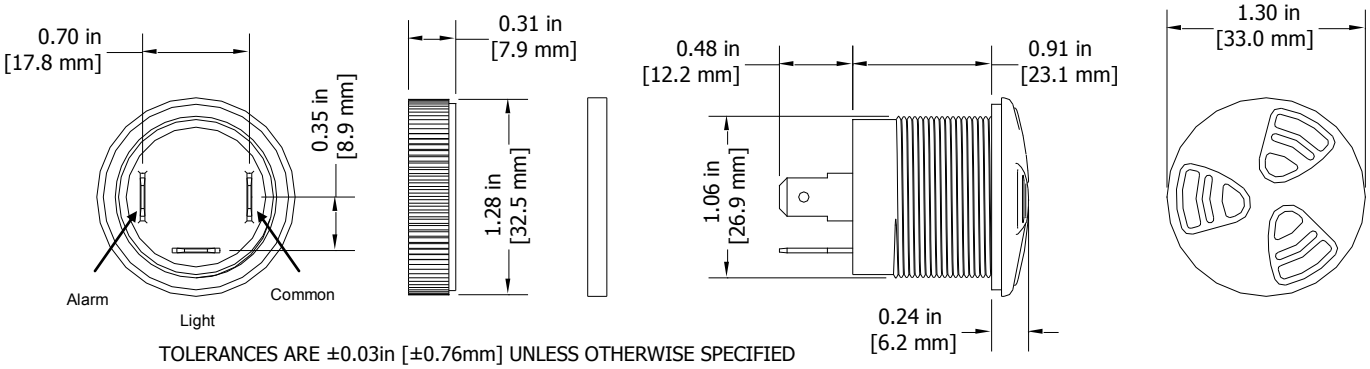
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz. Whoop Tone.
Tone Pulse Rate:	2±25% Cycles per second,
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHS-88W-930-Q

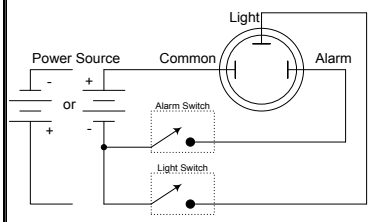
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

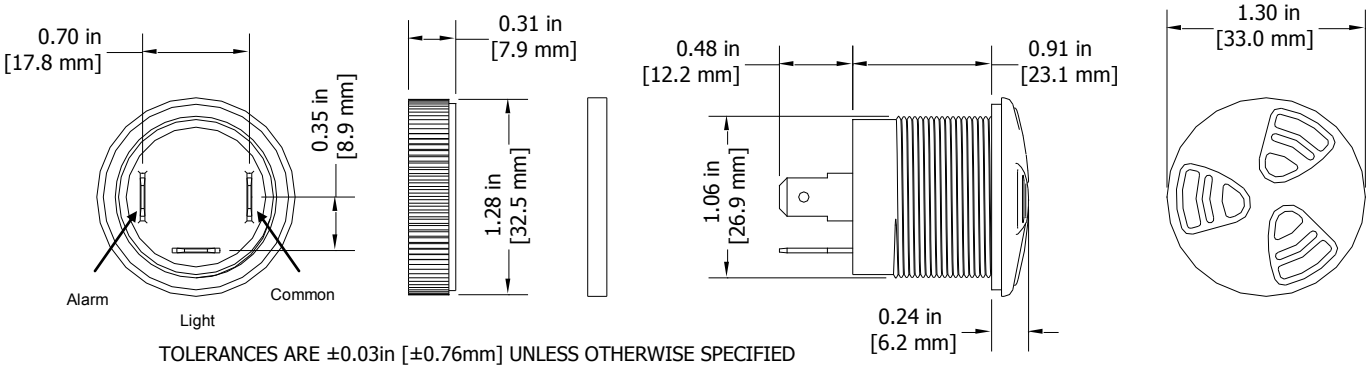
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz. Whoop Tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHO-88Y-930-Q

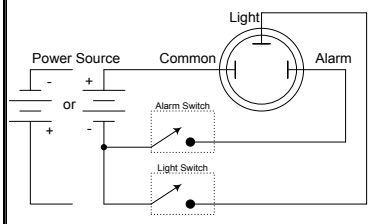
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

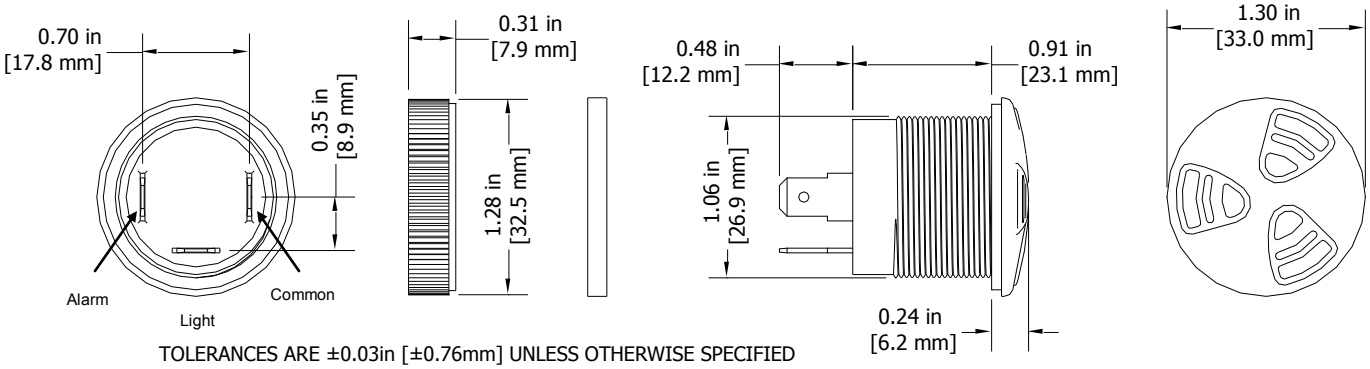
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250Hz. Whoop Tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHO-V88R-930-Q

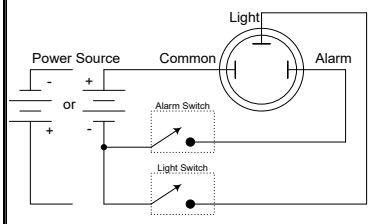
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit). The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

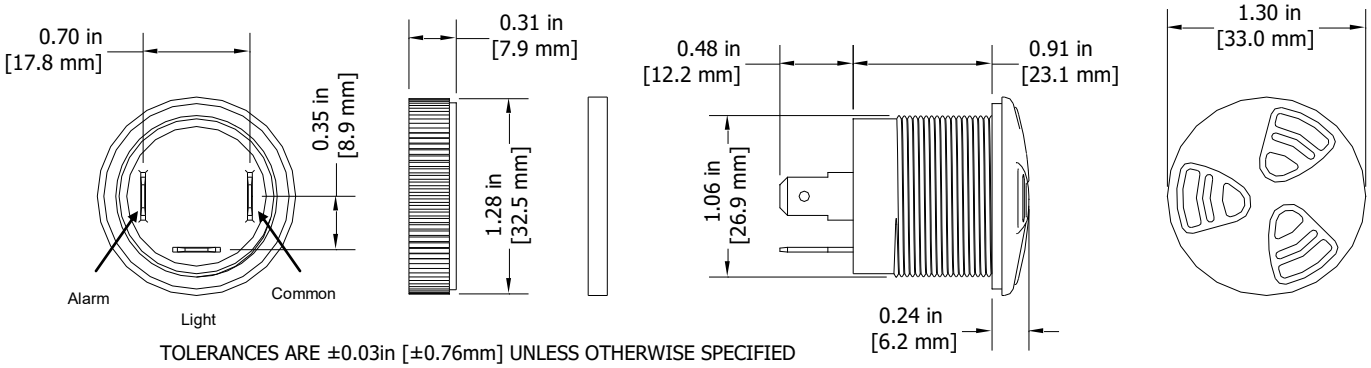
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Whoop Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz. Whoop Tone.
Tone Pulse Rate:	2±25% Cycles per second,
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHS-88B-930-Q

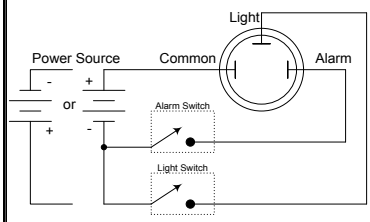
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

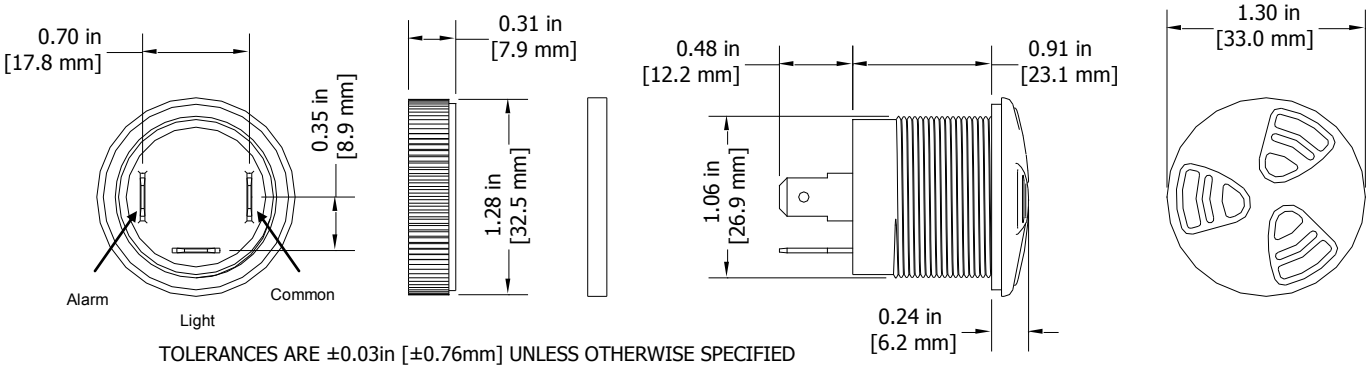
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz. Siren Tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHS-88G-930-Q

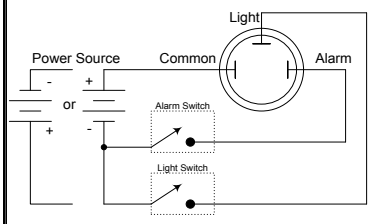
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

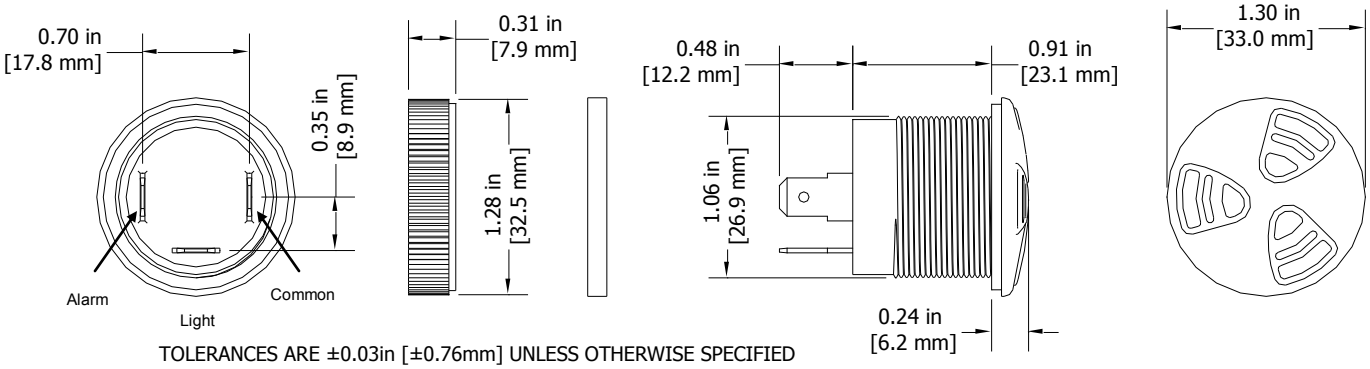
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz. Siren Tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHS-88R-930-Q

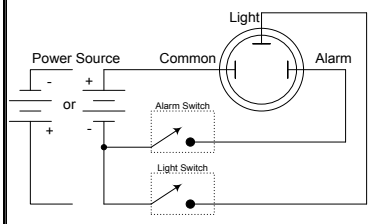
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

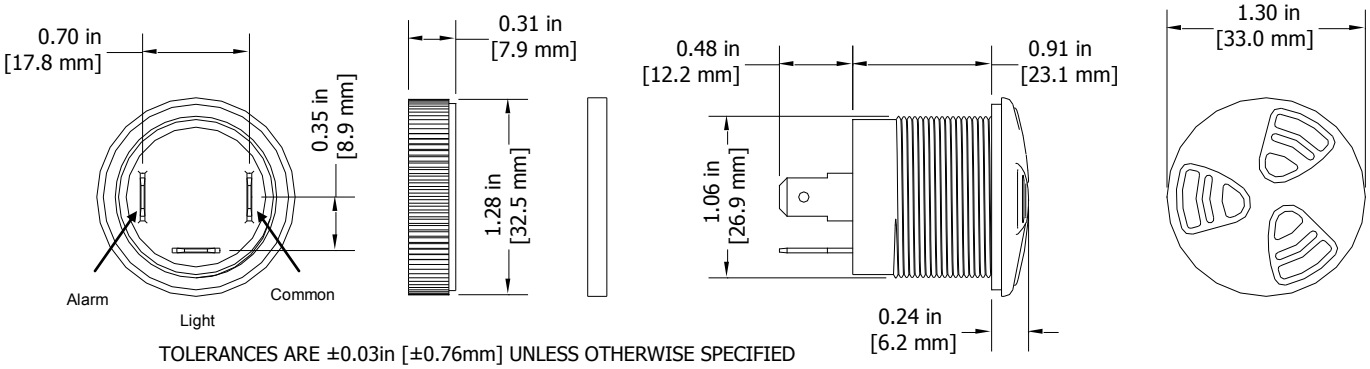
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz. Siren Tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHS-88W-930-Q

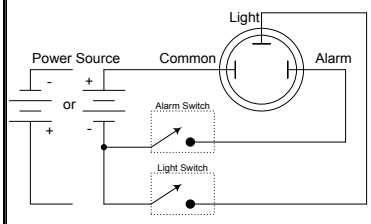
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

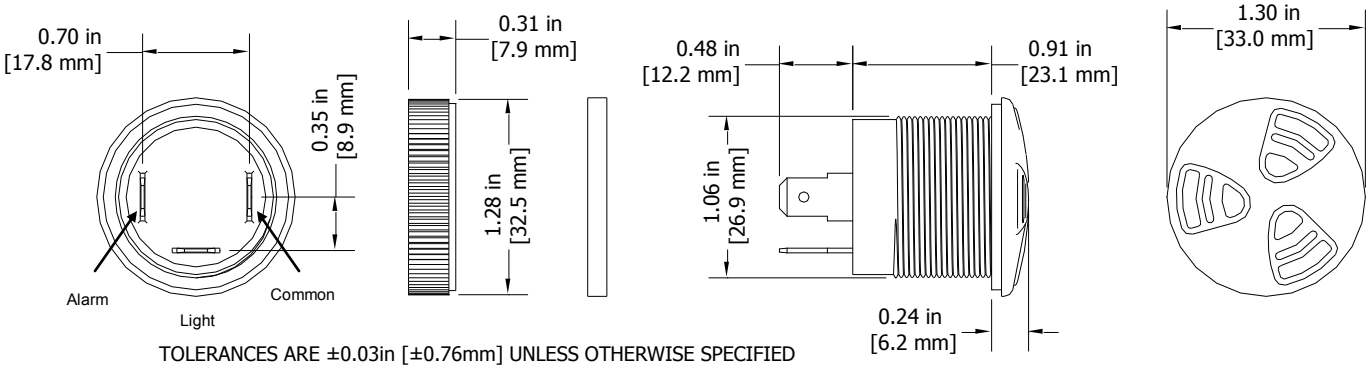
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz. Siren Tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHS-88Y-930-Q

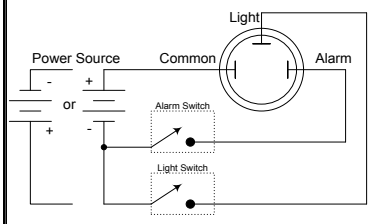
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

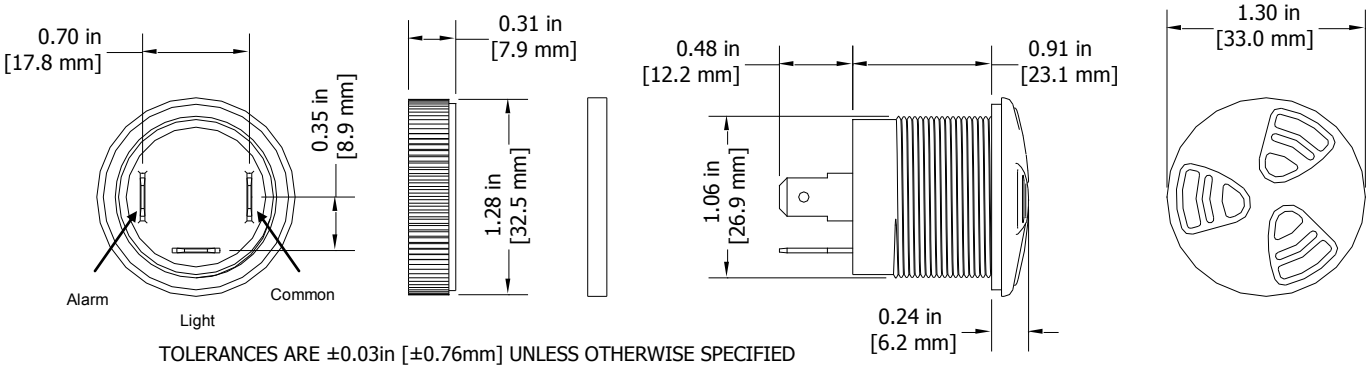
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Siren Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250Hz. Siren Tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHT-88B-930-Q

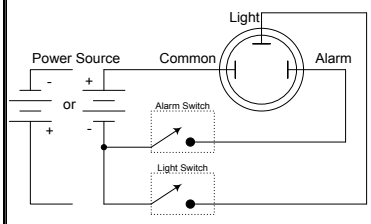
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

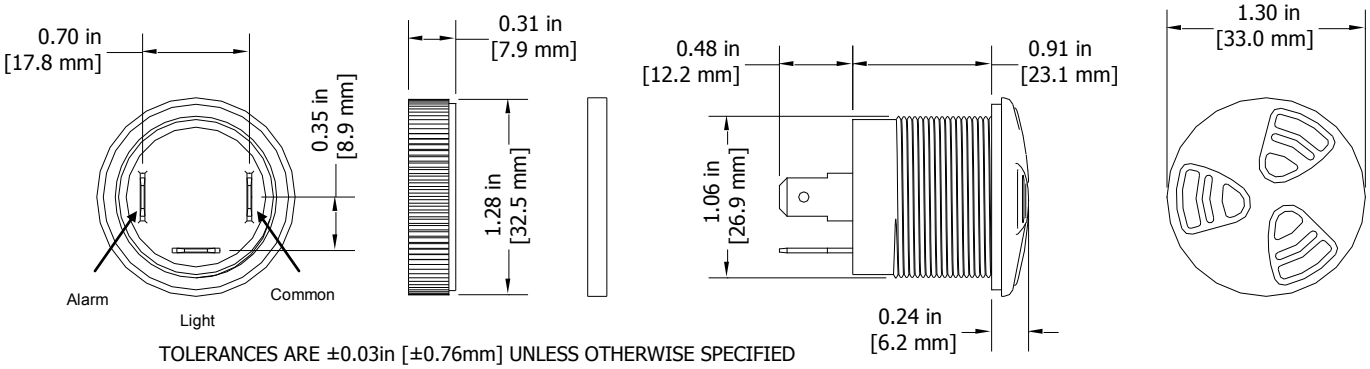
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud StaccatoTone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz. Staccato Tone.
Tone Pulse Rate:	8±25% Cycles per second, Beep Tone
Light Flash Rate:	8±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHT-88G-930-Q

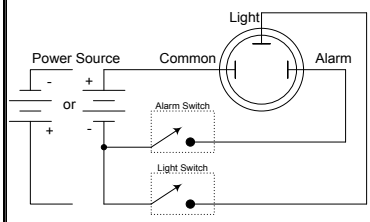
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

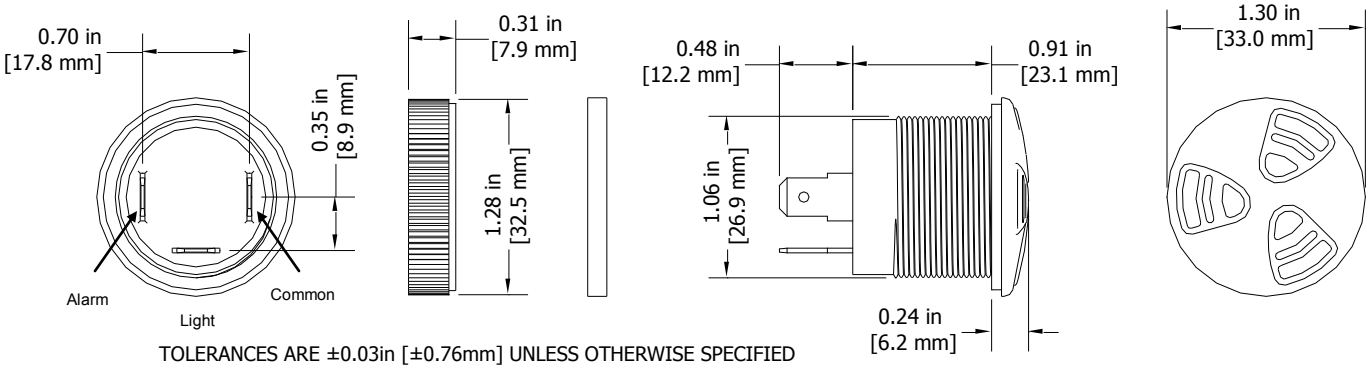
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Staccato Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz. Staccato Tone.
Tone Pulse Rate:	8±25% Cycles per second, Beep Tone
Light Flash Rate:	8±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHT-88R-930-Q

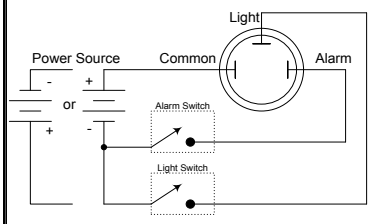
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

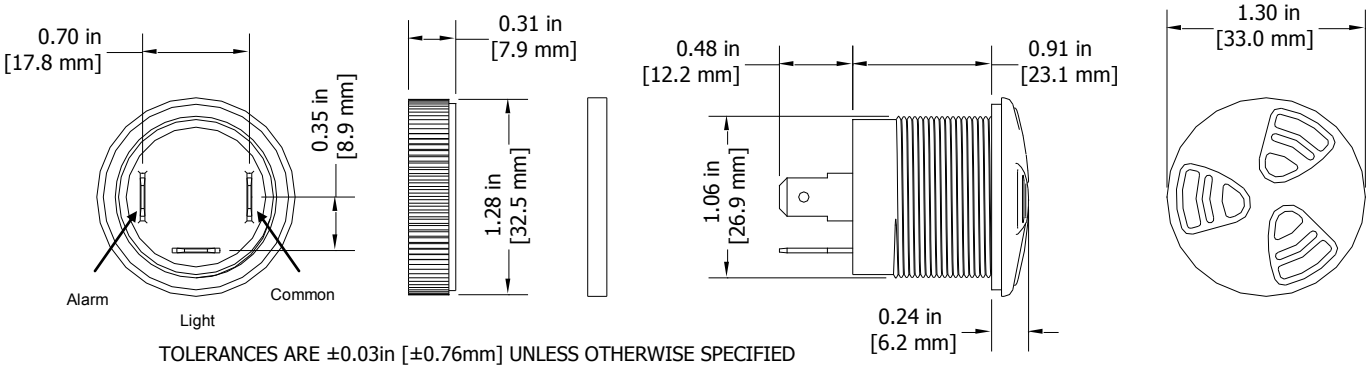
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Staccato Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz. Staccato Tone.
Tone Pulse Rate:	8±25% Cycles per second, Beep Tone
Light Flash Rate:	8±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHT-88W-930-Q

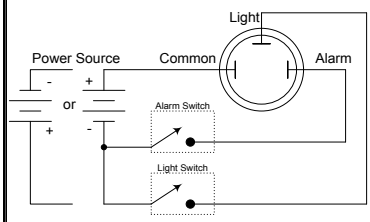
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

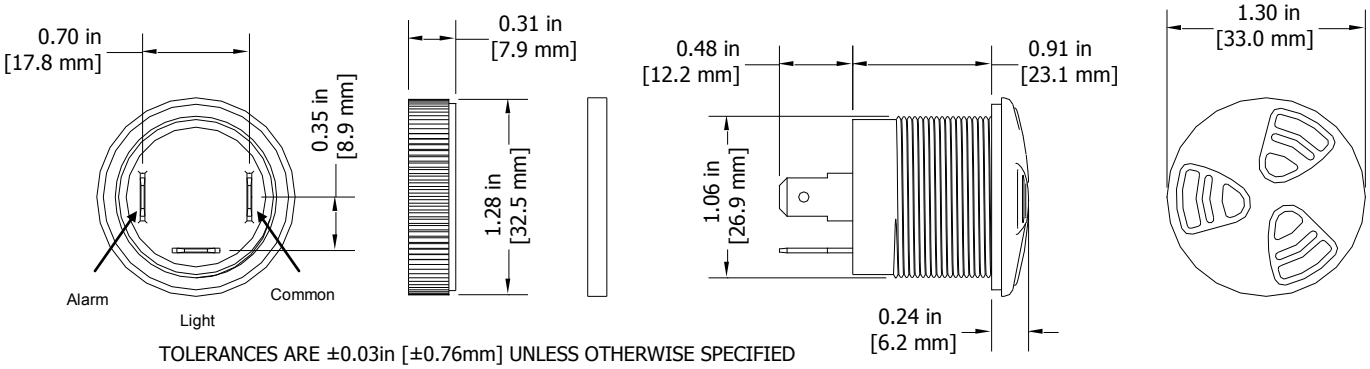
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Staccato Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz. Staccato Tone.
Tone Pulse Rate:	8±25% Cycles per second, Beep Tone
Light Flash Rate:	8±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHT-88Y-930-Q

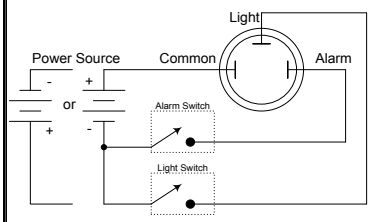
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

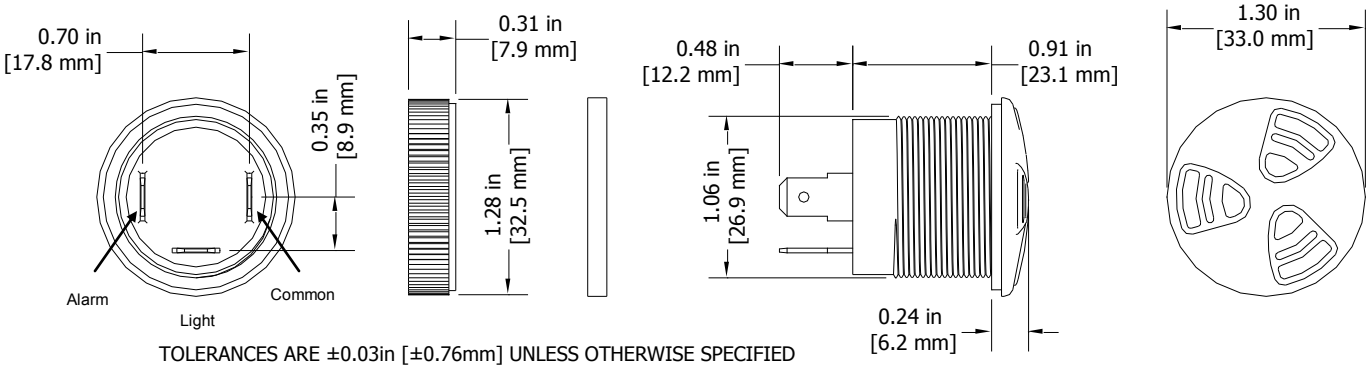
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Staccato Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250Hz. Staccato Tone.
Tone Pulse Rate:	8±25% Cycles per second, Beep Tone
Light Flash Rate:	8±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHW-88B-930-Q(F)

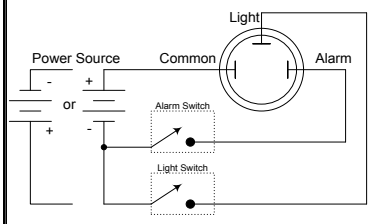
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

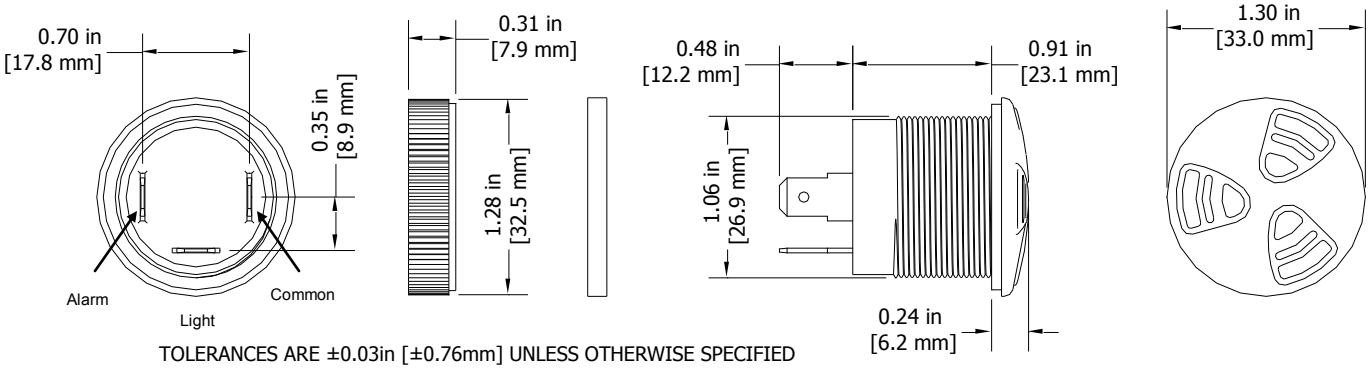
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz, high tone and 2600±250Hz low tone.
Tone Pulse Rate:	10±25% Cycles per second, Beep Tone
Light Flash Rate:	10±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHW-88B-930-Q(M)

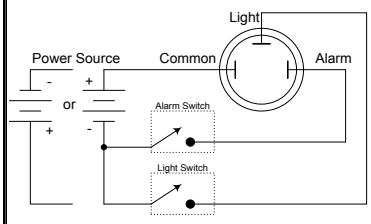
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

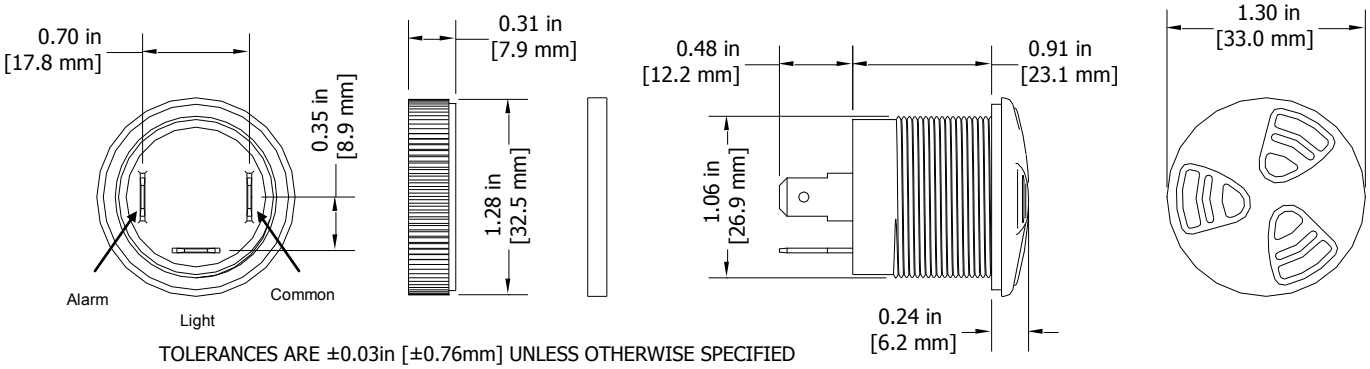
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz, high tone and 2600±250Hz low tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHW-88B-930-Q(S)

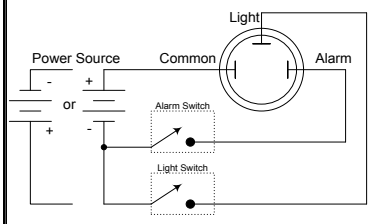
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

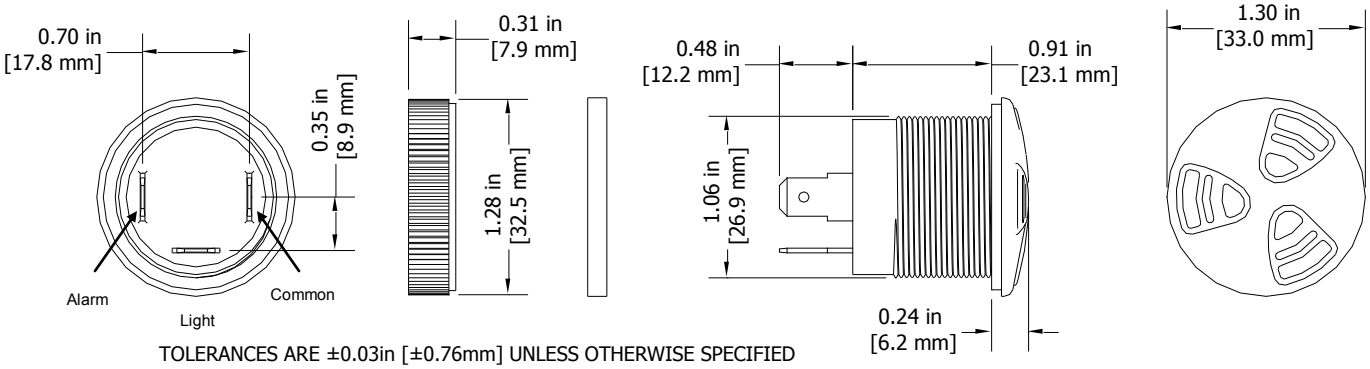
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Blue
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz, high tone and 2600±250Hz low tone.
Tone Pulse Rate:	1±25% Cycles per second, Beep Tone
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHW-88G-930-Q(F)

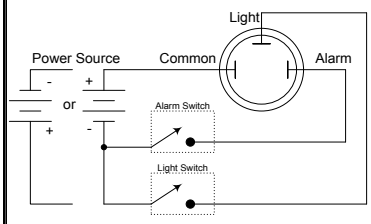
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

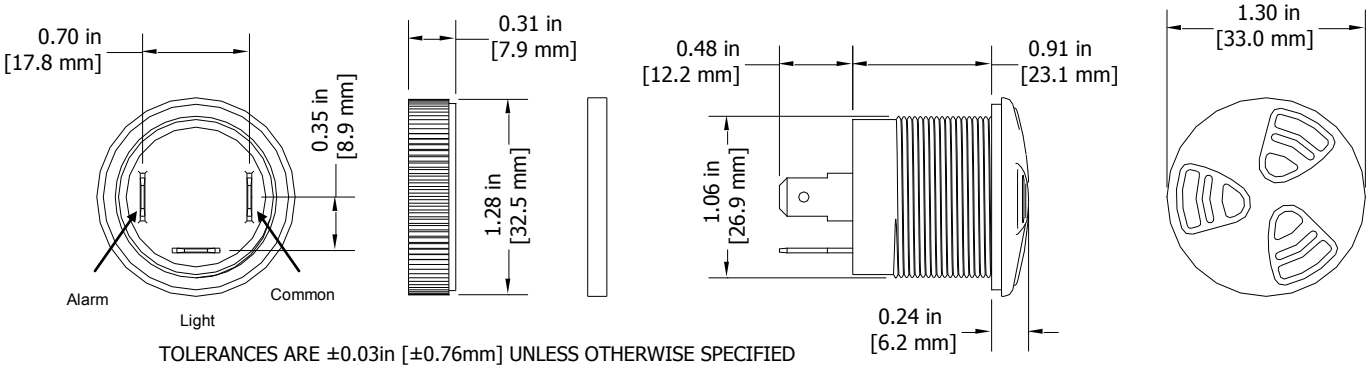
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz, high tone and 2600±250Hz low tone.
Tone Pulse Rate:	10±25% Cycles per second, Beep Tone
Light Flash Rate:	10±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHW-88G-930-Q(M)

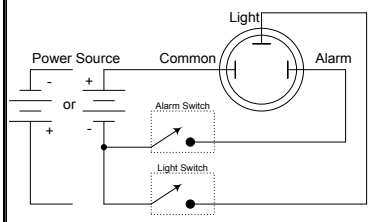
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

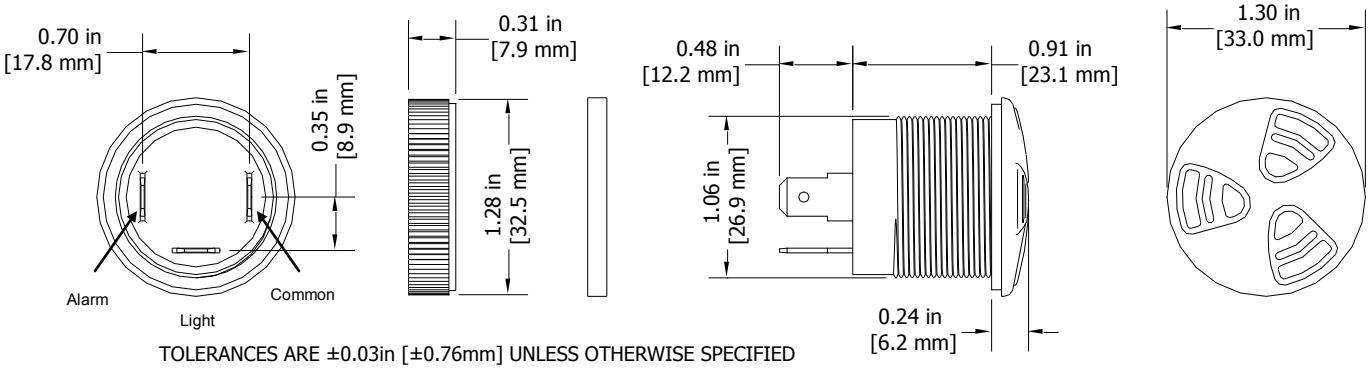
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz, high tone and 2600±250Hz low tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHW-88G-930-Q(S)

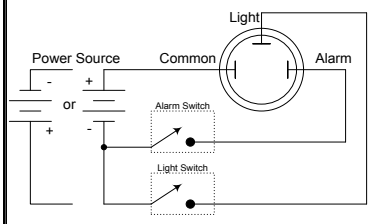
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

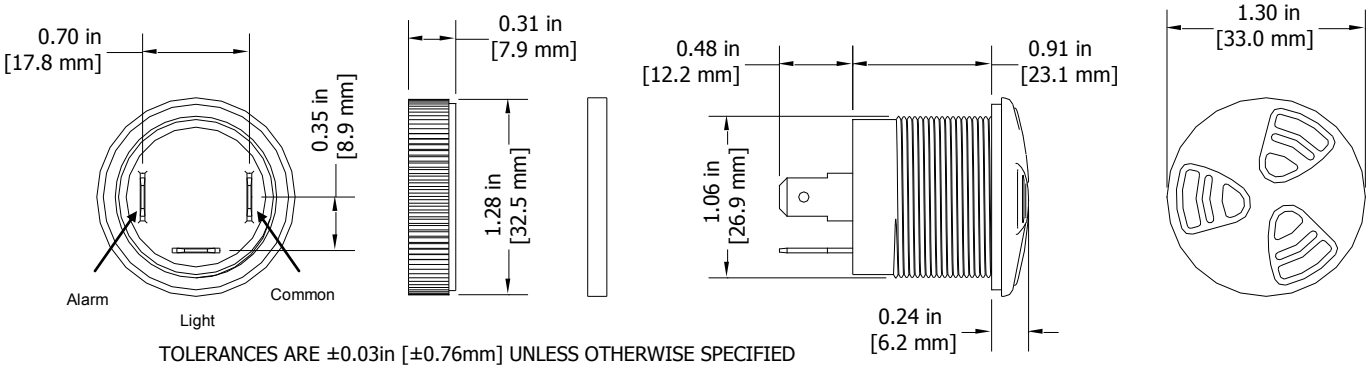
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Green
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz, high tone and 2600±250Hz low tone.
Tone Pulse Rate:	1±25% Cycles per second, Beep Tone
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHW-88R-930-Q(F)

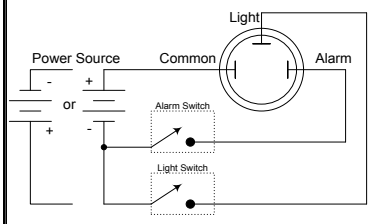
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

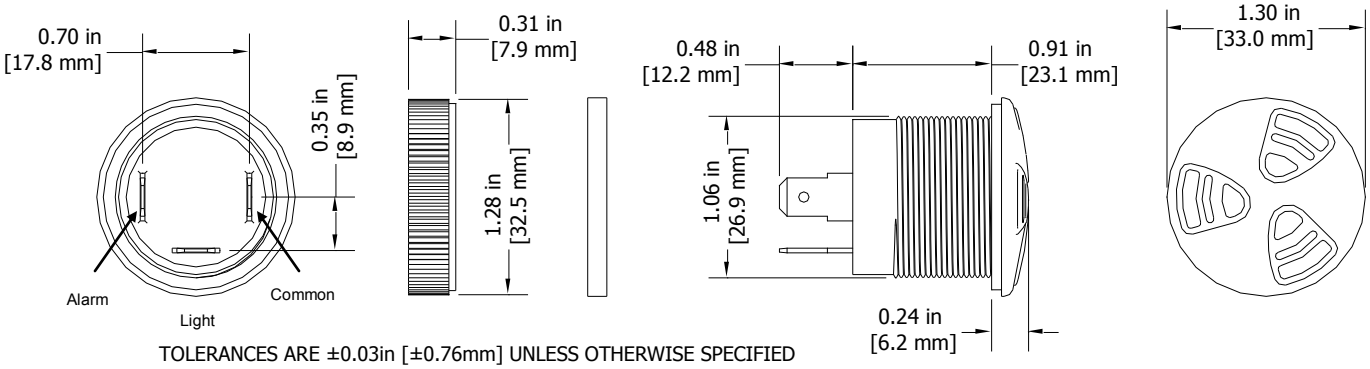
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz, high tone and 2600±250Hz low tone.
Tone Pulse Rate:	10±25% Cycles per second, Beep Tone
Light Flash Rate:	10±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHW-88R-930-Q(M)

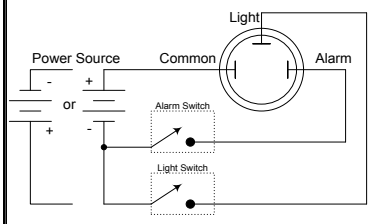
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

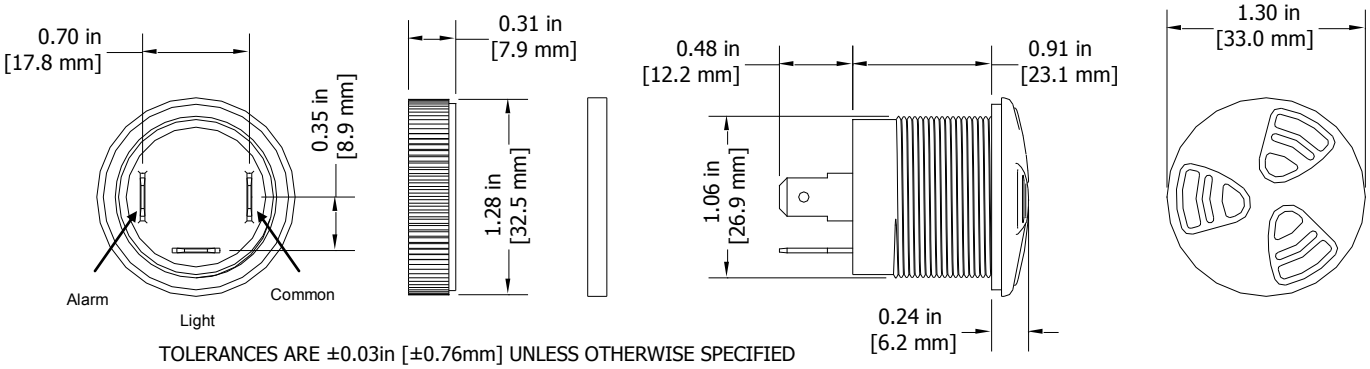
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz, high tone and 2600±250Hz low tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHW-88R-930-Q(S)

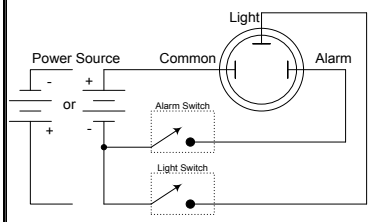
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

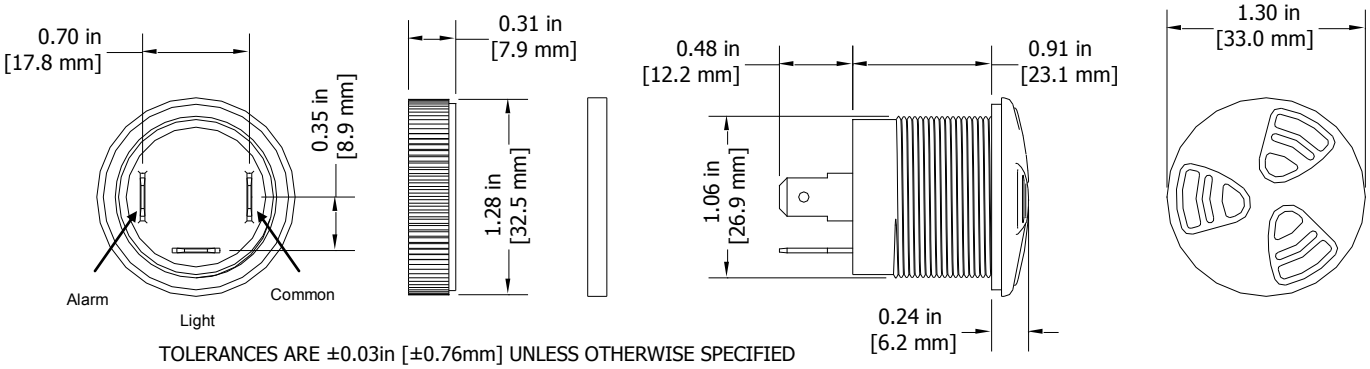
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Red
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz, high tone and 2600±250Hz low tone.
Tone Pulse Rate:	1±25% Cycles per second, Beep Tone
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHW-88W-930-Q(F)

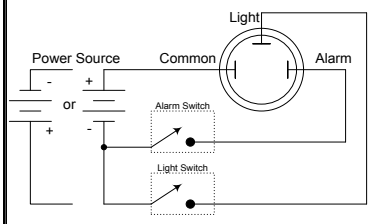
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

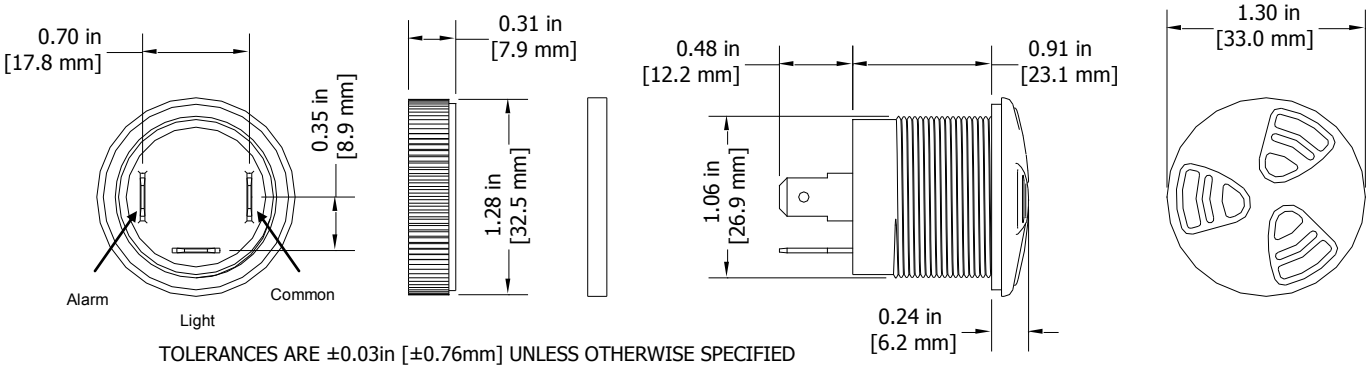
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz, high tone and 2600±250Hz low tone.
Tone Pulse Rate:	10±25% Cycles per second, Beep Tone
Light Flash Rate:	10±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHW-88W-930-Q(M)

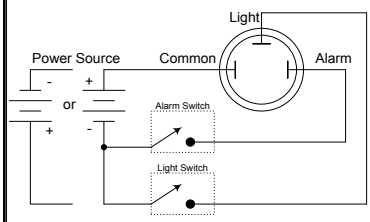
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

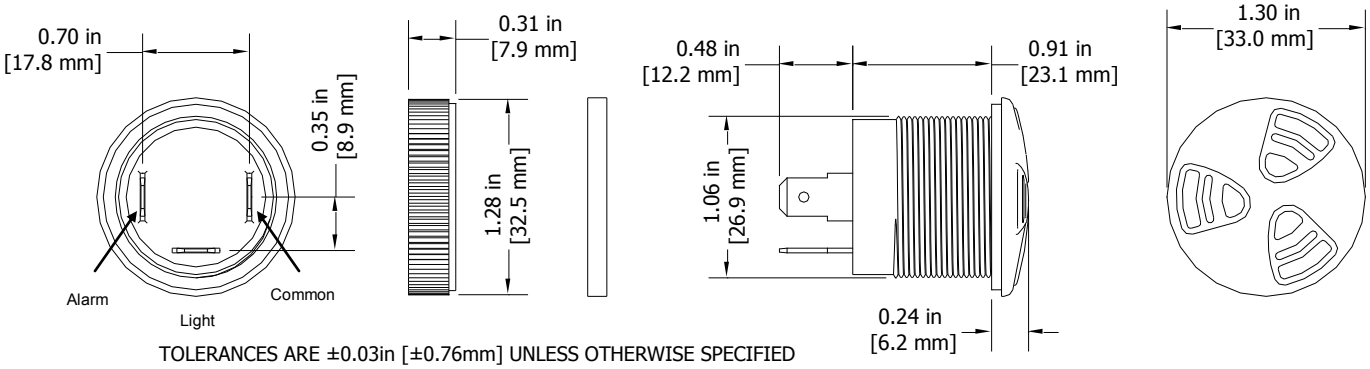
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz, high tone and 2600±250Hz low tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHW-88W-930-Q(S)

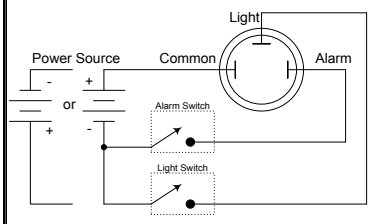
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

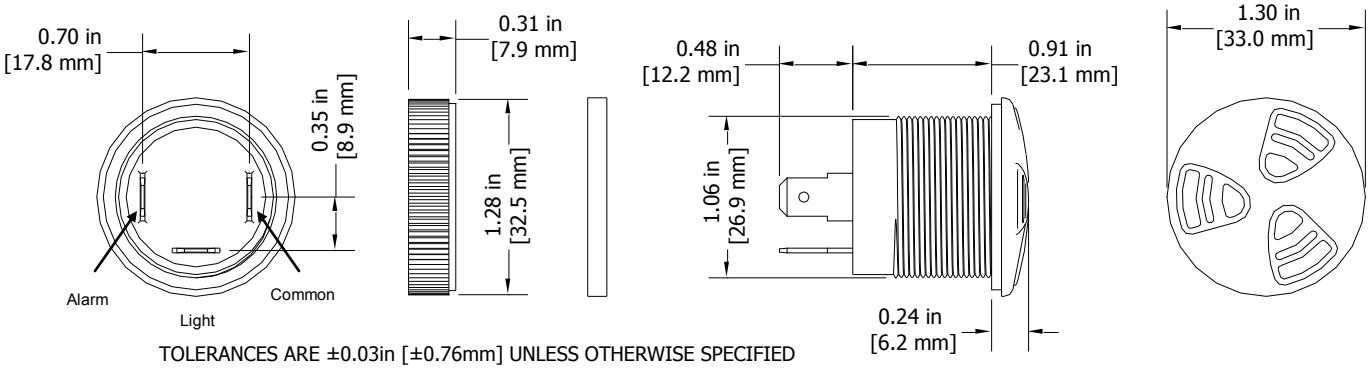
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	White
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz, high tone and 2600±250Hz low tone.
Tone Pulse Rate:	1±25% Cycles per second, Beep Tone
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHW-88Y-930-Q(F)

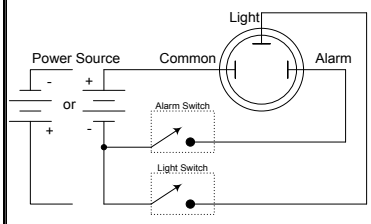
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

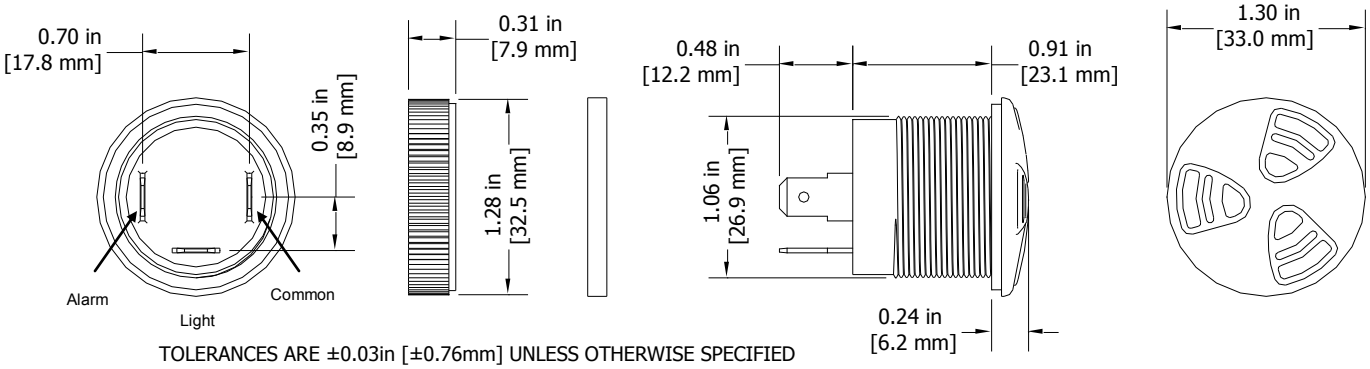
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz, high tone and 2600±250Hz low tone.
Tone Pulse Rate:	10±25% Cycles per second, Beep Tone
Light Flash Rate:	10±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHW-88Y-930-Q(M)

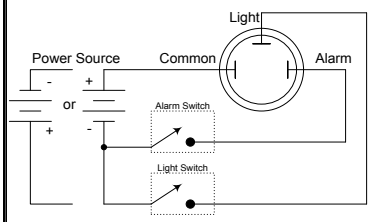
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

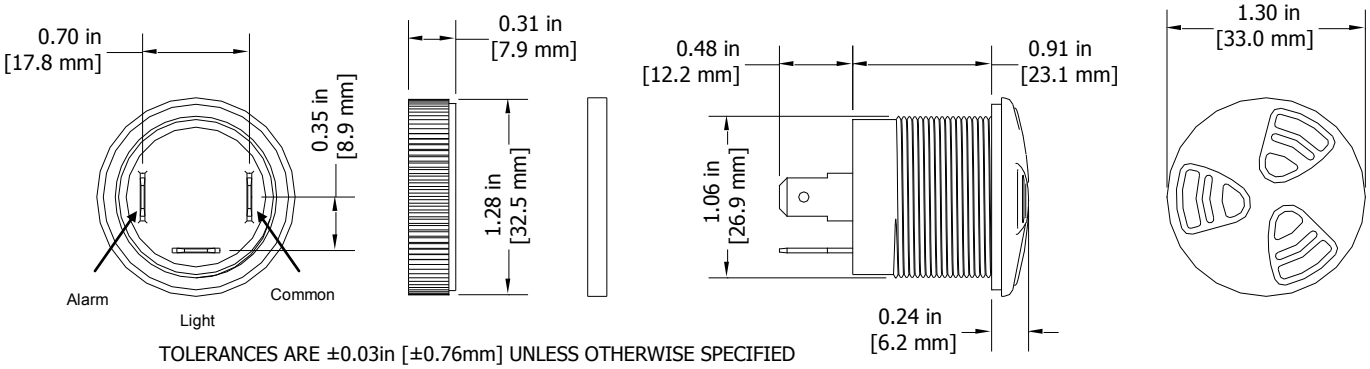
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz, high tone and 2600±250Hz low tone.
Tone Pulse Rate:	3±25% Cycles per second, Beep Tone
Light Flash Rate:	3±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

All specifications subject to change without notice.

TUHW-88Y-930-Q(S)

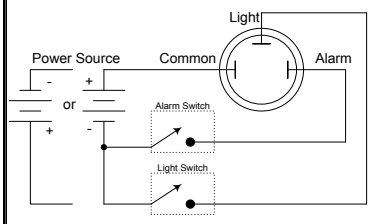
Made in USA

Pending



- High Intensity LED Light
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.065 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

Application Circuits



Floyd Bell's ground-breaking new Twin Turbo™ Universal Lighted Alarm is a panel-mount piezo-electric alert that can also emit a bright red light when activated, effectively combining independent operation of Floyd Bell's popular Turbo™ Alarms with their Turbo Light™ Panel Indicators in one convenient multi-sensory alarm device. The required control inputs for the Twin Turbo™ Universal are non polarized making the device a perfect fit for positive or negative switch applications. (see application circuit)

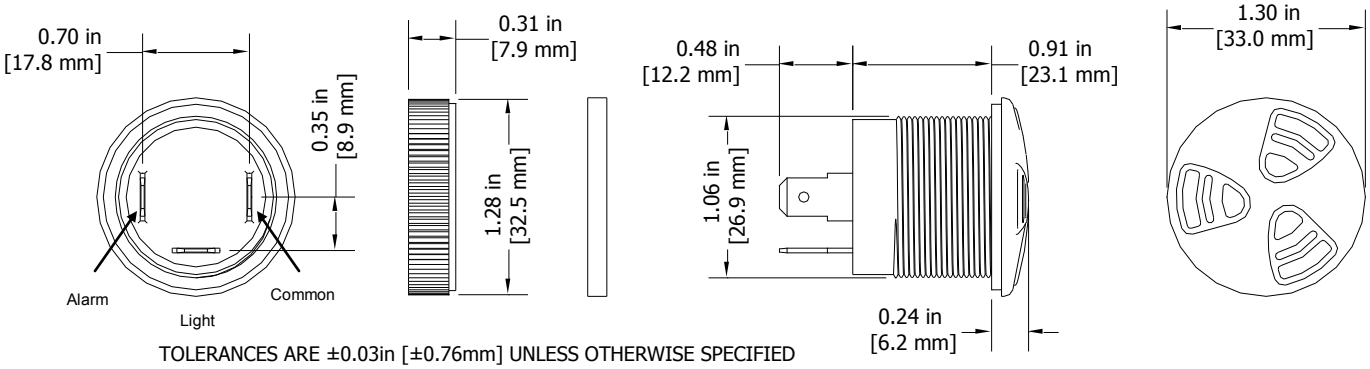
SPECIFICATIONS

Operating Mode:	Extra Bright LED Plus Extra Loud Warble Tone
Color:	Yellow
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Tone Frequency:	3000±250 Hz, high tone and 2600±250Hz low tone.
Tone Pulse Rate:	1±25% Cycles per second, Beep Tone
Light Flash Rate:	1±25% Cycles per second, 50% Duty cycle
Typical Operating Current:	125 mA at 9 Vdc 65mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Three Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Independent Control Inputs:	Control inputs for light and alarm are universal polarity. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 4.14

Copyright © 2014 Floyd Bell Inc.

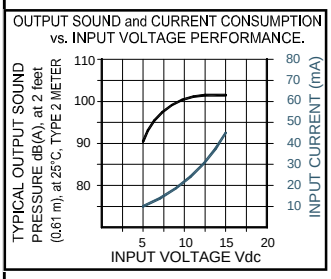
All specifications subject to change without notice.

TXB-86-515-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



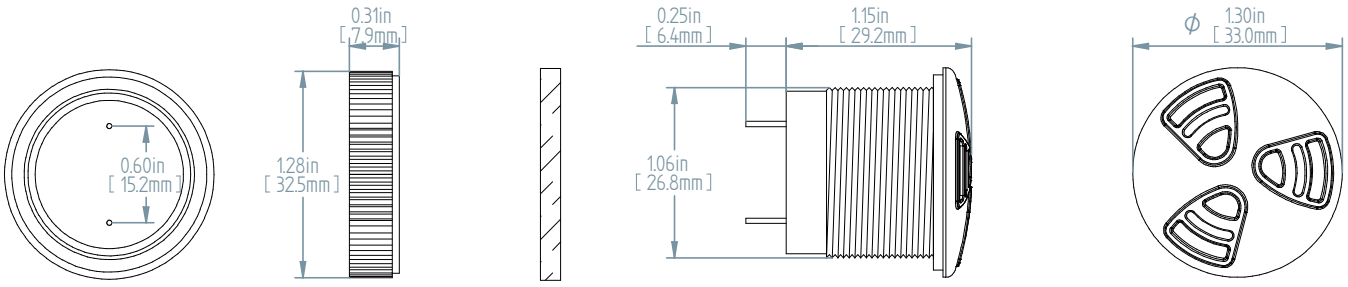
The Turbo TXB-86-515-P(F) is an extra loud output, panel or circuit board mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

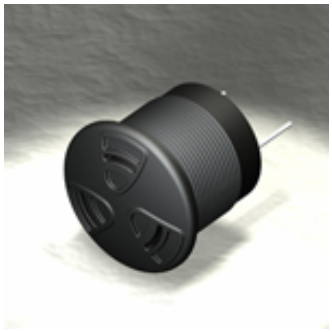
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

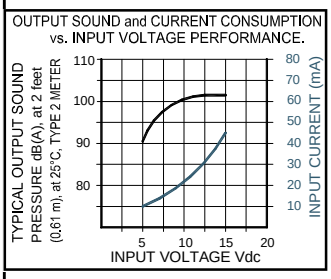
All specifications subject to change without notice.

TXB-86-515-P(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



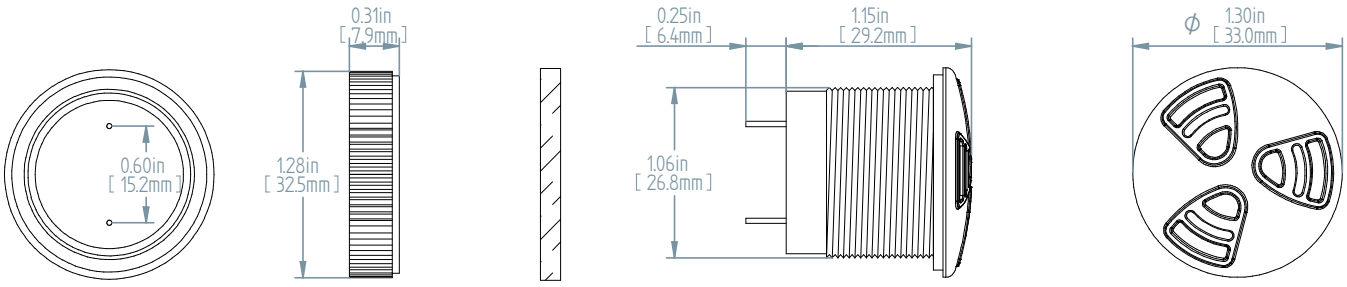
The Turbo TXB-86-515-P(S) is an extra loud output, panel or circuit board mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

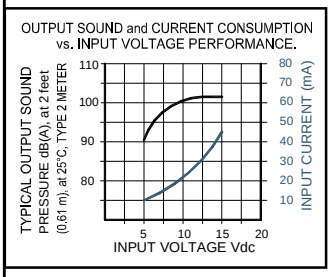
All specifications subject to change without notice.

TXB-86-515-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



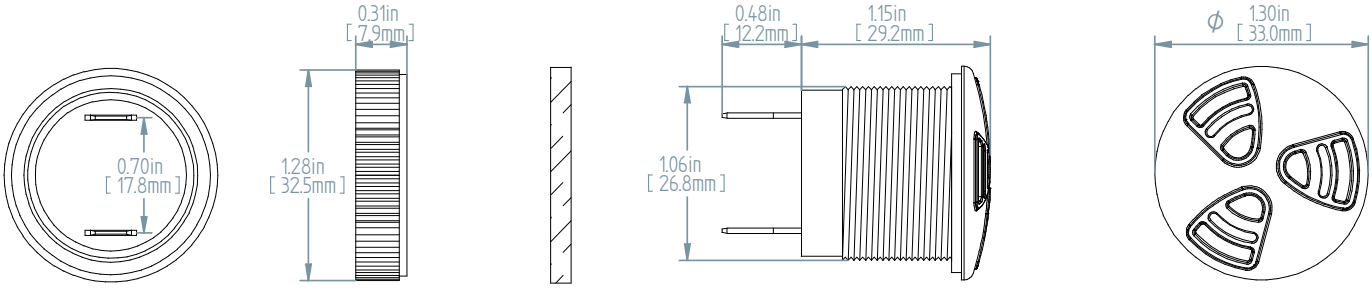
The Turbo TXB-86-515-Q(F) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

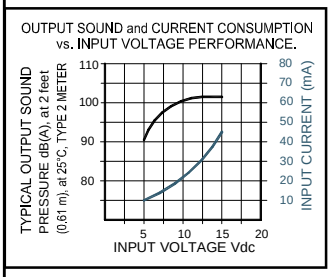
All specifications subject to change without notice.

TXB-86-515-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



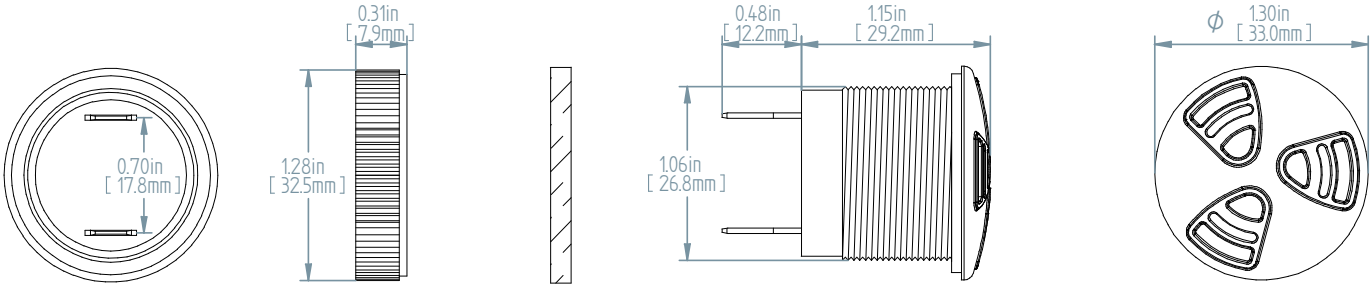
The Turbo TXB-86-515-Q(S) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

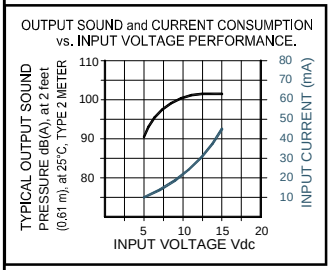
All specifications subject to change without notice.

TXB-86-515-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

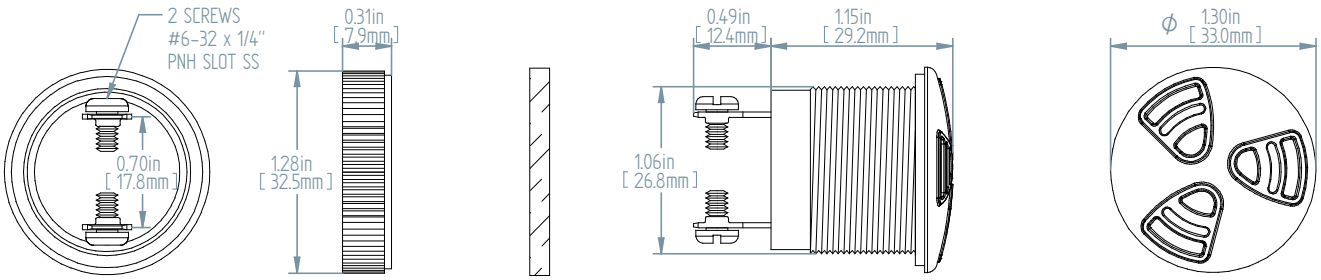


The Turbo TXB-86-515-S(F) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

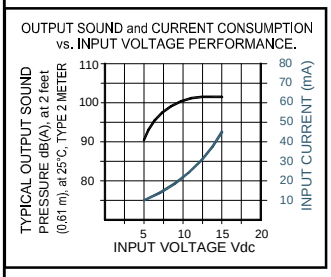
All specifications subject to change without notice.

TXB-86-515-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



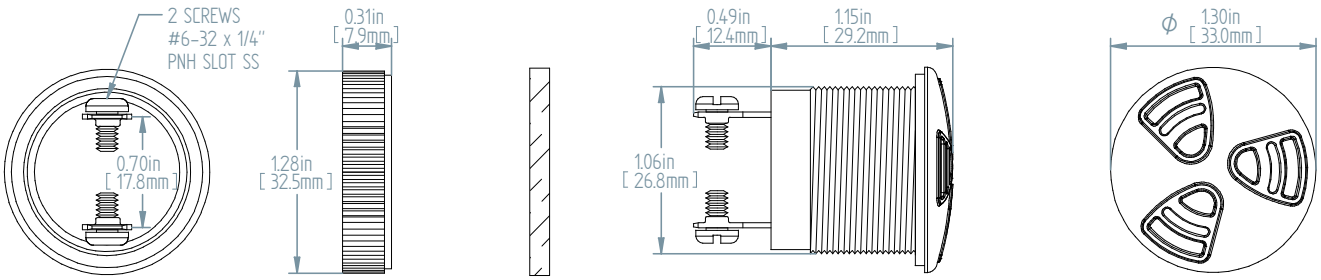
The Turbo TXB-86-515-S(S) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

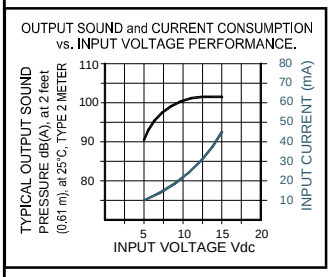
All specifications subject to change without notice.

TXB-86-515-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



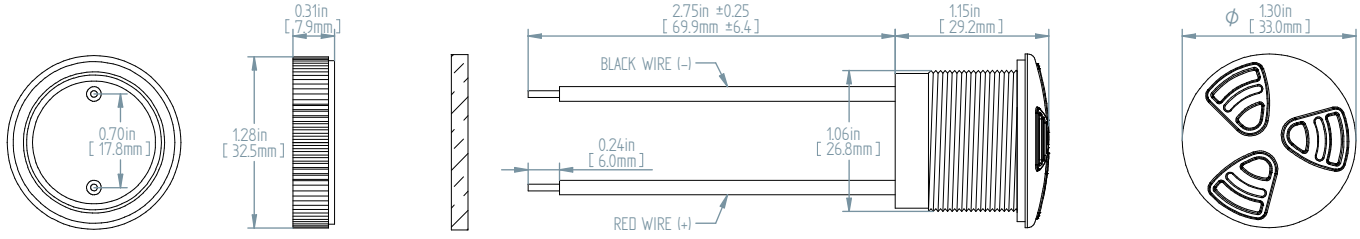
The Turbo TXB-86-515-W(F) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

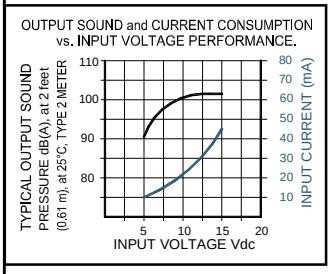
All specifications subject to change without notice.

TXB-86-515-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



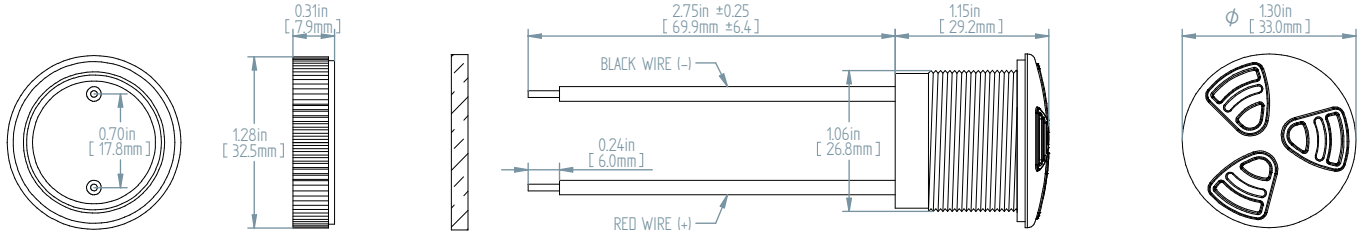
The Turbo TXB-86-515-W(S) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

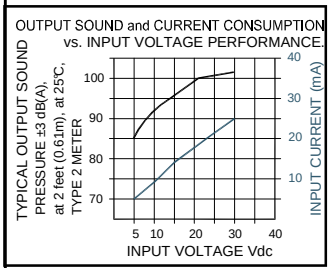
All specifications subject to change without notice.

TXB-86-530-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXB-86-530-Q(F) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

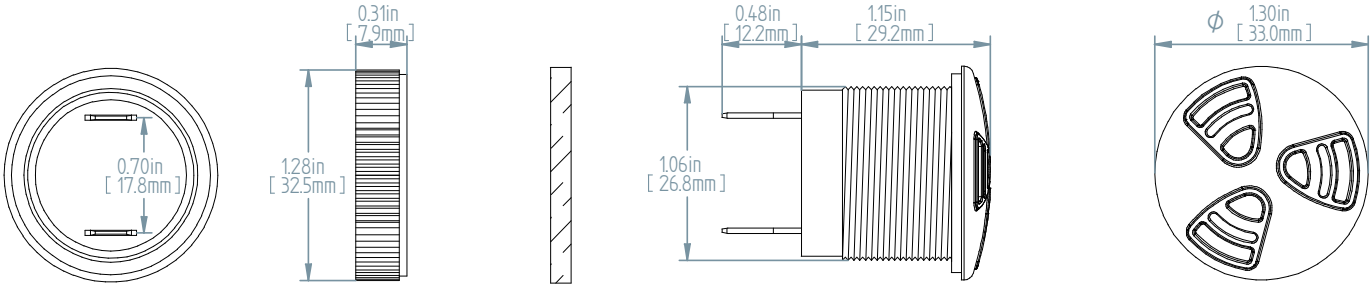
SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

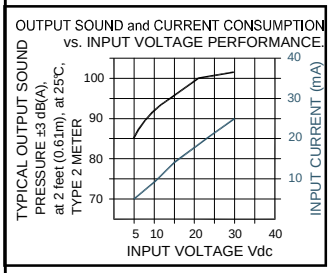
All specifications subject to change without notice.

TXB-86-530-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXB-86-530-Q(S) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

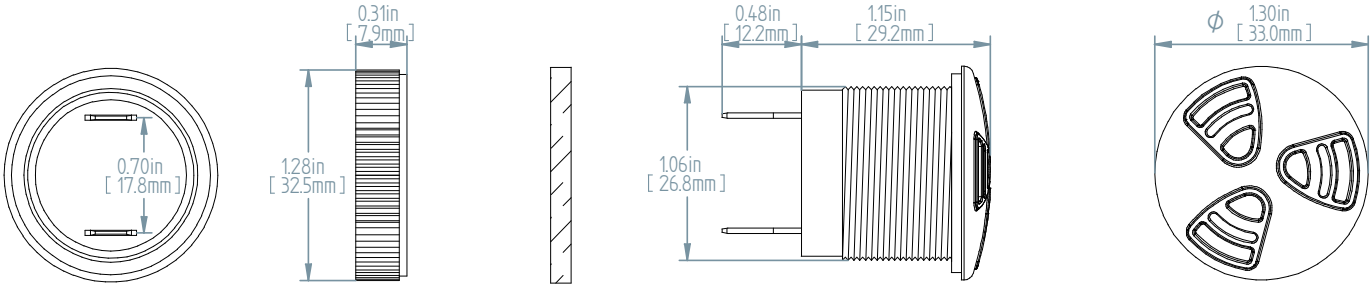
SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

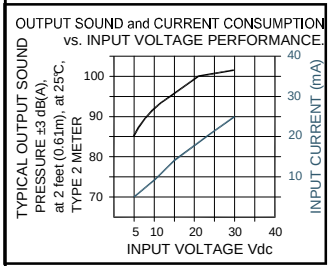
All specifications subject to change without notice.

TXB-86-530-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXB-86-530-S(F) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

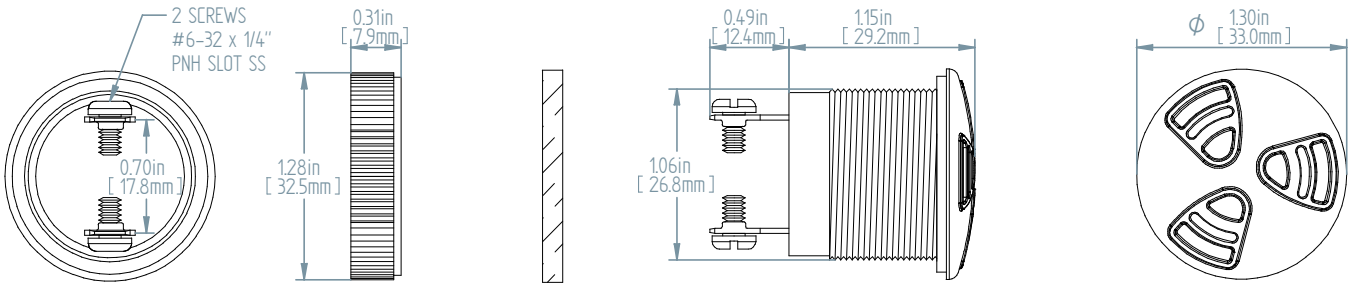
SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

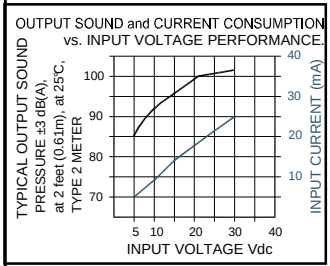
All specifications subject to change without notice.

TXB-86-530-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXB-86-530-S(S) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

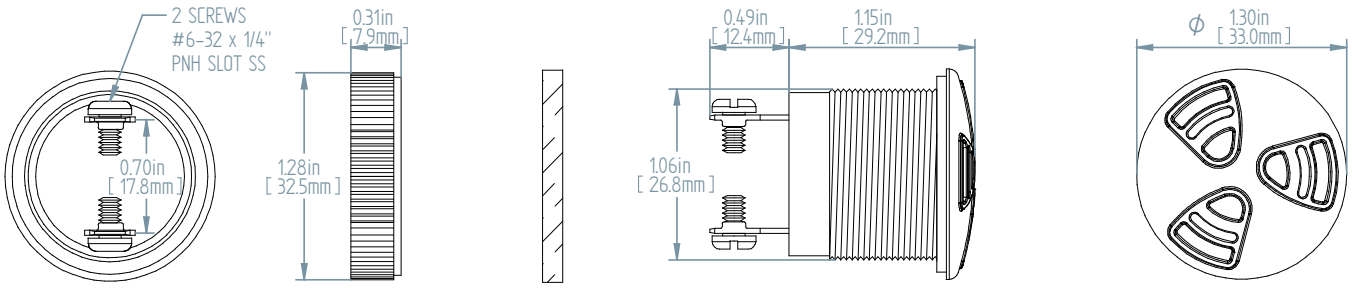
SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

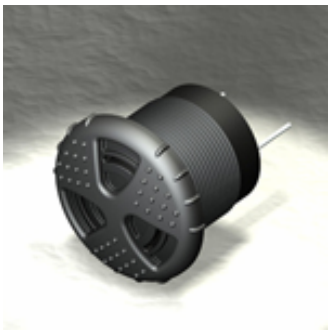
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

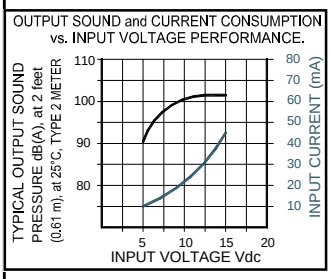
All specifications subject to change without notice.

TXB-V86-515-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



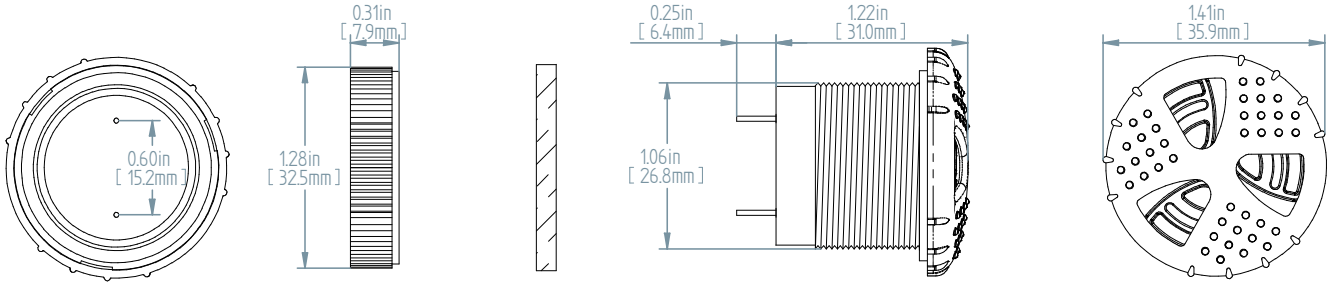
The Turbo TXB-V86-515-P(F) is an extra loud output, panel or circuit board mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

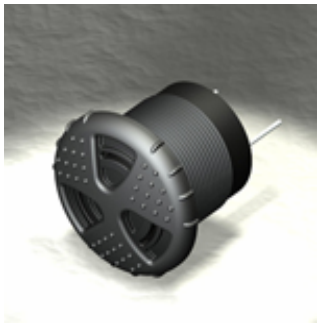
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

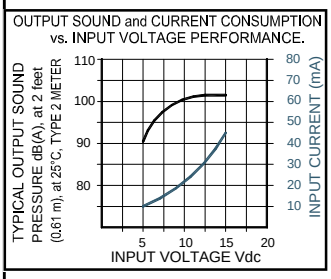
All specifications subject to change without notice.

TXB-V86-515-P(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



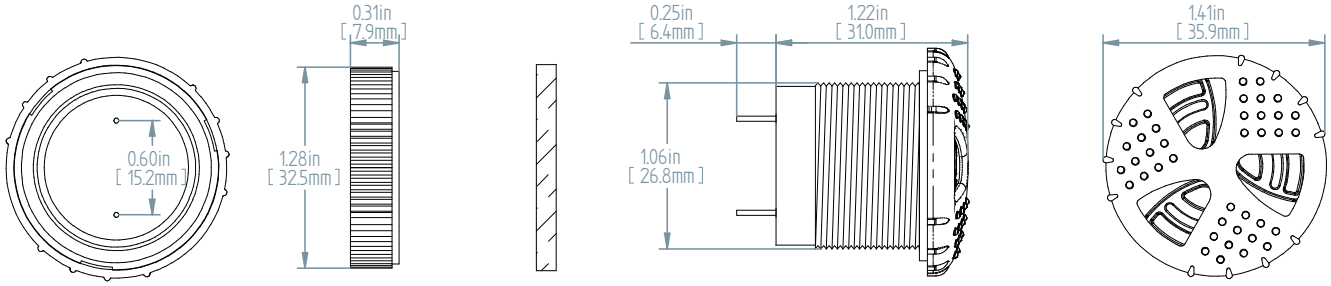
The Turbo TXB-V86-515-P(S) is an extra loud output, panel or circuit board mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

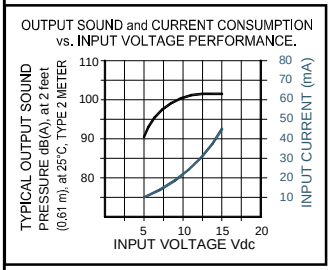
All specifications subject to change without notice.

TXB-V86-515-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



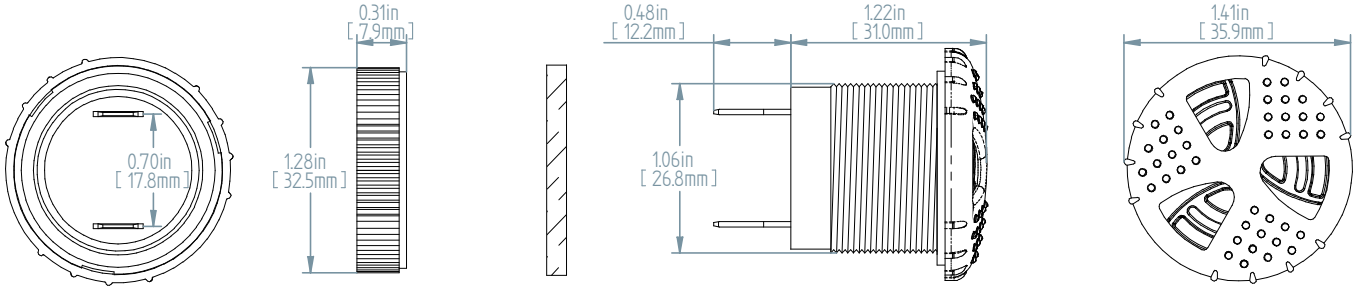
The Turbo TXB-V86-515-Q(F) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

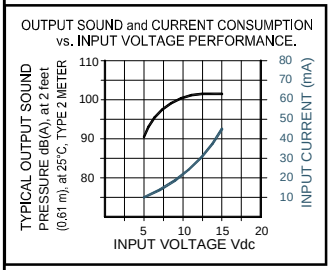
All specifications subject to change without notice.

TXB-V86-515-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



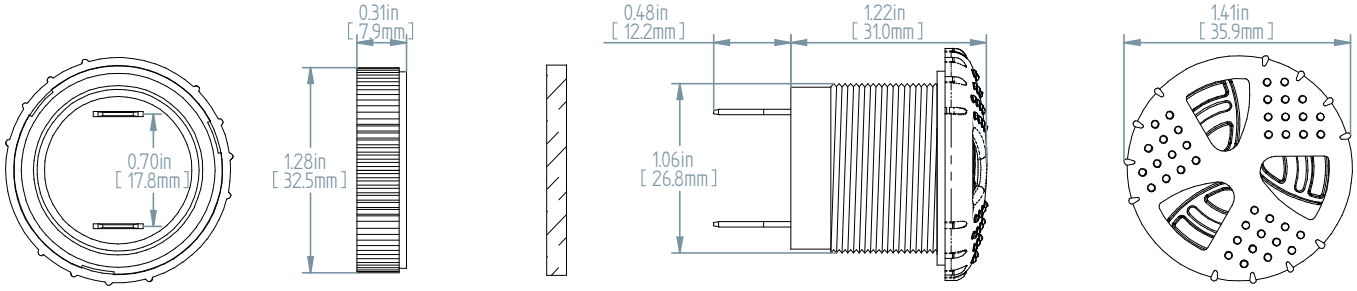
The Turbo TXB-V86-515-Q(S) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

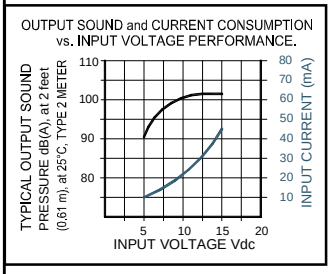
All specifications subject to change without notice.

TXB-V86-515-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



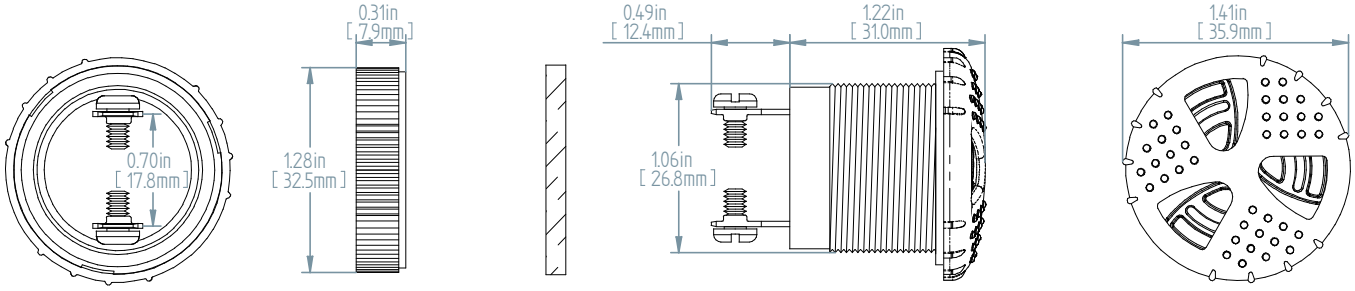
The Turbo TXB-V86-515-S(F) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

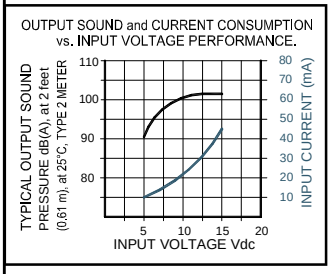
All specifications subject to change without notice.

TXB-V86-515-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



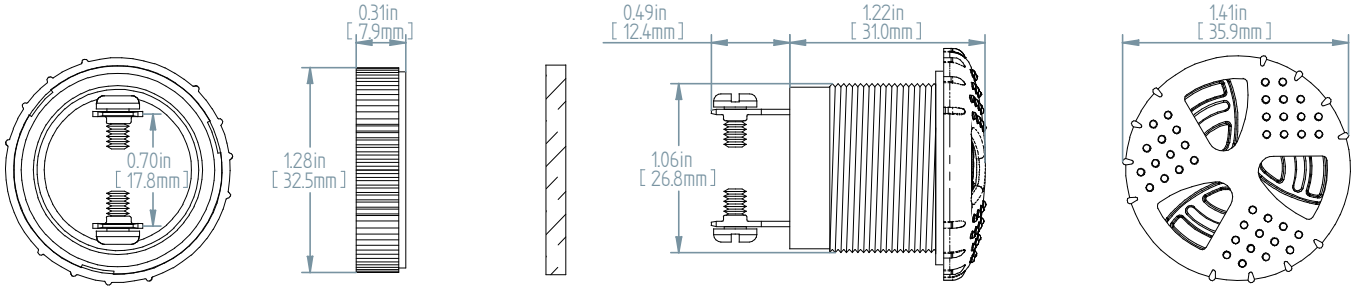
The Turbo TXB-V86-515-S(S) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

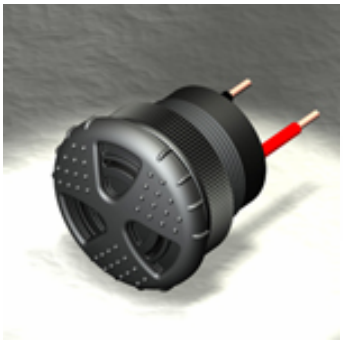
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

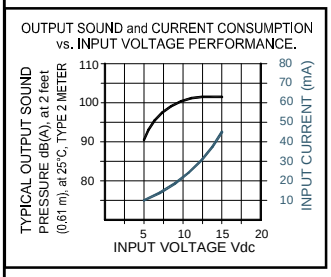
All specifications subject to change without notice.

TXB-V86-515-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



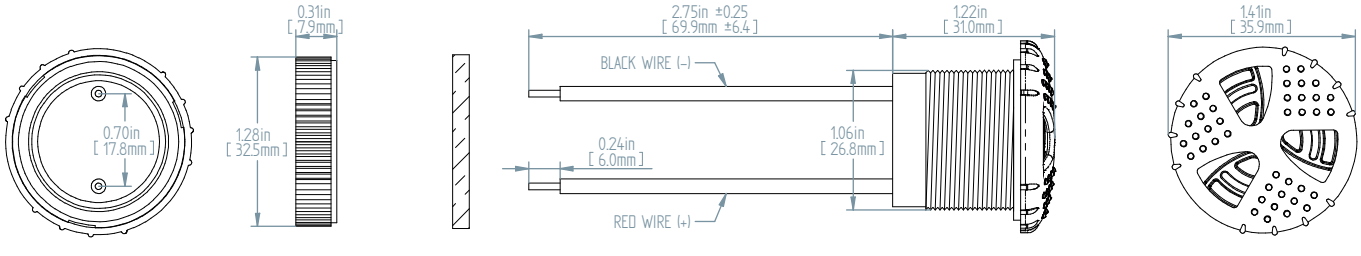
The Turbo TXB-V86-515-W(F) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

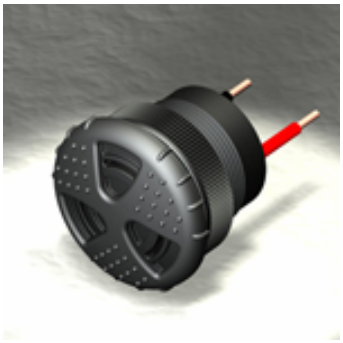
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

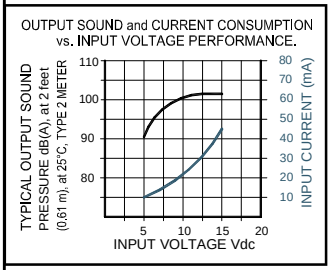
All specifications subject to change without notice.

TXB-V86-515-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



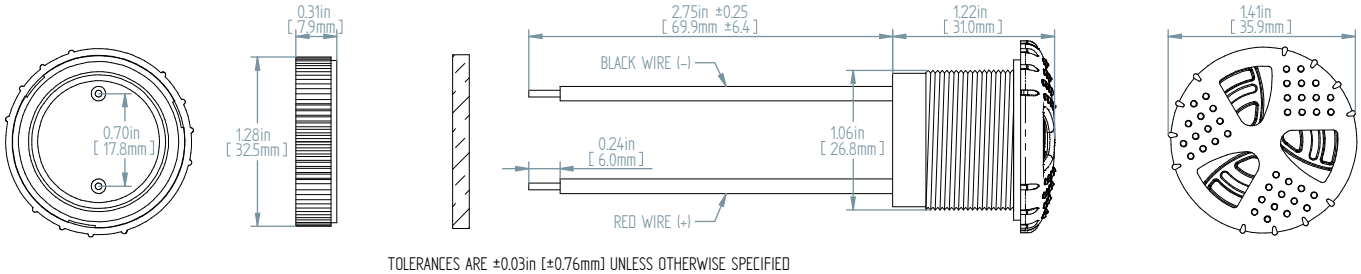
The Turbo TXB-V86-515-W(S) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

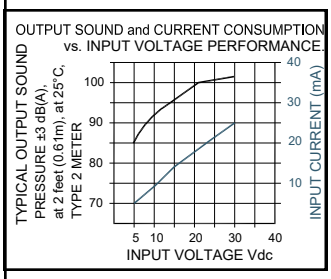
All specifications subject to change without notice.

TXB-V86-530-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXB-V86-530-Q(F) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

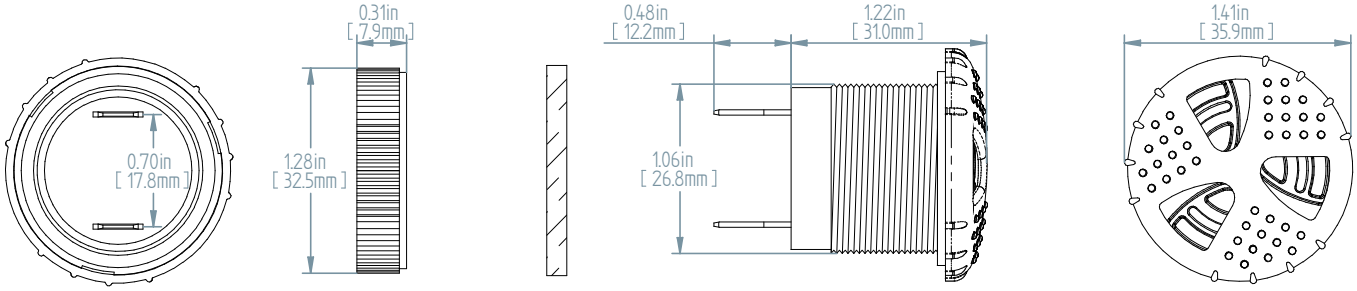
SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

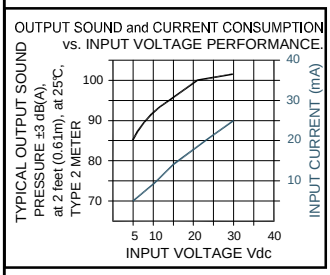
All specifications subject to change without notice.

TXB-V86-530-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXB-V86-530-Q(S) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

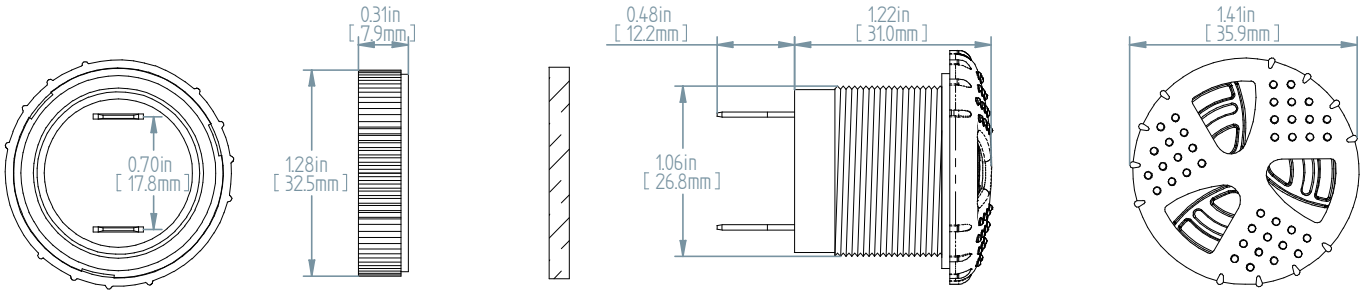
SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

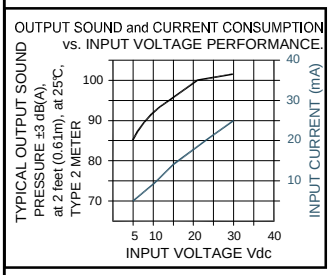
All specifications subject to change without notice.

TXB-V86-530-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXB-V86-530-S(F) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

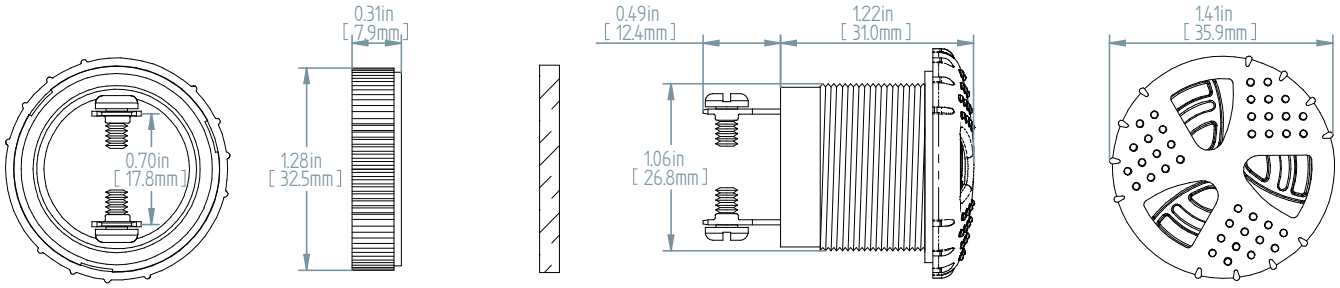
SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Beeps per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

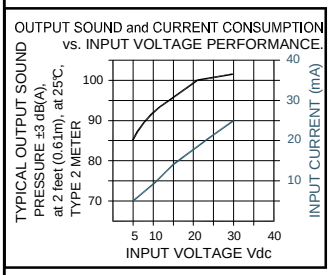
All specifications subject to change without notice.

TXB-V86-530-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXB-V86-530-S(S) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

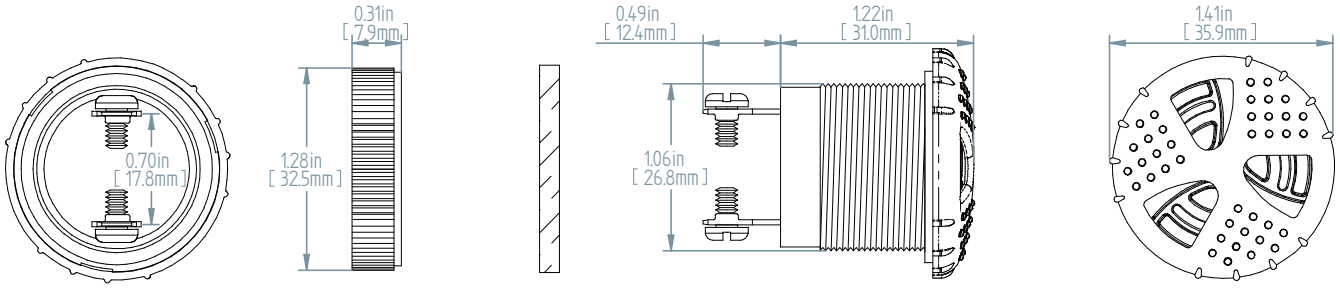
SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Beeps per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

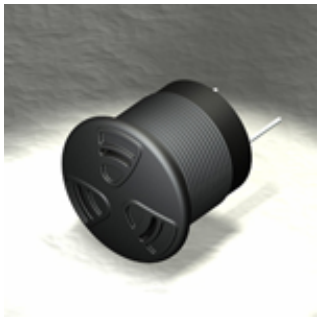
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

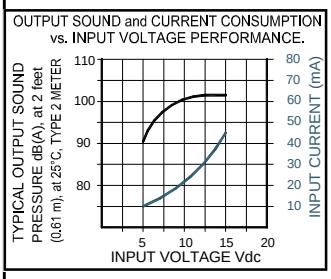
All specifications subject to change without notice.

TXC-86-515-P

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



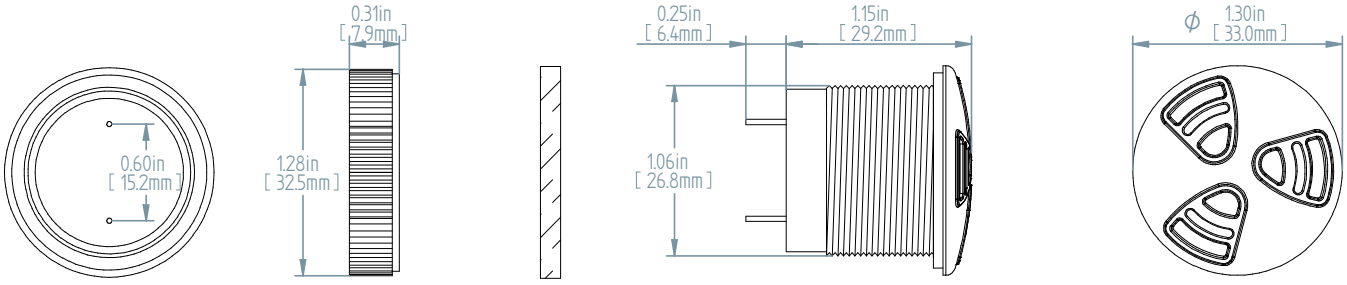
The Turbo TXC-86-515-P is an extra loud output, panel or circuit board mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

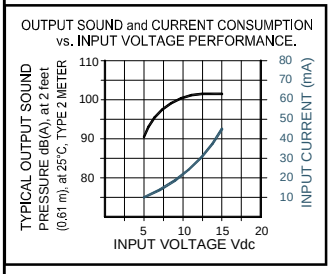
All specifications subject to change without notice.

TXC-86-515-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

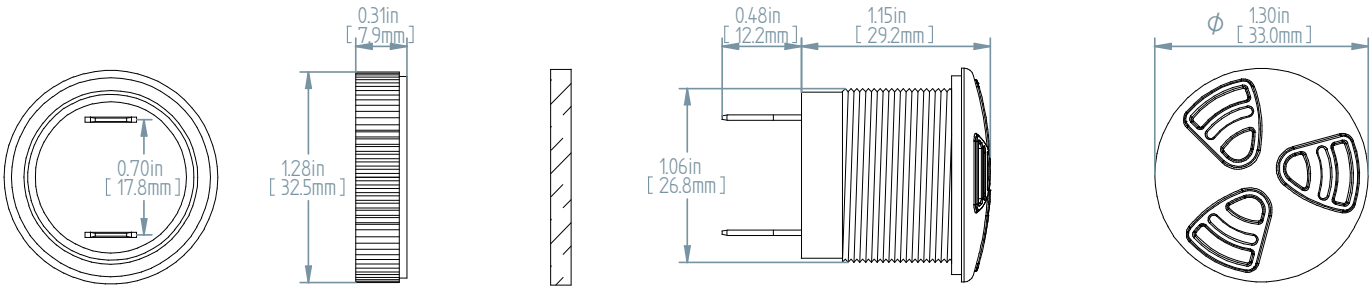


The Turbo TXC-86-515-Q is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

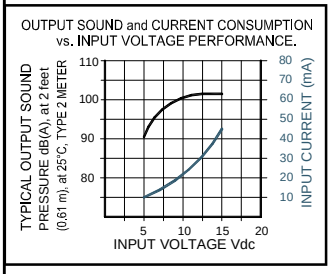
All specifications subject to change without notice.

TXC-86-515-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



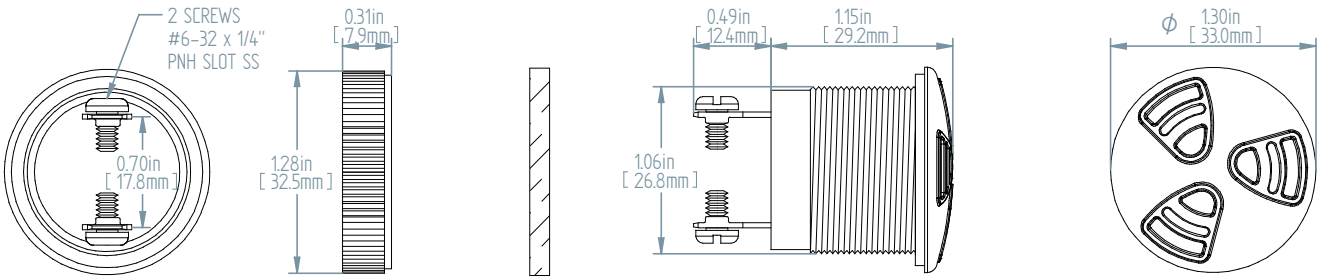
The Turbo TXC-86-515-S is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

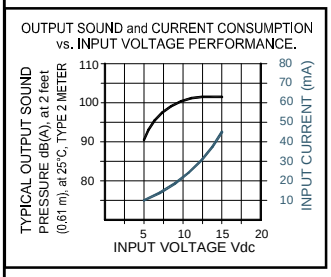
All specifications subject to change without notice.

TXC-86-515-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

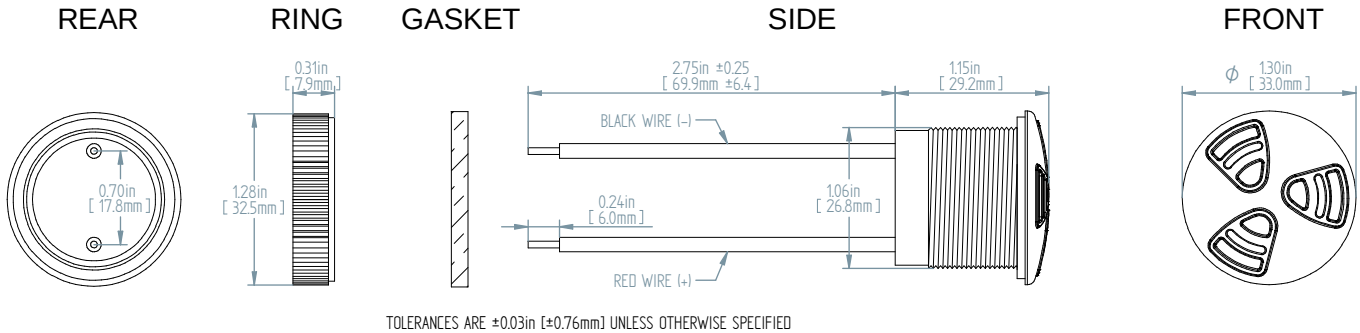


The Turbo TXC-86-515-W is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

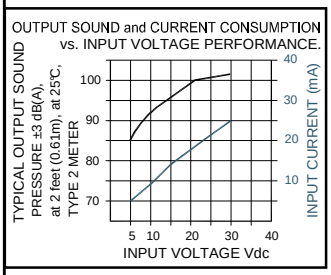
All specifications subject to change without notice.

TXC-86-530-Q

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXC-86-530-Q is an extra loud output, panel mounted alarm for operating voltages of 5-30Vdc. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

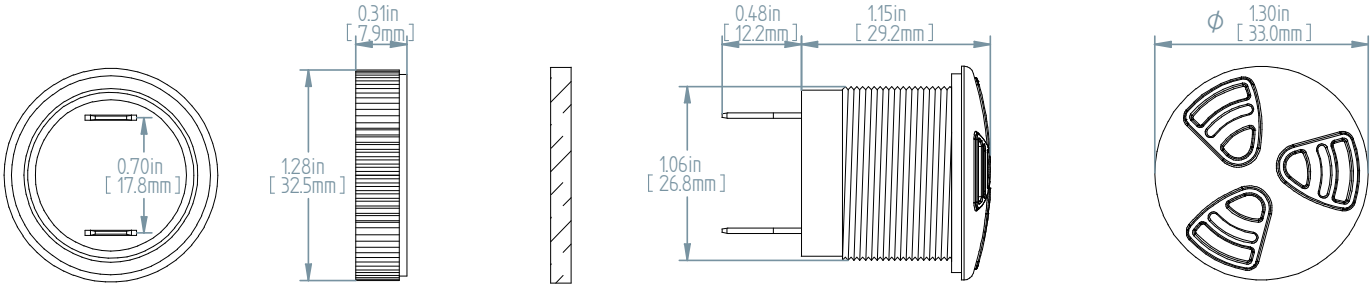
SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

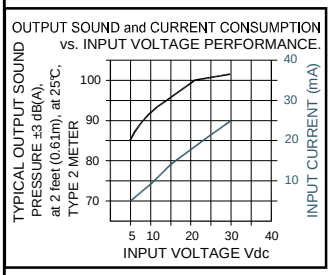
All specifications subject to change without notice.

TXC-86-530-S

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXC-86-530-S is an extra loud output, panel mounted alarm for operating voltages of 5-30Vdc. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

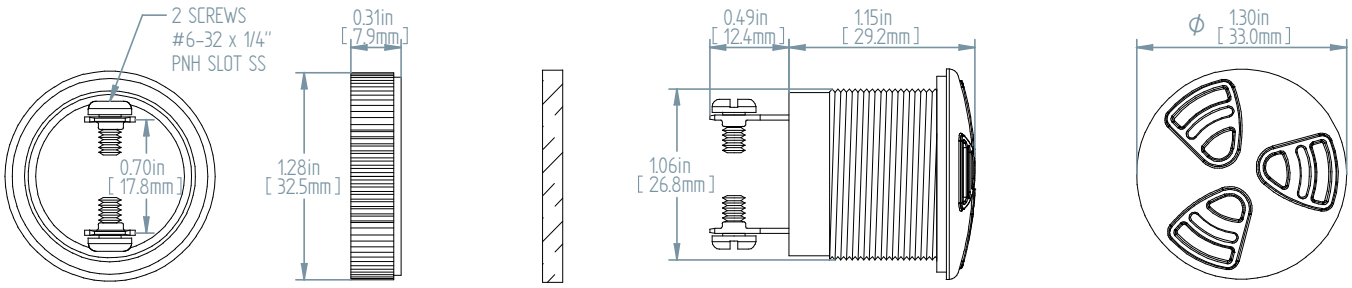
SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

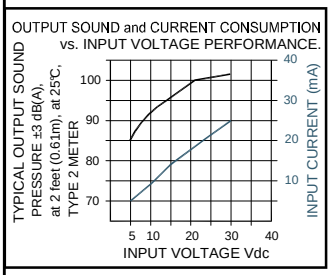
All specifications subject to change without notice.

TXC-86-530-W

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant



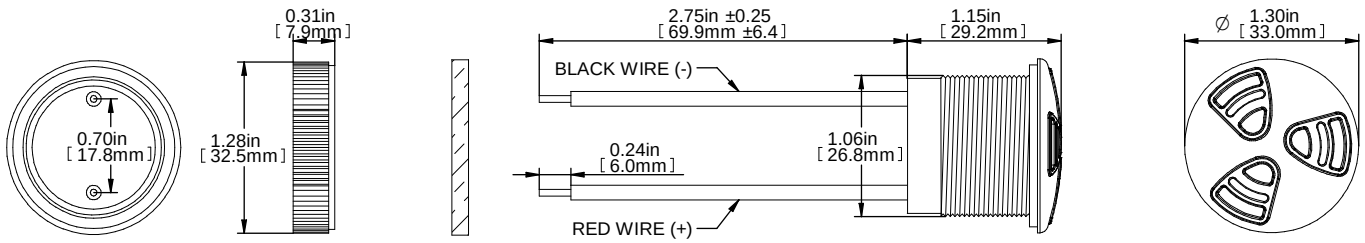
The Turbo TXC-86-530-W is an extra loud output, panel mounted alarm for operating voltages of 5-30Vdc. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

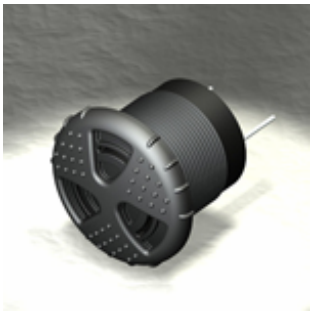
Revision: 12.13

Copyright © 2013 Floyd Bell Inc.

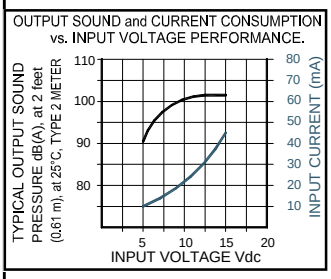
All specifications subject to change without notice.

TXC-V86-515-P

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



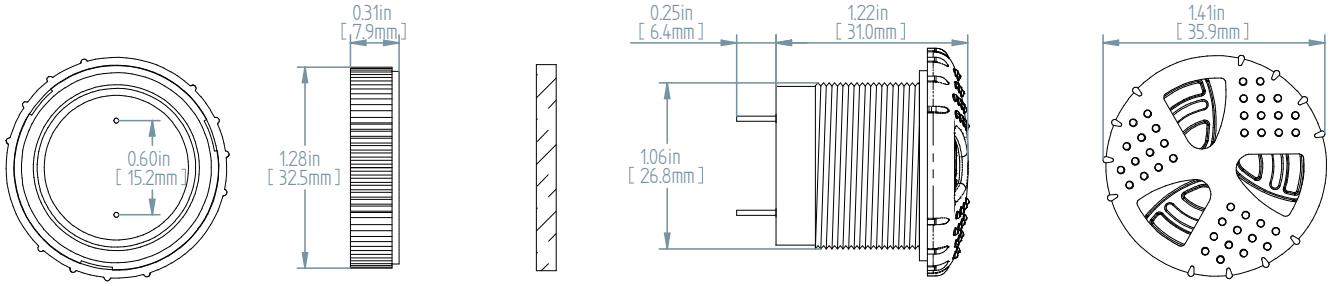
The Turbo TXC-V86-515-P is an extra loud output, panel or circuit board mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃
Storage Temperature:	-40℃ to +85℃
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

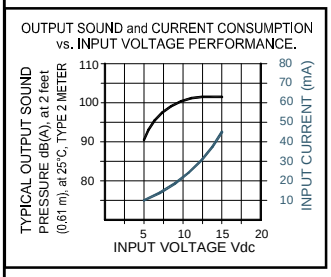
All specifications subject to change without notice.

TXC-V86-515-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

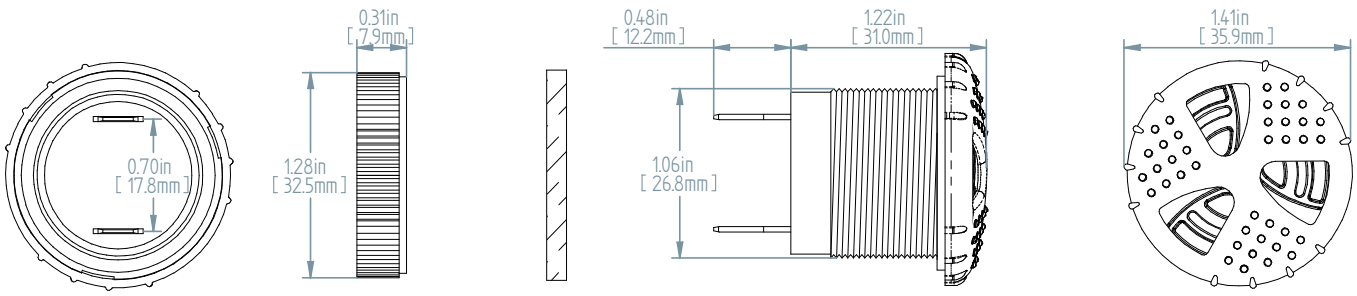


The Turbo TXC-V86-515-Q is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃
Storage Temperature:	-40℃ to +85℃
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

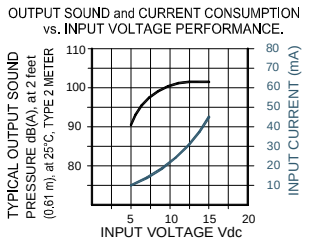
All specifications subject to change without notice.

TXC-V86-515-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



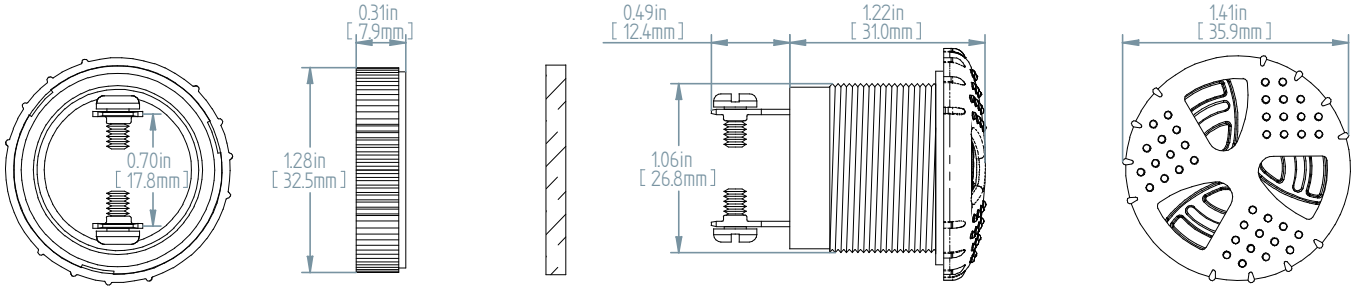
The Turbo TXC-V86-515-S is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃
Storage Temperature:	-40℃ to +85℃
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

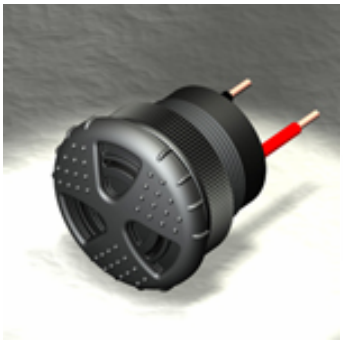
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

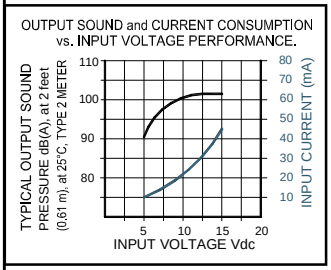
All specifications subject to change without notice.

TXC-V86-515-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



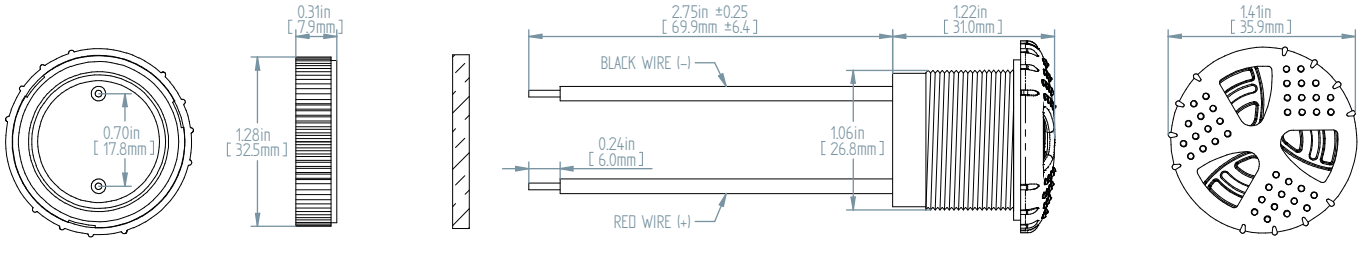
The Turbo TXC-V86-515-W is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

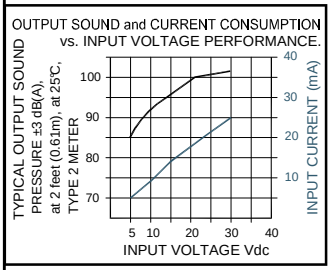
All specifications subject to change without notice.

TXC-V86-530-Q

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXC-V86-530-Q is an extra loud output, panel mounted alarm for operating voltages of 5-30Vdc. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

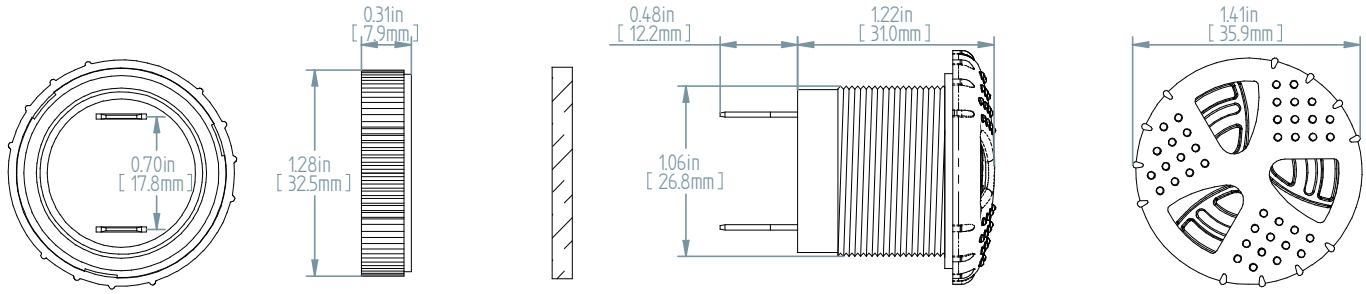
SPECIFICATIONS

PRELIMINARY

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

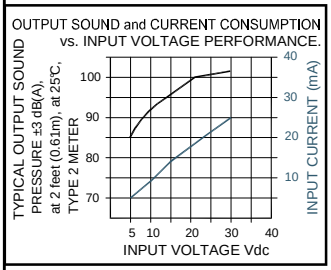
All specifications subject to change without notice.

TXC-V86-530-S

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXC-V86-530-S is an extra loud output, panel mounted alarm for operating voltages of 5-30Vdc. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

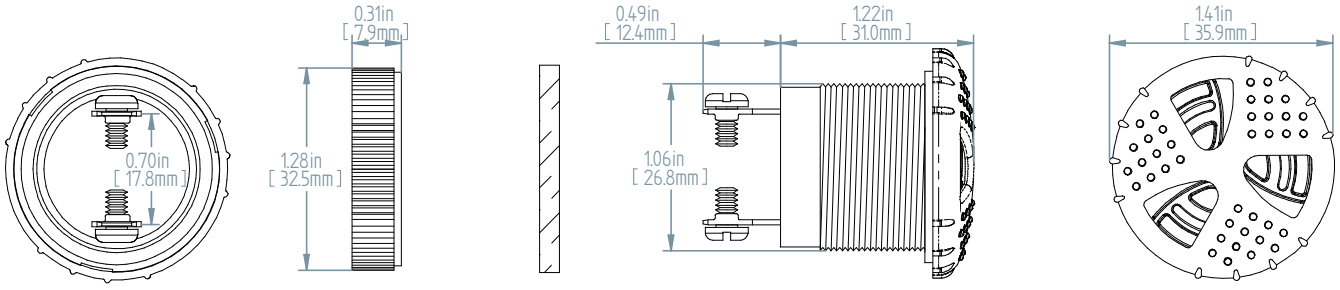
SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

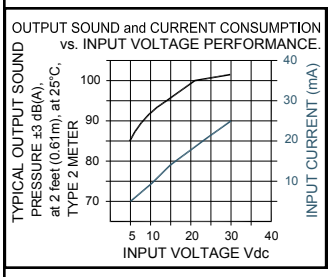
All specifications subject to change without notice.

TXC-V86-530-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



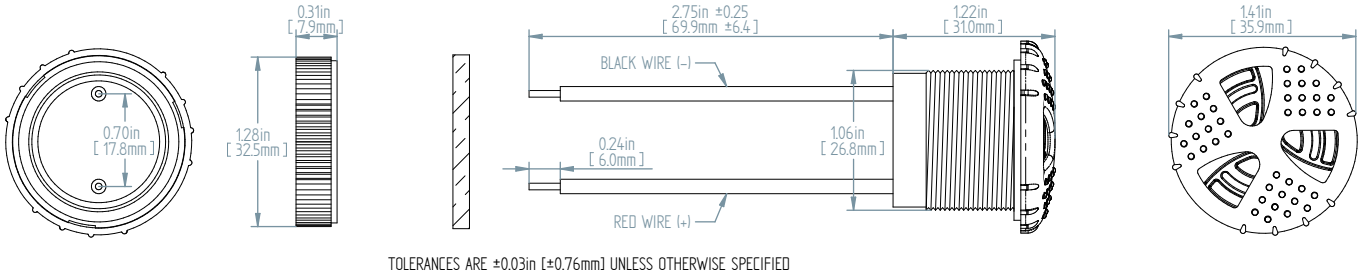
The Turbo TXC-V86-530-W is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

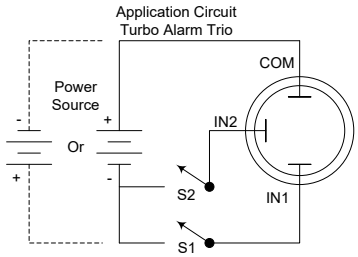
All specifications subject to change without notice.

TXCBW-86-530-Q(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



S2	S1	Sound	Rate	Frequency
Off	On	Constant	X	3000 Hz
On	Off	Beep	1 Hz	3000 Hz
On	On	Warble	2 Hz	2900 - 3000 Hz

The TXCBW-86-530-Q(F) is an extra loud, ***Triple tone***, panel mounted alarm for operating voltages of 5-30Vdc. The alarm functions as an Continuous tone, or Beep tone or a Warble tone. See application circuit and truth table below. The Turbo design features environmental robustness coupled with tamper resistant front mounting case and threaded attachment ring.

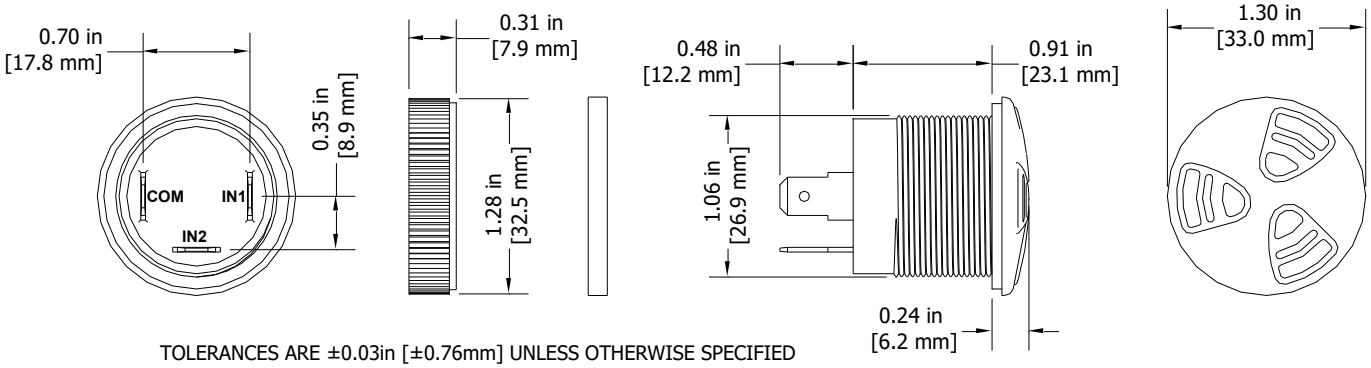
SPECIFICATIONS

Operating Mode:	Triple tone extra Loud Continuous tone or Beep tone, or a Warble tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	3Khz ±250 Hz. (Warble tone 2.9Khz to 3Khz)
Typical Pulse Rate:	3Hz Beep tone, 2Hz Warble tone
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 5.20

Copyright © 2020 Floyd Bell Inc.

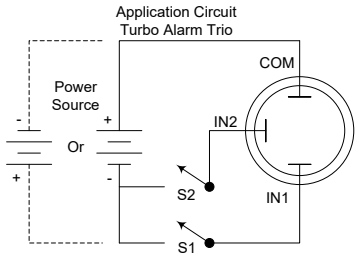
All specifications subject to change without notice.

TXCBW-86-530-Q(S)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



S2	S1	Sound	Rate	Frequency
Off	On	Constant	X	3000 Hz
On	Off	Beep	1 Hz	3000 Hz
On	On	Warble	2 Hz	2900 - 3000 Hz

The TXCBW-86-530-Q(S) is an extra loud, ***Triple tone***, panel mounted alarm for operating voltages of 5-30Vdc. The alarm functions as an Continuous tone, or Beep tone or a Warble tone. See application circuit and truth table below. The Turbo design features environmental robustness coupled with tamper resistant front mounting case and threaded attachment ring.

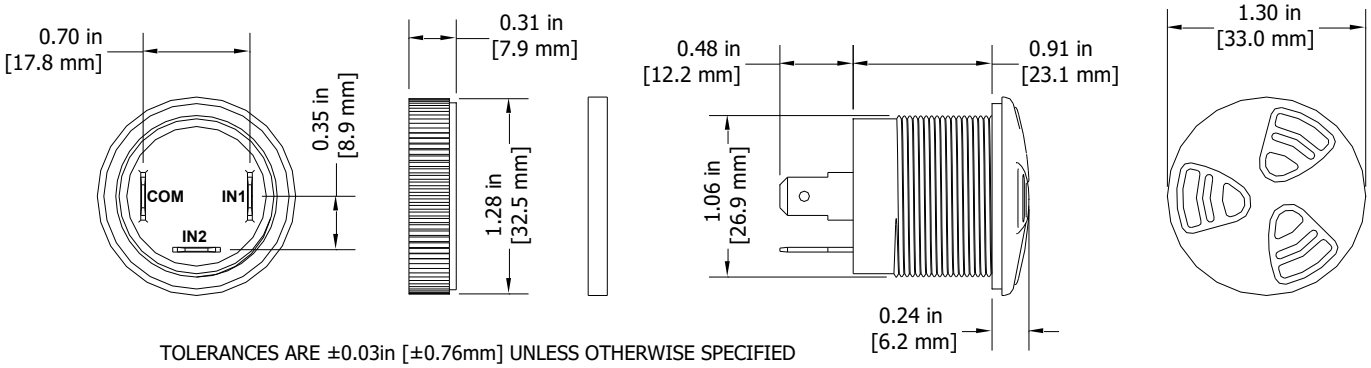
SPECIFICATIONS

Operating Mode:	Triple tone extra Loud Continuous tone or Beep tone, or a Warble tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	3Khz ±250 Hz. (Warble tone 2.9Khz to 3Khz)
Typical Pulse Rate:	1Hz Beep tone, 2Hz Warble tone
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 5.20

Copyright © 2020 Floyd Bell Inc.

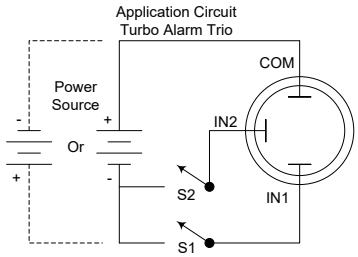
All specifications subject to change without notice.

TXCBW-V86-530-Q(F)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm



S2	S1	Sound	Rate	Frequency
Off	On	Constant	X	3000 Hz
On	Off	Beep	1 Hz	3000 Hz
On	On	Warble	2 Hz	2900 - 3000 Hz

The TXCBW-V86-530-Q(F) is an extra loud, ***Triple tone***, panel mounted alarm for operating voltages of 5-30Vdc. The alarm functions as an Continuous tone, or Beep tone or a Warble tone. See application circuit and truth table below. The Turbo design features environmental robustness coupled with tamper resistant front mounting case and threaded attachment ring.

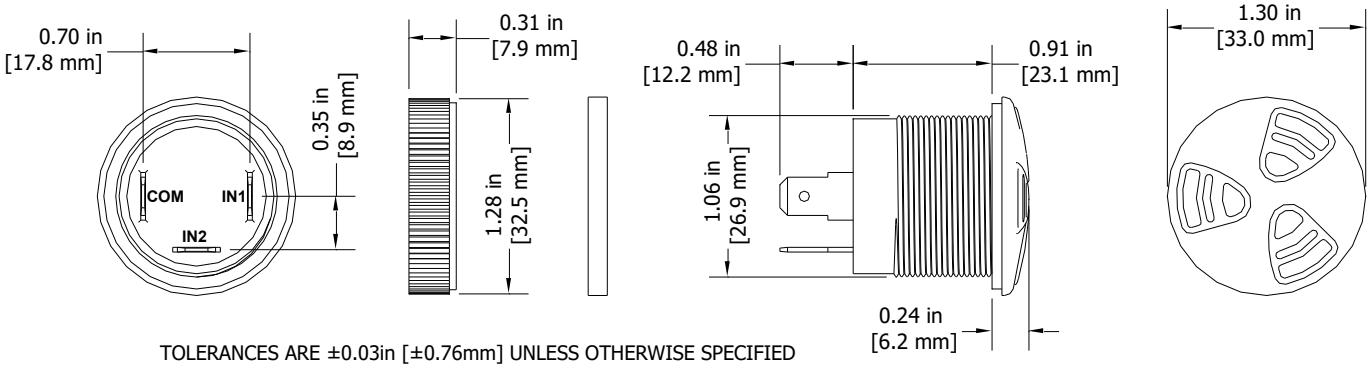
SPECIFICATIONS

Operating Mode:	Triple tone extra Loud Continuous tone or Beep tone, or a Warble tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	3Khz ±250 Hz. (Warble tone 2.9Khz to 3Khz)
Typical Pulse Rate:	3Hz Beep tone, 2Hz Warble tone
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	(With volume control fully open) 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 5.20

Copyright © 2020 Floyd Bell Inc.

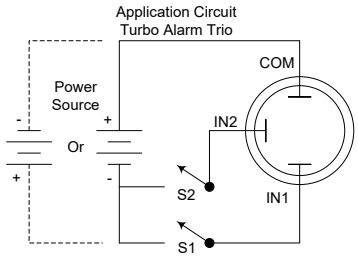
All specifications subject to change without notice.

TXCBW-V86-530-Q(S)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm



S2	S1	Sound	Rate	Frequency
Off	On	Constant	X	3000 Hz
On	Off	Beep	1 Hz	3000 Hz
On	On	Warble	2 Hz	2900 - 3000 Hz

The TXCBW-V86-530-Q(S) is an extra loud, ***Triple tone***, panel mounted alarm for operating voltages of 5-30Vdc. The alarm functions as an Continuous tone, or Beep tone or a Warble tone. See application circuit and truth table below. The Turbo design features environmental robustness coupled with tamper resistant front mounting case and threaded attachment ring.

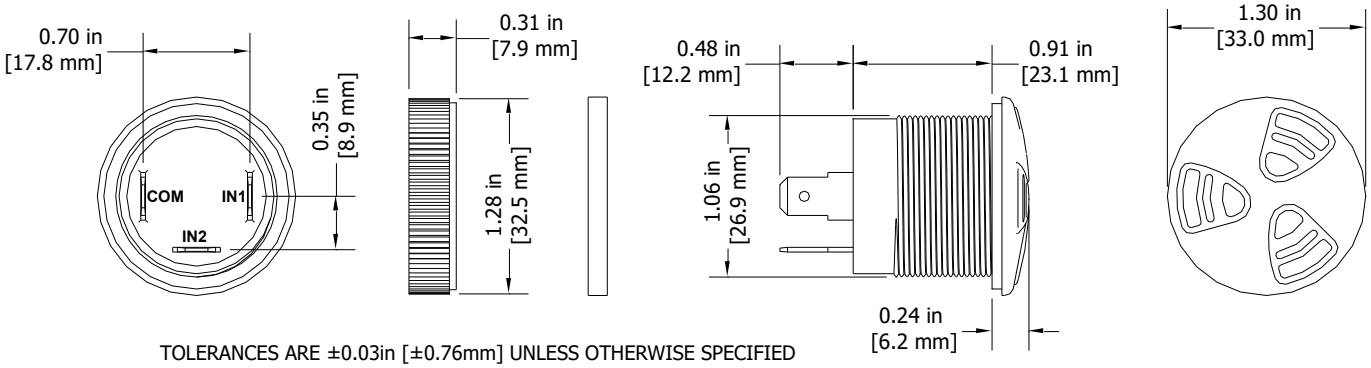
SPECIFICATIONS

Operating Mode:	Triple tone extra Loud Continuous tone or Beep tone, or a Warble tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	3Khz ±250 Hz. (Warble tone 2.9Khz to 3Khz)
Typical Pulse Rate:	1Hz Beep tone, 2Hz Warble tone
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	(With volume control fully open) 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

BACK RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 5.20

Copyright © 2020 Floyd Bell Inc.

All specifications subject to change without notice.

TXL7-96-930-Q

Made in USA

Pending



- 7 unique sounds one alarm
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.5 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

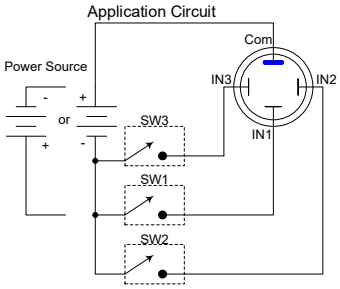
Floyd Bell's new Turbo TXL7 alarm is capable of seven unique, attention getting tones all in one alarm. (see tone chart below) Each tone can be electrically selected via 4 input connections to the alarm. To make wiring easy and convenient, the inputs are non polarized. The common connection can be ground or Positive. (see application circuit) The new Turbo XL series features lower frequency and louder output than most conventional piezo alarms. The lower frequency and loud output ensure that this alarm will be heard even in noisy environments.

SPECIFICATIONS

Operating Mode:	1 of 7 tones. Constant, Beep, Siren, Warble, Chime, Whoop, Ringer.
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Resonant Frequency:	1.8Khz±500 Hz.
Tone Pulse Rate:	See chart for nom pulse rate ±25% Cycles per second
Typical Operating Current:	15 mA at 9 Vdc 45 mA at 30 Vdc
Typical Sound Pressure:	100±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Four Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Control Inputs:	The Control inputs are universal polarity and are used to select which tone the alarm plays. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black, UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

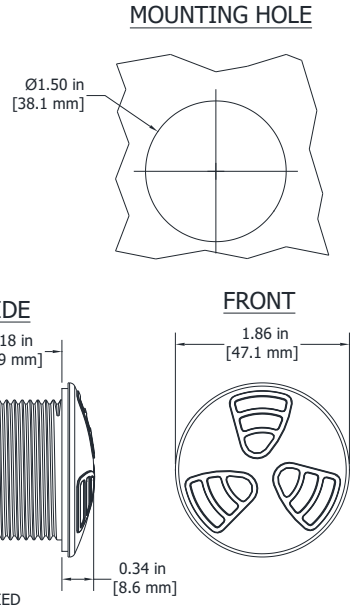
Application Circuit



Tone Chart

IN3	IN2	IN1	Sound	Rate	Frequency
0	0	0	Off	X	X
0	0	1	Constant	X	1800 Hz
0	1	0	Beep	2 Hz	1800 Hz
0	1	1	Siren	3 Hz	1600 - 2000 Hz
1	0	0	Warble	2 Hz	1700 - 1800 Hz
1	0	1	Chime	1 Hz	1800 Hz
1	1	0	Whoop	3 Hz	1600 - 2000 Hz
1	1	1	Ringer	10 Hz	1700 - 1800 Hz

DIMENSIONS



TOLERANCES ARE ±0.03in. [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 5.19

Copyright © 2019 Floyd Bell Inc.

All specifications subject to change without notice.

TXL7-V96-930-Q

Made in USA

Pending



- 7 unique sounds one alarm
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.5 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

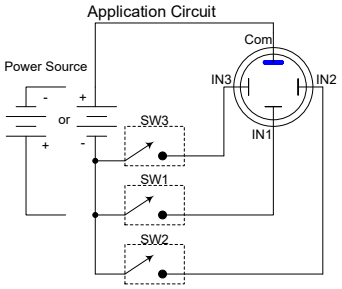
Floyd Bell's new Turbo TXL7 alarm is capable of seven unique, attention getting tones all in one alarm. (see tone chart below) Each tone can be electrically selected via 4 input connections to the alarm. To make wiring easy and convenient, the inputs are non polarized. The common connection can be ground or Positive. (see application circuit) The new Turbo XL series features lower frequency and louder output than most conventional piezo alarms. The lower frequency and loud output ensure that this alarm will be heard even in noisy environments.

SPECIFICATIONS

Operating Mode:	1 of 7 tones. Constant, Beep, Siren, Warble, Chime, Whoop, Ringer.
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Resonant Frequency:	1.8Khz±500 Hz.
Tone Pulse Rate:	See chart for nom pulse rate ±25% Cycles per second
Typical Operating Current:	15 mA at 9 Vdc 45 mA at 30 Vdc
Typical Sound Pressure:	100±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Four Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Control Inputs:	The Control inputs are universal polarity and are used to select which tone the alarm plays. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black, UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

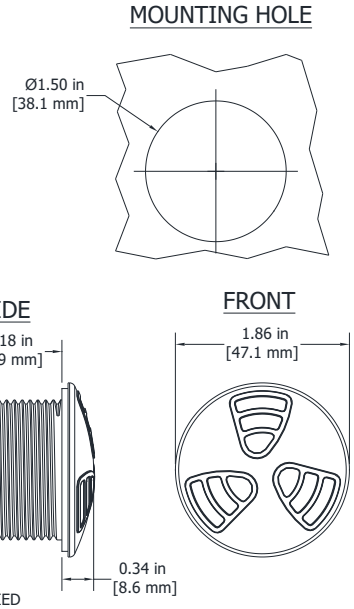
Application Circuit



Tone Chart

IN3	IN2	IN1	Sound	Rate	Frequency
0	0	0	Off	X	X
0	0	1	Constant	X	1800 Hz
0	1	0	Beep	2 Hz	1800 Hz
0	1	1	Siren	3 Hz	1600 - 2000 Hz
1	0	0	Warble	2 Hz	1700 - 1800 Hz
1	0	1	Chime	1 Hz	1800 Hz
1	1	0	Whoop	3 Hz	1600 - 2000 Hz
1	1	1	Ringer	10 Hz	1700 - 1800 Hz

DIMENSIONS



TOLERANCES ARE ±0.03in. [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 5.19

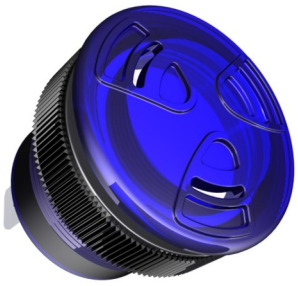
Copyright © 2019 Floyd Bell Inc.

All specifications subject to change without notice.

TXLL7-98B-930-Q

Made in USA

Pending



- 7 unique sounds and light in one alarm
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.5 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

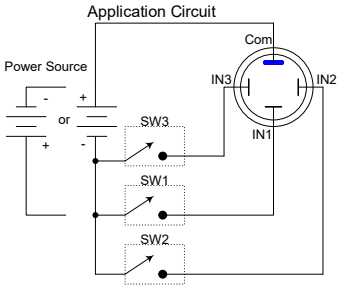
Floyd Bell's new Turbo TXLL7 alarm/Light is capable of seven unique, attention getting tones and lights all in one alarm. Each tone and light combination can be electrically selected via 4 input connections to the alarm. To make wiring easy and convenient, the inputs are non polarized. The common connection can be ground or Positive. (see application circuit) The new Turbo TXLL7 series features lower frequency, louder output than most conventional piezo alarms along with a sequenced light illumination. The lower frequeny, loud output and light ensure that this alarm will be heard or seen even in noisy environments.

SPECIFICATIONS

Operating Mode:	1 of 7 tones with light. Constant, Beep, Siren, Warble, Chime, Whoop, Ringer
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Resonant Frequency:	1.8Khz±500 Hz.
Tone and Light Pulse Rate:	See chart for nom pulse rate ±25% Cycles per second
Typical Operating Current:	15 mA at 9 Vdc 45 mA at 30 Vdc
Typical Sound Pressure:	100±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Four Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Control Inputs:	The Control inputs are universal polarity and are used to select which tone the alarm plays. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

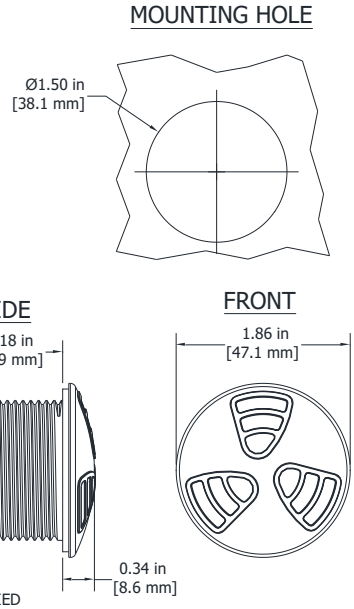
Application Circuit



Tone Chart

IN3	IN2	IN1	Sound	Rate	Frequency
0	0	0	Off	X	X
0	0	1	Constant	X	1800 Hz
0	1	0	Beep	2 Hz	1800 Hz
0	1	1	Siren	3 Hz	1600 - 2000 Hz
1	0	0	Warble	2 Hz	1700 - 1800 Hz
1	0	1	Chime	1 Hz	1800 Hz
1	1	0	Whoop	3 Hz	1600 - 2000 Hz
1	1	1	Ringer	10 Hz	1700 - 1800 Hz

DIMENSIONS



TOLERANCES ARE ±0.03in. [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 1.20

Copyright © 2019 Floyd Bell Inc.

All specifications subject to change without notice.

TXLL7-98G-930-Q

Made in USA

Pending



- 7 unique sounds and light in one alarm
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.5 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

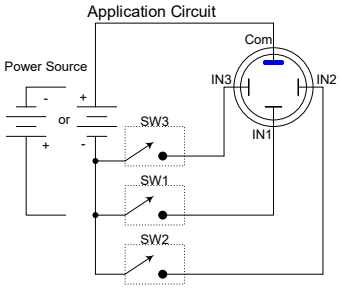
Floyd Bell's new Turbo TXLL7 alarm/Light is capable of seven unique, attention getting tones and lights all in one alarm. Each tone and light combination can be electrically selected via 4 input connections to the alarm. To make wiring easy and convenient, the inputs are non polarized. The common connection can be ground or Positive. (see application circuit) The new Turbo TXLL7 series features lower frequency, louder output than most conventional piezo alarms along with a sequenced light illumination. The lower frequeny, loud output and light ensure that this alarm will be heard or seen even in noisy environments.

SPECIFICATIONS

Operating Mode:	1 of 7 tones with light. Constant, Beep, Siren, Warble, Chime, Whoop, Ringer
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Resonant Frequency:	1.8Khz±500 Hz.
Tone and Light Pulse Rate:	See chart for nom pulse rate ±25% Cycles per second
Typical Operating Current:	15 mA at 9 Vdc 45 mA at 30 Vdc
Typical Sound Pressure:	100±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Four Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Control Inputs:	The Control inputs are universal polarity and are used to select which tone the alarm plays. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

Application Circuit

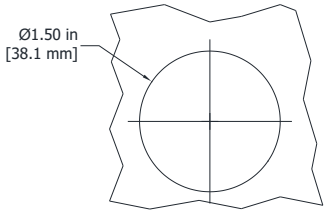


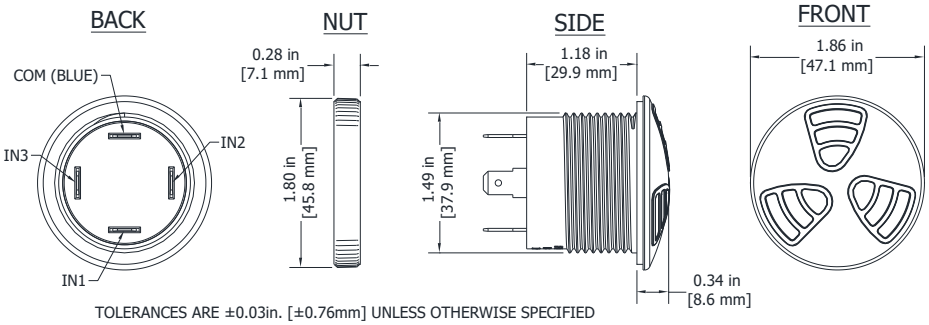
Tone Chart

IN3	IN2	IN1	Sound	Rate	Frequency
0	0	0	Off	X	X
0	0	1	Constant	X	1800 Hz
0	1	0	Beep	2 Hz	1800 Hz
0	1	1	Siren	3 Hz	1600 - 2000 Hz
1	0	0	Warble	2 Hz	1700 - 1800 Hz
1	0	1	Chime	1 Hz	1800 Hz
1	1	0	Whoop	3 Hz	1600 - 2000 Hz
1	1	1	Ringer	10 Hz	1700 - 1800 Hz

DIMENSIONS

MOUNTING HOLE





TOLERANCES ARE ±0.03in. [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 1.20

Copyright © 2019 Floyd Bell Inc.

All specifications subject to change without notice.

TXLL7-98R-930-Q

Made in USA

Pending



- 7 unique sounds and light in one alarm
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.5 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

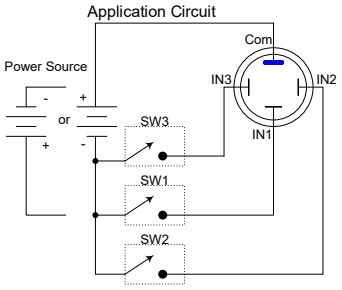
Floyd Bell's new Turbo TXLL7 alarm/Light is capable of seven unique, attention getting tones and lights all in one alarm. Each tone and light combination can be electrically selected via 4 input connections to the alarm. To make wiring easy and convenient, the inputs are non polarized. The common connection can be ground or Positive. (see application circuit) The new Turbo TXLL7 series features lower frequency, louder output than most conventional piezo alarms along with a sequenced light illumination. The lower frequeny, loud output and light ensure that this alarm will be heard or seen even in noisy environments.

SPECIFICATIONS

Operating Mode:	1 of 7 tones with light. Constant, Beep, Siren, Warble, Chime, Whoop, Ringer
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Resonant Frequency:	1.8Khz±500 Hz.
Tone and Light Pulse Rate:	See chart for nom pulse rate ±25% Cycles per second
Typical Operating Current:	15 mA at 9 Vdc 45 mA at 30 Vdc
Typical Sound Pressure:	100±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Four Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Control Inputs:	The Control inputs are universal polarity and are used to select which tone the alarm plays. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

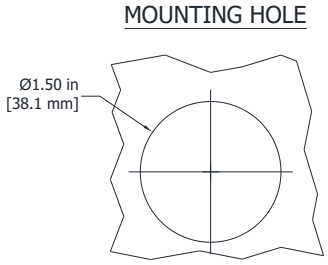
Application Circuit

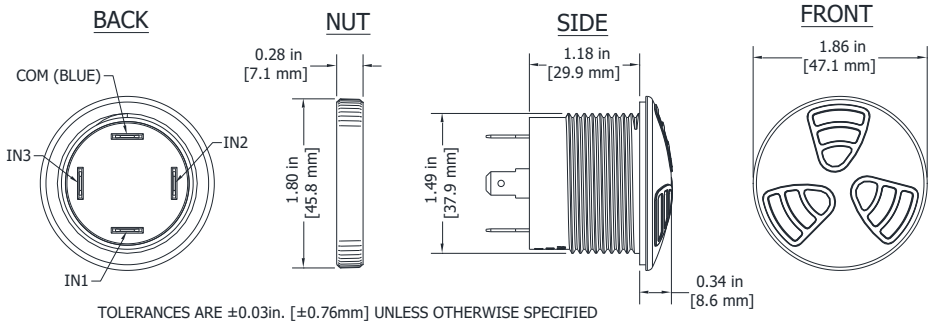


Tone Chart

IN3	IN2	IN1	Sound	Rate	Frequency
0	0	0	Off	X	X
0	0	1	Constant	X	1800 Hz
0	1	0	Beep	2 Hz	1800 Hz
0	1	1	Siren	3 Hz	1600 - 2000 Hz
1	0	0	Warble	2 Hz	1700 - 1800 Hz
1	0	1	Chime	1 Hz	1800 Hz
1	1	0	Whoop	3 Hz	1600 - 2000 Hz
1	1	1	Ringer	10 Hz	1700 - 1800 Hz

DIMENSIONS





TOLERANCES ARE ±0.03in. [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 1.20

Copyright © 2019 Floyd Bell Inc.

All specifications subject to change without notice.

TXLL7-98W-930-Q

Made in USA

Pending



- 7 unique sounds and light in one alarm
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.5 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

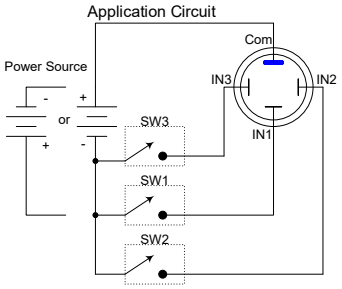
Floyd Bell's new Turbo TXLL7 alarm/Light is capable of seven unique, attention getting tones and lights all in one alarm. Each tone and light combination can be electrically selected via 4 input connections to the alarm. To make wiring easy and convenient, the inputs are non polarized. The common connection can be ground or Positive. (see application circuit) The new Turbo TXLL7 series features lower frequency, louder output than most conventional piezo alarms along with a sequenced light illumination. The lower frequeny, loud output and light ensure that this alarm will be heard or seen even in noisy environments.

SPECIFICATIONS

Operating Mode:	1 of 7 tones with light. Constant, Beep, Siren, Warble, Chime, Whoop, Ringer
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Resonant Frequency:	1.8Khz±500 Hz.
Tone and Light Pulse Rate:	See chart for nom pulse rate ±25% Cycles per second
Typical Operating Current:	15 mA at 9 Vdc 45 mA at 30 Vdc
Typical Sound Pressure:	100±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Four Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Control Inputs:	The Control inputs are universal polarity and are used to select which tone the alarm plays. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

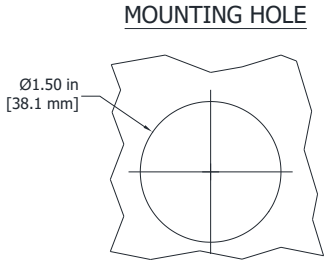
Application Circuit

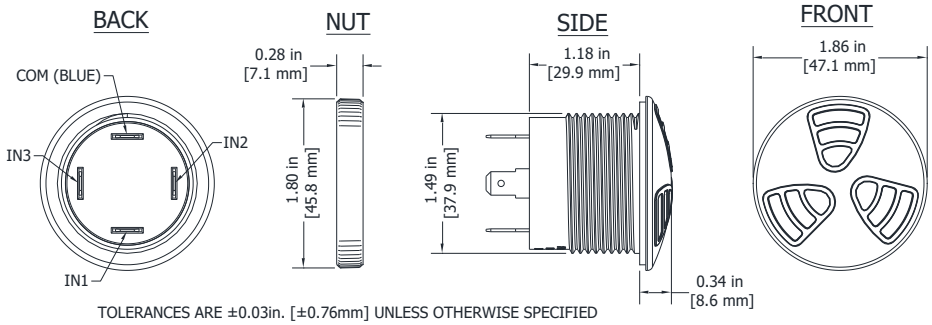


Tone Chart

IN3	IN2	IN1	Sound	Rate	Frequency
0	0	0	Off	X	X
0	0	1	Constant	X	1800 Hz
0	1	0	Beep	2 Hz	1800 Hz
0	1	1	Siren	3 Hz	1600 - 2000 Hz
1	0	0	Warble	2 Hz	1700 - 1800 Hz
1	0	1	Chime	1 Hz	1800 Hz
1	1	0	Whoop	3 Hz	1600 - 2000 Hz
1	1	1	Ringer	10 Hz	1700 - 1800 Hz

DIMENSIONS





TOLERANCES ARE ±0.03in. [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 1.20

Copyright © 2019 Floyd Bell Inc.

All specifications subject to change without notice.

TXLL7-98Y-930-Q

Made in USA

Pending



- 7 unique sounds and light in one alarm
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.5 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

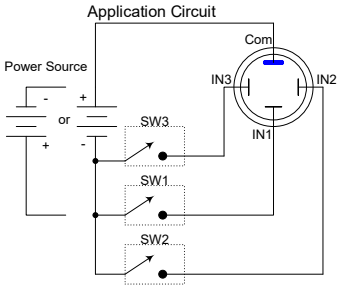
Floyd Bell's new Turbo TXLL7 alarm/Light is capable of seven unique, attention getting tones and lights all in one alarm. Each tone and light combination can be electrically selected via 4 input connections to the alarm. To make wiring easy and convenient, the inputs are non polarized. The common connection can be ground or Positive. (see application circuit) The new Turbo TXLL7 series features lower frequency, louder output than most conventional piezo alarms along with a sequenced light illumination. The lower frequeny, loud output and light ensure that this alarm will be heard or seen even in noisy environments.

SPECIFICATIONS

Operating Mode:	1 of 7 tones with light. Constant, Beep, Siren, Warble, Chime, Whoop, Ringer
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Resonant Frequency:	1.8Khz±500 Hz.
Tone and Light Pulse Rate:	See chart for nom pulse rate ±25% Cycles per second
Typical Operating Current:	15 mA at 9 Vdc 45 mA at 30 Vdc
Typical Sound Pressure:	100±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Four Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Control Inputs:	The Control inputs are universal polarity and are used to select which tone the alarm plays. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

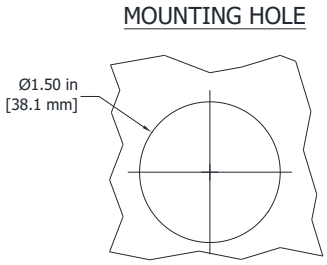
Application Circuit

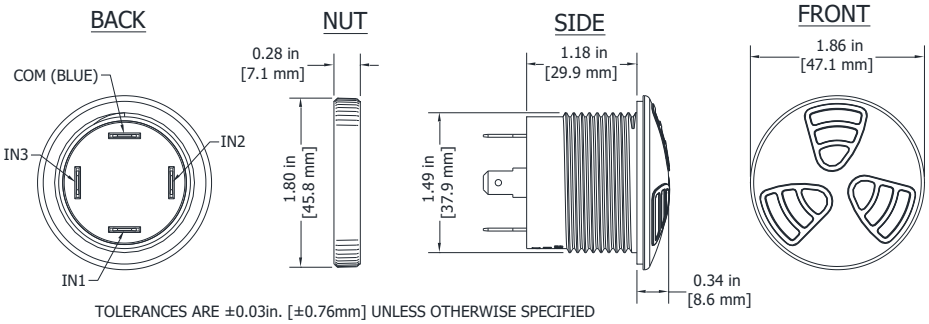


Tone Chart

IN3	IN2	IN1	Sound	Rate	Frequency
0	0	0	Off	X	X
0	0	1	Constant	X	1800 Hz
0	1	0	Beep	2 Hz	1800 Hz
0	1	1	Siren	3 Hz	1600 - 2000 Hz
1	0	0	Warble	2 Hz	1700 - 1800 Hz
1	0	1	Chime	1 Hz	1800 Hz
1	1	0	Whoop	3 Hz	1600 - 2000 Hz
1	1	1	Ringer	10 Hz	1700 - 1800 Hz

DIMENSIONS





TOLERANCES ARE ±0.03in. [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 1.20

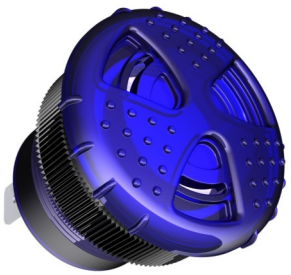
Copyright © 2019 Floyd Bell Inc.

All specifications subject to change without notice.

TXLL7-V98B-930-Q

Made in USA

Pending



- 7 unique sounds and light in one alarm
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.5 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

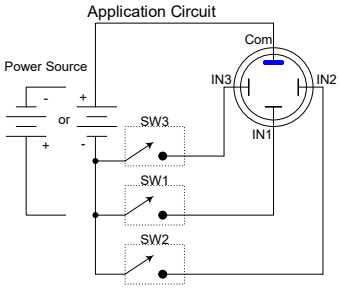
Floyd Bell's new Turbo TXLL7 alarm/Light is capable of seven unique, attention getting tones and lights all in one alarm. Each tone and light combination can be electrically selected via 4 input connections to the alarm. To make wiring easy and convenient, the inputs are non polarized. The common connection can be ground or Positive. (see application circuit) The new Turbo TXLL7 series features lower frequency, louder output than most conventional piezo alarms along with a sequenced light illumination. The lower frequeny, loud output and light ensure that this alarm will be heard or seen even in noisy environments.

SPECIFICATIONS

Operating Mode:	1 of 7 tones with light. Constant, Beep, Siren, Warble, Chime, Whoop, Ringer
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Resonant Frequency:	1.8Khz±500 Hz.
Tone and Light Pulse Rate:	See chart for nom pulse rate ±25% Cycles per second
Typical Operating Current:	15 mA at 9 Vdc 45 mA at 30 Vdc
Typical Sound Pressure:	100±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Four Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Control Inputs:	The Control inputs are universal polarity and are used to select which tone the alarm plays. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

Application Circuit

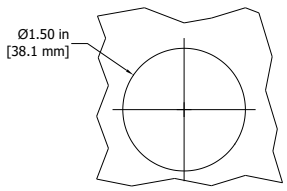


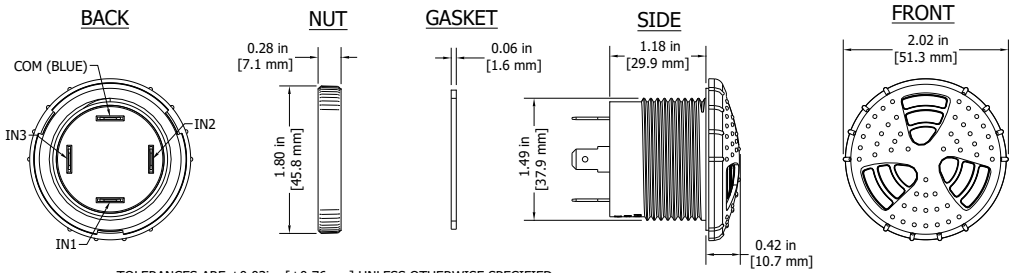
Tone Chart

IN3	IN2	IN1	Sound	Rate	Frequency
0	0	0	Off	X	X
0	0	1	Constant	X	1800 Hz
0	1	0	Beep	2 Hz	1800 Hz
0	1	1	Siren	3 Hz	1600 - 2000 Hz
1	0	0	Warble	2 Hz	1700 - 1800 Hz
1	0	1	Chime	1 Hz	1800 Hz
1	1	0	Whoop	3 Hz	1600 - 2000 Hz
1	1	1	Ringer	10 Hz	1700 - 1800 Hz

DIMENSIONS

MOUNTING HOLE





TOLERANCES ARE ±0.03in. [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 1.20

Copyright © 2019 Floyd Bell Inc.

All specifications subject to change without notice.

TXLL7-V98G-930-Q

Made in USA

Pending



- 7 unique sounds and light in one alarm
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.5 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

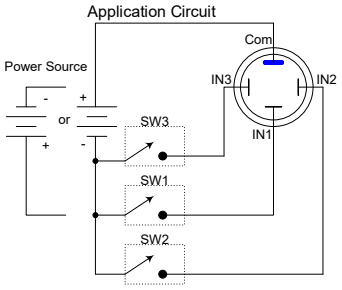
Floyd Bell's new Turbo TXLL7 alarm/Light is capable of seven unique, attention getting tones and lights all in one alarm. Each tone and light combination can be electrically selected via 4 input connections to the alarm. To make wiring easy and convenient, the inputs are non polarized. The common connection can be ground or Positive. (see application circuit) The new Turbo TXLL7 series features lower frequency, louder output than most conventional piezo alarms along with a sequenced light illumination. The lower frequeny, loud output and light ensure that this alarm will be heard or seen even in noisy environments.

SPECIFICATIONS

Operating Mode:	1 of 7 tones with light. Constant, Beep, Siren, Warble, Chime, Whoop, Ringer
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Resonant Frequency:	1.8Khz±500 Hz.
Tone and Light Pulse Rate:	See chart for nom pulse rate ±25% Cycles per second
Typical Operating Current:	15 mA at 9 Vdc 45 mA at 30 Vdc
Typical Sound Pressure:	100±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Four Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Control Inputs:	The Control inputs are universal polarity and are used to select which tone the alarm plays. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

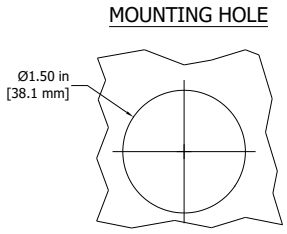
Application Circuit

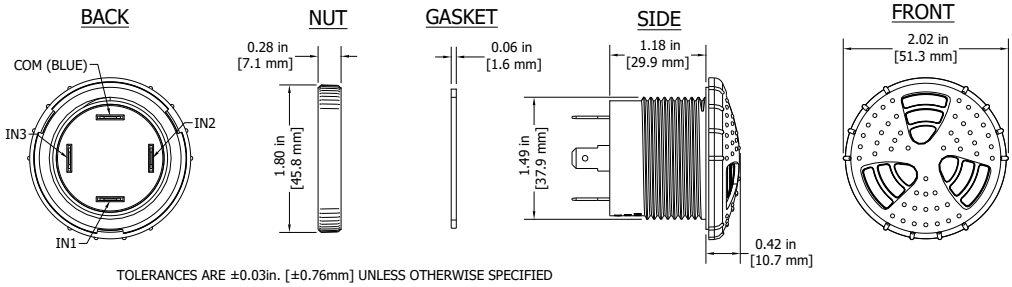


Tone Chart

IN3	IN2	IN1	Sound	Rate	Frequency
0	0	0	Off	X	X
0	0	1	Constant	X	1800 Hz
0	1	0	Beep	2 Hz	1800 Hz
0	1	1	Siren	3 Hz	1600 - 2000 Hz
1	0	0	Warble	2 Hz	1700 - 1800 Hz
1	0	1	Chime	1 Hz	1800 Hz
1	1	0	Whoop	3 Hz	1600 - 2000 Hz
1	1	1	Ringer	10 Hz	1700 - 1800 Hz

DIMENSIONS





TOLERANCES ARE ±0.03in. [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 1.20

Copyright © 2019 Floyd Bell Inc.

All specifications subject to change without notice.

TXLL7-V98R-930-Q

Made in USA

Pending



- 7 unique sounds and light in one alarm
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.5 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

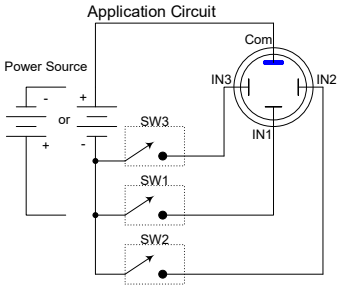
Floyd Bell's new Turbo TXLL7 alarm/Light is capable of seven unique, attention getting tones and lights all in one alarm. Each tone and light combination can be electrically selected via 4 input connections to the alarm. To make wiring easy and convenient, the inputs are non polarized. The common connection can be ground or Positive. (see application circuit) The new Turbo TXLL7 series features lower frequency, louder output than most conventional piezo alarms along with a sequenced light illumination. The lower frequeny, loud output and light ensure that this alarm will be heard or seen even in noisy environments.

SPECIFICATIONS

Operating Mode:	1 of 7 tones with light. Constant, Beep, Siren, Warble, Chime, Whoop, Ringer
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Resonant Frequency:	1.8Khz±500 Hz.
Tone and Light Pulse Rate:	See chart for nom pulse rate ±25% Cycles per second
Typical Operating Current:	15 mA at 9 Vdc 45 mA at 30 Vdc
Typical Sound Pressure:	100±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Four Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Control Inputs:	The Control inputs are universal polarity and are used to select which tone the alarm plays. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

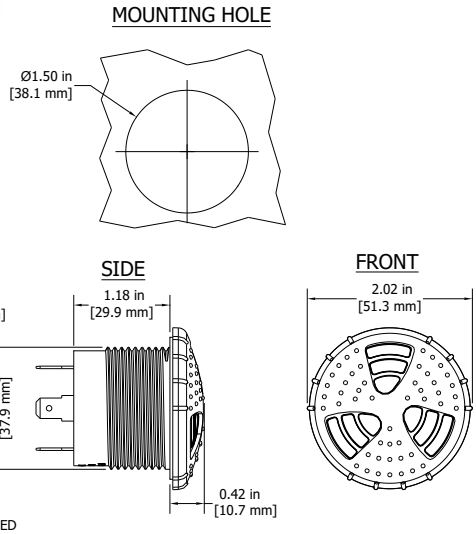
Application Circuit



Tone Chart

IN3	IN2	IN1	Sound	Rate	Frequency
0	0	0	Off	X	X
0	0	1	Constant	X	1800 Hz
0	1	0	Beep	2 Hz	1800 Hz
0	1	1	Siren	3 Hz	1600 - 2000 Hz
1	0	0	Warble	2 Hz	1700 - 1800 Hz
1	0	1	Chime	1 Hz	1800 Hz
1	1	0	Whoop	3 Hz	1600 - 2000 Hz
1	1	1	Ringer	10 Hz	1700 - 1800 Hz

DIMENSIONS



TOLERANCES ARE ±0.03in. [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 1.20

Copyright © 2019 Floyd Bell Inc.

All specifications subject to change without notice.

TXLL7-V98W-930-Q

Made in USA

Pending



- 7 unique sounds and light in one alarm
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.5 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

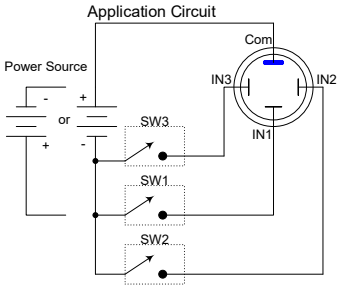
Floyd Bell's new Turbo TXLL7 alarm/Light is capable of seven unique, attention getting tones and lights all in one alarm. Each tone and light combination can be electrically selected via 4 input connections to the alarm. To make wiring easy and convenient, the inputs are non polarized. The common connection can be ground or Positive. (see application circuit) The new Turbo TXLL7 series features lower frequency, louder output than most conventional piezo alarms along with a sequenced light illumination. The lower frequeny, loud output and light ensure that this alarm will be heard or seen even in noisy environments.

SPECIFICATIONS

Operating Mode:	1 of 7 tones with light. Constant, Beep, Siren, Warble, Chime, Whoop, Ringer
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Resonant Frequency:	1.8Khz±500 Hz.
Tone and Light Pulse Rate:	See chart for nom pulse rate ±25% Cycles per second
Typical Operating Current:	15 mA at 9 Vdc 45 mA at 30 Vdc
Typical Sound Pressure:	100±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Four Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Control Inputs:	The Control inputs are universal polarity and are used to select which tone the alarm plays. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

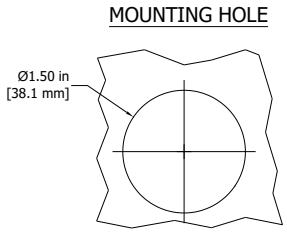
Application Circuit

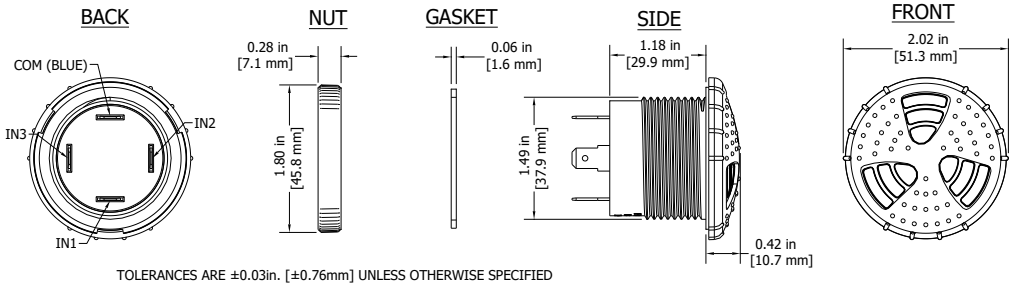


Tone Chart

IN3	IN2	IN1	Sound	Rate	Frequency
0	0	0	Off	X	X
0	0	1	Constant	X	1800 Hz
0	1	0	Beep	2 Hz	1800 Hz
0	1	1	Siren	3 Hz	1600 - 2000 Hz
1	0	0	Warble	2 Hz	1700 - 1800 Hz
1	0	1	Chime	1 Hz	1800 Hz
1	1	0	Whoop	3 Hz	1600 - 2000 Hz
1	1	1	Ringer	10 Hz	1700 - 1800 Hz

DIMENSIONS





TOLERANCES ARE ±0.03in. [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 1.20

Copyright © 2019 Floyd Bell Inc.

All specifications subject to change without notice.

TXLL7-V98Y-930-Q

Made in USA

Pending



- 7 unique sounds and light in one alarm
- Indoor or Outdoor Use
- NEMA 4X and IP68 Rated
- Mounts in 1.5 inch Panel Hole
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring

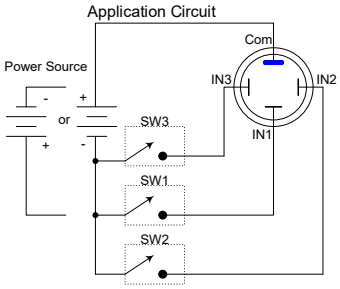
Floyd Bell's new Turbo TXLL7 alarm/Light is capable of seven unique, attention getting tones and lights all in one alarm. Each tone and light combination can be electrically selected via 4 input connections to the alarm. To make wiring easy and convenient, the inputs are non polarized. The common connection can be ground or Positive. (see application circuit) The new Turbo TXLL7 series features lower frequency, louder output than most conventional piezo alarms along with a sequenced light illumination. The lower frequeny, loud output and light ensure that this alarm will be heard or seen even in noisy environments.

SPECIFICATIONS

Operating Mode:	1 of 7 tones with light. Constant, Beep, Siren, Warble, Chime, Whoop, Ringer
Operating Voltage:	9-30 Vdc
Nominal Operating Voltage:	24 Vdc
Resonant Frequency:	1.8Khz±500 Hz.
Tone and Light Pulse Rate:	See chart for nom pulse rate ±25% Cycles per second
Typical Operating Current:	15 mA at 9 Vdc 45 mA at 30 Vdc
Typical Sound Pressure:	100±5 dB(A), at 9 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Four Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Control Inputs:	The Control inputs are universal polarity and are used to select which tone the alarm plays. The Common connection can be positive with negative switch inputs or negative with positive switch inputs.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-30°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Lens/Case– Red Translucent Polycarbonate UL94V-0 Potting- 2 parts epoxy resin or silicone, black NEMA 4X Gasket – 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity– Withstands 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

Application Circuit

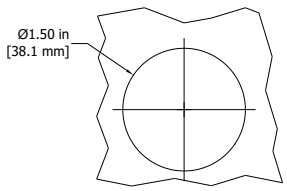


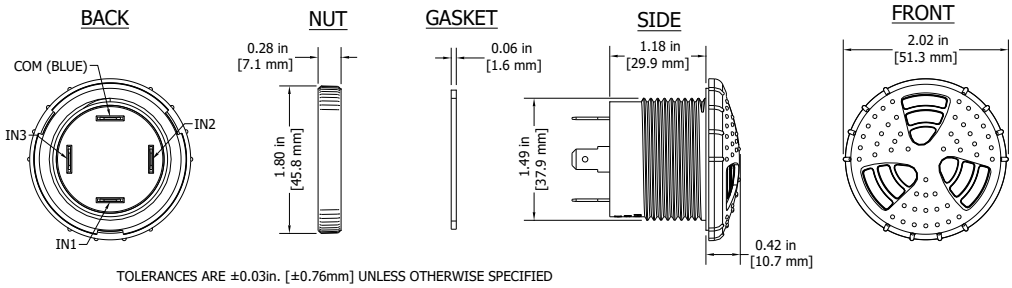
Tone Chart

IN3	IN2	IN1	Sound	Rate	Frequency
0	0	0	Off	X	X
0	0	1	Constant	X	1800 Hz
0	1	0	Beep	2 Hz	1800 Hz
0	1	1	Siren	3 Hz	1600 - 2000 Hz
1	0	0	Warble	2 Hz	1700 - 1800 Hz
1	0	1	Chime	1 Hz	1800 Hz
1	1	0	Whoop	3 Hz	1600 - 2000 Hz
1	1	1	Ringer	10 Hz	1700 - 1800 Hz

DIMENSIONS

MOUNTING HOLE





TOLERANCES ARE ±0.03in. [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

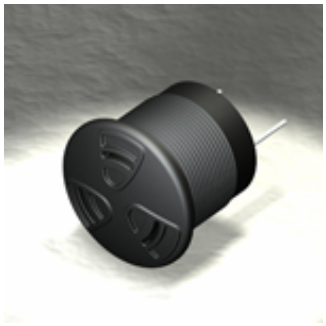
Revision: 1.20

Copyright © 2019 Floyd Bell Inc.

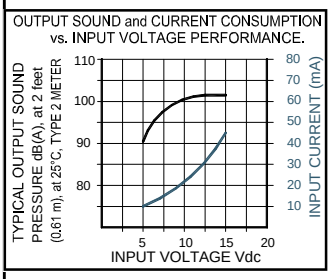
All specifications subject to change without notice.

TXO-86-515-P

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



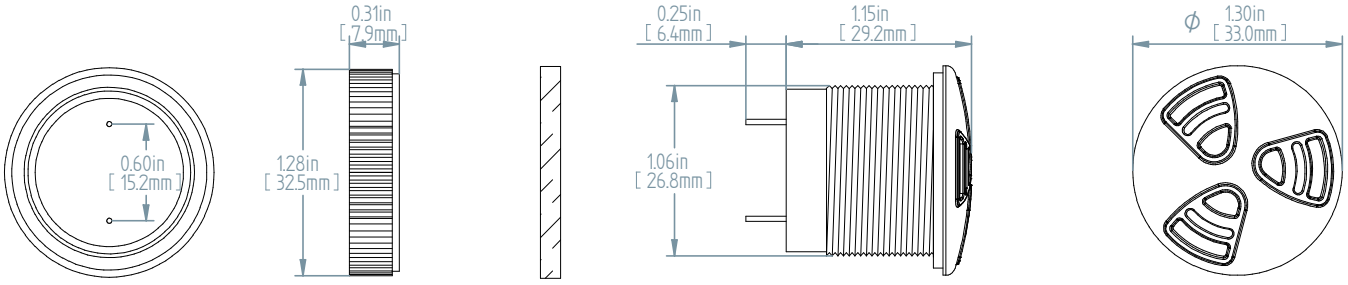
The Turbo TXO-86-515-P is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Whoop Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

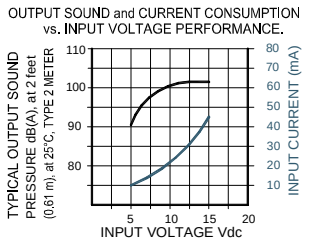
All specifications subject to change without notice.

TXO-86-515-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



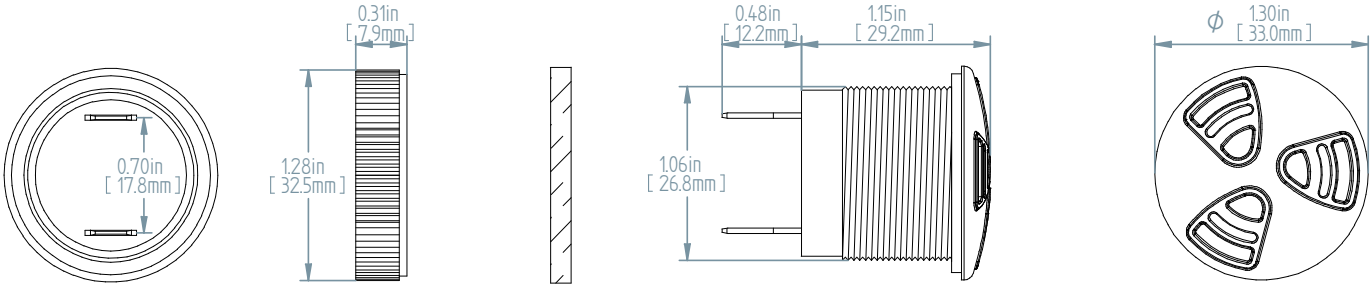
The Turbo TXO-86-515-Q is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Whoop Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

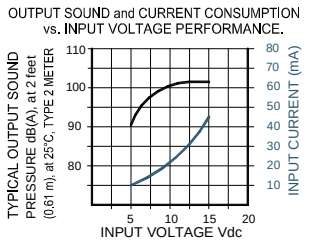
All specifications subject to change without notice.

TXO-86-515-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

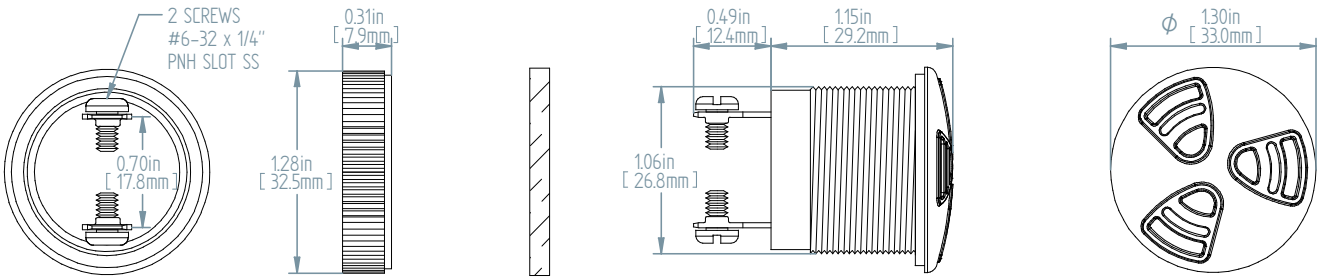


The Turbo TXO-86-515-S is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Whoop Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

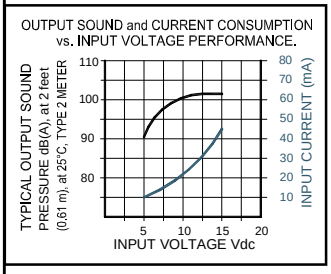
All specifications subject to change without notice.

TXO-86-515-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



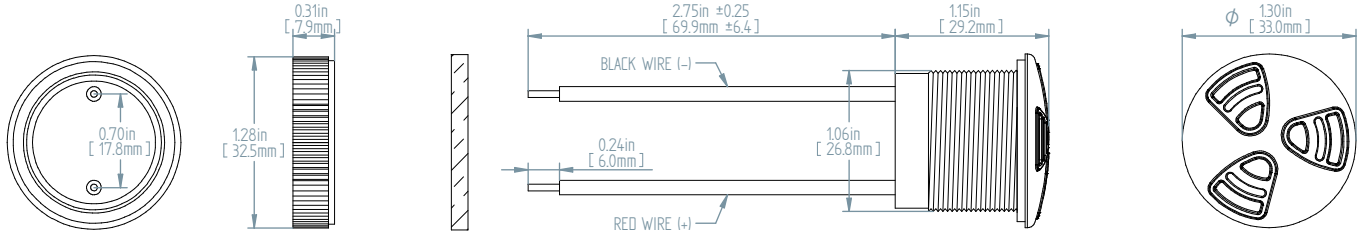
The Turbo TXO-86-515-W is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Whoop Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

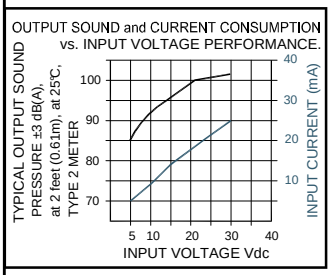
All specifications subject to change without notice.

TXO-86-530-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXO-86-530-Q is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

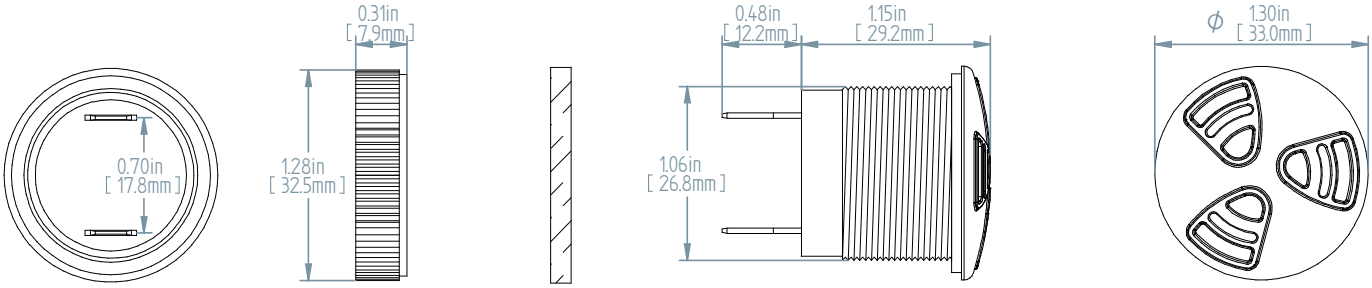
SPECIFICATIONS

Operating Mode:	Extra Loud Whoop Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

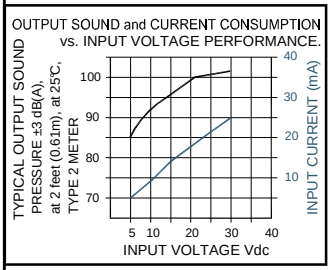
All specifications subject to change without notice.

TXO-86-530-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXO-86-530-S is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

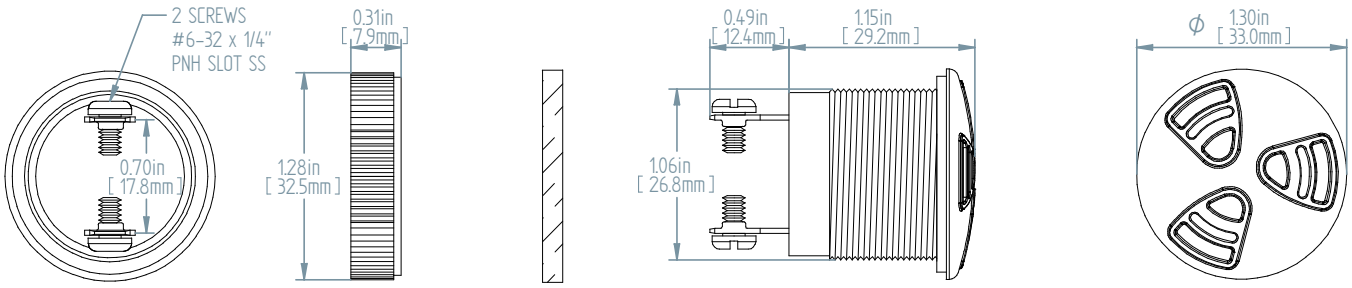
SPECIFICATIONS

Operating Mode:	Extra Loud Whoop Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

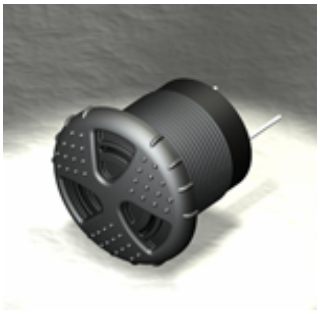
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

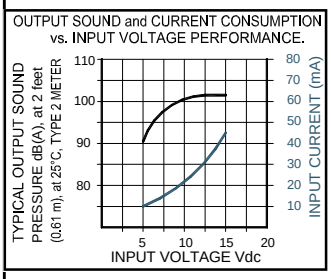
All specifications subject to change without notice.

TXO-V86-515-P

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



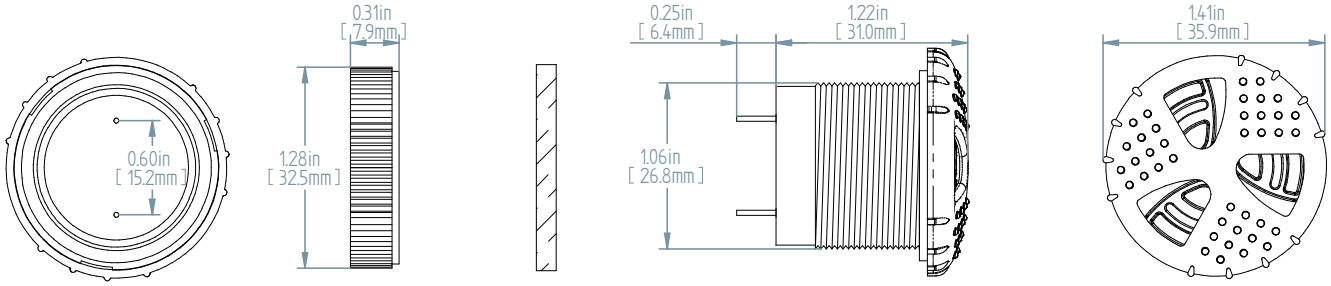
The Turbo TXO-V86-515-P is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Whoop Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

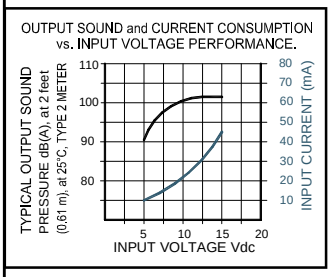
All specifications subject to change without notice.

TXO-V86-515-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



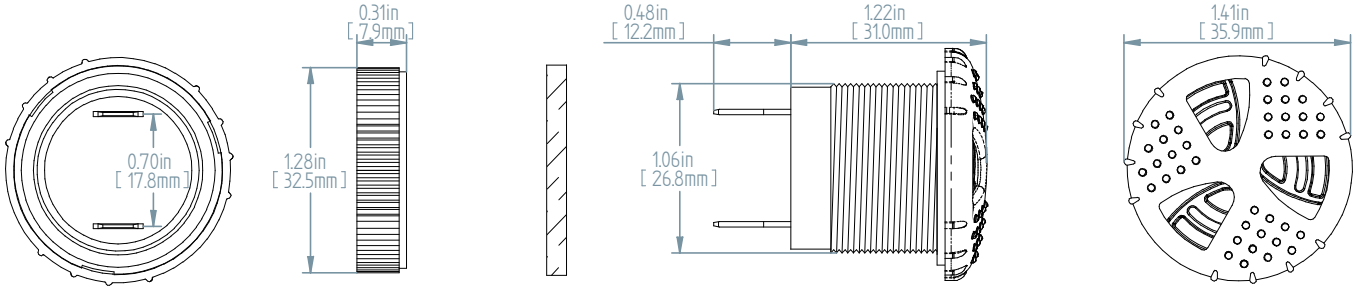
The Turbo TXO-V86-515-Q is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Whoop Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

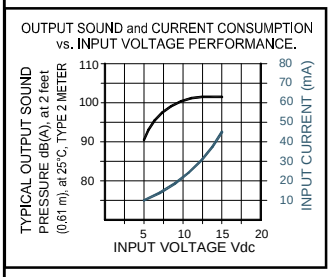
All specifications subject to change without notice.

TXO-V86-515-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

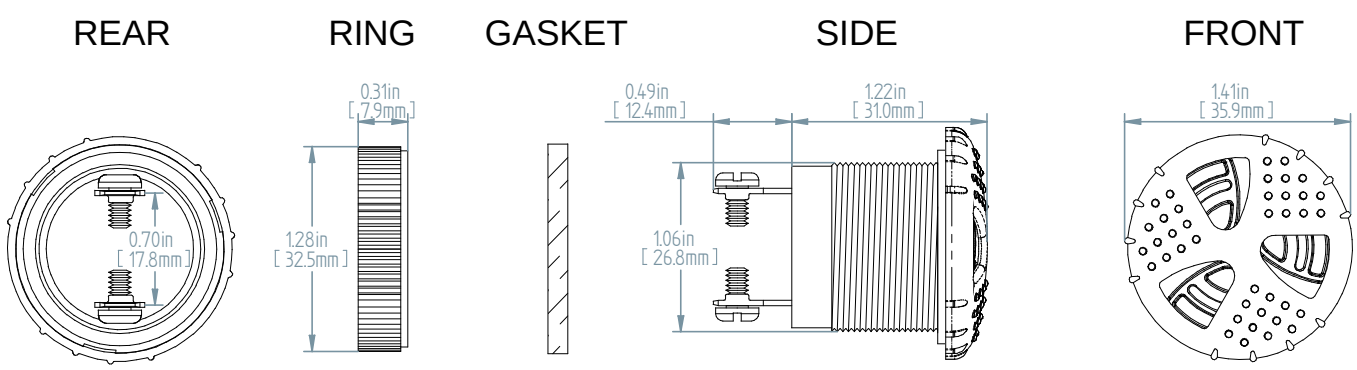


The Turbo TXO-V86-515-S is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Whoop Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

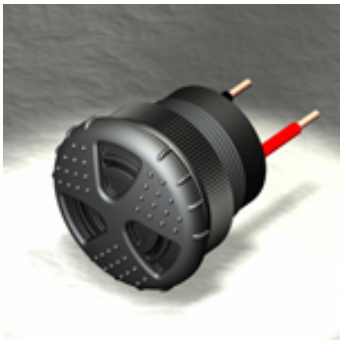
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

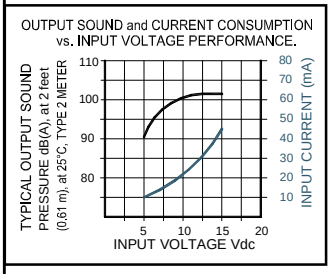
All specifications subject to change without notice.

TXO-V86-515-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



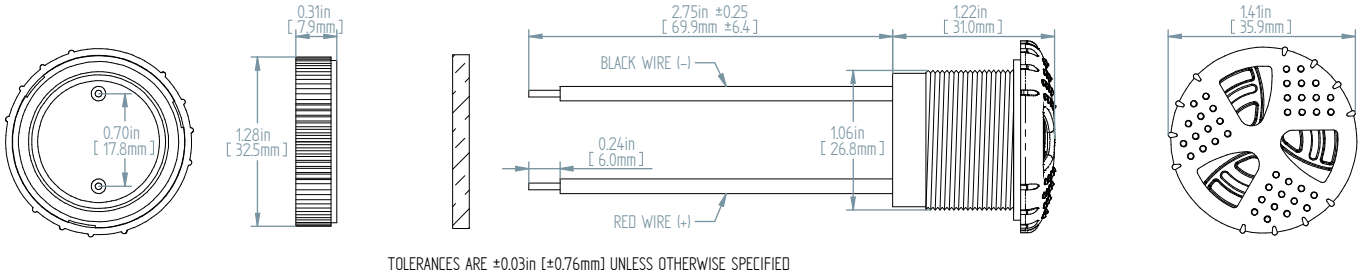
The Turbo TXO-V86-515-W is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Whoop Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

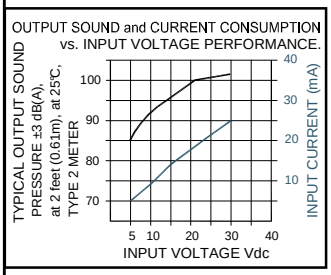
All specifications subject to change without notice.

TXO-V86-530-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXO-V86-530-Q is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

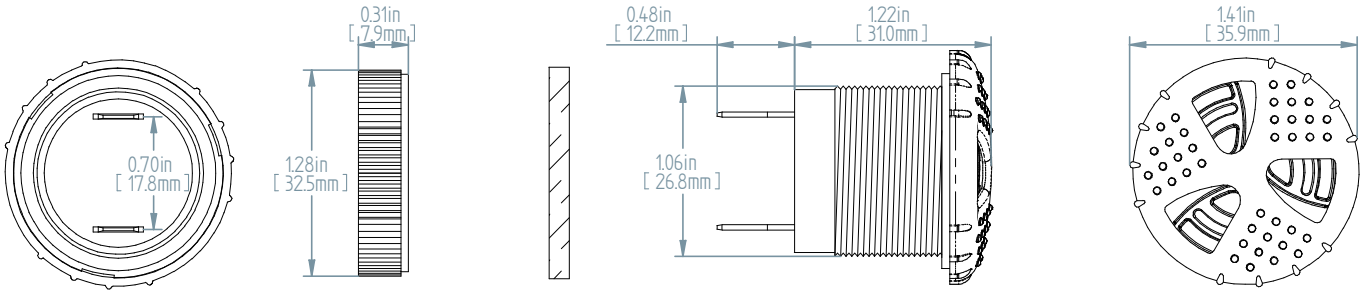
SPECIFICATIONS

Operating Mode:	Extra Loud Whoop Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

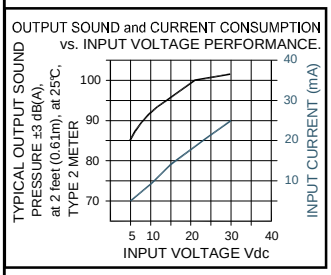
All specifications subject to change without notice.

TXO-V86-530-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXO-V86-530-S is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

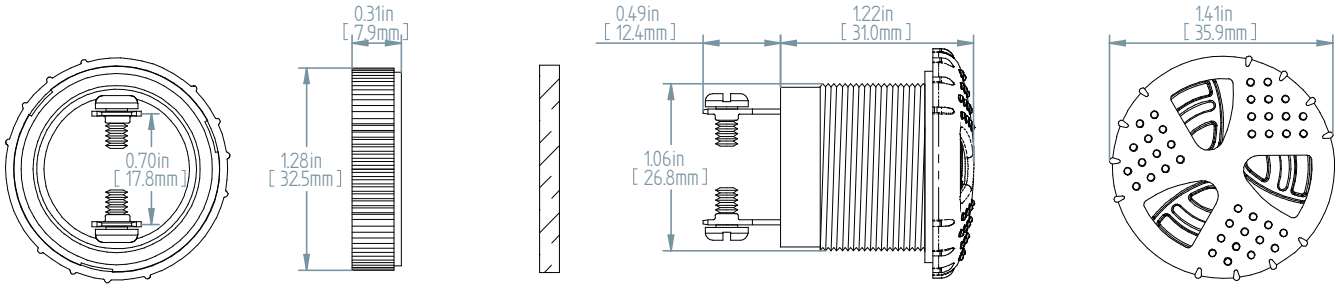
SPECIFICATIONS

Operating Mode:	Extra Loud Whoop Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

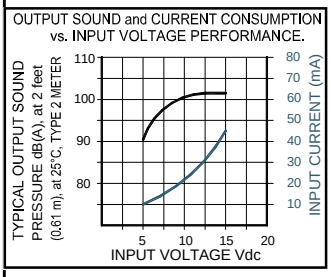
All specifications subject to change without notice.

TXS-86-515-P

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



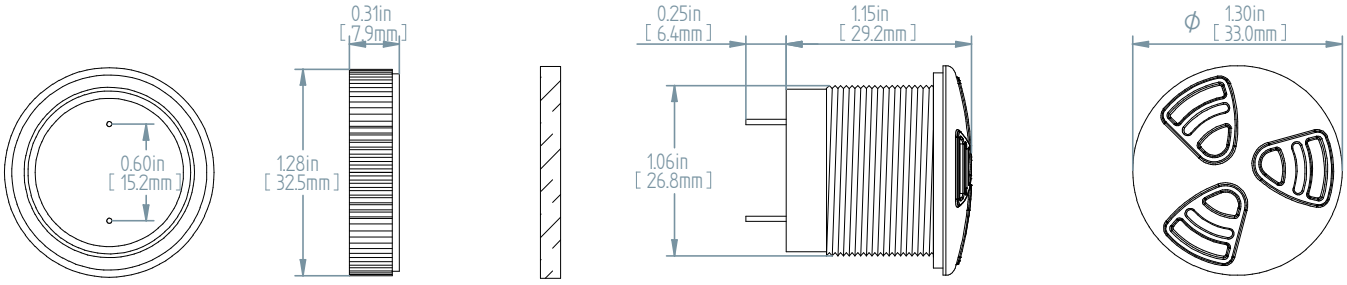
The Turbo TXS-86-515-P is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Siren Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

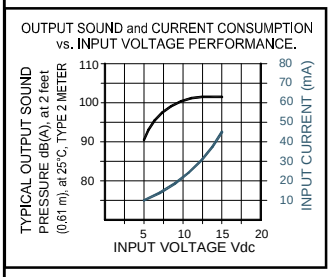
All specifications subject to change without notice.

TXS-86-515-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

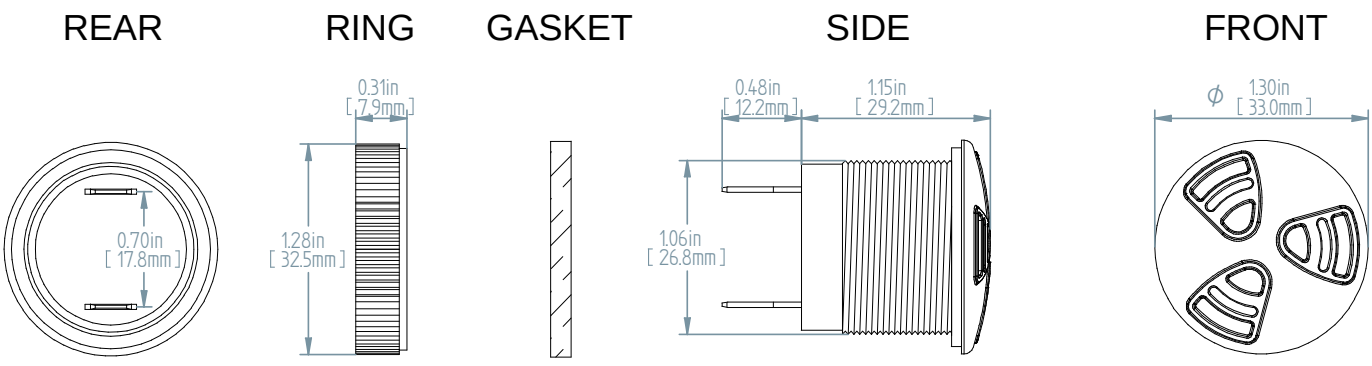


The Turbo TXS-86-515-Q is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Siren Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

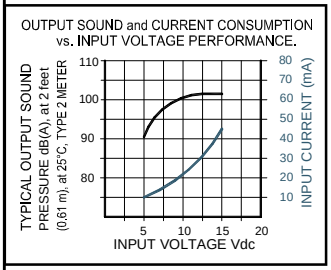
All specifications subject to change without notice.

TXS-86-515-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

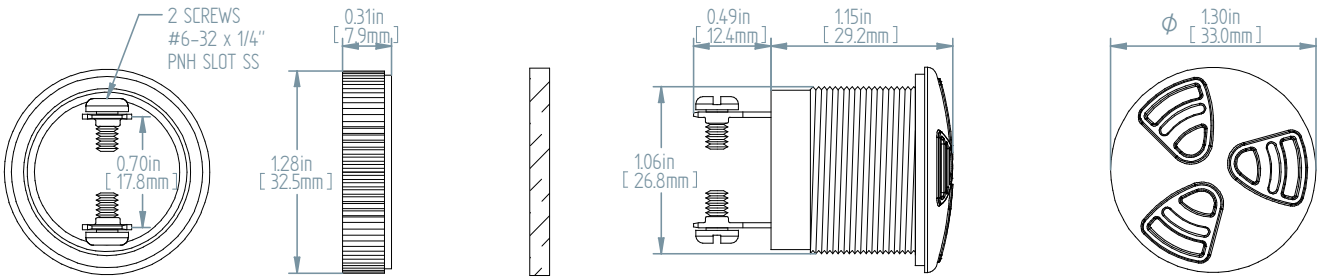


The Turbo TXS-86-515-S is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Siren Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

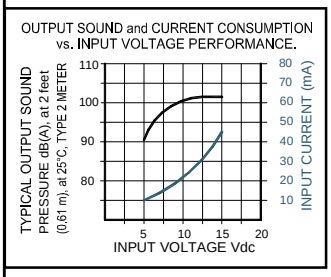
All specifications subject to change without notice.

TXS-86-515-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



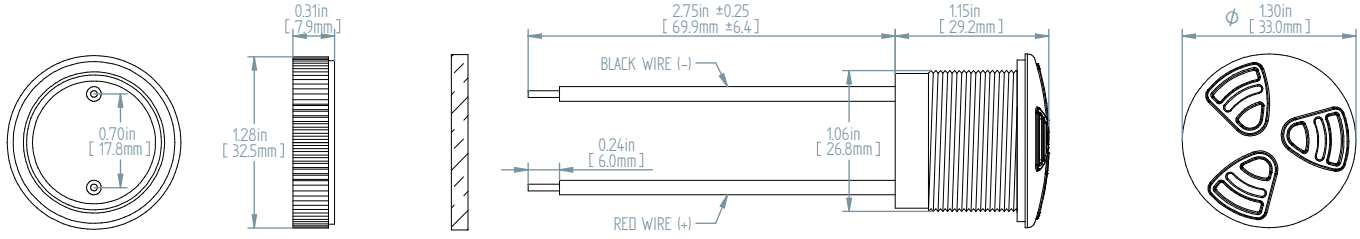
The Turbo TXS-86-515-W is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Siren Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

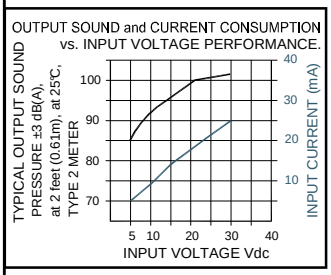
All specifications subject to change without notice.

TXS-86-530-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXS-86-530-Q is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

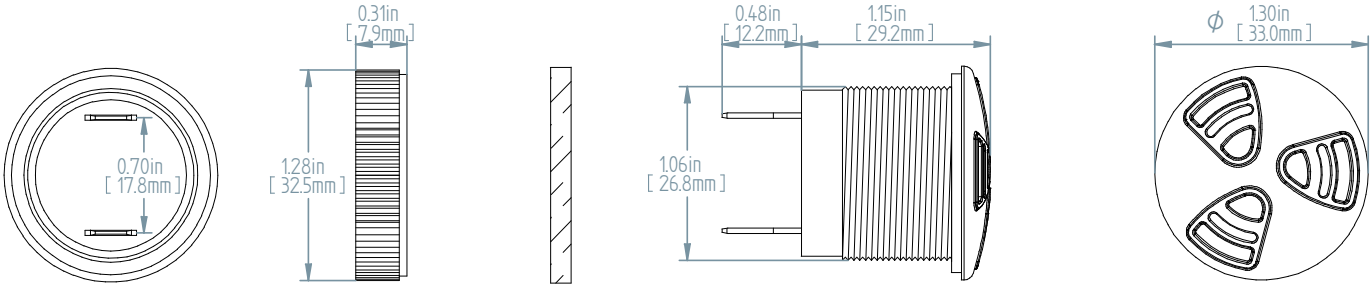
SPECIFICATIONS

Operating Mode:	Extra Loud Siren Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

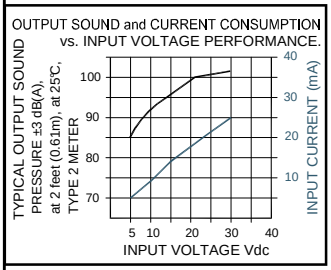
All specifications subject to change without notice.

TXS-86-530-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXS-86-530-S is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

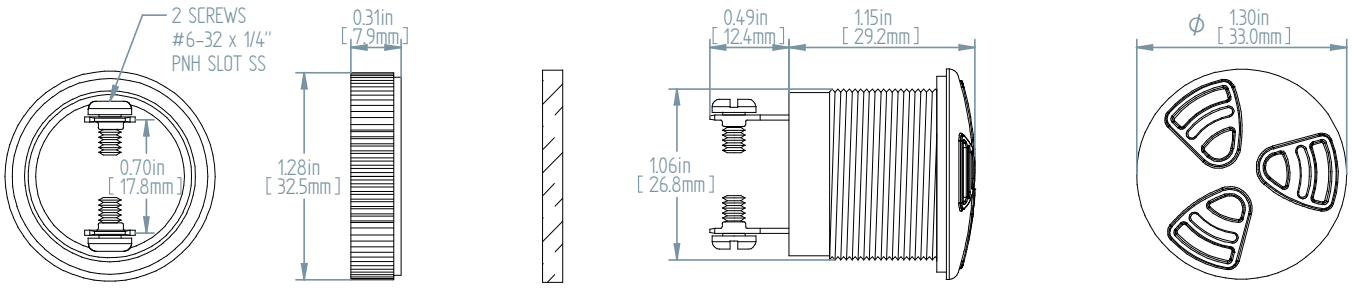
SPECIFICATIONS

Operating Mode:	Extra Loud Siren Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

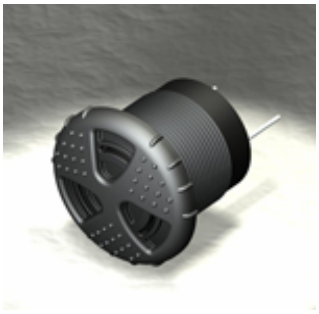
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

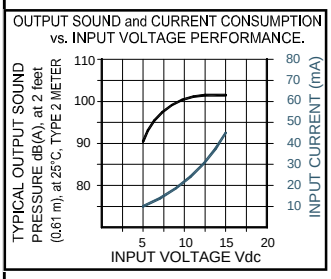
All specifications subject to change without notice.

TXS-V86-515-P

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



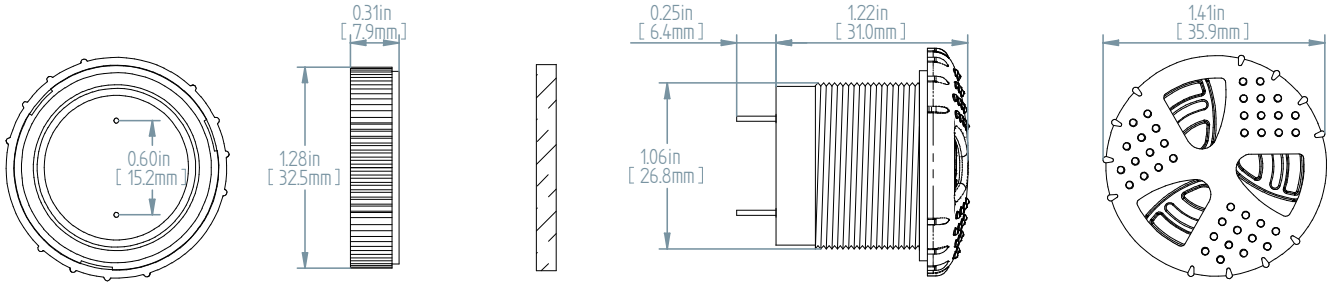
The Turbo TXS-V86-515-P is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Siren Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

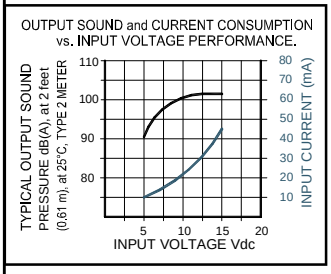
All specifications subject to change without notice.

TXS-V86-515-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



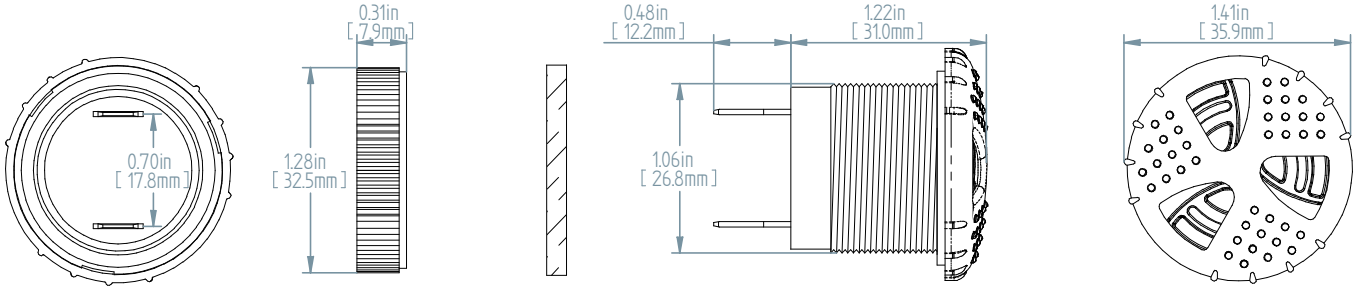
The Turbo TXS-V86-515-Q is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Siren Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

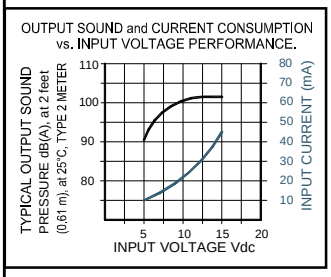
All specifications subject to change without notice.

TXS-V86-515-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

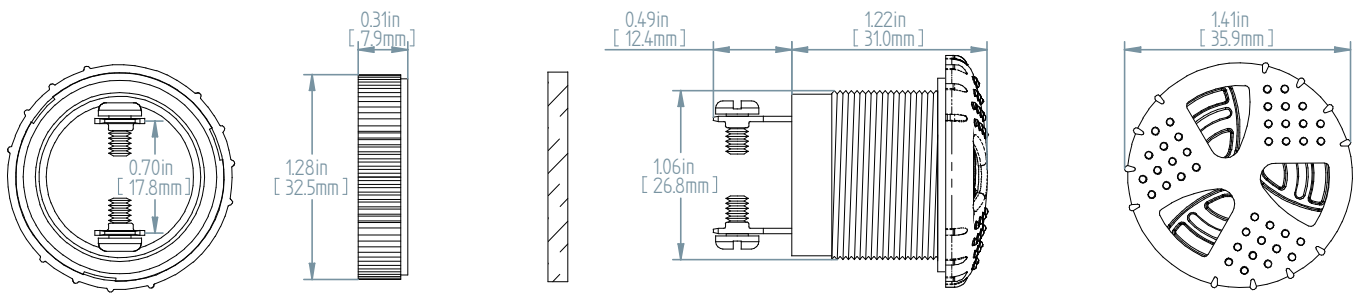


The Turbo TXS-V86-515-S is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Siren Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

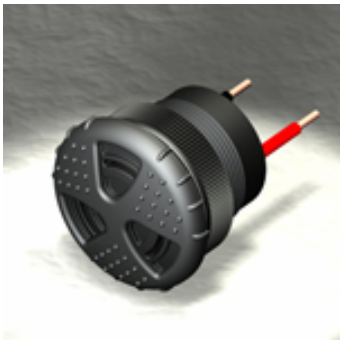
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

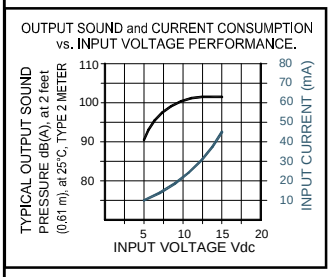
All specifications subject to change without notice.

TXS-V86-515-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



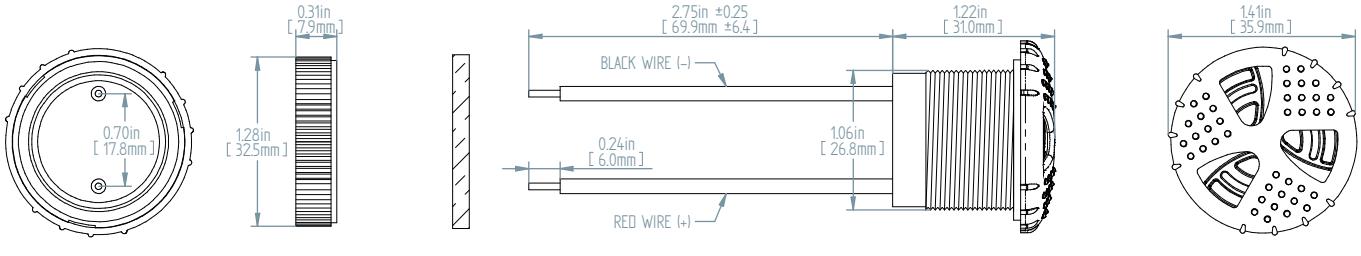
The Turbo TXS-V86-515-W is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Siren Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

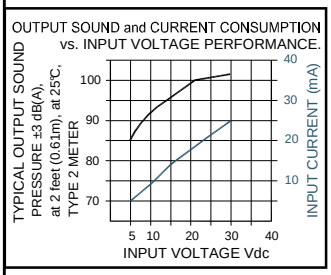
All specifications subject to change without notice.

TXS-V86-530-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXS-V86-530-Q is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

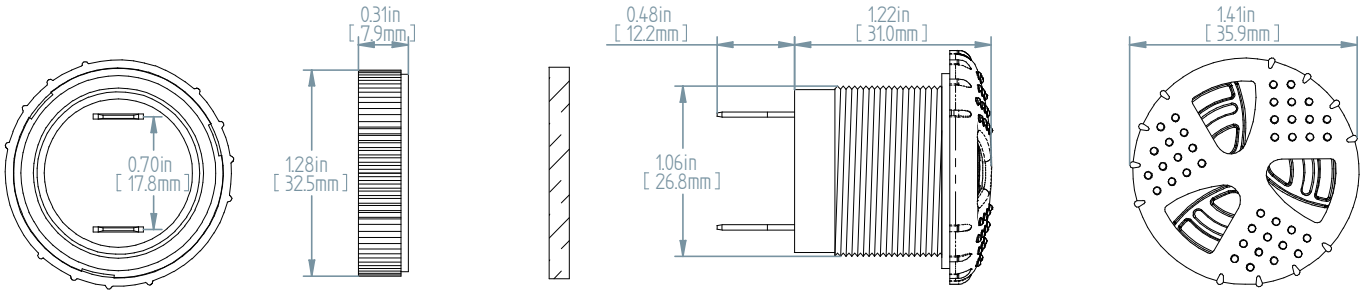
SPECIFICATIONS

Operating Mode:	Extra Loud Siren Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

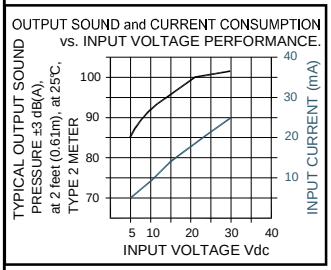
All specifications subject to change without notice.

TXS-V86-530-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXS-V86-530-S is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

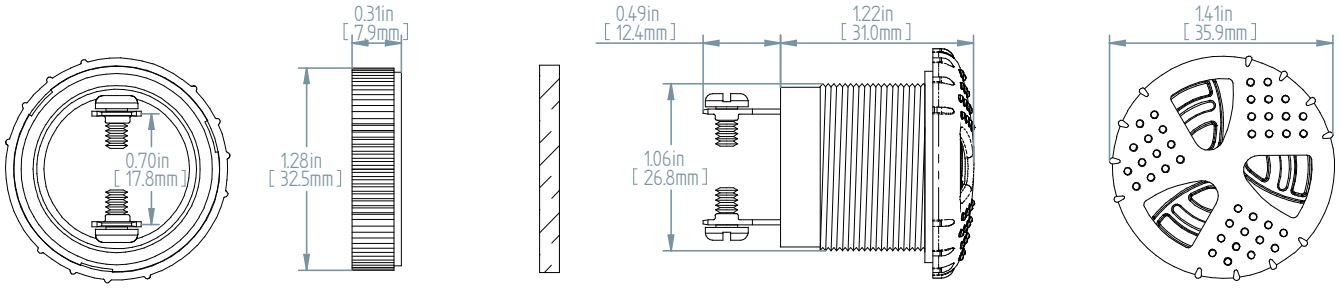
SPECIFICATIONS

Operating Mode:	Extra Loud Siren Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

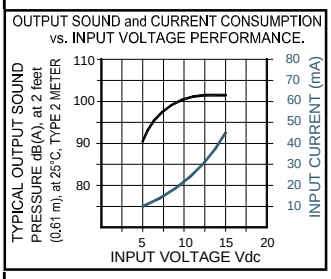
All specifications subject to change without notice.

TXT-86-515-P

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



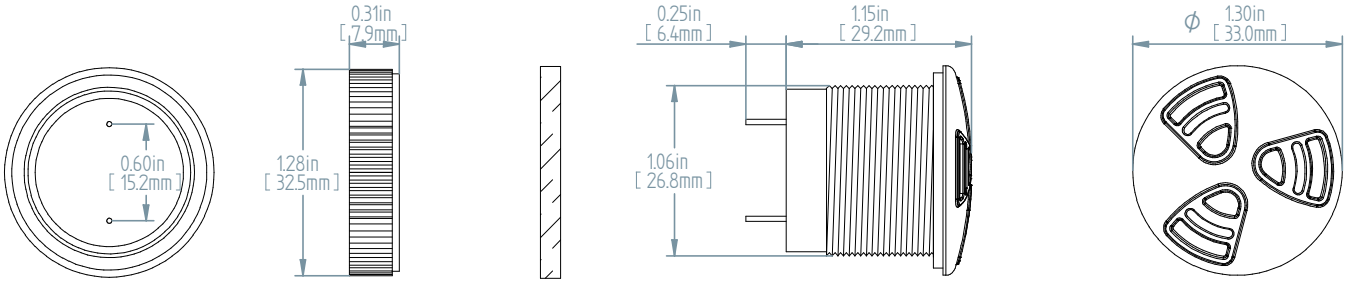
The Turbo TXT-86-515-P is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Staccato Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

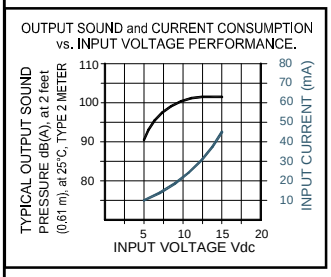
All specifications subject to change without notice.

TXT-86-515-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



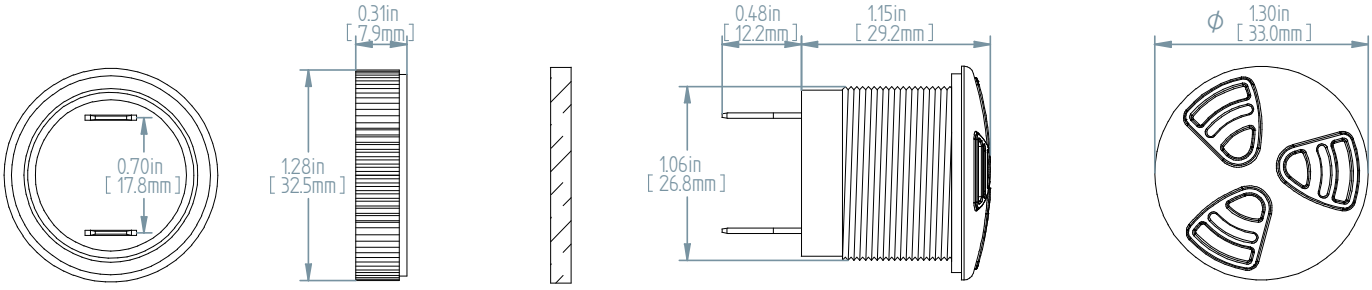
The Turbo TXT-86-515-Q is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Staccato Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

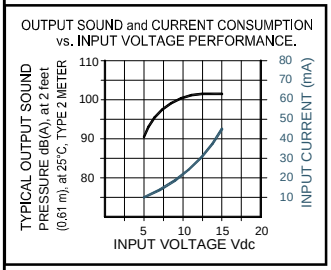
All specifications subject to change without notice.

TXT-86-515-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

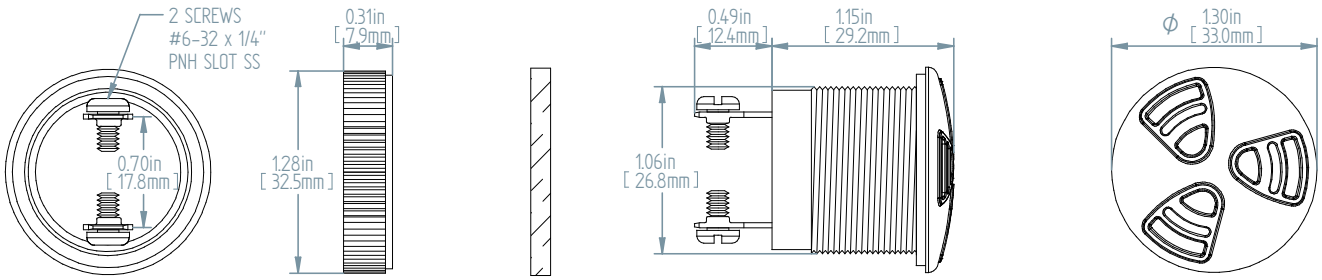


The Turbo TXT-86-515-S is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Staccato Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

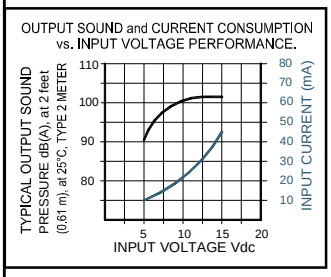
All specifications subject to change without notice.

TXT-86-515-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



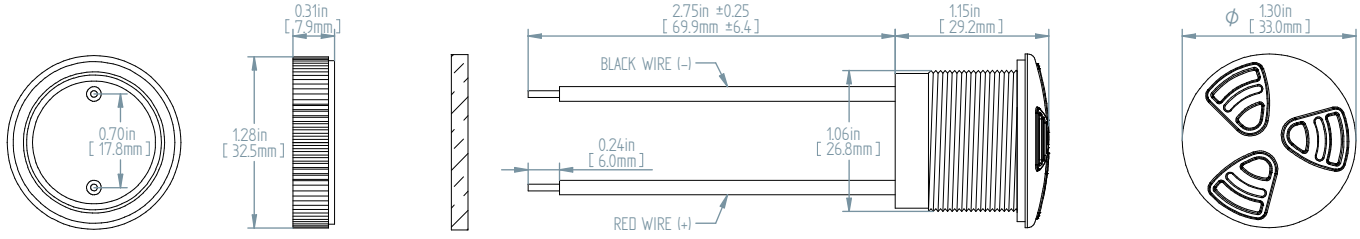
The Turbo TXT-86-515-W is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Staccato Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

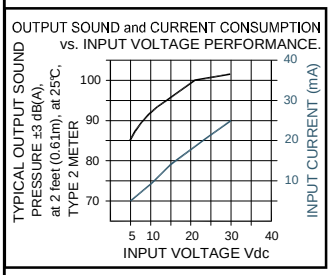
All specifications subject to change without notice.

TXT-86-530-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXT-86-530-Q is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

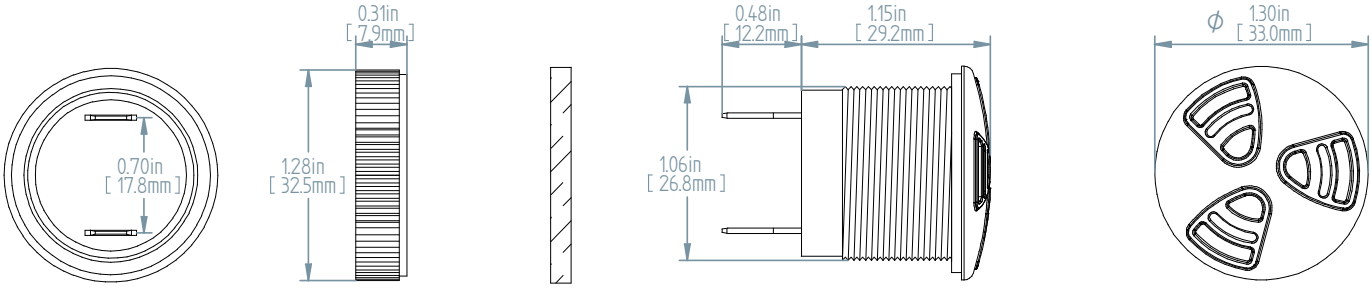
SPECIFICATIONS

Operating Mode:	Extra Loud Staccato Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

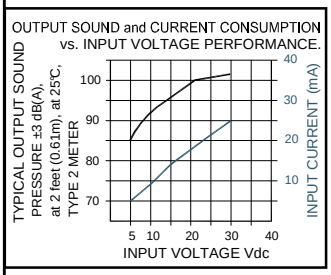
All specifications subject to change without notice.

TXT-86-530-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXT-86-530-S is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

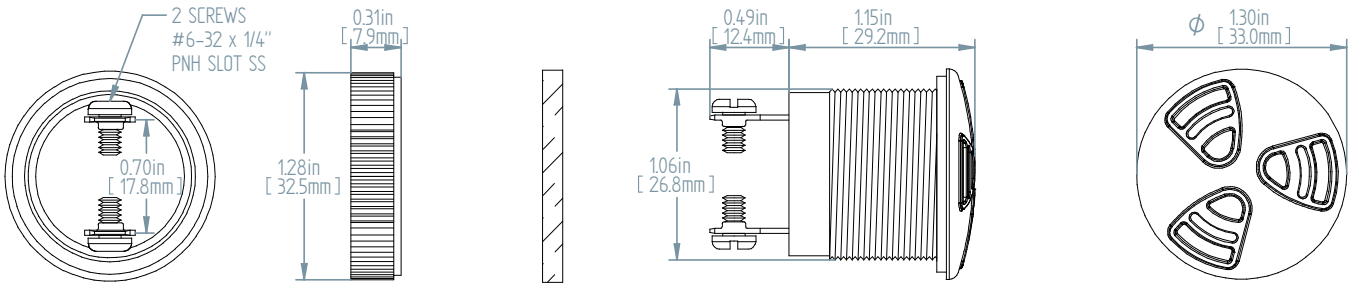
SPECIFICATIONS

Operating Mode:	Extra Loud Staccato Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

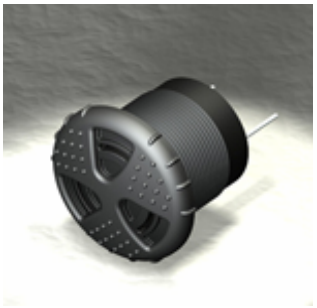
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

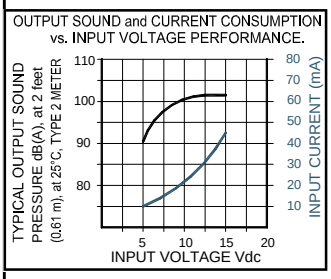
All specifications subject to change without notice.

TXT-V86-515-P

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



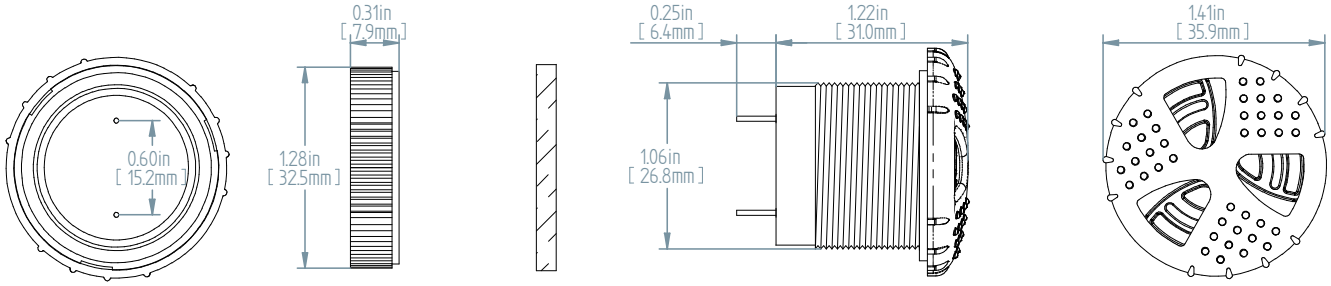
The Turbo TXT-V86-515-P is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume

SPECIFICATIONS

Operating Mode:	Extra Loud Staccato Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

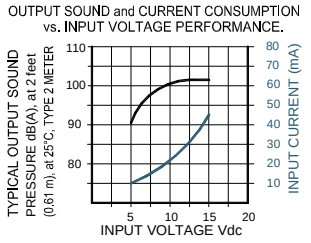
All specifications subject to change without notice.

TXT-V86-515-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



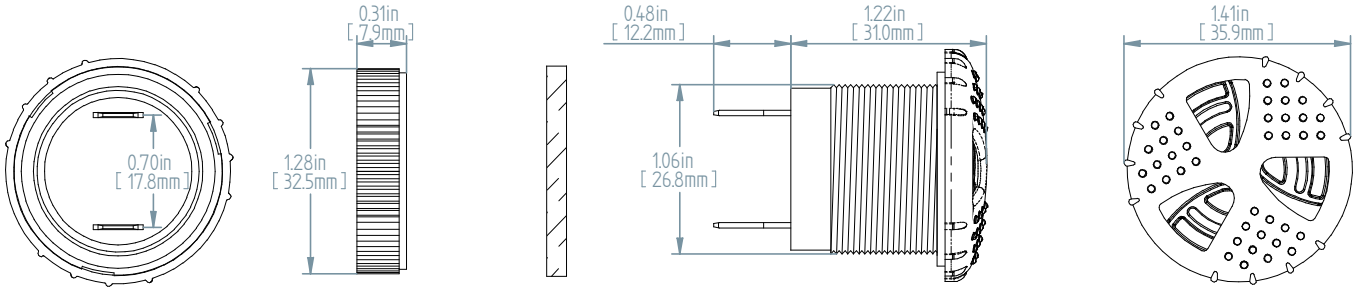
The Turbo TXT-V86-515-Q is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Staccato Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

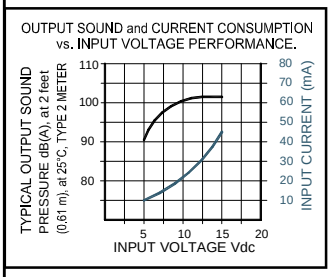
All specifications subject to change without notice.

TXT-V86-515-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



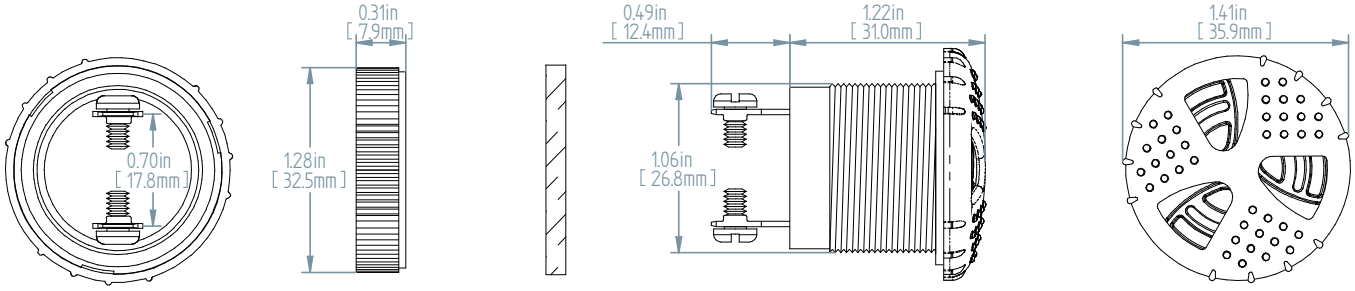
The Turbo TXT-V86-515-S is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Staccato Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

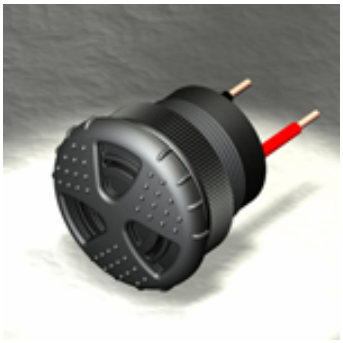
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

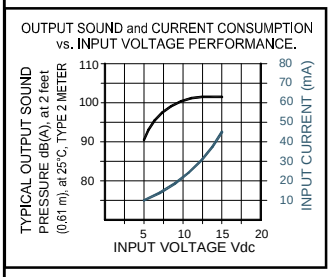
All specifications subject to change without notice.

TXT-V86-515-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



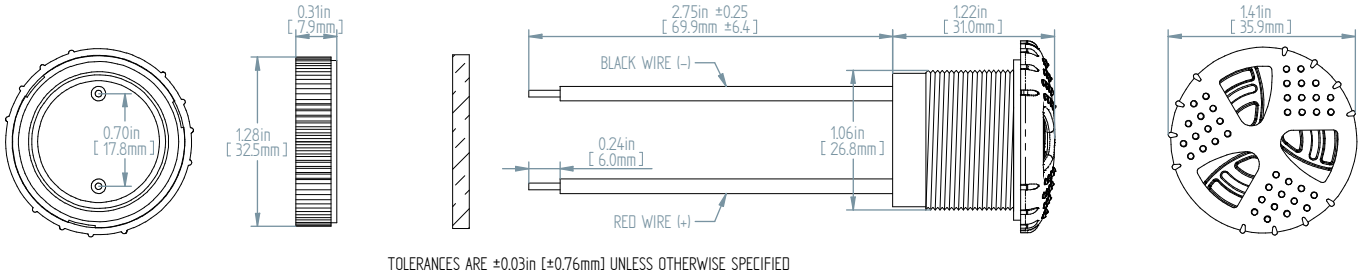
The Turbo TXT-V86-515-W is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Staccato Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

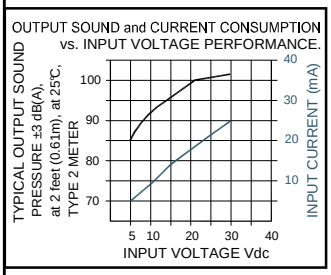
All specifications subject to change without notice.

TXT-V86-530-Q

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXT-V86-530-Q is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

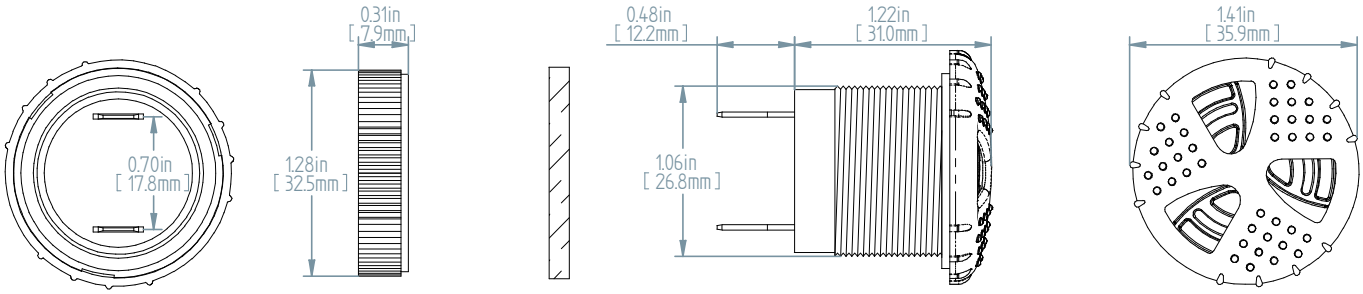
SPECIFICATIONS

Operating Mode:	Extra Loud Staccato Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

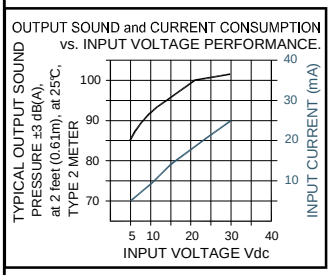
All specifications subject to change without notice.

TXT-V86-530-S

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXT-V86-530-S is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

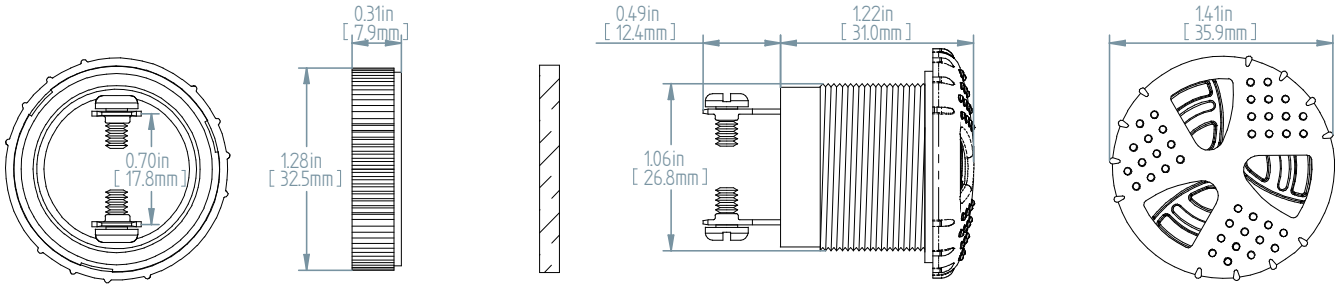
SPECIFICATIONS

Operating Mode:	Extra Loud Staccato Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

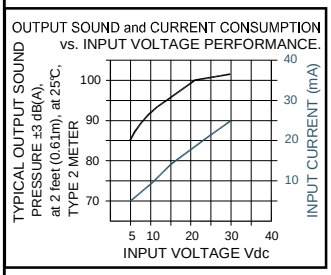
All specifications subject to change without notice.

TXT-V86-530-W

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXT-V86-530-W is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

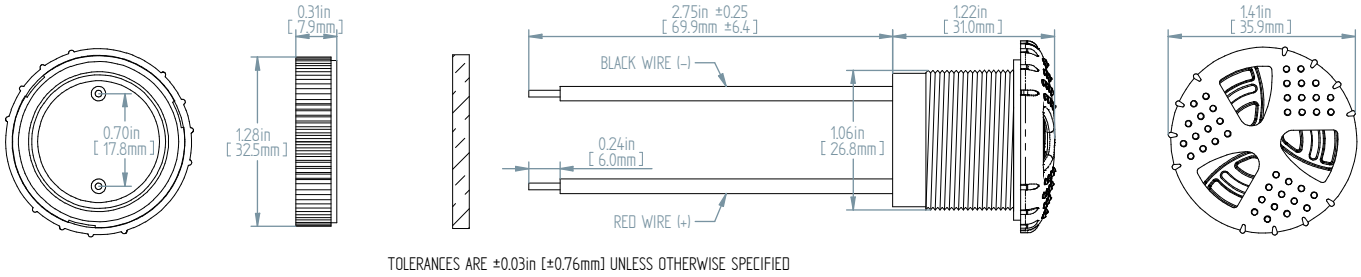
SPECIFICATIONS

Operating Mode:	Extra Loud Staccato Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	24 Vdc
Operating Frequency:	2900±250 Hz. 8±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 1.14

Copyright © 2014 Floyd Bell Inc.

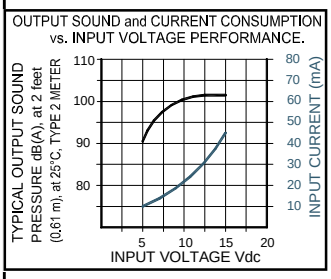
All specifications subject to change without notice.

TXW-86-515-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



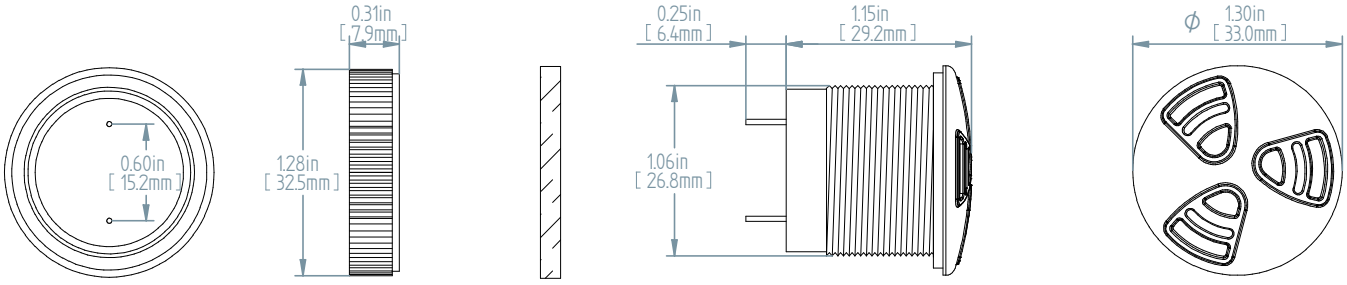
The Turbo TXW-86-515-P(F) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

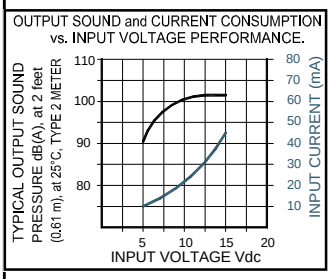
All specifications subject to change without notice.

TXW-86-515-P(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



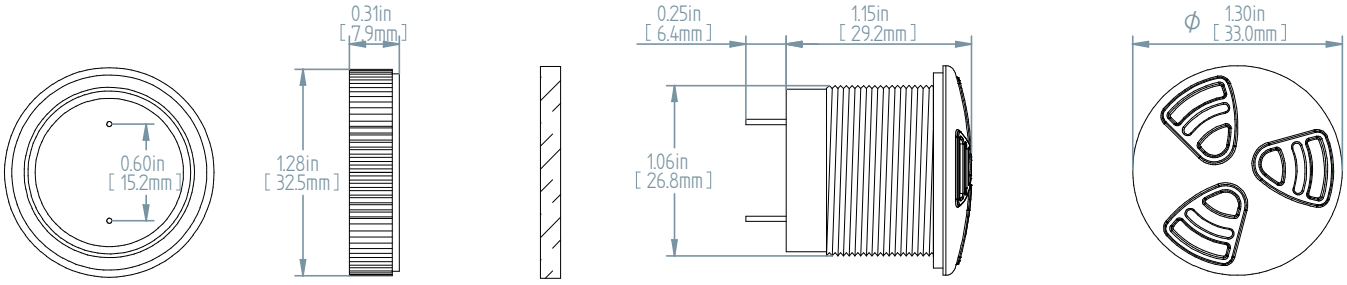
The Turbo TXW-86-515-P(S) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

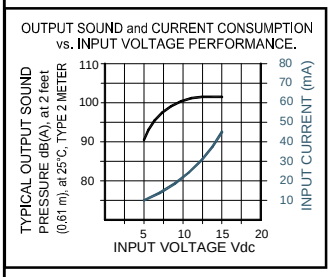
All specifications subject to change without notice.

TXW-86-515-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



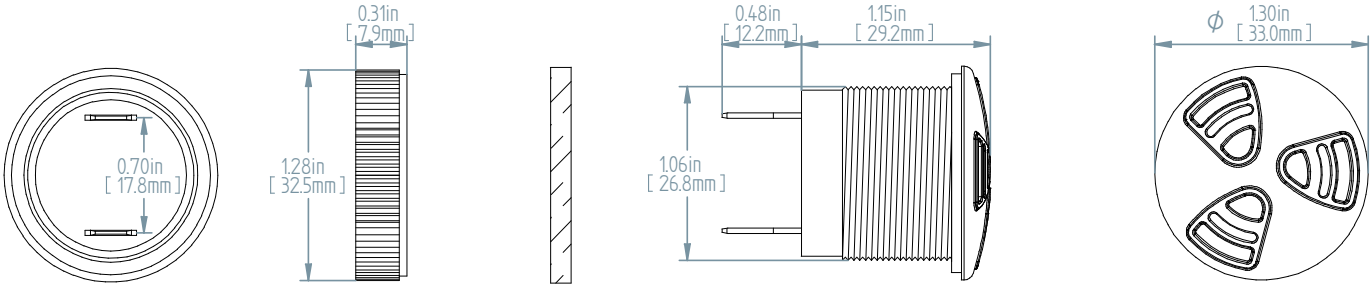
The Turbo TXW-86-515-Q(F) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

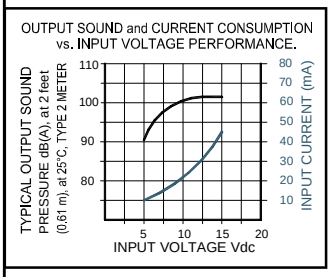
All specifications subject to change without notice.

TXW-86-515-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



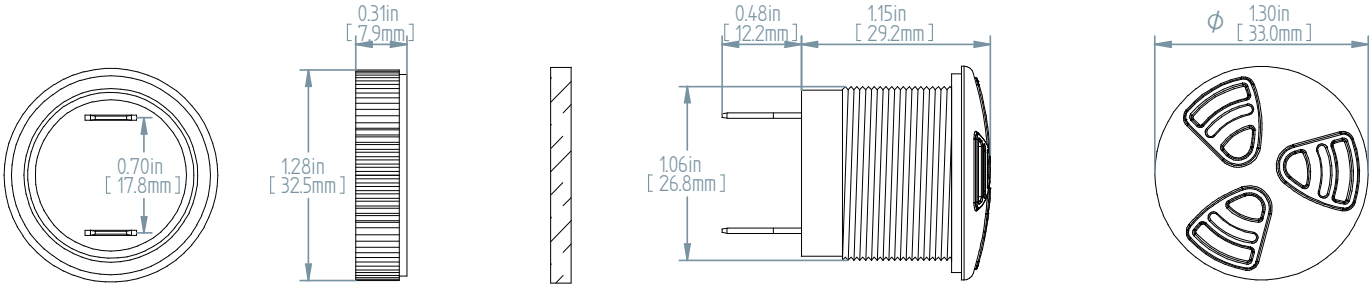
The Turbo TXW-86-515-Q(S) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

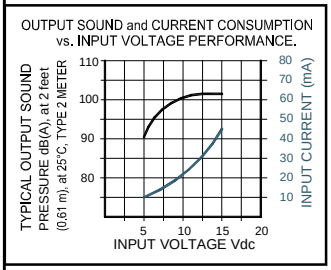
All specifications subject to change without notice.

TXW-86-515-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



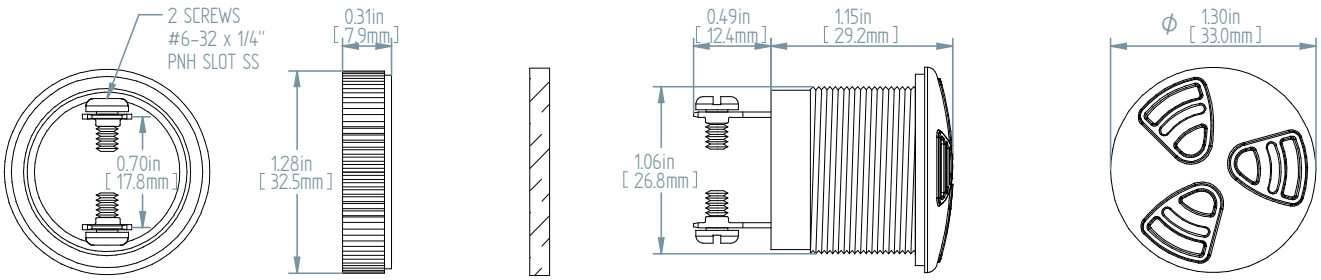
The Turbo TXW-86-515-S(F) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	Low Frequency— 2600±250 Hz High Frequency— 2900±250 Hz 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

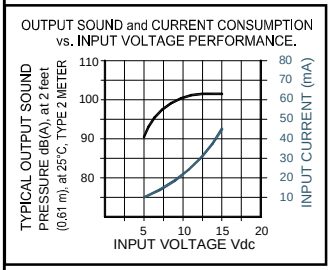
All specifications subject to change without notice.

TXW-86-515-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



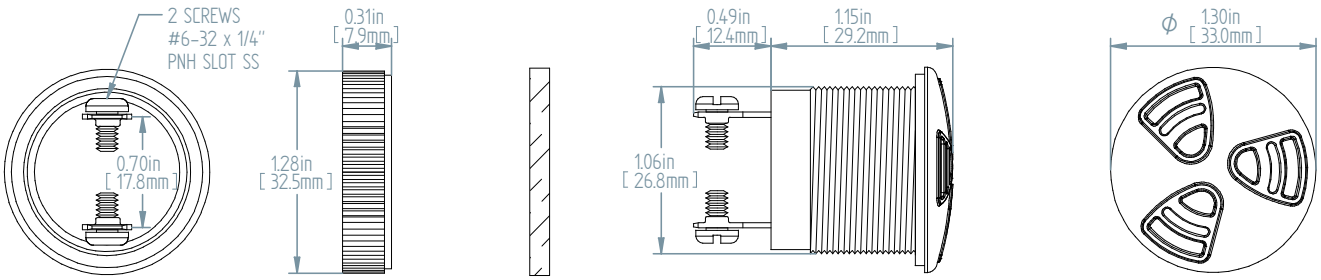
The Turbo TXW-86-515-S(S) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

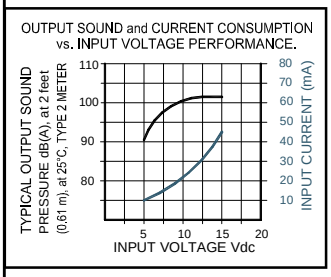
All specifications subject to change without notice.

TXW-86-515-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



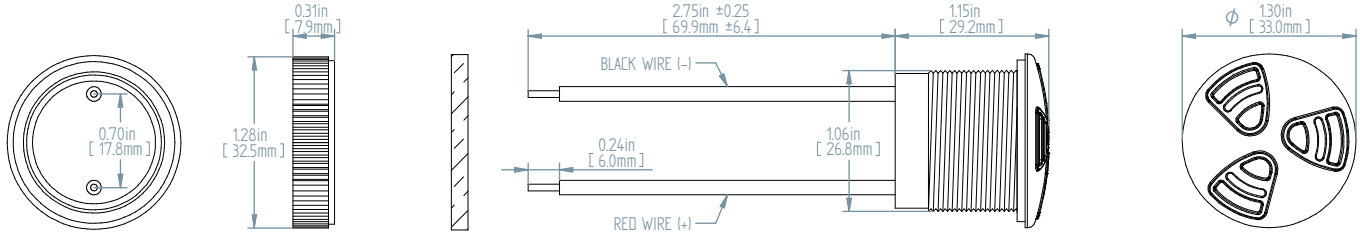
The Turbo TXW-86-515-W(F) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

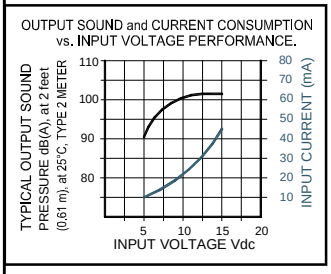
All specifications subject to change without notice.

TXW-86-515-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



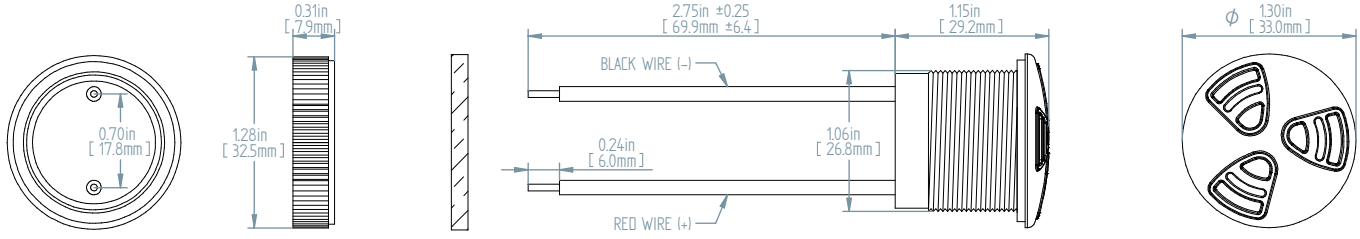
The Turbo TXW-86-515-W(S) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

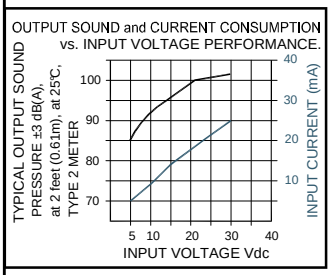
All specifications subject to change without notice.

TXW-86-530-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXW-86-530-Q(F) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

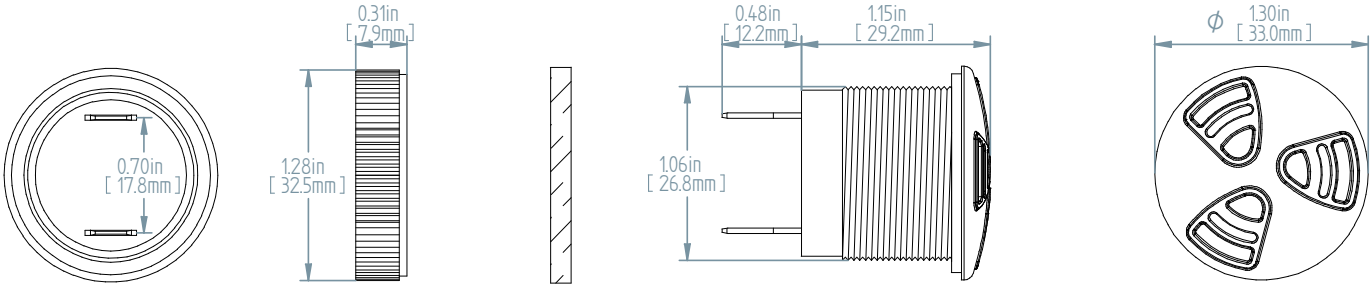
SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

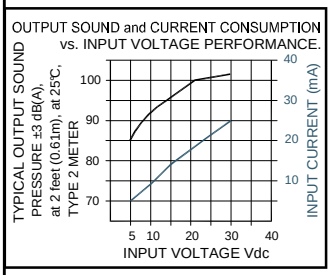
All specifications subject to change without notice.

TXW-86-530-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXW-86-530-Q(S) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

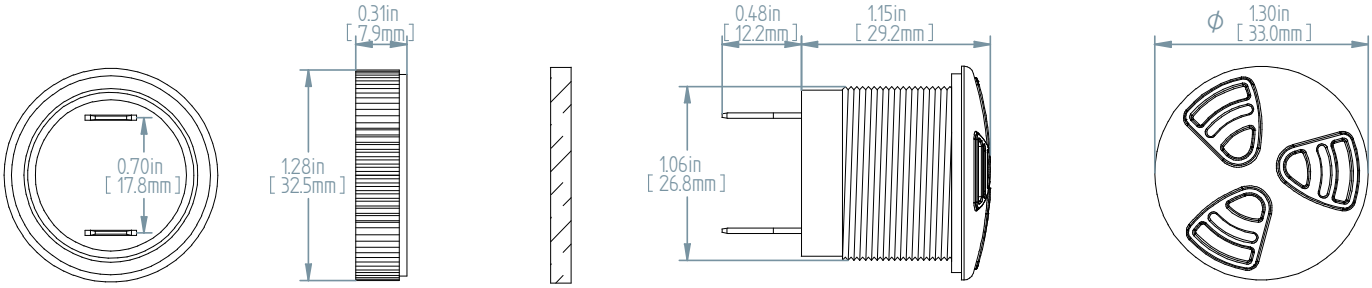
SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

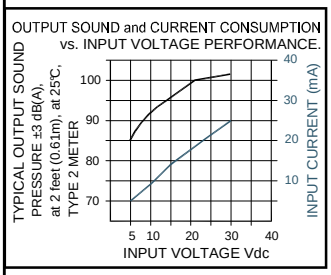
All specifications subject to change without notice.

TXW-86-530-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXW-86-530-S(F) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

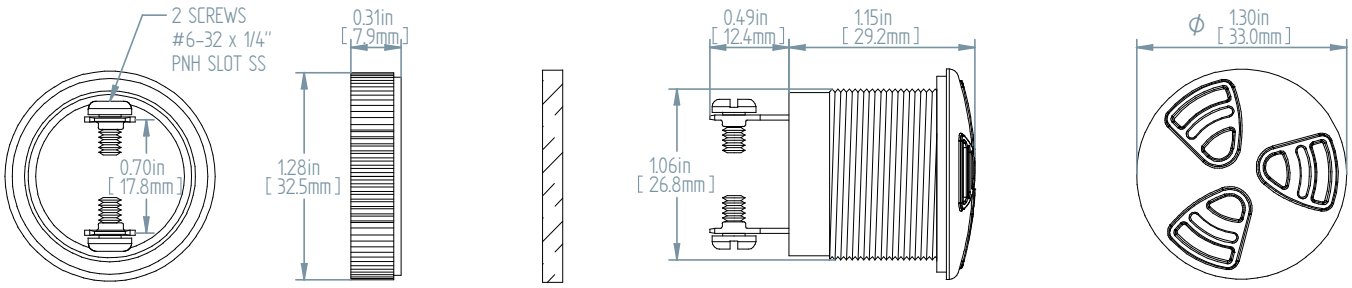
SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

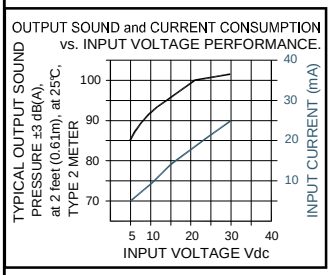
All specifications subject to change without notice.

TXW-86-530-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXW-86-530-S(S) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring.

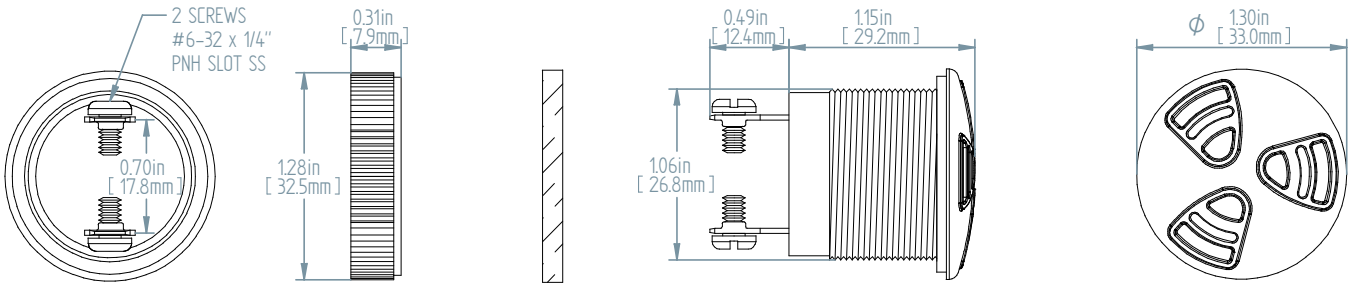
SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

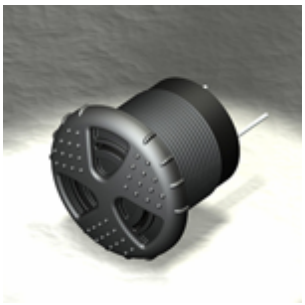
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

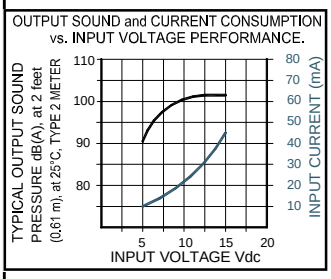
All specifications subject to change without notice.

TXW-V86-515-P(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



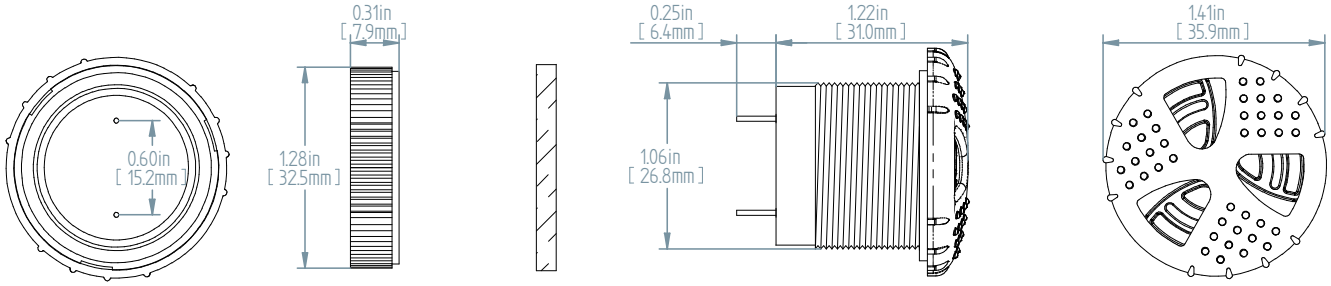
The Turbo TXW-V86-515-P(F) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

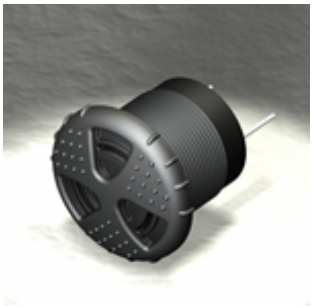
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

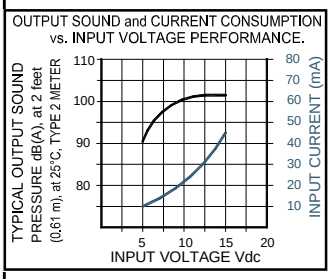
All specifications subject to change without notice.

TXW-V86-515-P(S)

Made in USA



- Patented Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



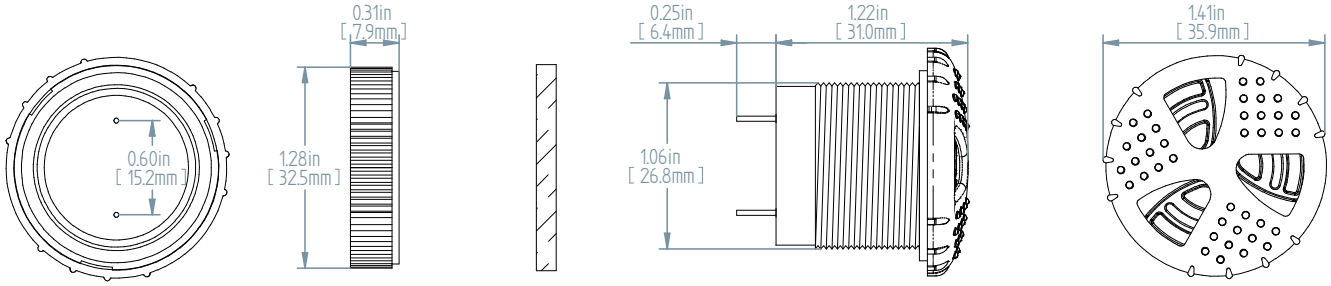
The Turbo TXW-V86-515-P(S) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

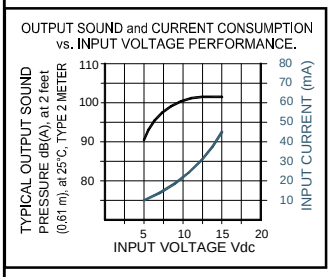
All specifications subject to change without notice.

TXW-V86-515-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology

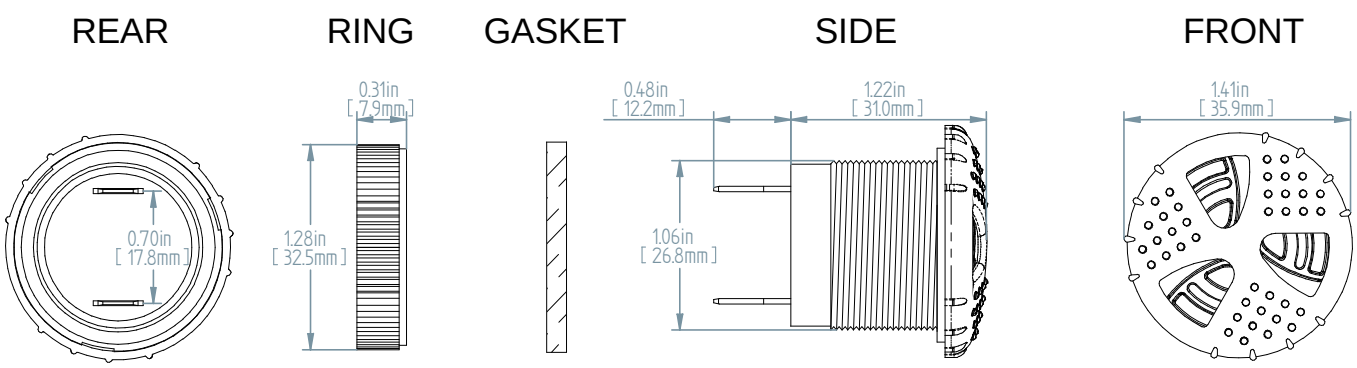


The Turbo TXW-V86-515-Q(F) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

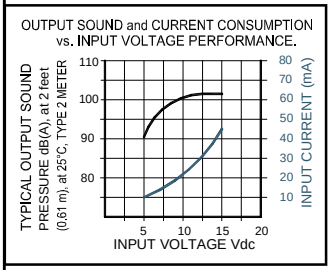
All specifications subject to change without notice.

TXW-V86-515-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



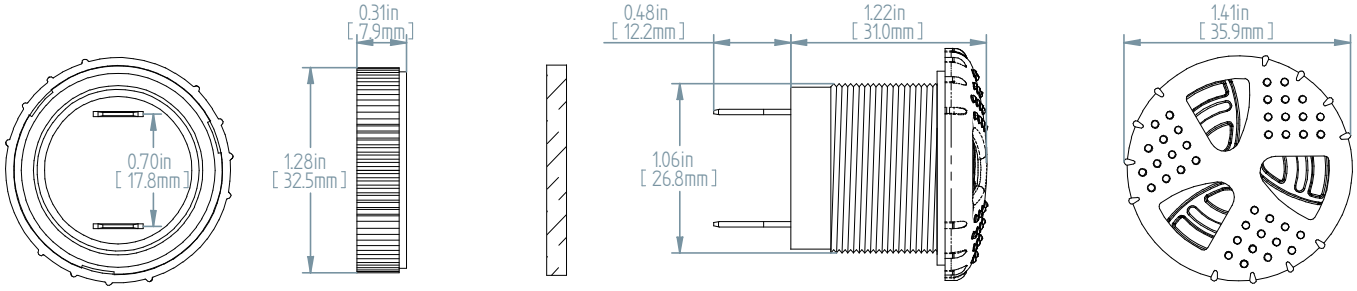
The Turbo TXW-V86-515-Q(S) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

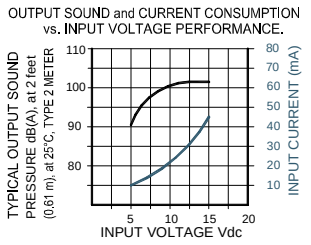
All specifications subject to change without notice.

TXW-V86-515-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



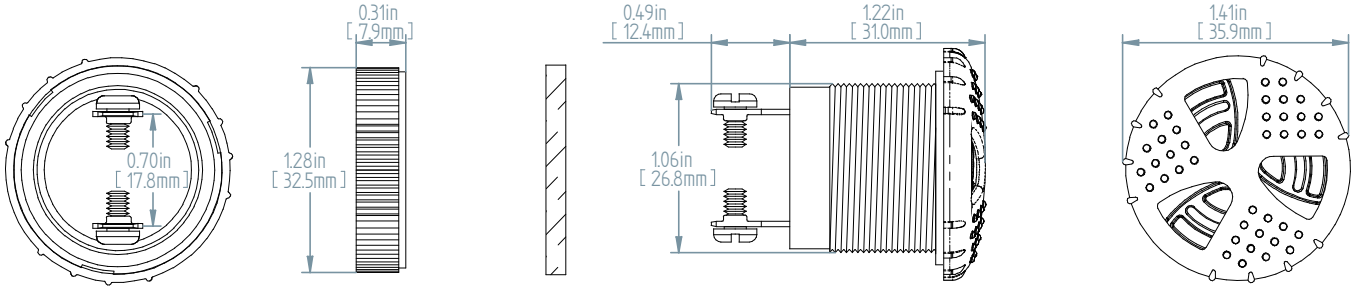
The Turbo TXW-V86-515-S(F) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

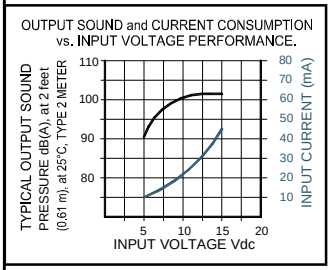
All specifications subject to change without notice.

TXW-V86-515-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



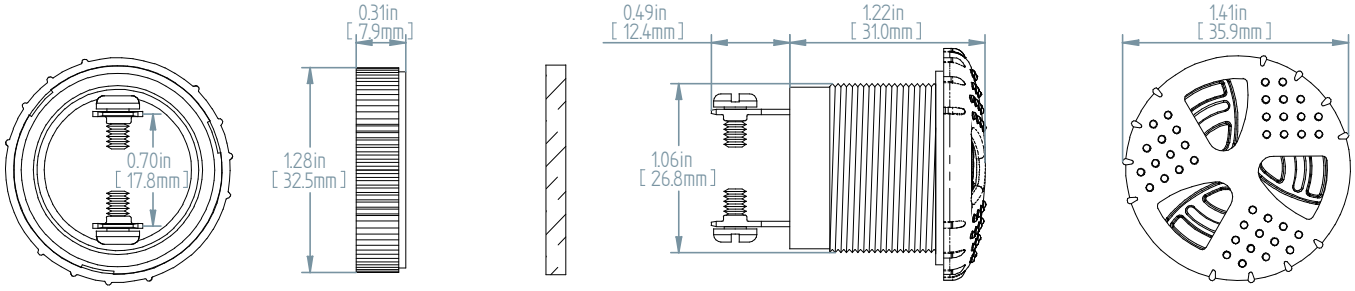
The Turbo TXW-V86-515-S(S) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

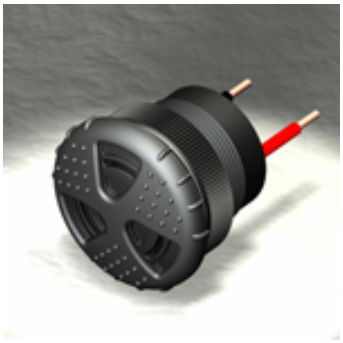
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

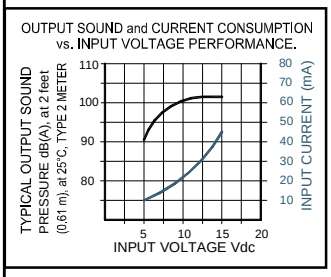
All specifications subject to change without notice.

TXW-V86-515-W(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



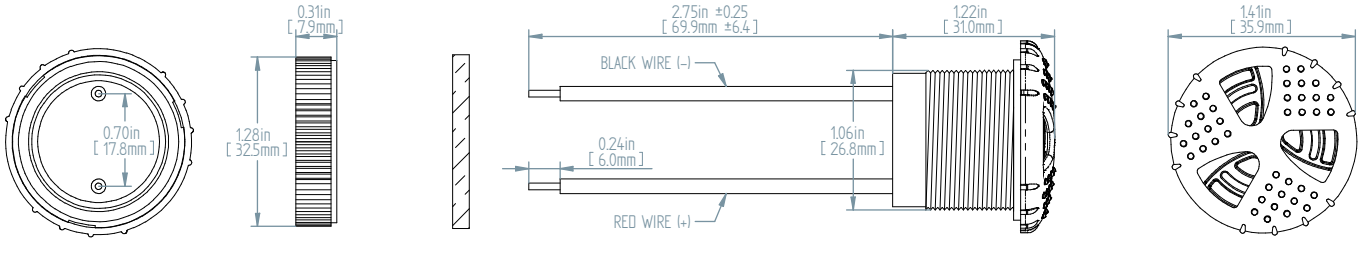
The Turbo TXW-V86-515-W(F) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

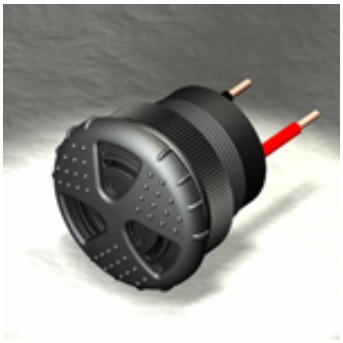
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

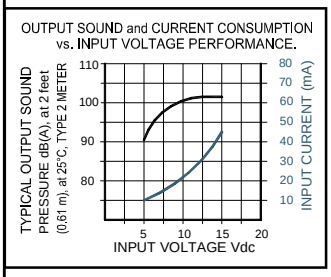
All specifications subject to change without notice.

TXW-V86-515-W(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



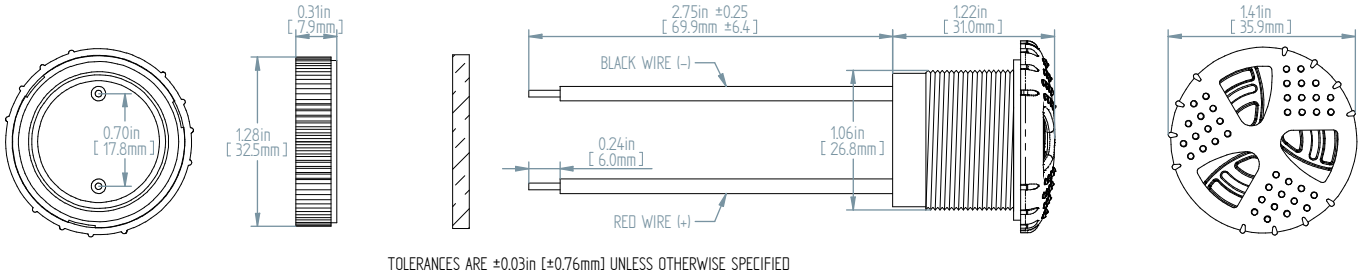
The Turbo TXW-V86-515-W(S) is an extra loud output, panel mounted alarm for operating voltages of 5-15VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	10 mA at 5 Vdc 50 mA at 15 Vdc
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

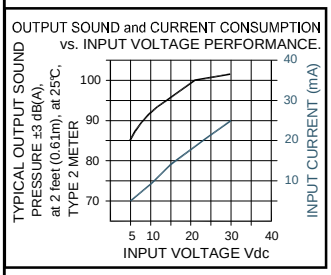
All specifications subject to change without notice.

TXW-V86-530-Q(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXW-V86-530-Q(F) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

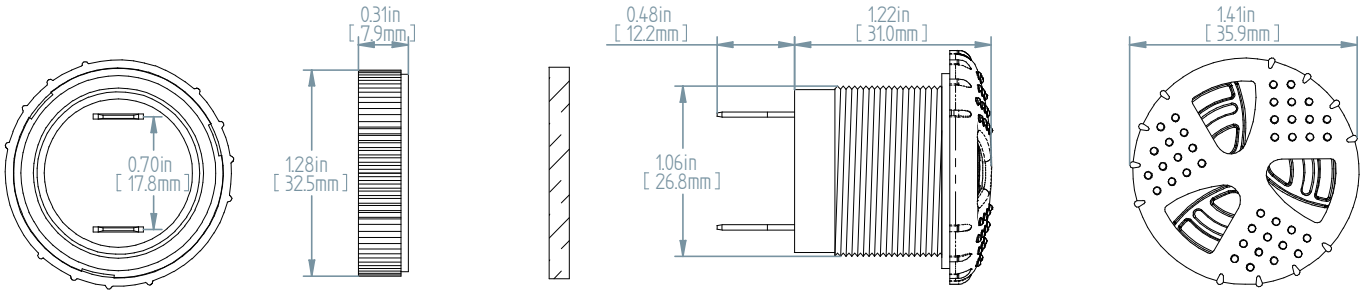
SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

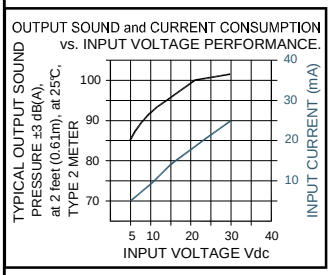
All specifications subject to change without notice.

TXW-V86-530-Q(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXW-V86-530-Q(S) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

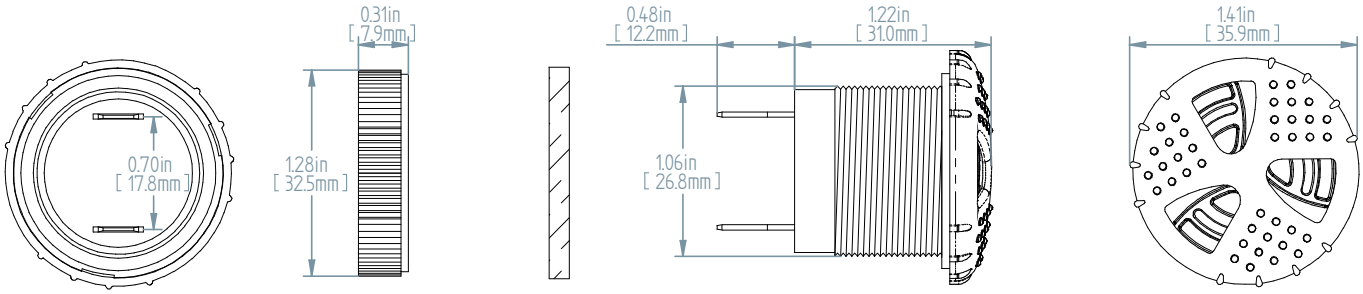
SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

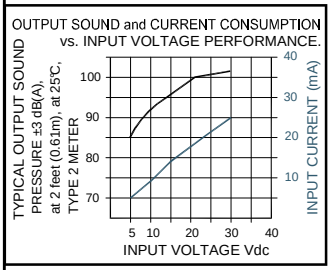
All specifications subject to change without notice.

TXW-V86-530-S(F)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXW-V86-530-S(F) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

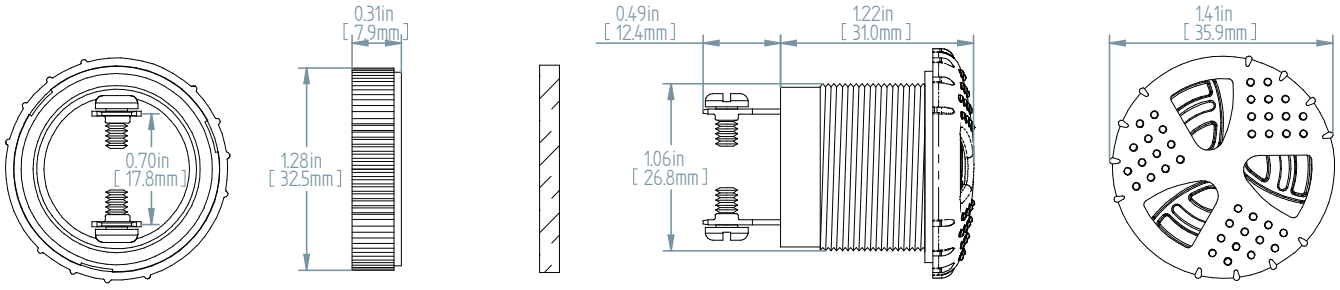
SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

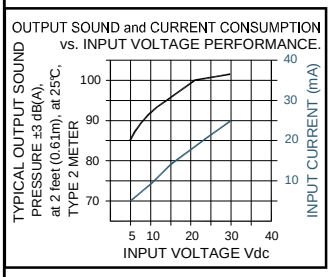
All specifications subject to change without notice.

TXW-V86-530-S(S)

Made in USA



- Patent-Pending Revolutionary Turbo Design
- Tamper Resistant Front-Mounting Case with Threaded Attachment Ring
- Corrosion Resistant Stainless Steel Diaphragm
- Reliable Piezoelectric Technology



The Turbo TXW-V86-530-S(S) is an extra loud output, panel mounted alarm for operating voltages of 5-30VDC. The Turbo design features a tamper resistant front-mounting case with threaded attachment ring. The snap-fit rotary volume control provides variable attenuation up to approximately 15dB.

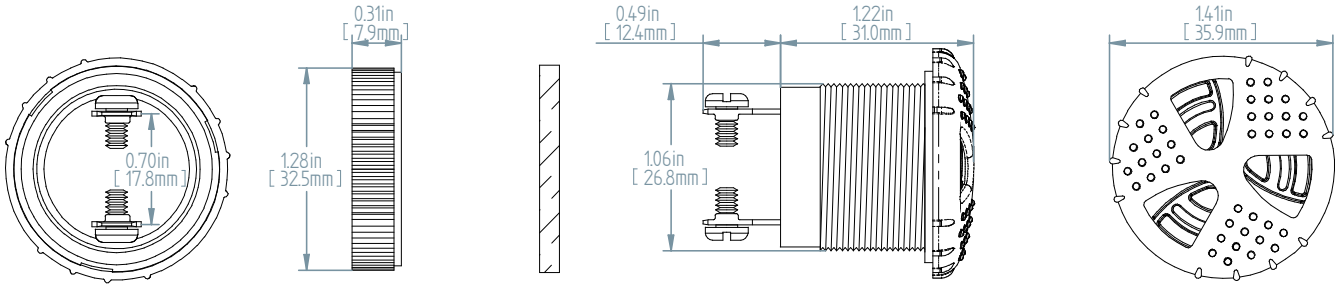
SPECIFICATIONS

Operating Mode:	Extra Loud Warble Tone
Operating Voltage:	5-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Cycles per second
Typical Operating Current:	5 mA at 5 Vdc 25 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94V-0, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 NEMA 4X Gasket - 0.125" Thick, 60 Durometer Neoprene
Environmental Durability:	ASTM B117 Certified- Withstands exposure to salt spray for 300 hours IP 68 Certified– Withstands water submergence and dust exposure Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

PRELIMINARY

DIMENSIONS

REAR RING GASKET SIDE FRONT



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

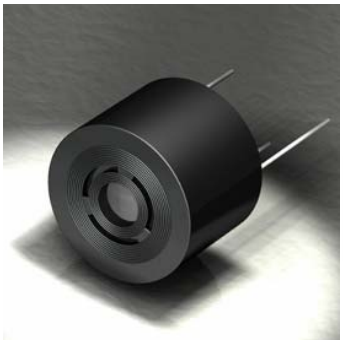
Revision: 9.09

Copyright © 2009 Floyd Bell Inc.

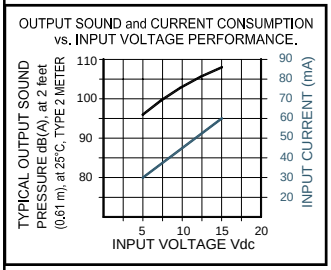
All specifications subject to change without notice.

UB-05-515-P(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- PCB Mountable
- Reliable Piezoelectric Technology
- Polarity Protected

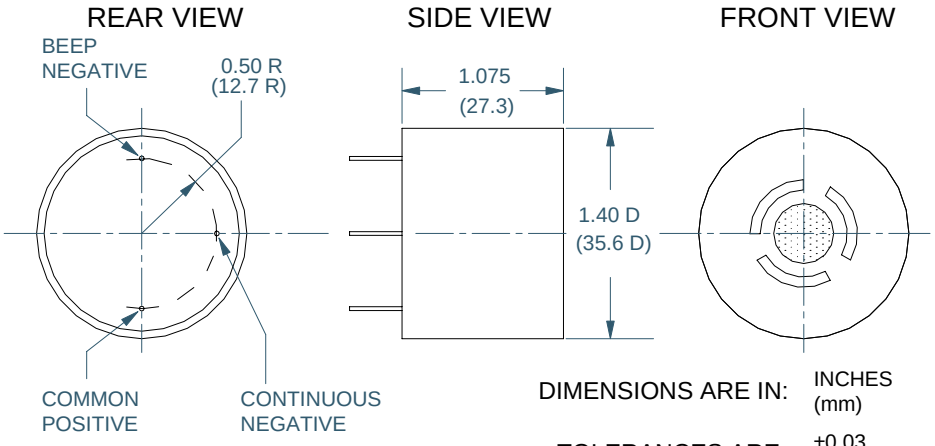


The UB-05-515-P(F)D is an ultra loud output, PCB mounted alarm for operating voltages of 5-15VDC. The alarm functions as a fast beep tone and as a continuous tone. It is terminated with three 0.032" diameter pins for mounting to a printed circuit board.

SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. 3±25% Pulses per second in Beep Mode
Typical Operating Current:	30 mA at 5 Vdc 60 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

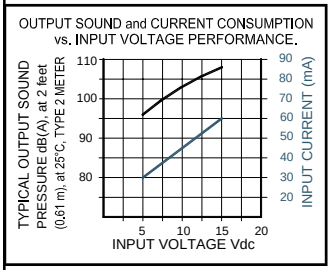
All specifications subject to change without notice.

UB-09-515-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected



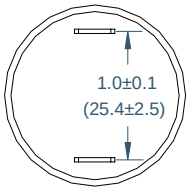
The UB-09-515-Q(F) is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The fast beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

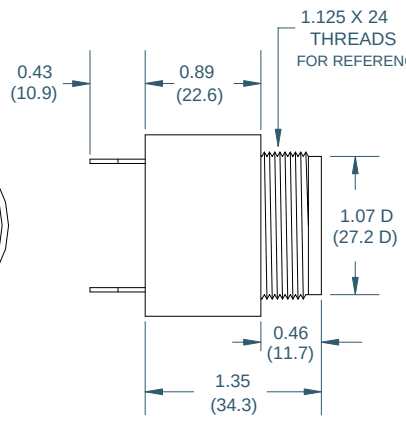
Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. 3±25% Beeps per second
Typical Operating Current:	30 mA at 5 Vdc 60 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

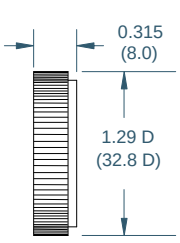
REAR VIEW



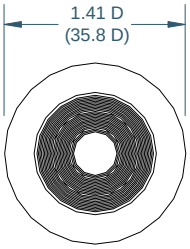
SIDE VIEW



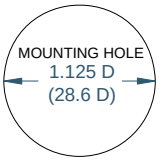
RING



FRONT VIEW

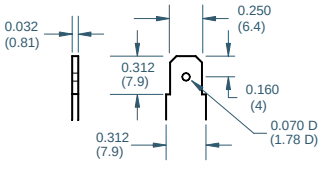


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

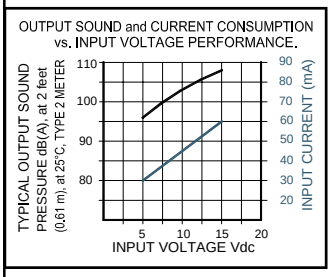
All specifications subject to change without notice.

UB-09-515-Q(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

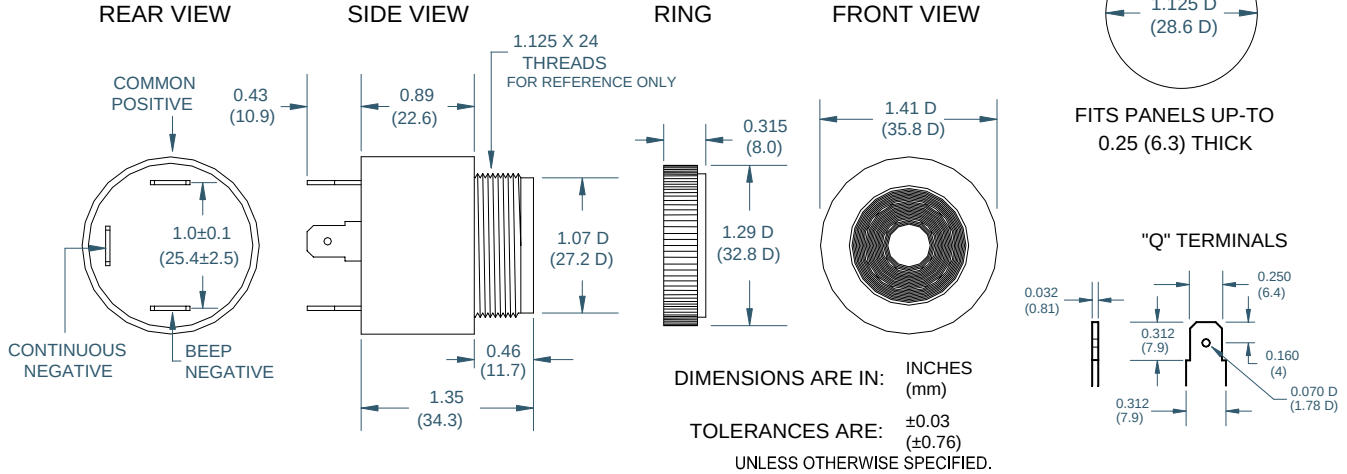


The UB-09-515-Q(F)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 5-15VDC. The alarm functions as a fast beep tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. 3±25% Beeps per second
Typical Operating Current:	30 mA at 5 Vdc 60 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

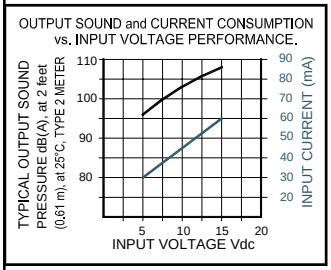
All specifications subject to change without notice.

UB-09-515-Q(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

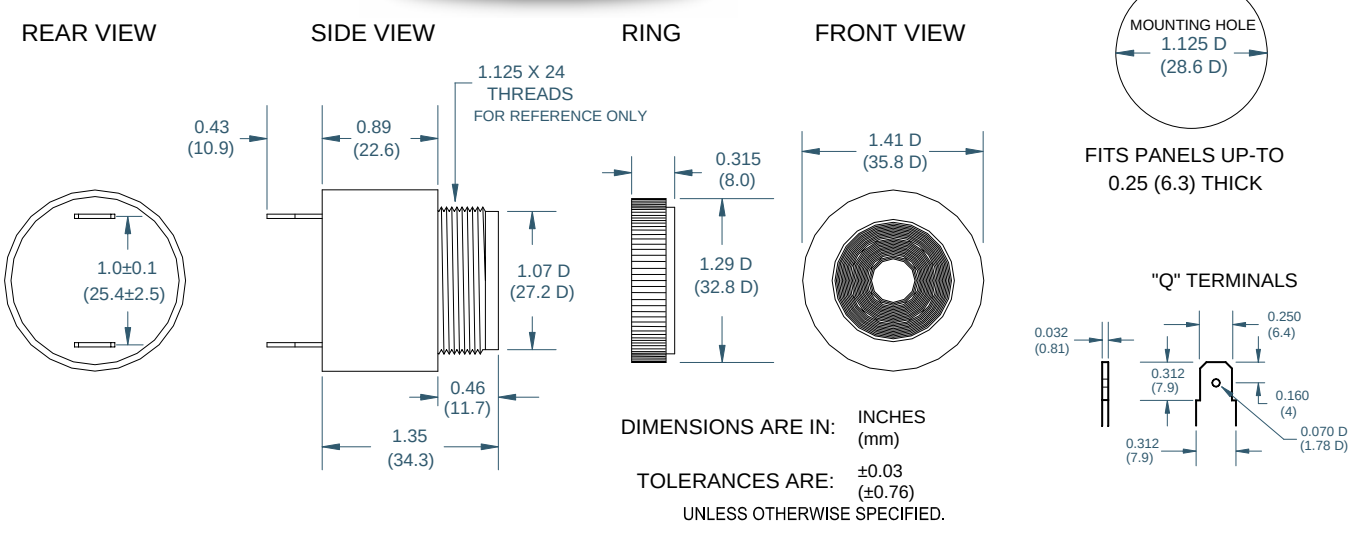


The UB-09-515-Q(S) is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The slow beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. 1±25% Beeps per second
Typical Operating Current:	30 mA at 5 Vdc 60 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

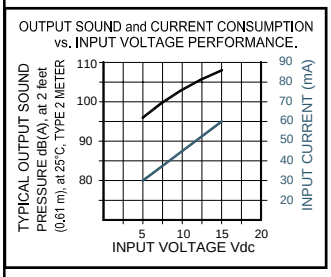
All specifications subject to change without notice.

UB-09-515-Q(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

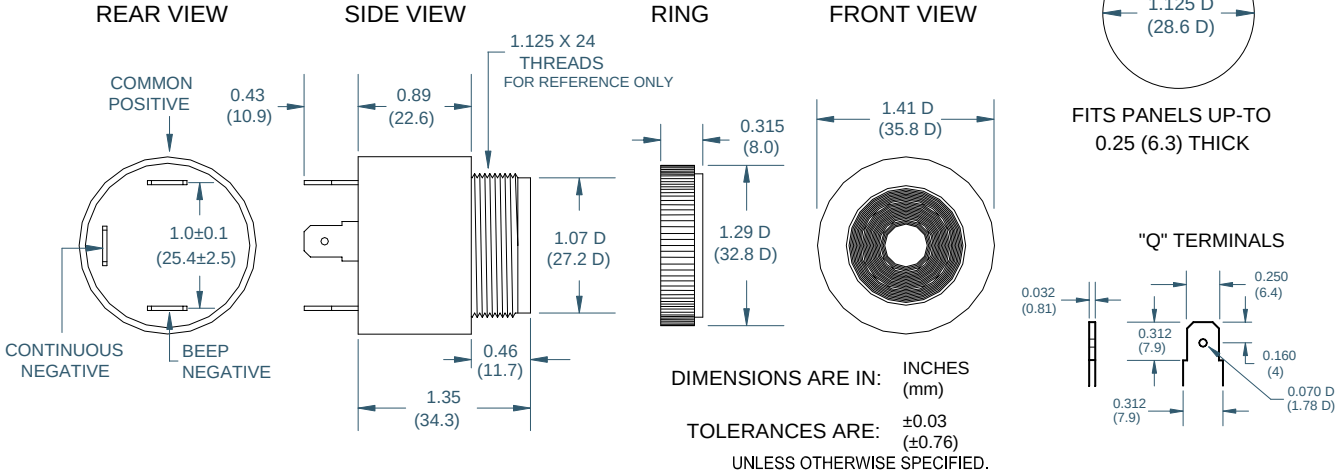


The UB-09-515-Q(S)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 5-15VDC. The alarm functions as a slow beep tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. 1±25% Beeps per second
Typical Operating Current:	30 mA at 5 Vdc 60 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

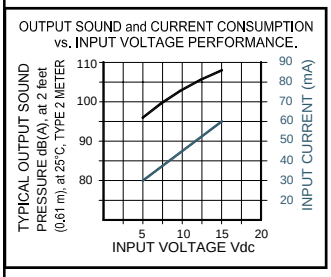
All specifications subject to change without notice.

UB-09-515-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

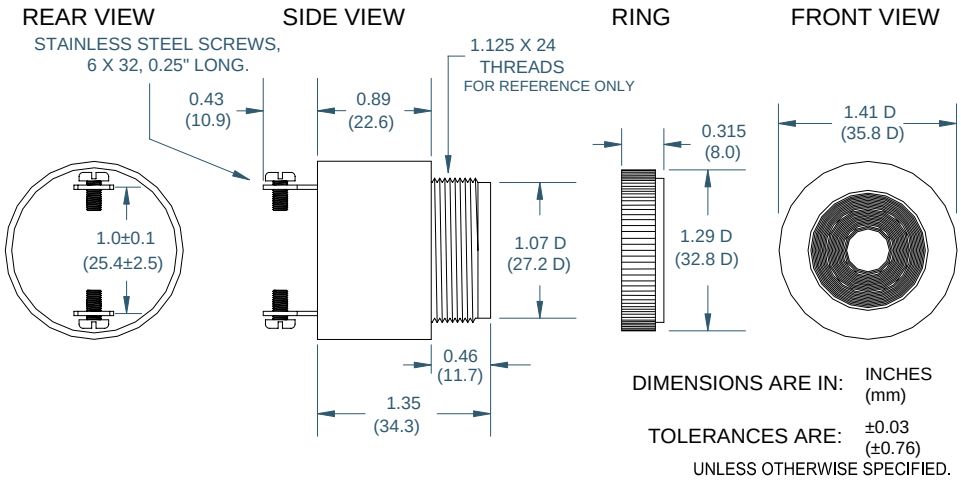


The UB-09-515-S(F) is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The fast beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

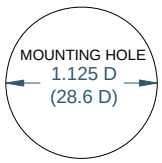
SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. 3±25% Beeps per second
Typical Operating Current:	30 mA at 5 Vdc 60 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

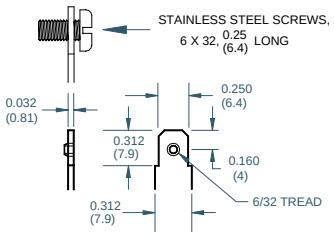


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

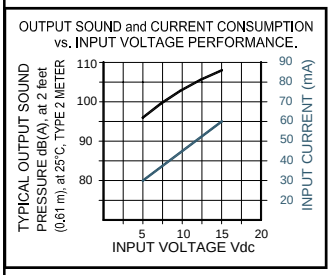
All specifications subject to change without notice.

UB-09-515-S(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

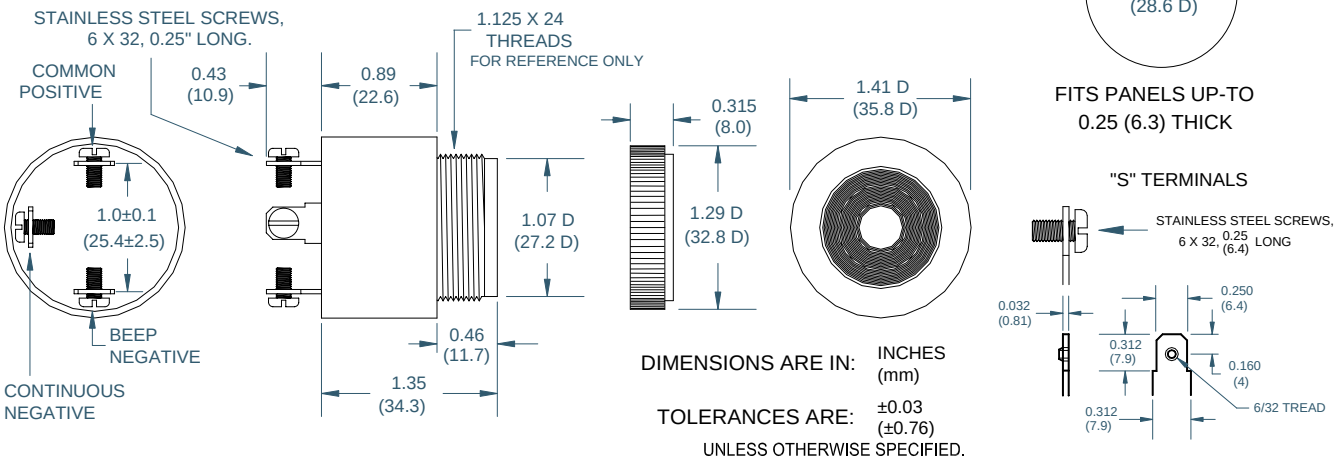


The UB-09-515-S(F)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 5-15VDC. The alarm functions as a fast beep tone and as a continuous tone. Both tone modes have a typical sound pressure level of 109 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. 3±25% Beeps per second
Typical Operating Current:	30 mA at 5 Vdc 60 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

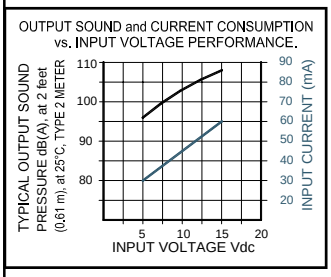
All specifications subject to change without notice.

UB-09-515-S(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

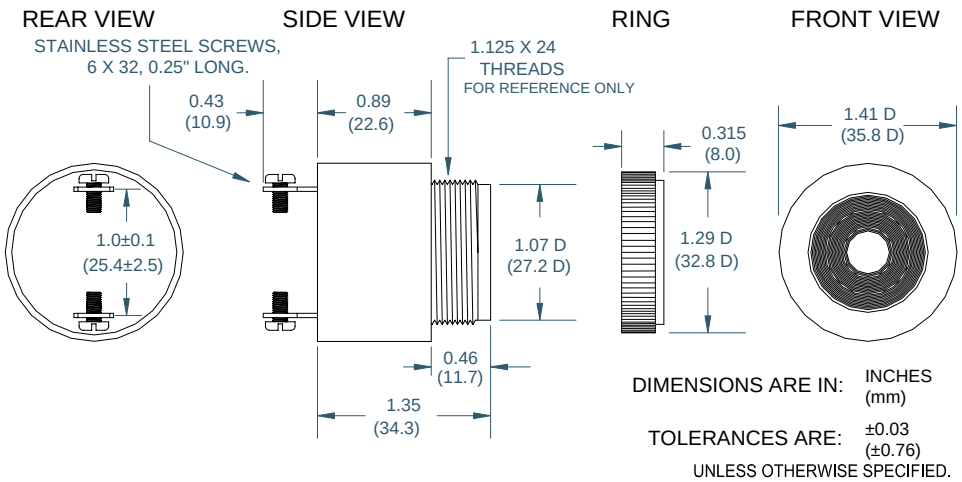


The UB-09-515-S(S) is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The slow beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

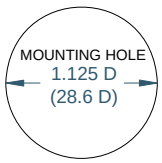
SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. 1±25% Beeps per second
Typical Operating Current:	30 mA at 5 Vdc 60 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

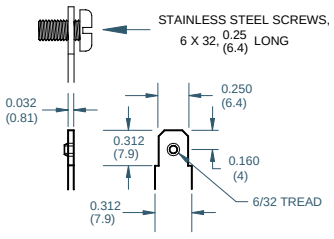


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

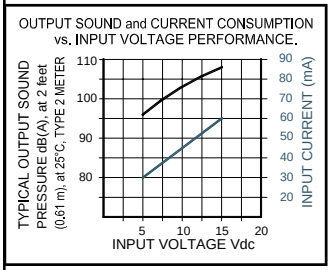
All specifications subject to change without notice.

UB-09-515-S(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

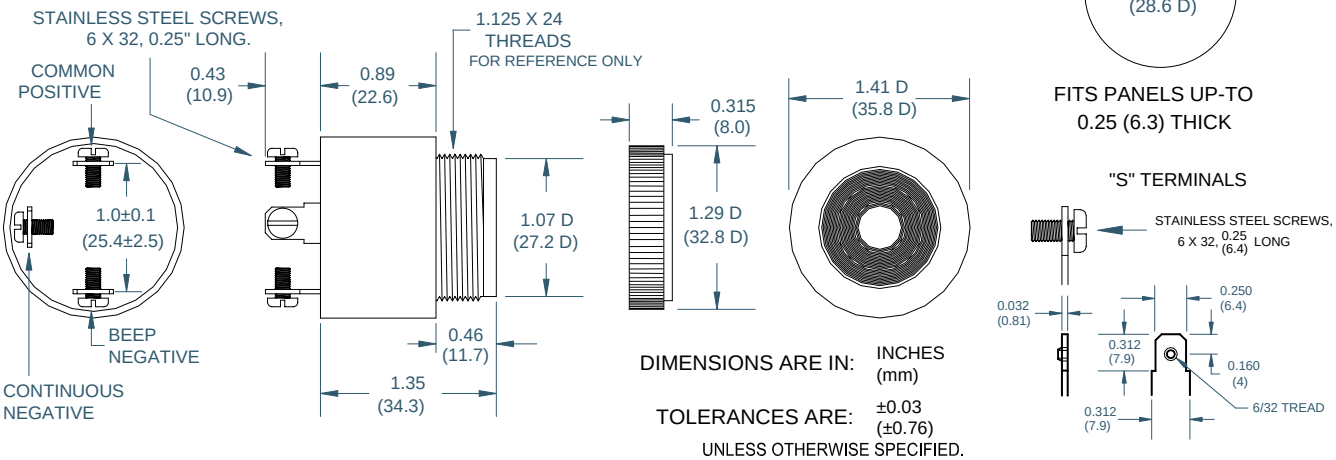


The UB-09-515-S(S)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 5-15VDC. The alarm functions as a slow beep tone and as a continuous tone. Both tone modes have a typical sound pressure level of 109 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. 1±25% Beeps per second
Typical Operating Current:	30 mA at 5 Vdc 60 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

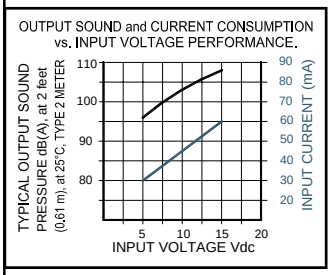
All specifications subject to change without notice.

UB-09-515-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

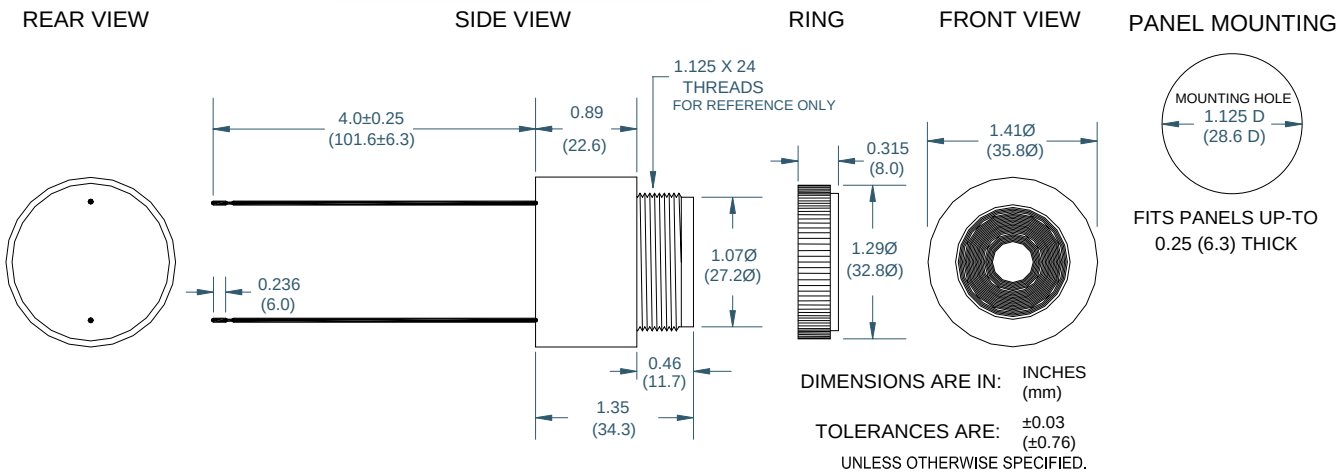


The UB-09-515-W(F) is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The fast beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. 3±25% Beeps per second
Typical Operating Current:	30 mA at 5 Vdc 60 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

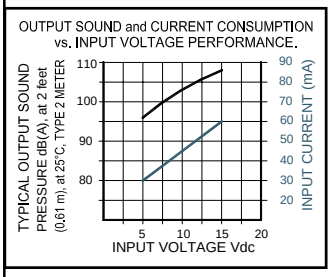
All specifications subject to change without notice.

UB-09-515-W(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

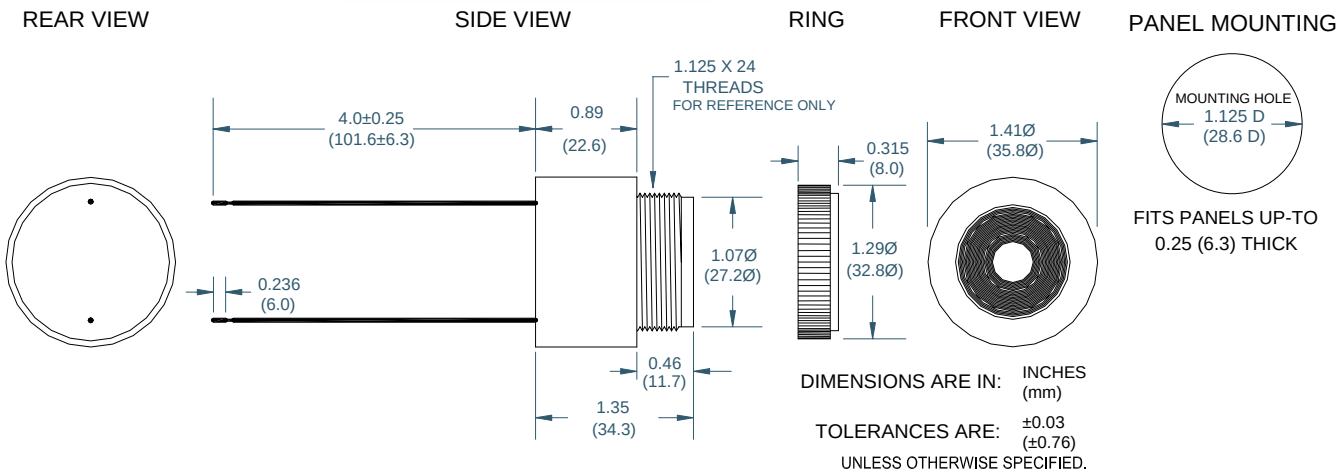


The UB-09-515-W(S) is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The slow beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. 1±25% Beeps per second
Typical Operating Current:	30 mA at 5 Vdc 60 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

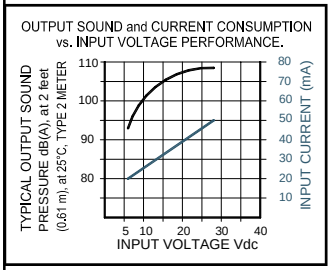
All specifications subject to change without notice.

UB-09-628-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

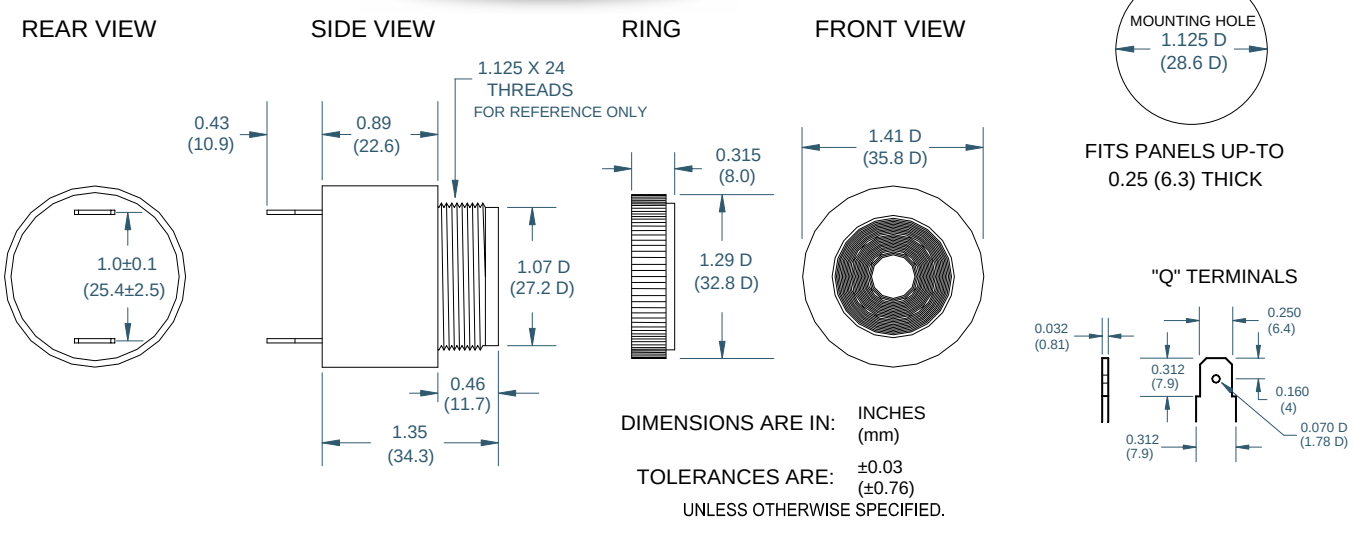


The UB-09-628-Q(F) is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The fast beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. 3±25% Beeps per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

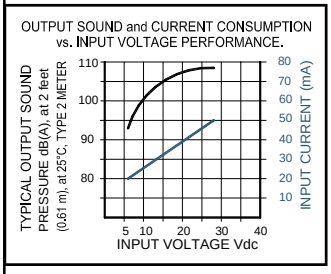
All specifications subject to change without notice.

UB-09-628-Q(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

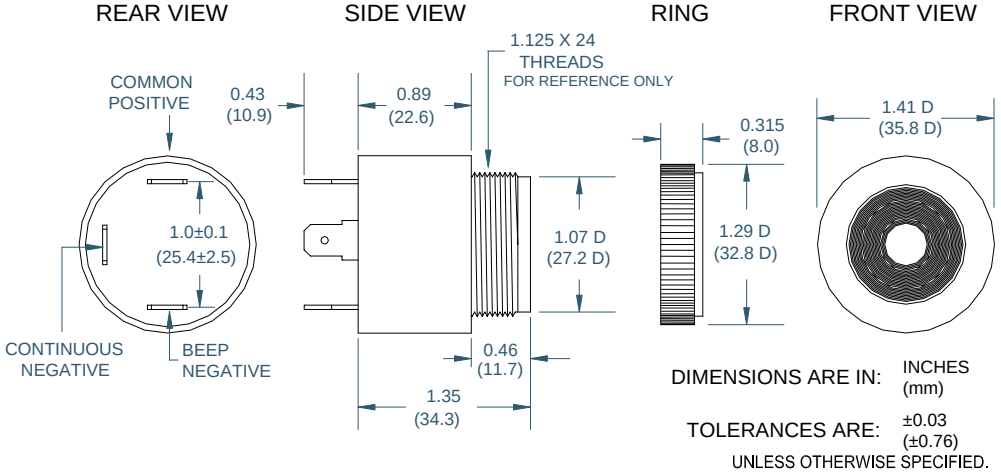


The UB-09-628-Q(F)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 6-28VDC. The alarm functions as a fast beep tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

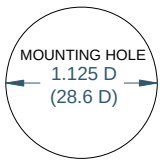
SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. 3±25% Beeps per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

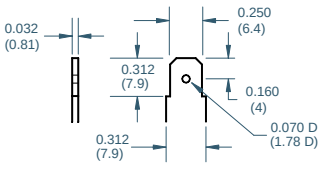


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

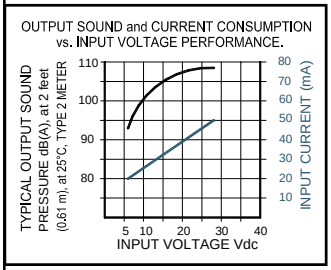
All specifications subject to change without notice.

UB-09-628-Q(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

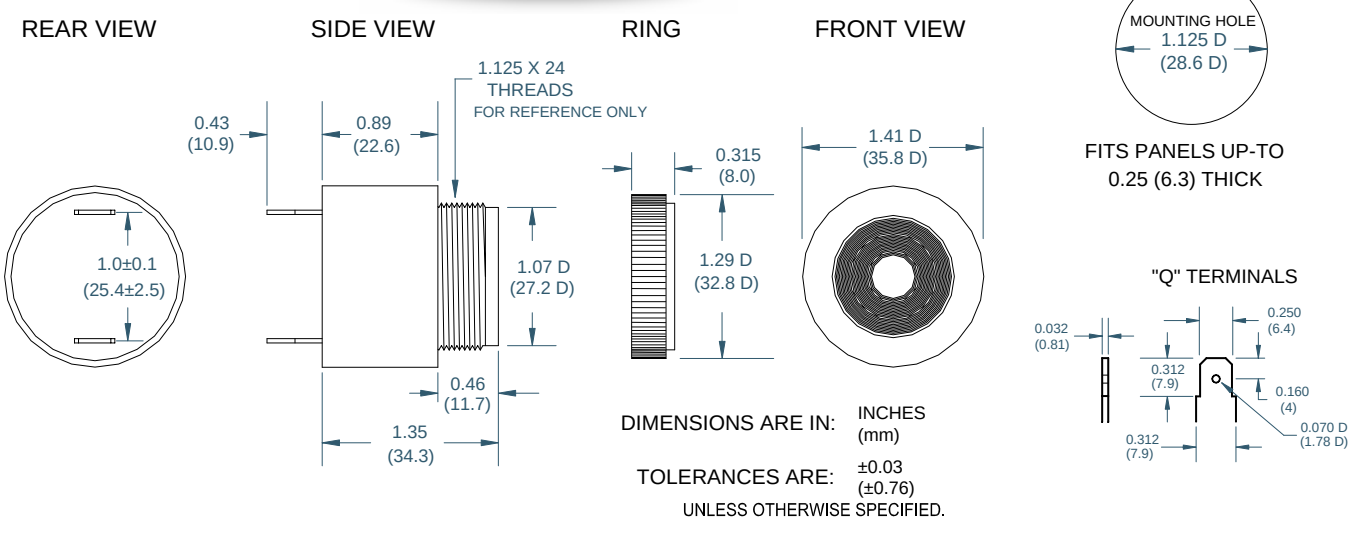


The UB-09-628-Q(S) is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The slow beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. 1±25% Beeps per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

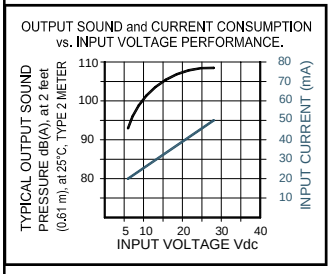
All specifications subject to change without notice.

UB-09-628-Q(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

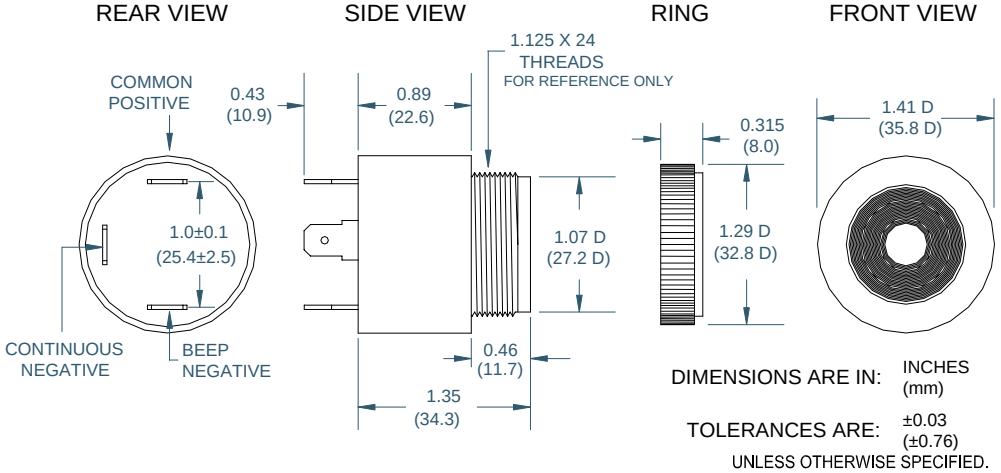


The UB-09-628-Q(S)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 6-28VDC. The alarm functions as a slow beep tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

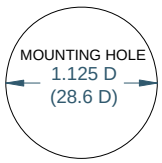
SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. 1±25% Beeps per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

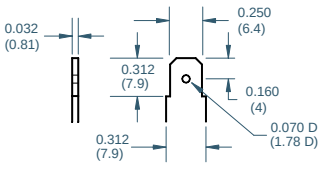


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

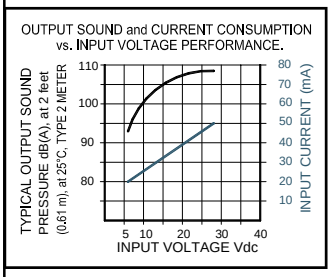
All specifications subject to change without notice.

UB-09-628-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

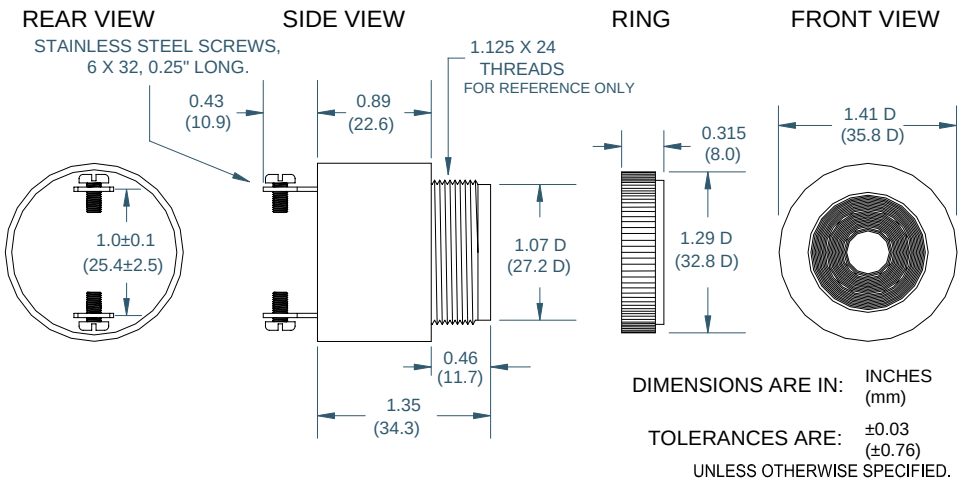


The UB-09-628-S(F) is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The fast beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

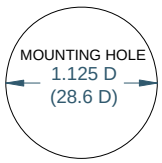
SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. 3±25% Beeps per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

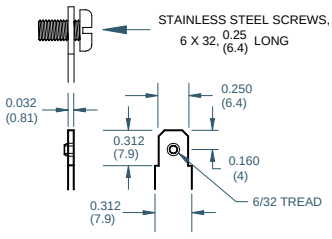


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

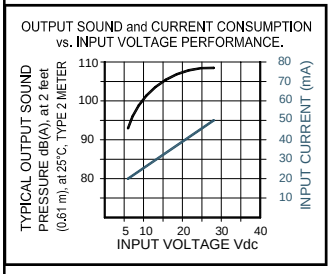
All specifications subject to change without notice.

UB-09-628-S(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

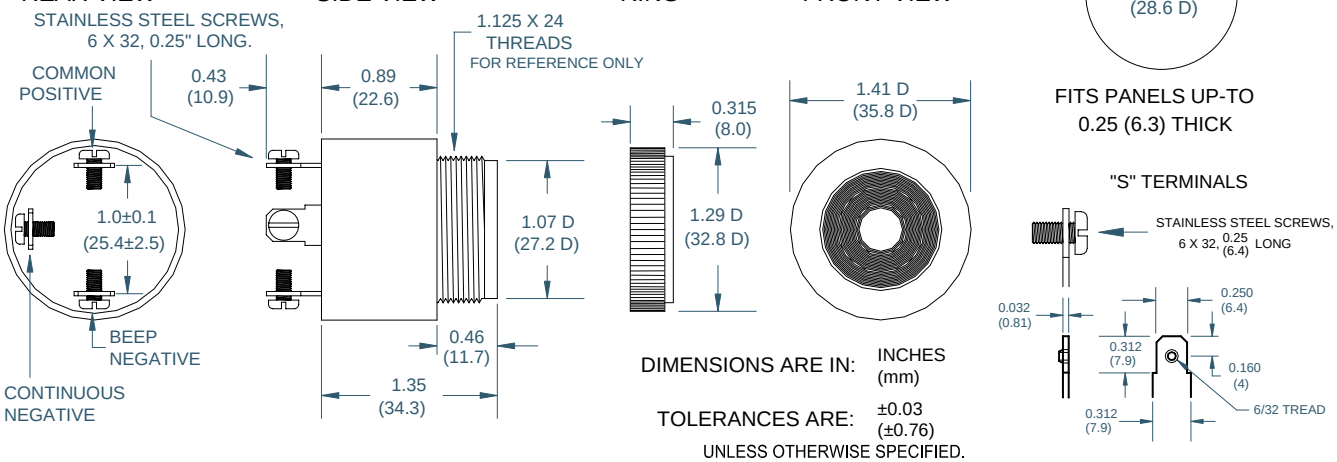


The UB-09-628-S(F)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 6-28VDC. The alarm functions as a fast beep tone and as a continuous tone. Both tone modes have a typical sound pressure level of 109 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. 3±25% Beeps per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

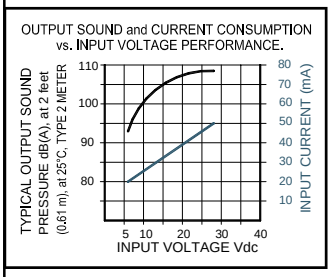
All specifications subject to change without notice.

UB-09-628-S(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

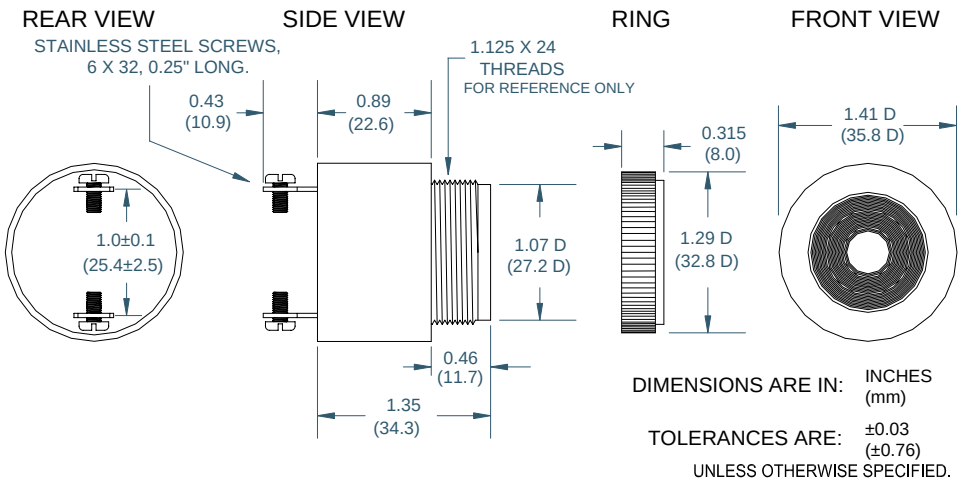


The UB-09-628-S(S) is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The slow beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

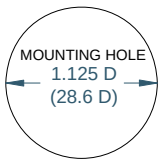
SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. 1±25% Beeps per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

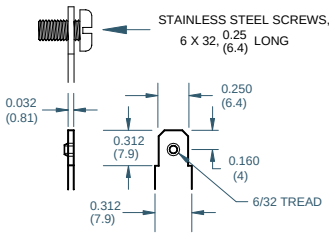


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

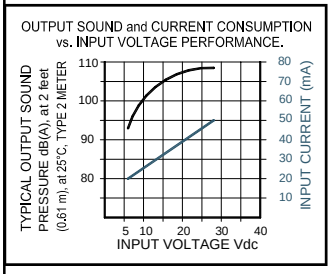
All specifications subject to change without notice.

UB-09-628-S(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

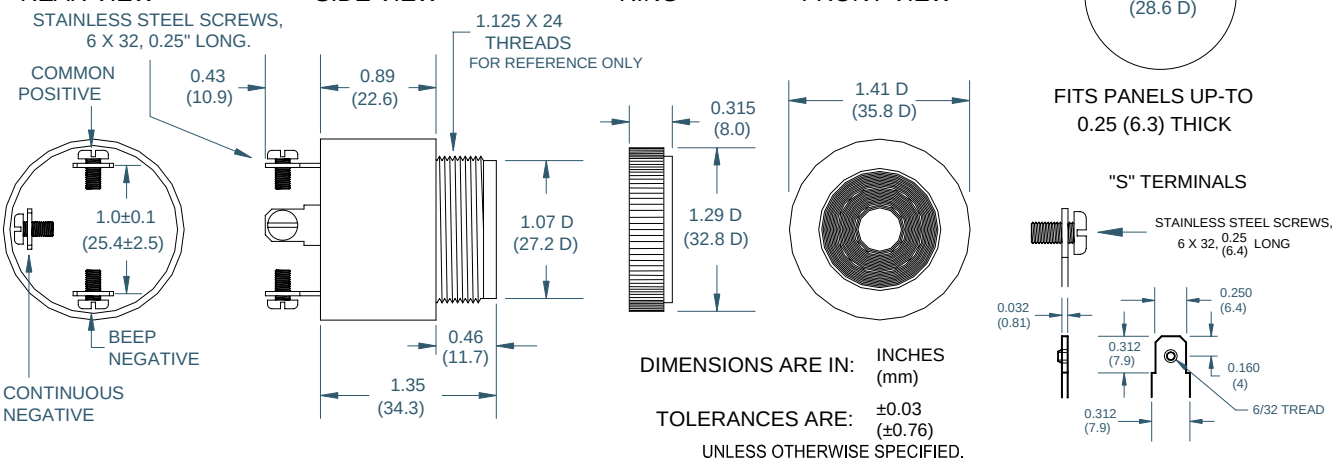


The UB-09-628-S(S)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 6-28VDC. The alarm functions as a slow beep tone and as a continuous tone. Both tone modes have a typical sound pressure level of 109 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. 1±25% Beeps per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

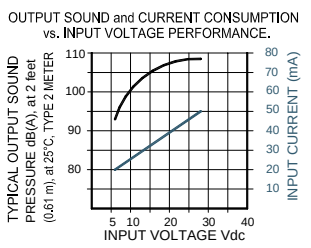
All specifications subject to change without notice.

UB-09-628-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

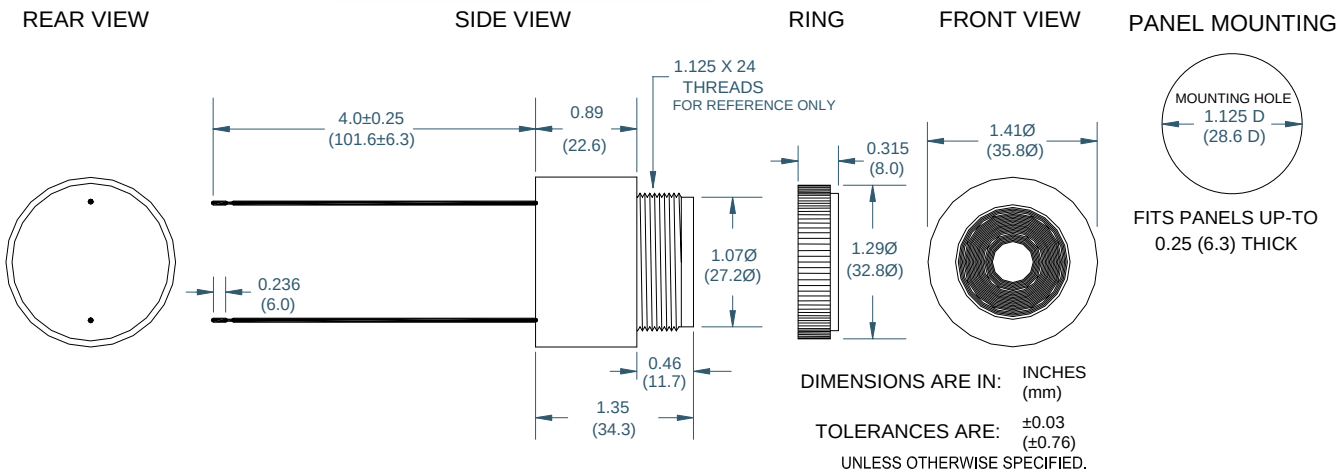


The UB-09-628-W(F) is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The fast beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. 3±25% Beeps per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

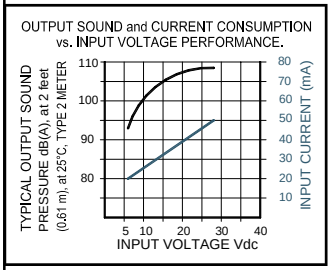
All specifications subject to change without notice.

UB-09-628-W(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

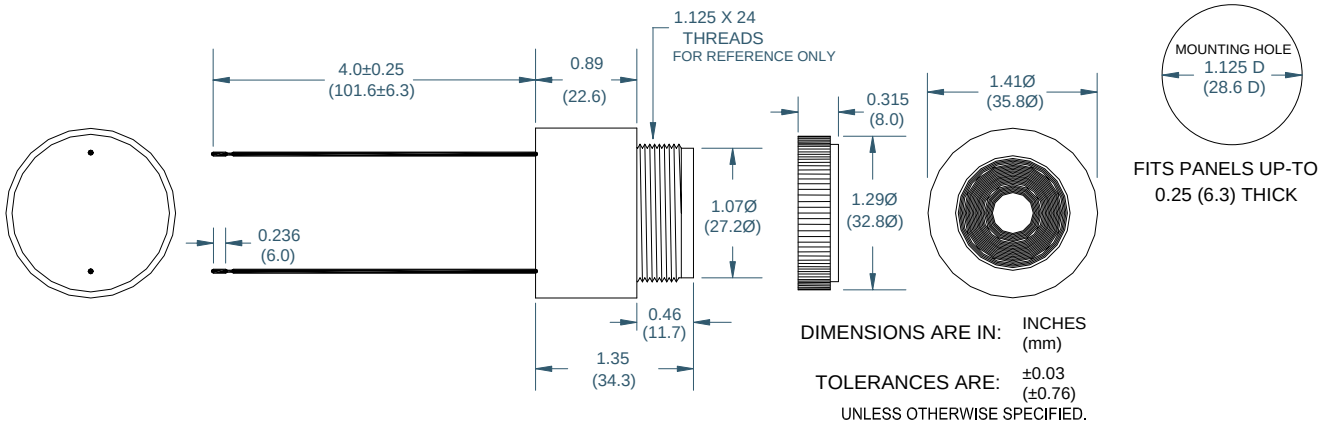


The UB-09-628-W(S) is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The slow beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. 1±25% Beeps per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

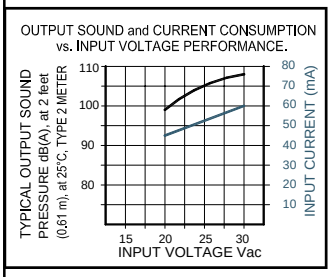
All specifications subject to change without notice.

UB-19-230-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily



The UB-19-230-Q(F) is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The fast beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. 3±25% Beeps per second
Typical Operating Current:	45 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	100±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

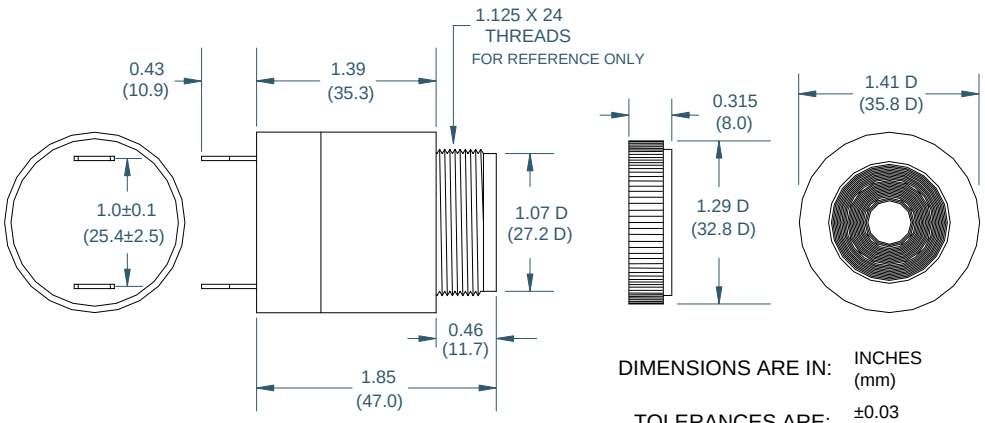
DIMENSIONS

REAR VIEW

SIDE VIEW

RING

FRONT VIEW

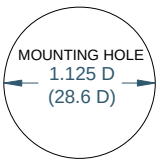


DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

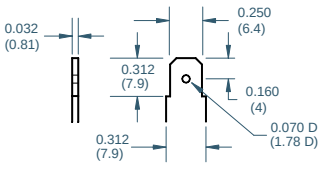
UNLESS OTHERWISE SPECIFIED.

PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

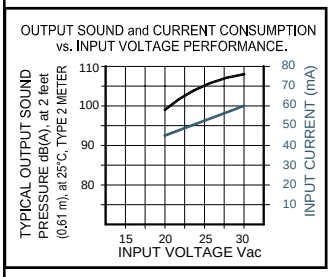
All specifications subject to change without notice.

UB-19-230-Q(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily



The UB-19-230-Q(S) is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The slow beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. 1±25% Beeps per second
Typical Operating Current:	45 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	100±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

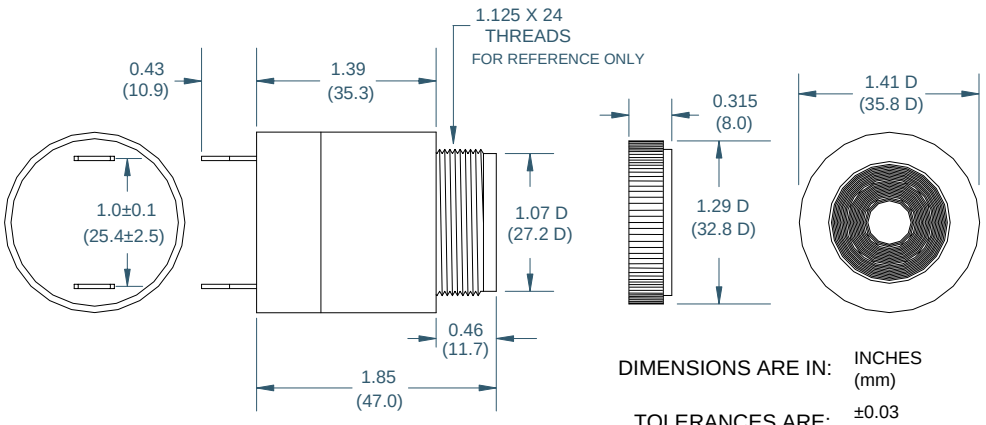
DIMENSIONS

REAR VIEW

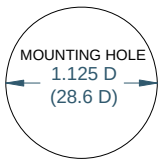
SIDE VIEW

RING

FRONT VIEW

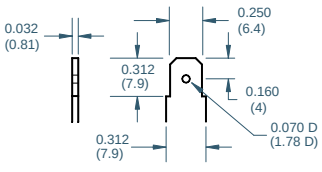


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

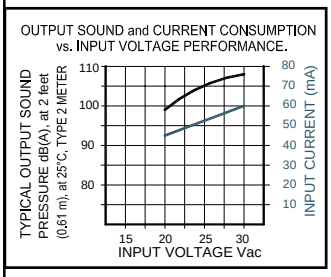
All specifications subject to change without notice.

UB-19-230-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily

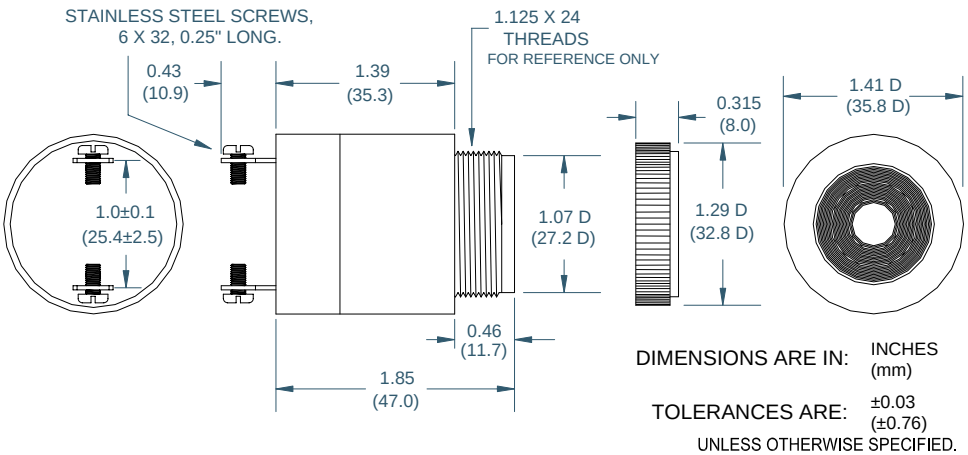


The UB-19-230-S(F) is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The fast beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

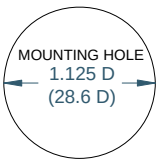
SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. 3±25% Beeps per second
Typical Operating Current:	45 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	100±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

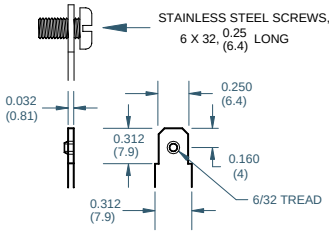


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

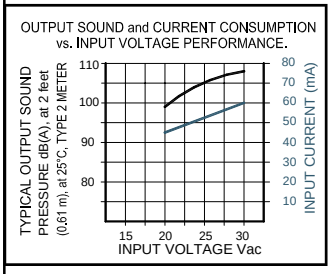
All specifications subject to change without notice.

UB-19-230-S(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

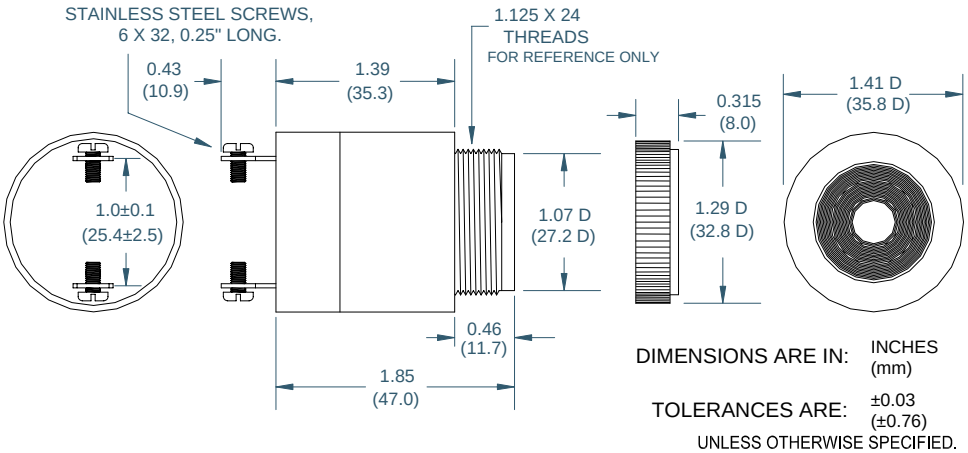


The UB-19-230-S(S) is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The slow beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

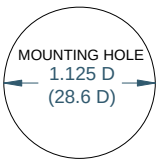
SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. 1±25% Beeps per second
Typical Operating Current:	45 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	100±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

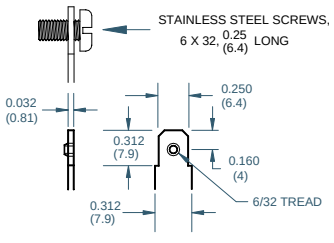


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

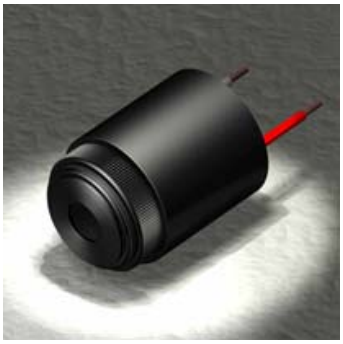
Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

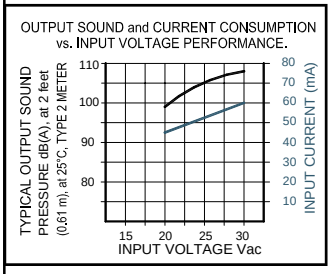
All specifications subject to change without notice.

UB-19-230-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily



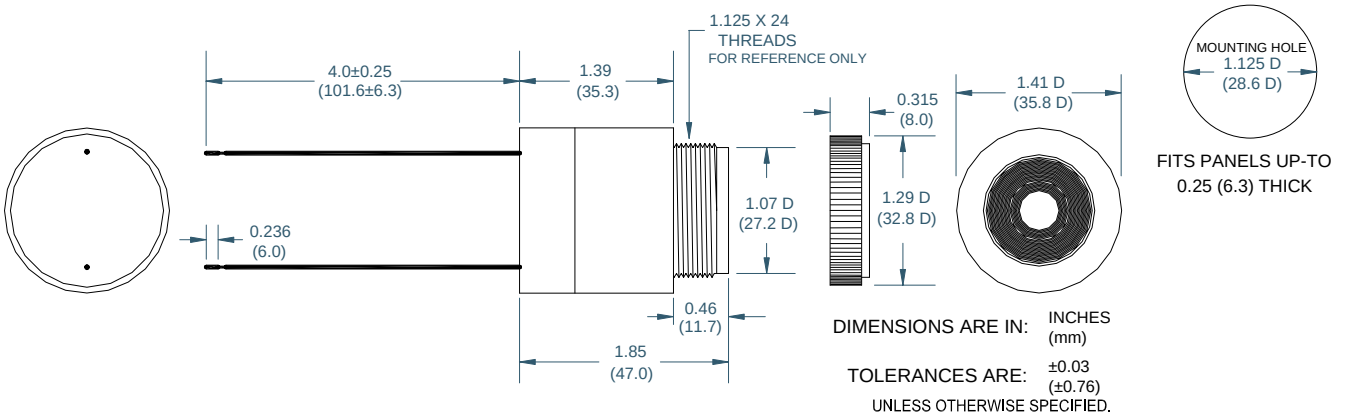
The UB-19-230-W(F) is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The fast beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. 3±25% Beeps per second
Typical Operating Current:	45 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	100±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW | SIDE VIEW | RING | FRONT VIEW | PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

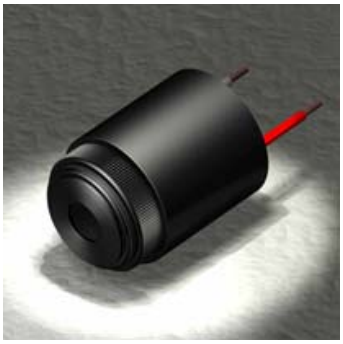
Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

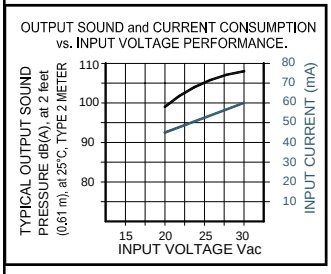
All specifications subject to change without notice.

UB-19-230-W(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily

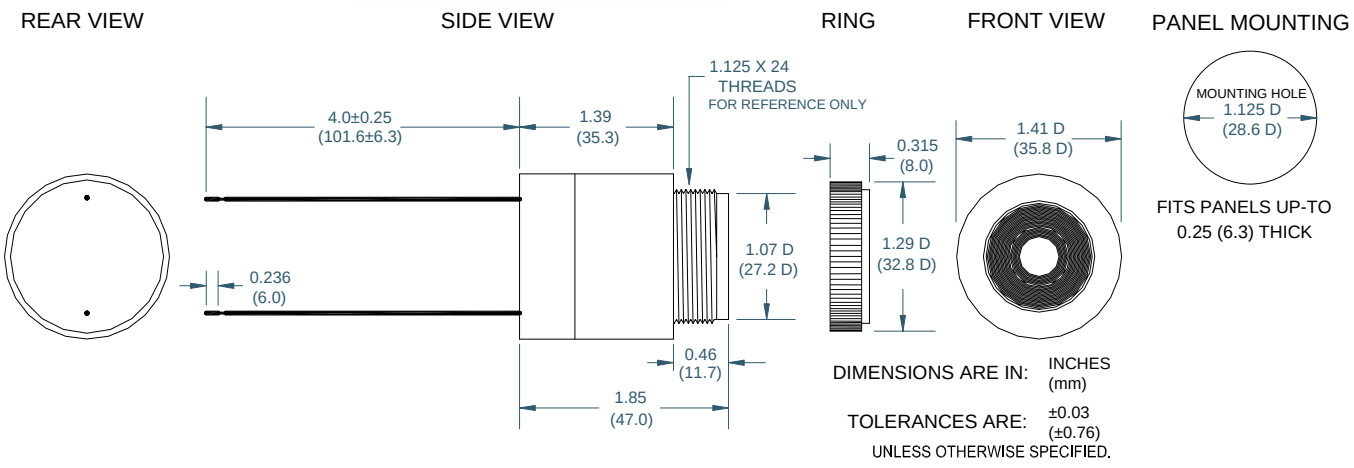


The UB-19-230-W(S) is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The slow beep tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Beep Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. 1±25% Beeps per second
Typical Operating Current:	45 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	100±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

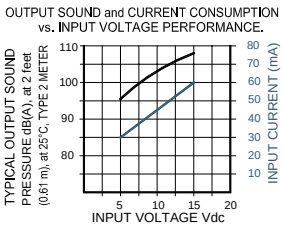
All specifications subject to change without notice.

UC-09-515-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

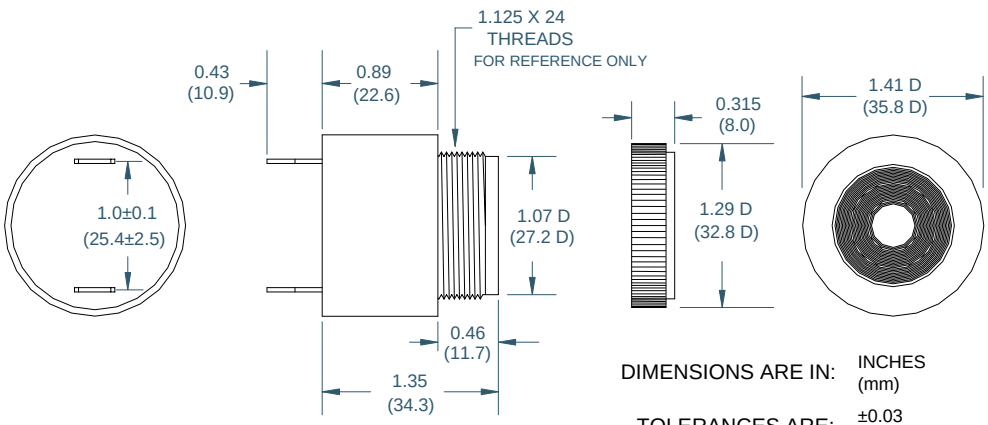


The UC-09-515-Q is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The continuous tone has a typical sound pressure level of 108 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

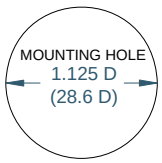
SPECIFICATIONS

Operating Mode:	Ultra Loud Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz.
Typical Operating Current:	30 mA at 5 Vdc 60 mA at 15 Vdc
Typical Sound Pressure:	96±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

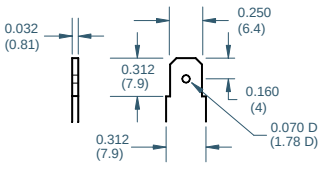


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

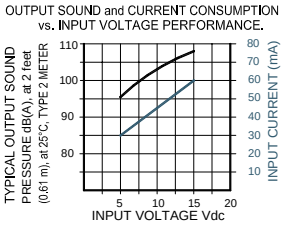
All specifications subject to change without notice.

UC-09-515-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

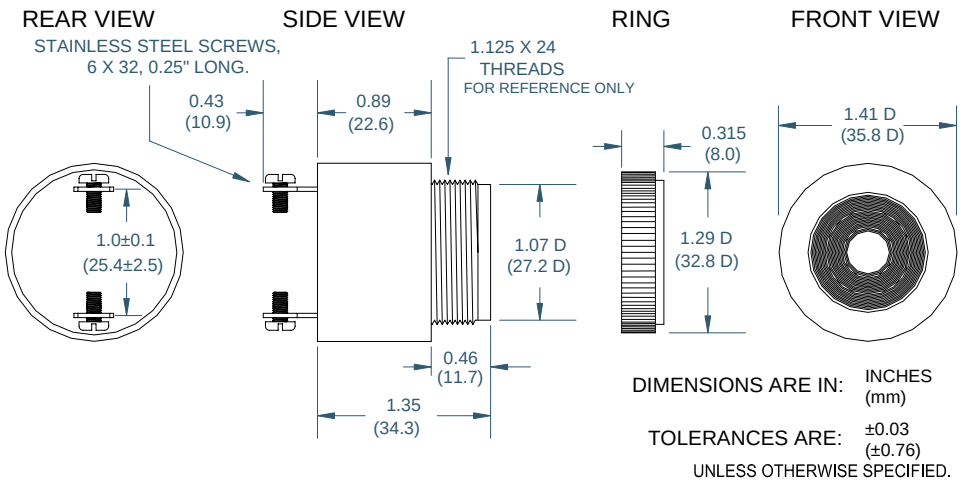


The UC-09-515-S is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The continuous tone has a typical sound pressure level of 108 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

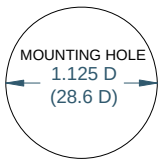
SPECIFICATIONS

Operating Mode:	Ultra Loud Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz.
Typical Operating Current:	30 mA at 5 Vdc 60 mA at 15 Vdc
Typical Sound Pressure:	96±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

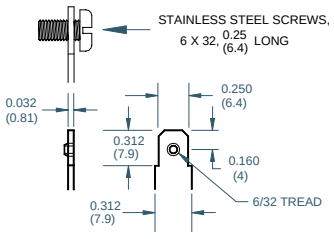


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

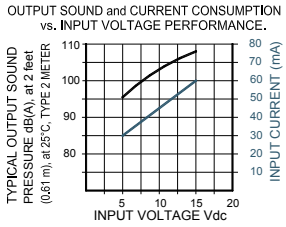
All specifications subject to change without notice.

UC-09-515-T

Made in USA

Image Not Available

- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

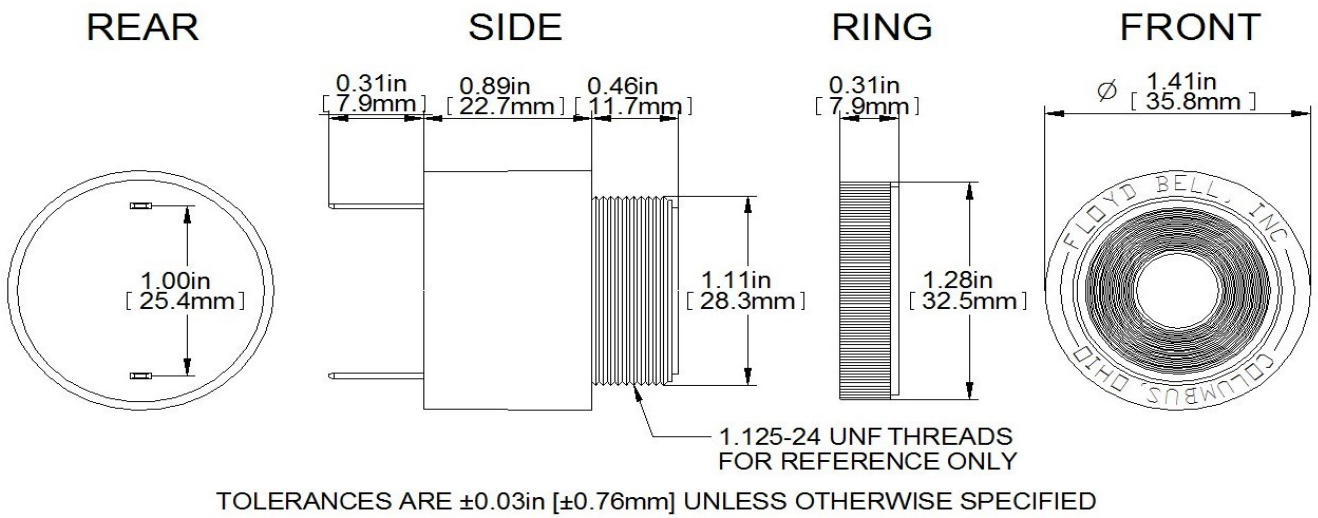


The UC-09-515-T is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The continuous tone has a typical sound pressure level of 108 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Ultra Loud Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz.
Typical Operating Current:	30 mA at 5 Vdc 60 mA at 15 Vdc
Typical Sound Pressure:	96±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

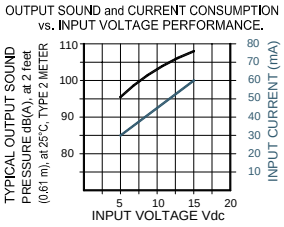
All specifications subject to change without notice.

UC-09-515-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected



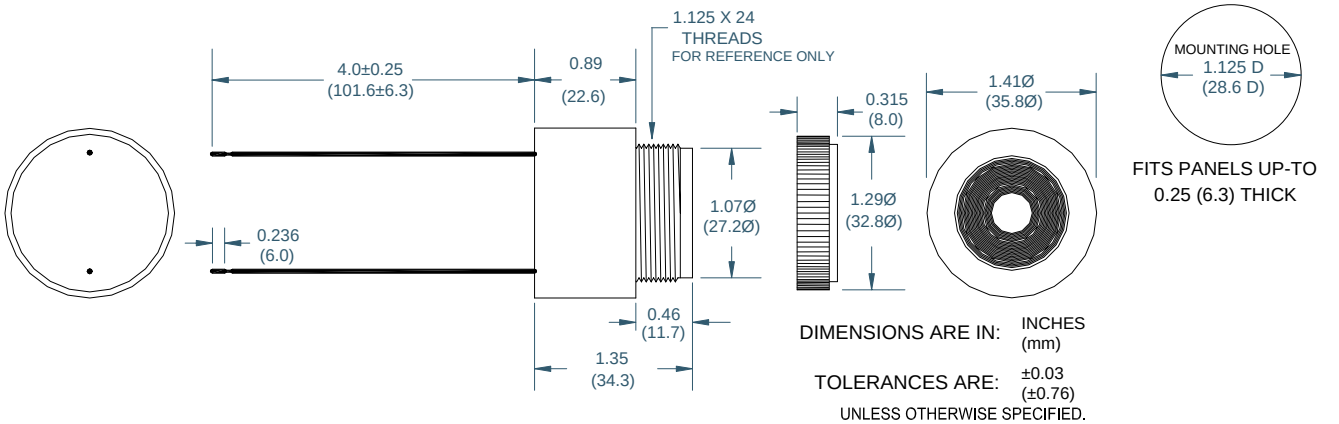
The UC-09-515-W is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The continuous tone has a typical sound pressure level of 108 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz.
Typical Operating Current:	30 mA at 5 Vdc 60 mA at 15 Vdc
Typical Sound Pressure:	96±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW | SIDE VIEW | RING | FRONT VIEW | PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

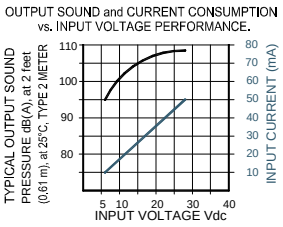
All specifications subject to change without notice.

UC-09-628-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected



The UC-09-628-Q is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The continuous tone has a typical sound pressure level of 108 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

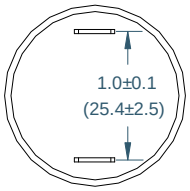
SPECIFICATIONS

Operating Mode:	Ultra Loud Continuous Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz.
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	95±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25℃ 108±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

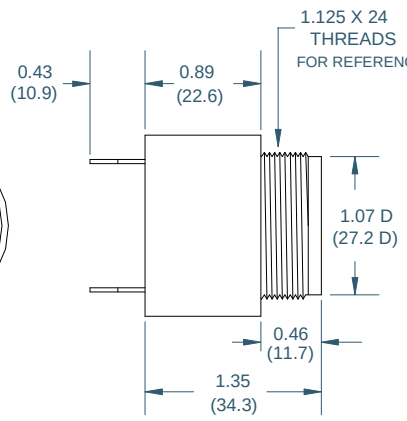
RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS

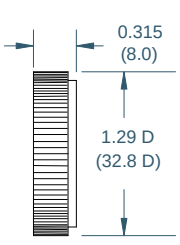
REAR VIEW



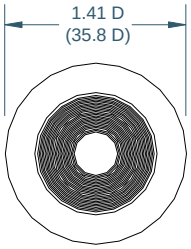
SIDE VIEW



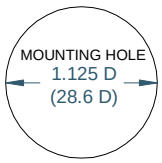
RING



FRONT VIEW

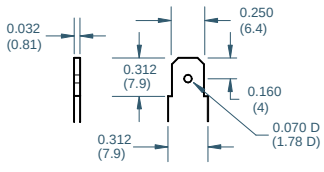


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 5.11

Copyright © 2011 Floyd Bell Inc.

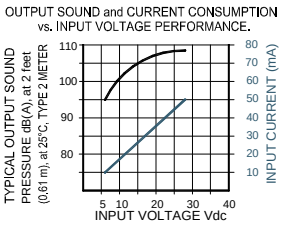
All specifications subject to change without notice.

UC-09-628-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

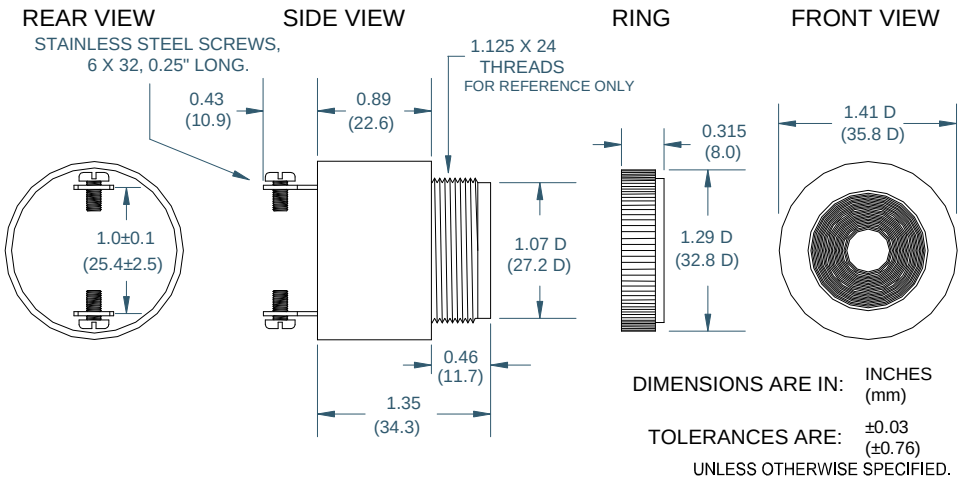


The UC-09-628-S is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The continuous tone has a typical sound pressure level of 108 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

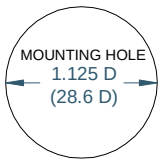
SPECIFICATIONS

Operating Mode:	Ultra Loud Continuous Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz.
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	95±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25℃ 108±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-40℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

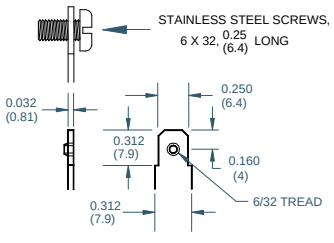


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 5.11

Copyright © 2011 Floyd Bell Inc.

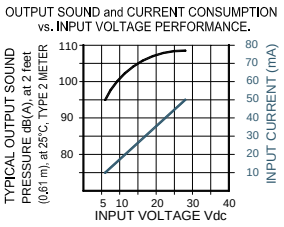
All specifications subject to change without notice.

UC-09-628-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected



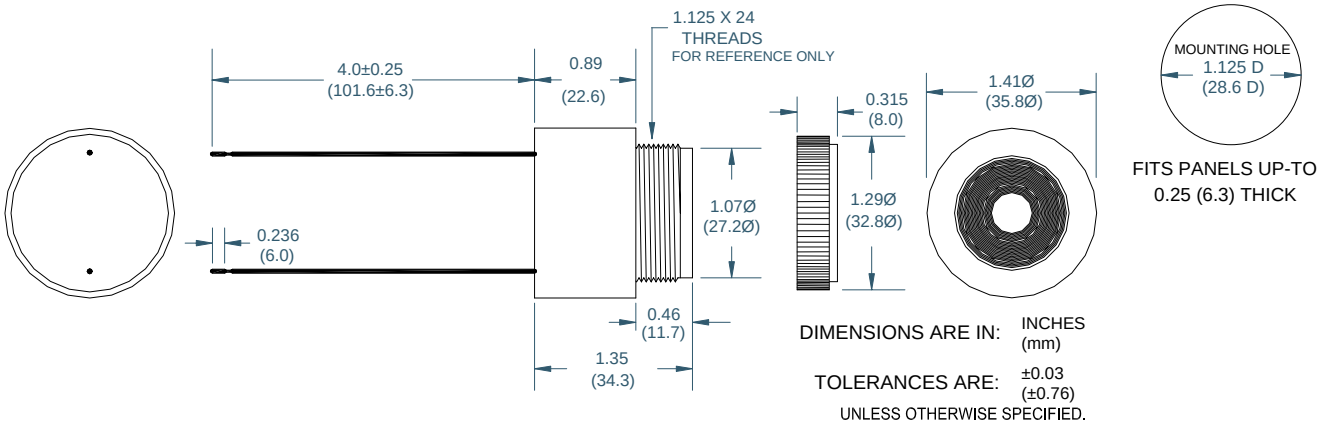
The UC-09-628-W is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The continuous tone has a typical sound pressure level of 108 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Continuous Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz.
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	95±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW | SIDE VIEW | RING | FRONT VIEW | PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

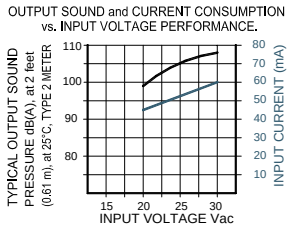
All specifications subject to change without notice.

UC-19-230-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



The UC-19-230-Q is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The continuous tone has a typical sound pressure level of 108 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Continuous Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz.
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	98±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

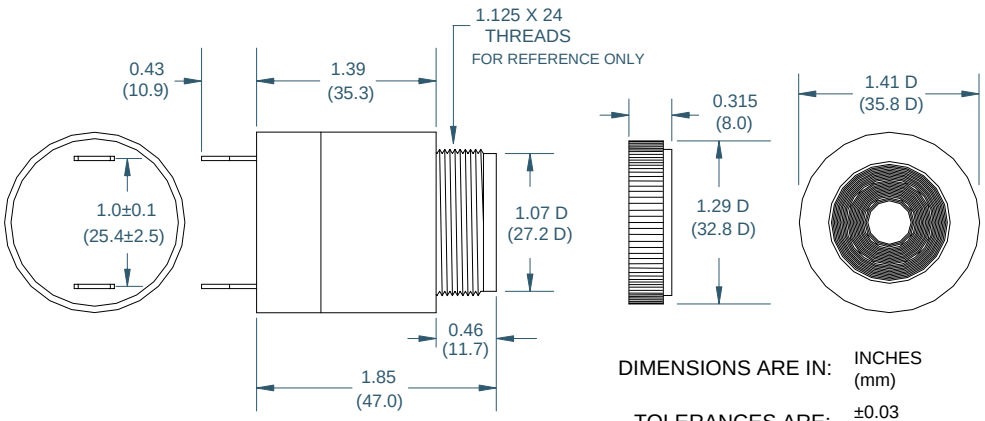
DIMENSIONS

REAR VIEW

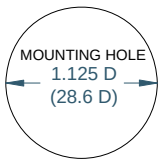
SIDE VIEW

RING

FRONT VIEW

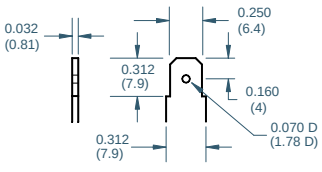


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

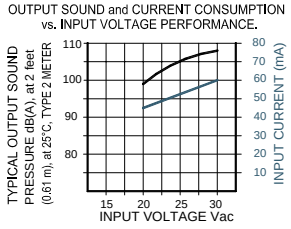
All specifications subject to change without notice.

UC-19-230-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

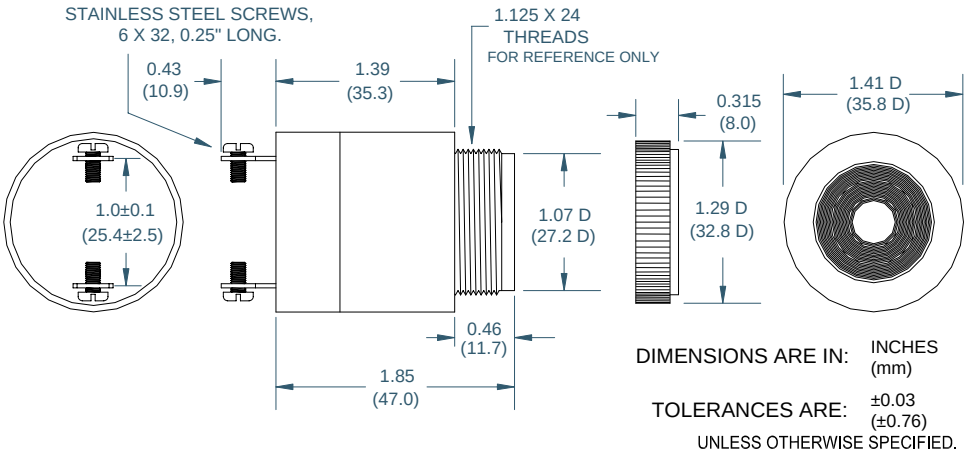


The UC-19-230-S is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The continuous tone has a typical sound pressure level of 108 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

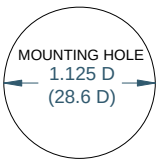
SPECIFICATIONS

Operating Mode:	Ultra Loud Continuous Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz.
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	98±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

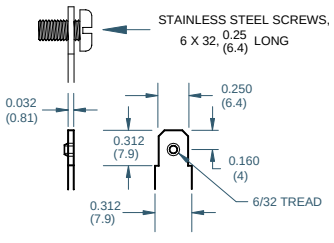


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

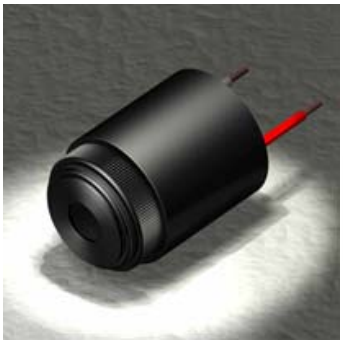
Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

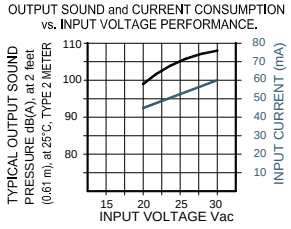
All specifications subject to change without notice.

UC-19-230-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily

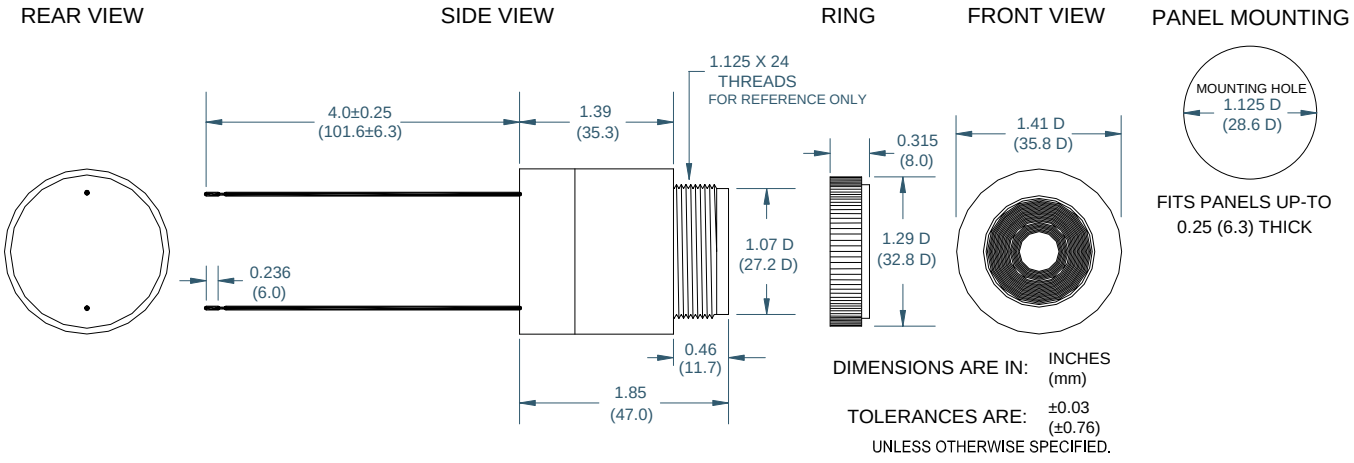


The UC-19-230-W is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The continuous tone has a typical sound pressure level of 108 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Continuous Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz.
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	98±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 108±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

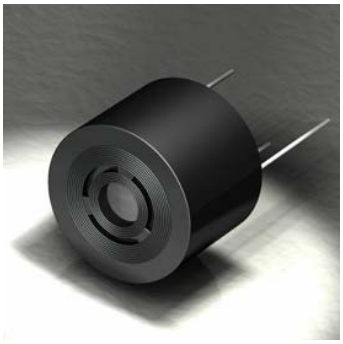
Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

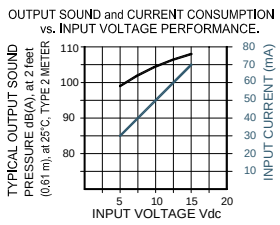
All specifications subject to change without notice.

UO-05-515-P

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- PCB Mountable
- Reliable Piezoelectric Technology
- Polarity Protected

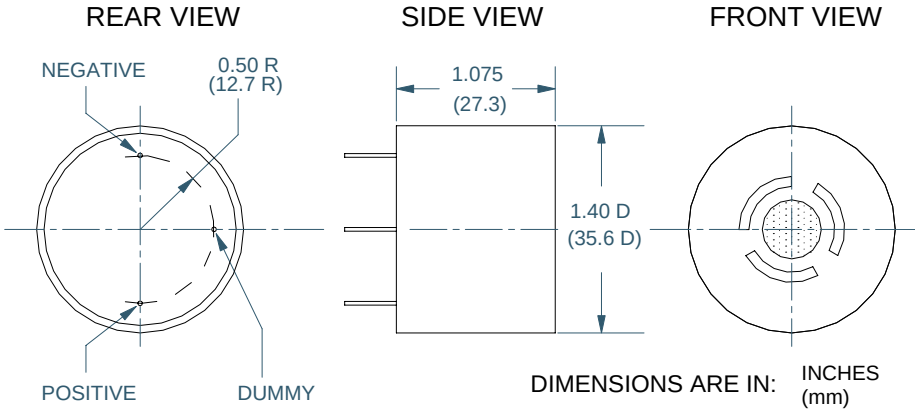


The UO-05-515-P is an ultra loud output, PCB mounted alarm for operating voltages of 5-15VDC. The whoop tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with three 0.032" diameter pins for mounting to a printed circuit board.

SPECIFICATIONS

Operating Mode:	Ultra Loud Whoop Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 2±25% Cycles per second
Typical Operating Current:	30 mA at 5 Vdc 70 mA at 15 Vdc
Typical Sound Pressure:	100±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

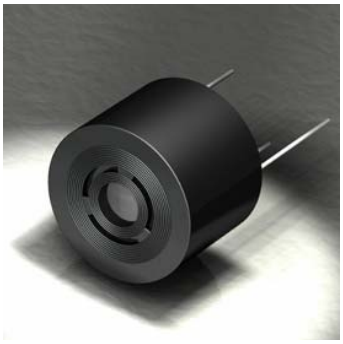
Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

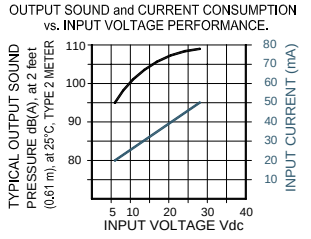
All specifications subject to change without notice.

UO-05-628-P

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- PCB Mountable
- Reliable Piezoelectric Technology
- Polarity Protected

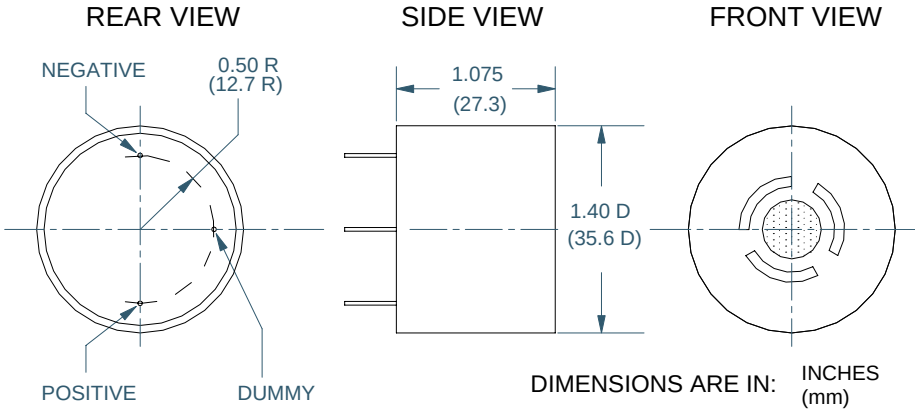


The UO-05-628-P is an ultra loud output, PCB mounted alarm for operating voltages of 6-28VDC. The whoop tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with three 0.032" diameter pins for mounting to a printed circuit board.

SPECIFICATIONS

Operating Mode:	Ultra Loud Whoop Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 2±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	95±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

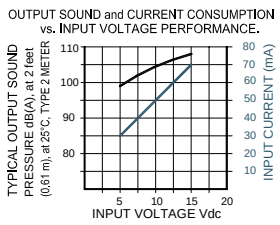
All specifications subject to change without notice.

UO-09-515-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

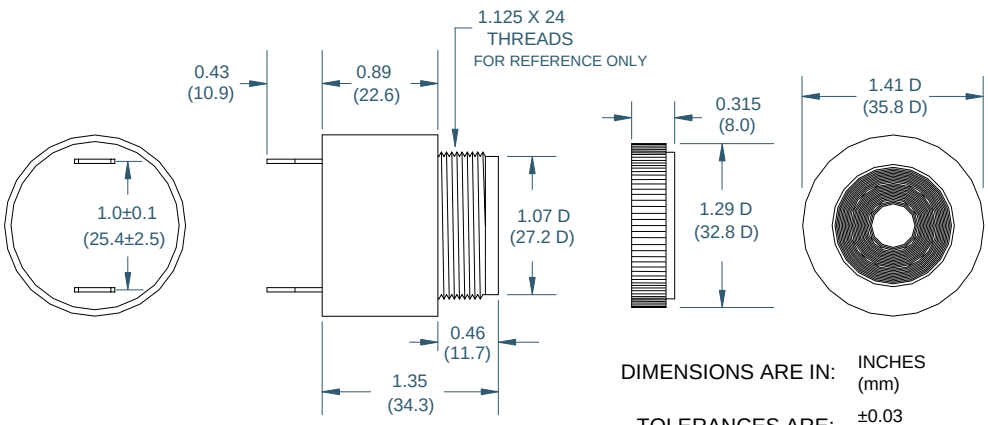


The UO-09-515-Q is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The whoop tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Whoop Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 2±25% Cycles per second
Typical Operating Current:	30 mA at 5 Vdc 70 mA at 15 Vdc
Typical Sound Pressure:	100±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

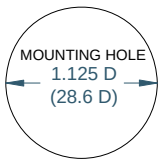


DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

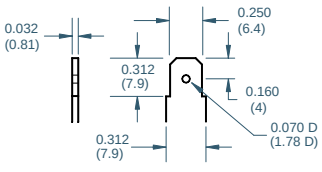
UNLESS OTHERWISE SPECIFIED.

PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

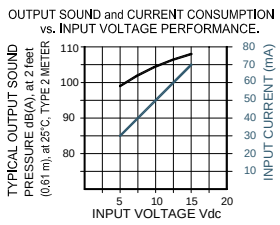
All specifications subject to change without notice.

UO-09-515-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

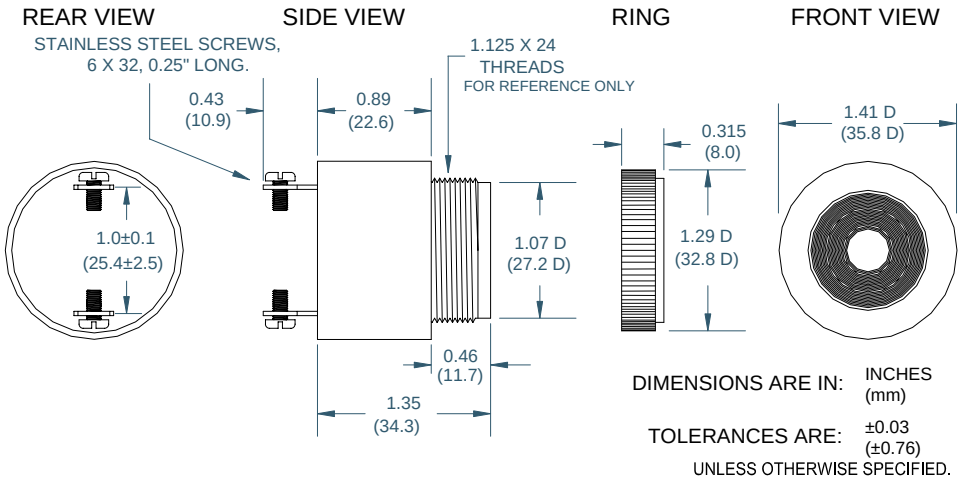


The UO-09-515-S is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The whoop tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

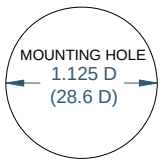
SPECIFICATIONS

Operating Mode:	Ultra Loud Whoop Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 2±25% Cycles per second
Typical Operating Current:	30 mA at 5 Vdc 70 mA at 15 Vdc
Typical Sound Pressure:	100±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

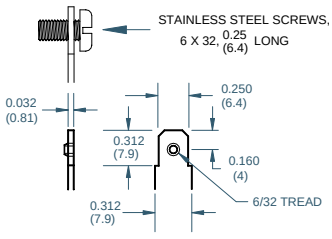


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

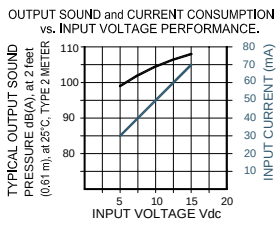
All specifications subject to change without notice.

UO-09-515-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

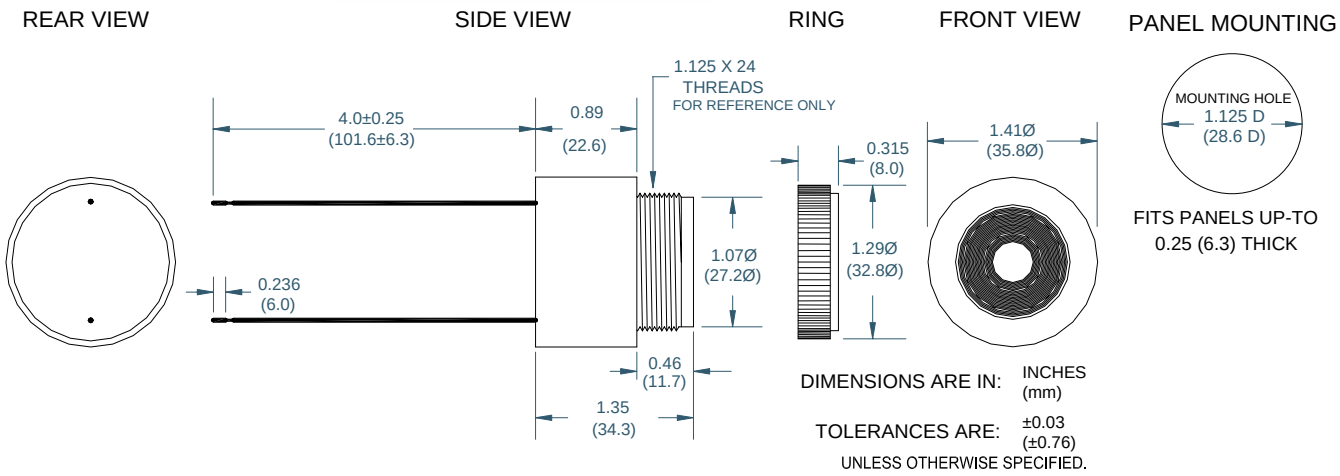


The UO-09-515-W is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The whoop tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Whoop Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 2±25% Cycles per second
Typical Operating Current:	30 mA at 5 Vdc 70 mA at 15 Vdc
Typical Sound Pressure:	100±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

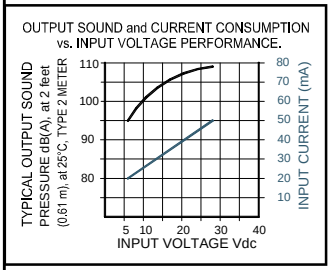
All specifications subject to change without notice.

UO-09-628-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

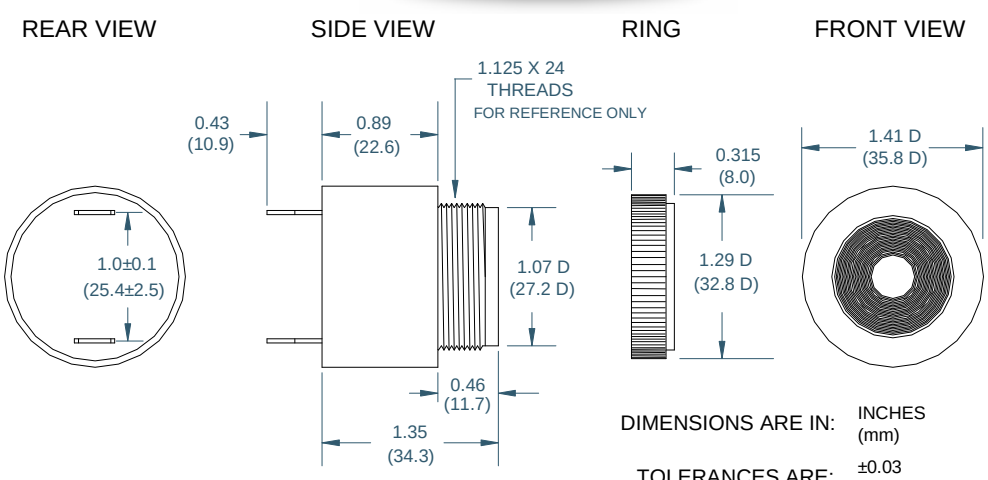


The UO-09-628-Q is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The whoop tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Whoop Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 2±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	95±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25℃ 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

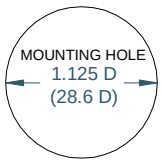


DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

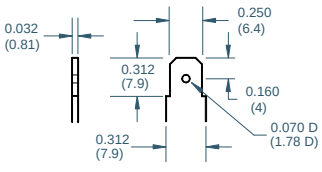
UNLESS OTHERWISE SPECIFIED.

PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

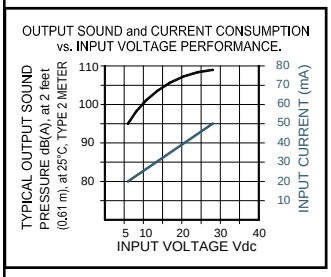
All specifications subject to change without notice.

UO-09-628-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

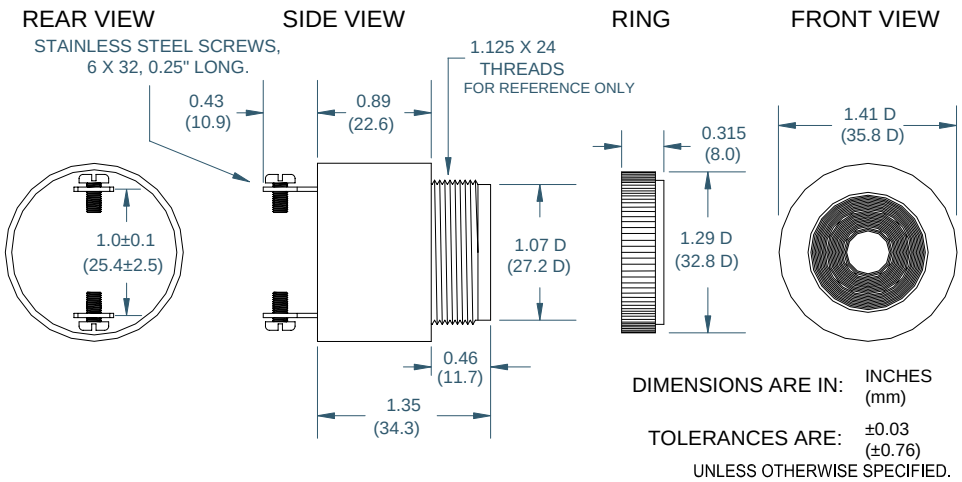


The UO-09-628-S is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The whoop tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

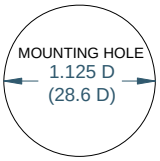
SPECIFICATIONS

Operating Mode:	Ultra Loud Whoop Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 2±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	95±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

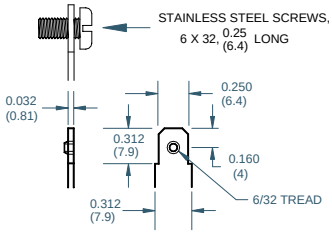


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

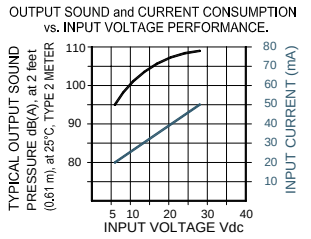
All specifications subject to change without notice.

UO-09-628-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

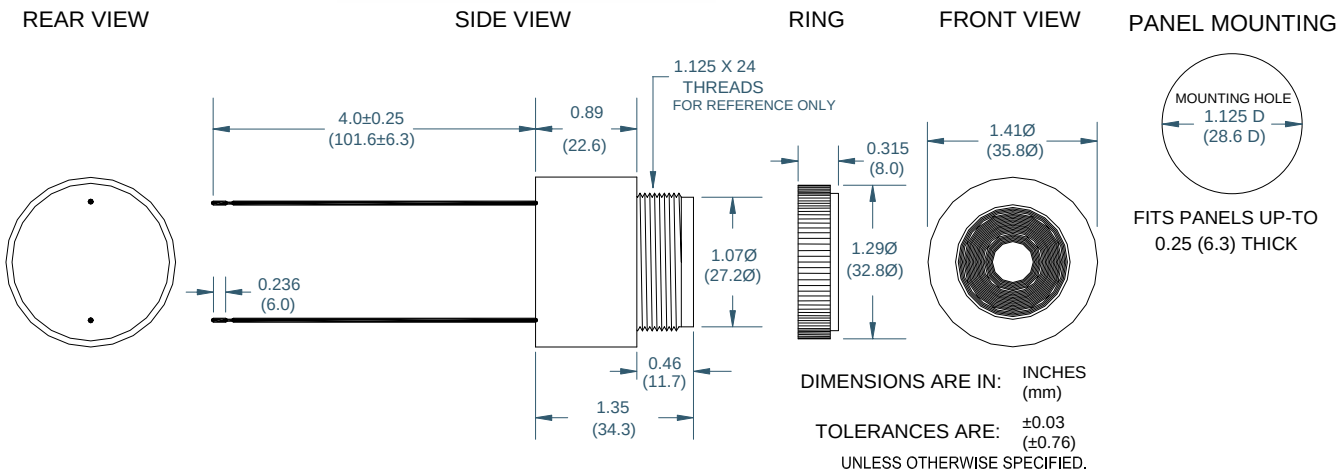


The UO-09-628-W is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The whoop tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Whoop Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 2±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	95±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

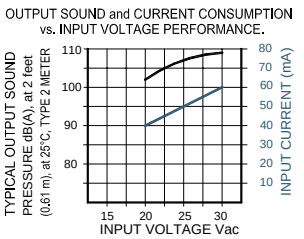
All specifications subject to change without notice.

UO-19-230-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily



The UO-19-230-Q is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The whoop tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Whoop Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. Center 2±25% Cycles per second
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	102±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

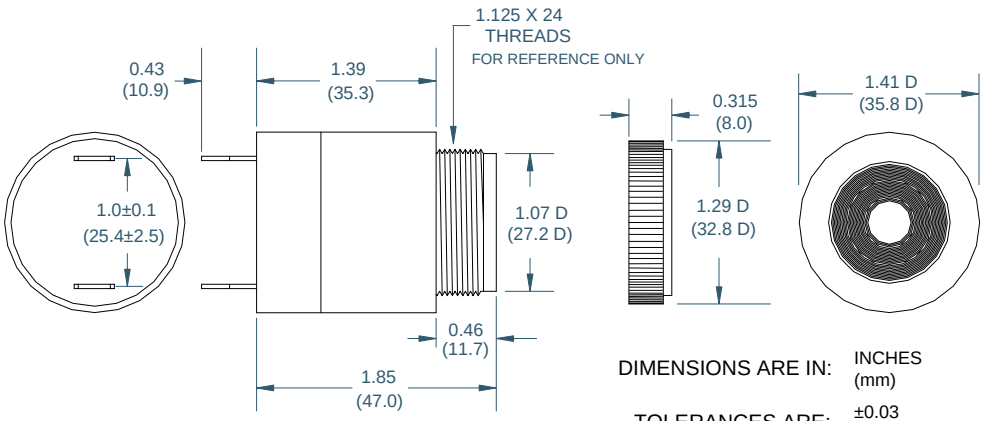
DIMENSIONS

REAR VIEW

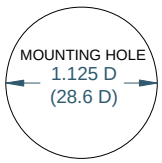
SIDE VIEW

RING

FRONT VIEW

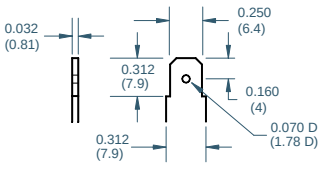


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

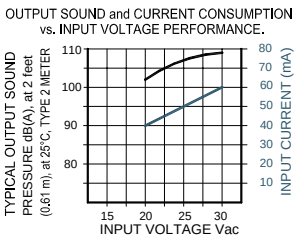
All specifications subject to change without notice.

UO-19-230-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily

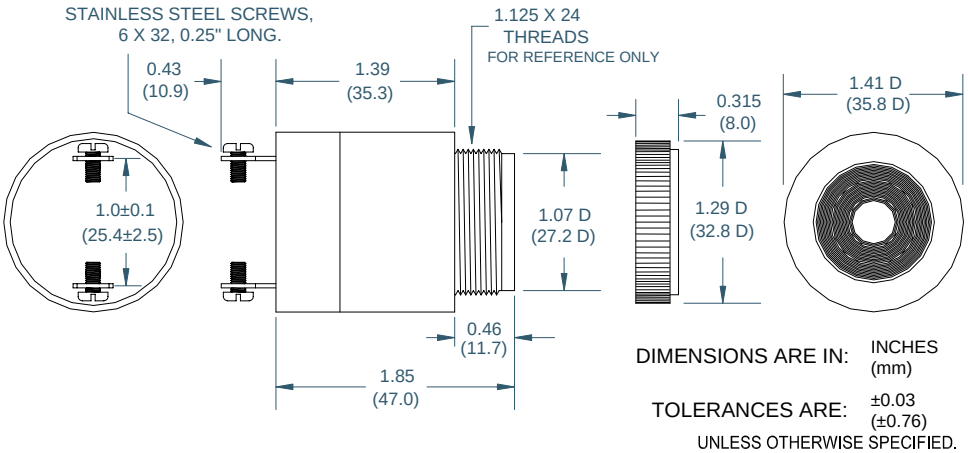


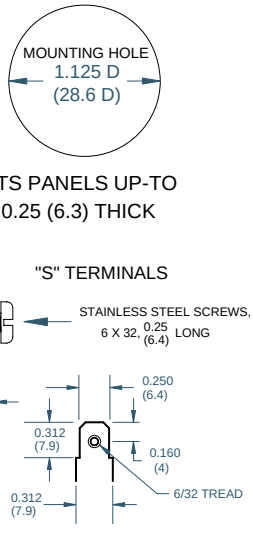
The UO-19-230-S is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The whoop tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Ultra Loud Whoop Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. Center 2±25% Cycles per second
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	102±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

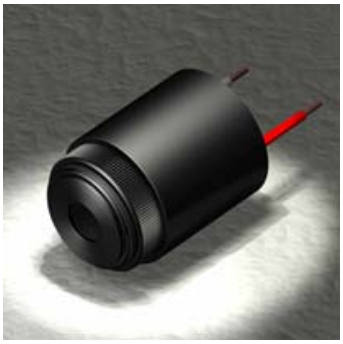
Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

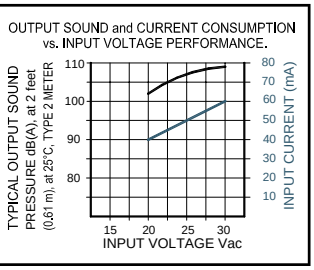
All specifications subject to change without notice.

UO-19-230-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily

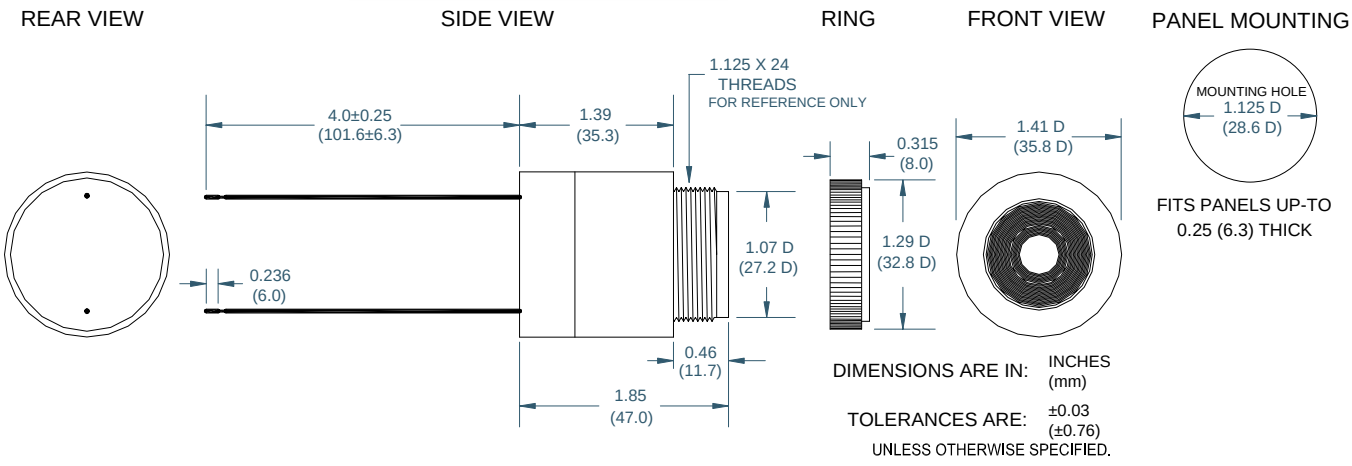


The UO-19-230-W is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The whoop tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Whoop Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. Center 2±25% Cycles per second
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	102±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

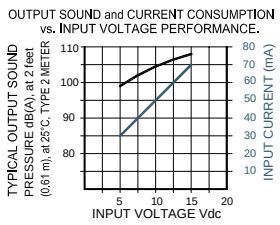
All specifications subject to change without notice.

US-09-515-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

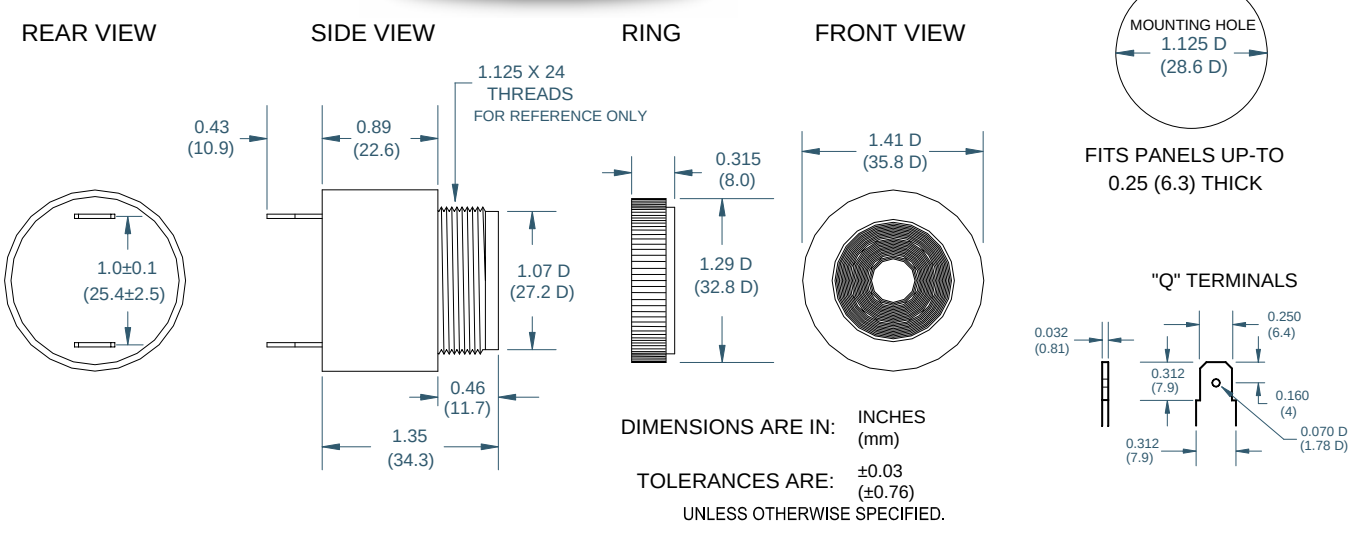


The US-09-515-Q is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The siren tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Siren Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	30 mA at 5 Vdc 70 mA at 15 Vdc
Typical Sound Pressure:	100±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

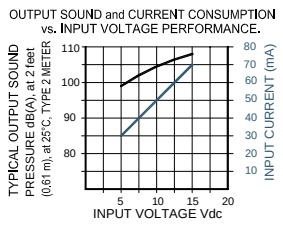
All specifications subject to change without notice.

US-09-515-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

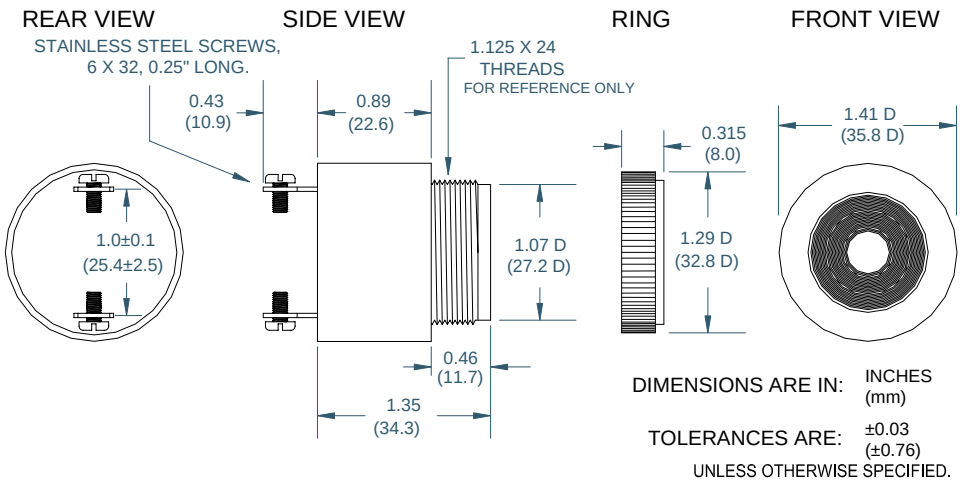


The US-09-515-S is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The siren tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Ultra Loud Siren Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	30 mA at 5 Vdc 70 mA at 15 Vdc
Typical Sound Pressure:	100±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

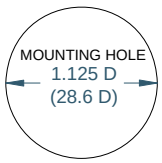


DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

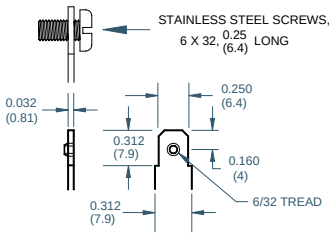
UNLESS OTHERWISE SPECIFIED.

PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

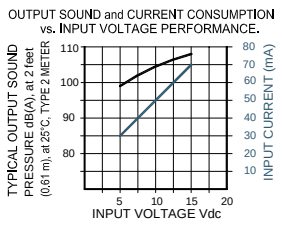
All specifications subject to change without notice.

US-09-515-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

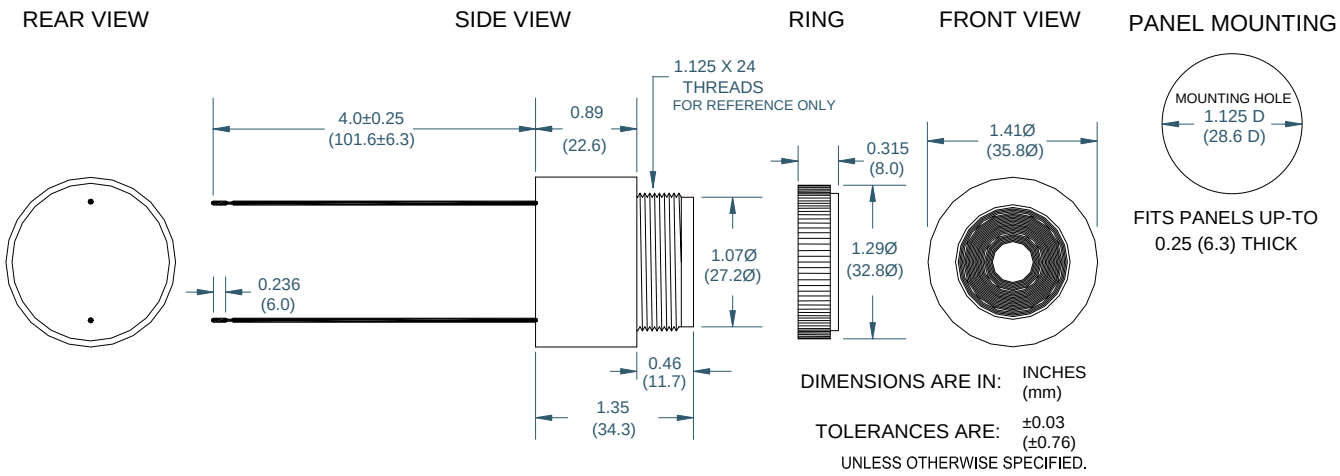


The US-09-515-W is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The siren tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Siren Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	30 mA at 5 Vdc 70 mA at 15 Vdc
Typical Sound Pressure:	100±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

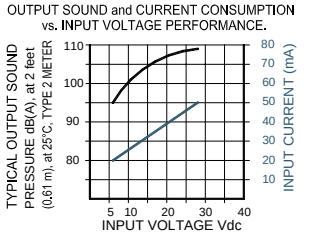
All specifications subject to change without notice.

US-09-628-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

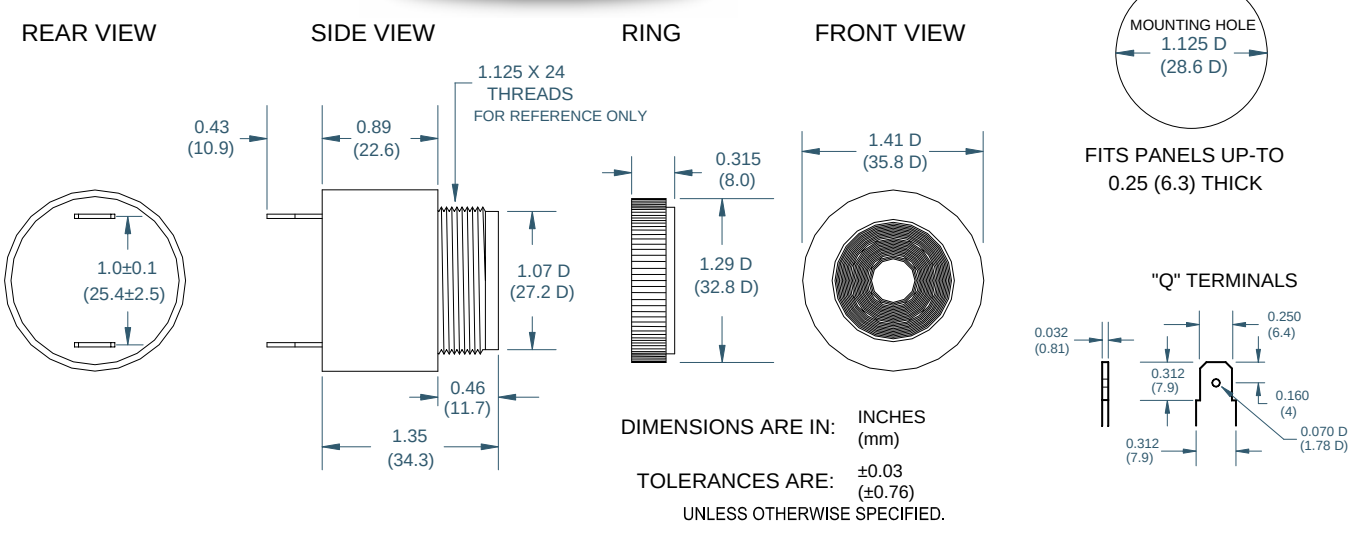


The US-09-628-Q is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The siren tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Siren Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	95±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

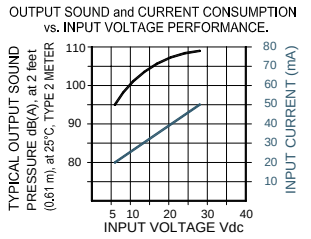
All specifications subject to change without notice.

US-09-628-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

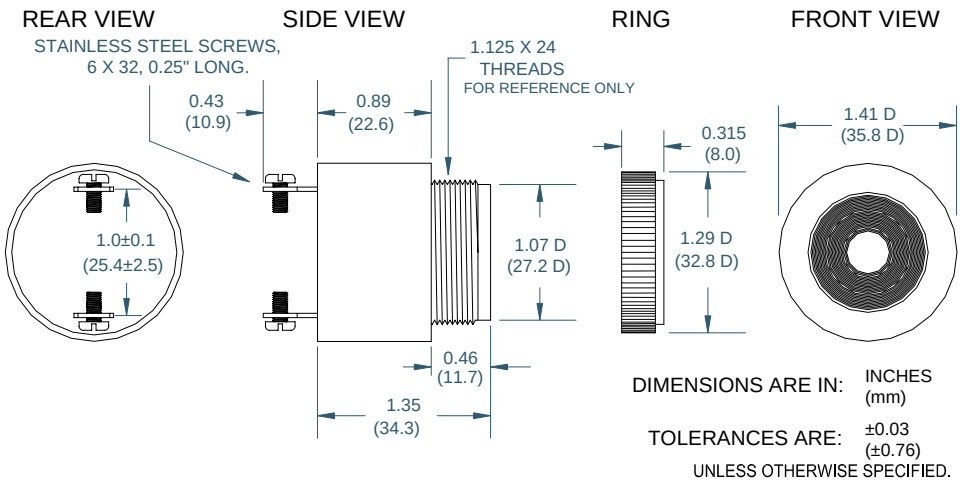


The US-09-628-S is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The siren tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

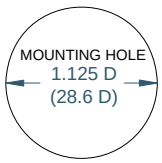
SPECIFICATIONS

Operating Mode:	Ultra Loud Siren Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	95±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

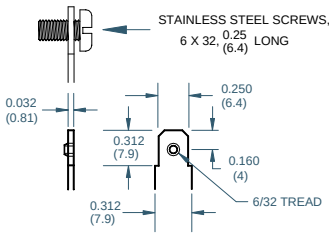


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

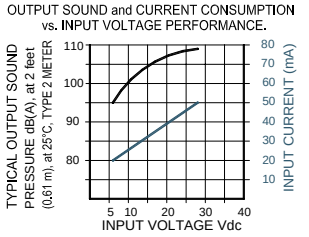
All specifications subject to change without notice.

US-09-628-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

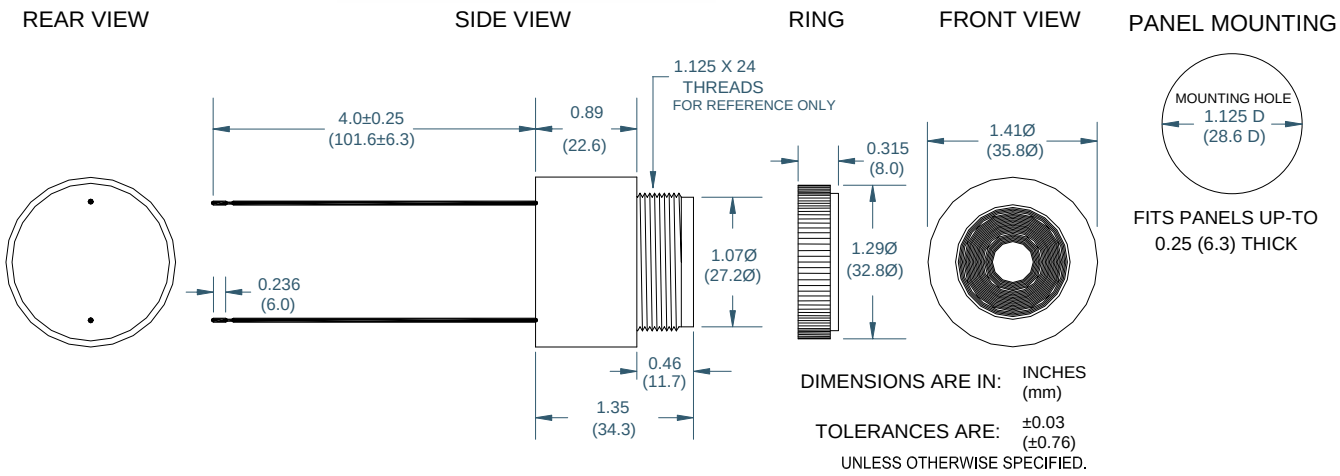


The US-09-628-W is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The siren tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Siren Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	95±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

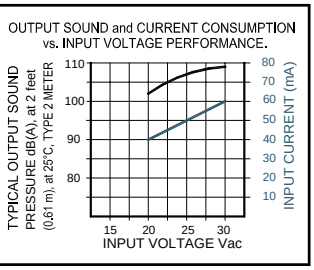
All specifications subject to change without notice.

US-19-230-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily



The US-19-230-Q is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The siren tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Siren Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	102±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

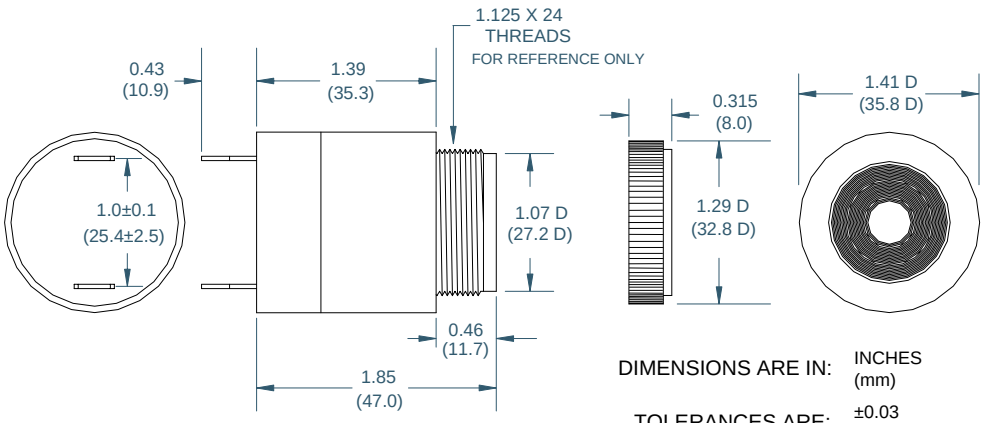
DIMENSIONS

REAR VIEW

SIDE VIEW

RING

FRONT VIEW

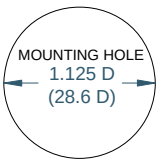


DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

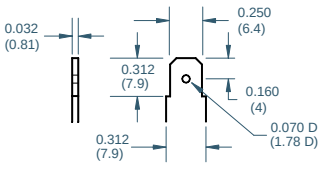
UNLESS OTHERWISE SPECIFIED.

PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

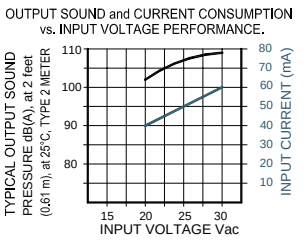
All specifications subject to change without notice.

US-19-230-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily

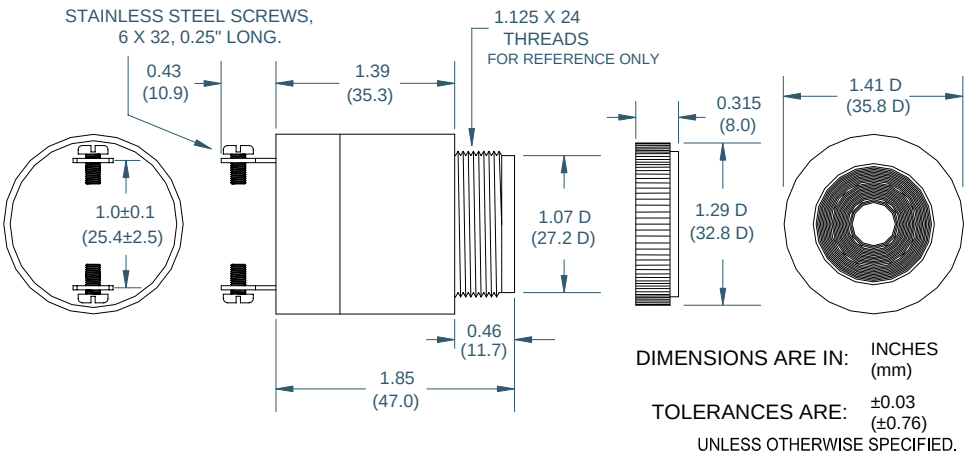


The US-19-230-S is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The siren tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

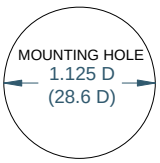
SPECIFICATIONS

Operating Mode:	Ultra Loud Siren Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	102±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

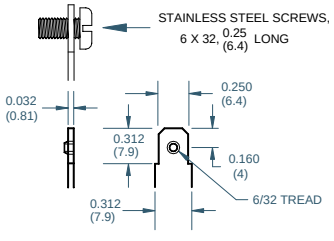


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

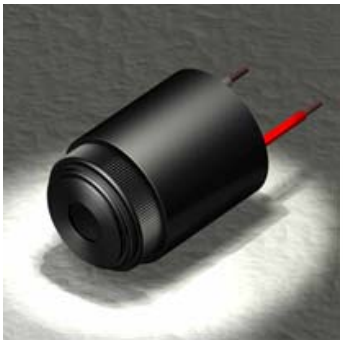
Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

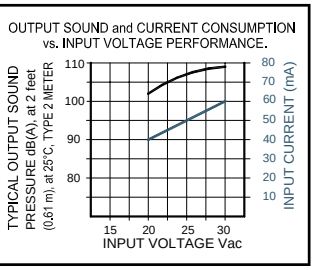
All specifications subject to change without notice.

US-19-230-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily

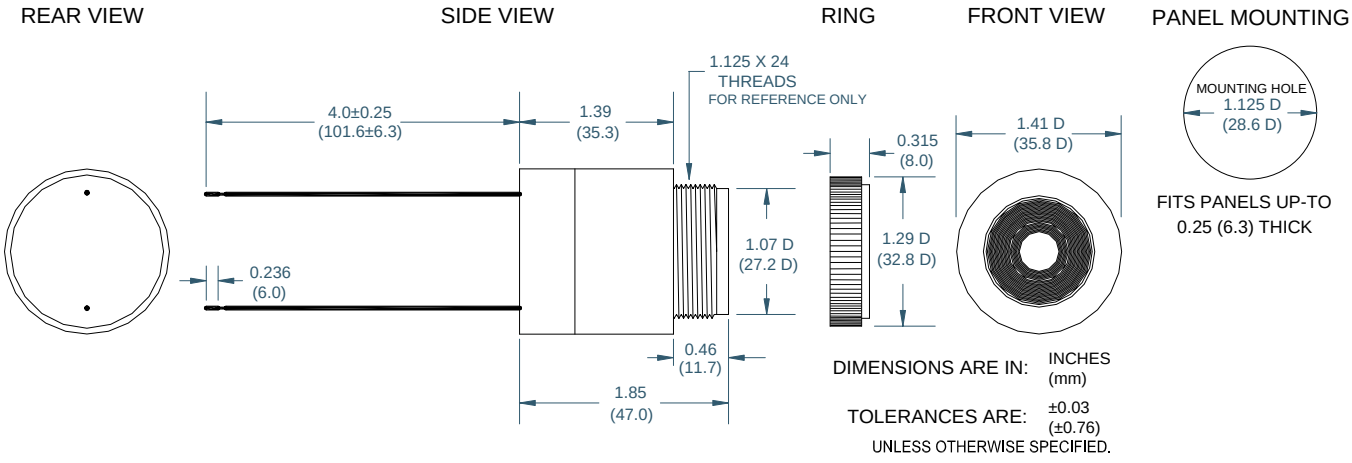


The US-19-230-W is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The siren tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Siren Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	102±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

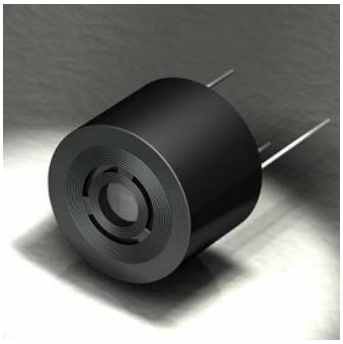
Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

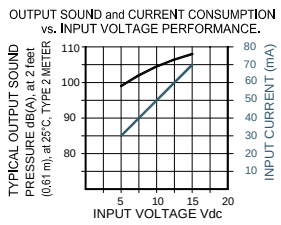
All specifications subject to change without notice.

UT-05-515-P

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- PCB Mountable
- Reliable Piezoelectric Technology
- Polarity Protected

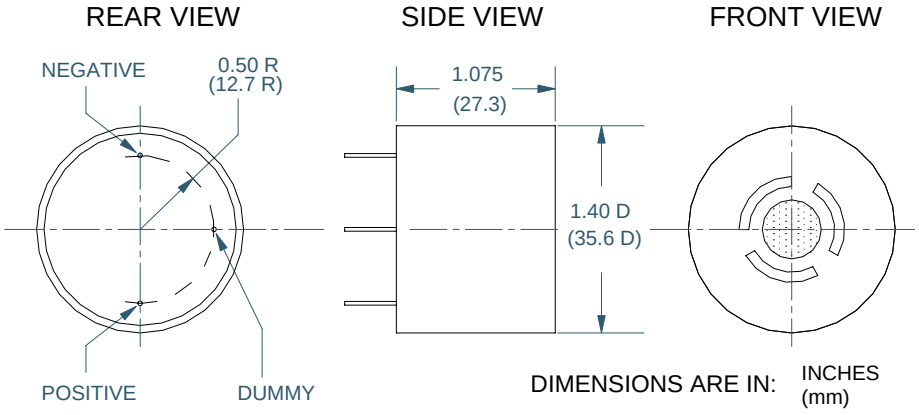


The UT-05-515-P is an ultra loud output, PCB mounted alarm for operating voltages of 5-15VDC. The staccato tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with three 0.032" diameter pins for mounting to a printed circuit board.

SPECIFICATIONS

Operating Mode:	Ultra Loud Staccato Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 8±25% Cycles per second
Typical Operating Current:	30 mA at 5 Vdc 70 mA at 15 Vdc
Typical Sound Pressure:	100±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

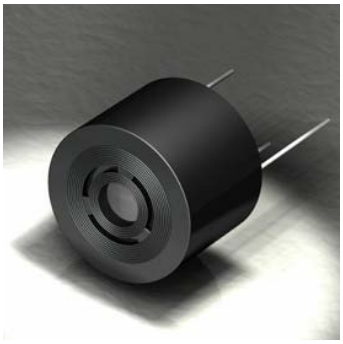
Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

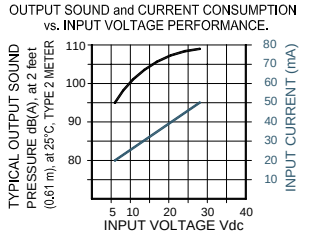
All specifications subject to change without notice.

UT-05-628-P

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- PCB Mountable
- Reliable Piezoelectric Technology
- Polarity Protected

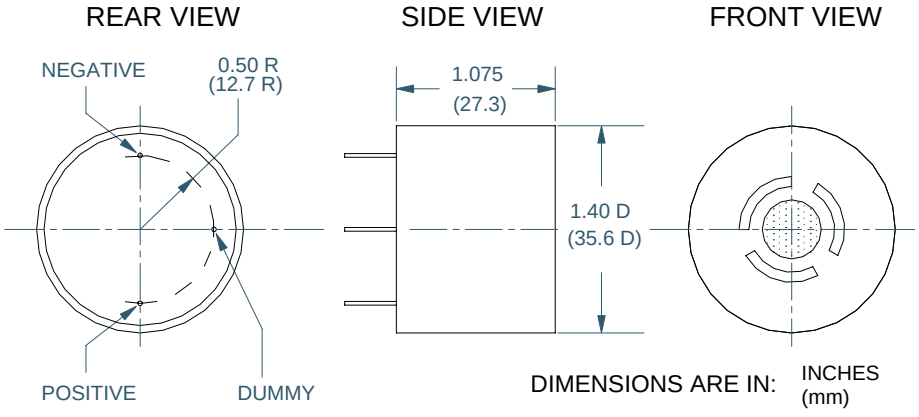


The UT-05-628-P is an ultra loud output, PCB mounted alarm for operating voltages of 6-28VDC. The staccato tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with three 0.032" diameter pins for mounting to a printed circuit board.

SPECIFICATIONS

Operating Mode:	Ultra Loud Staccato Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 8±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	95±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

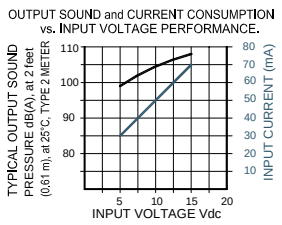
All specifications subject to change without notice.

UT-09-515-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected



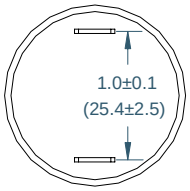
The UT-09-515-Q is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The staccato tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

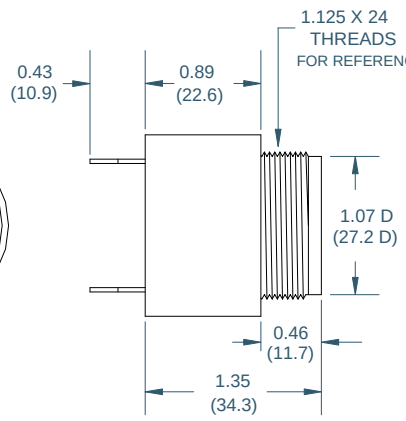
Operating Mode:	Ultra Loud Staccato Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 8±25% Cycles per second
Typical Operating Current:	30 mA at 5 Vdc 70 mA at 15 Vdc
Typical Sound Pressure:	100±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

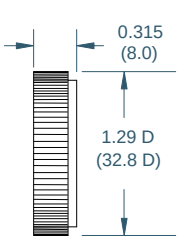
REAR VIEW



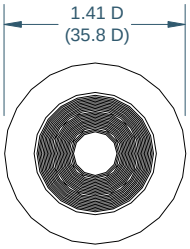
SIDE VIEW



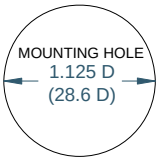
RING



FRONT VIEW

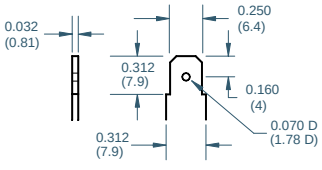


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

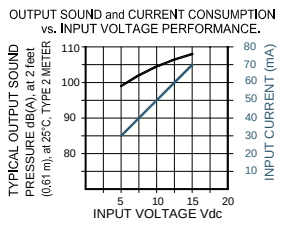
All specifications subject to change without notice.

UT-09-515-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

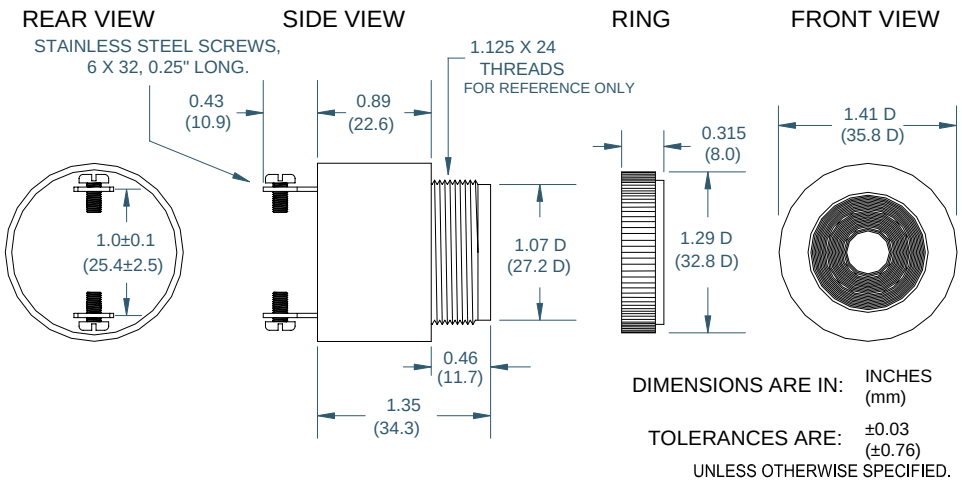


The UT-09-515-S is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The staccato tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Ultra Loud Staccato Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 8±25% Cycles per second
Typical Operating Current:	30 mA at 5 Vdc 70 mA at 15 Vdc
Typical Sound Pressure:	100±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

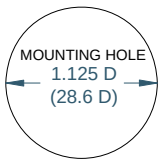


DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

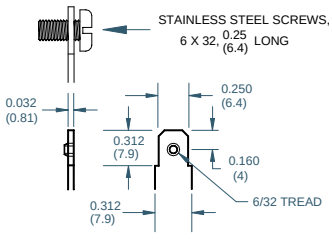
UNLESS OTHERWISE SPECIFIED.

PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

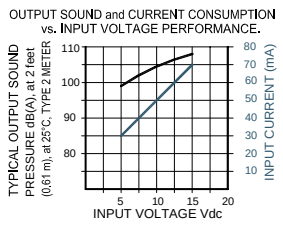
All specifications subject to change without notice.

UT-09-515-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected



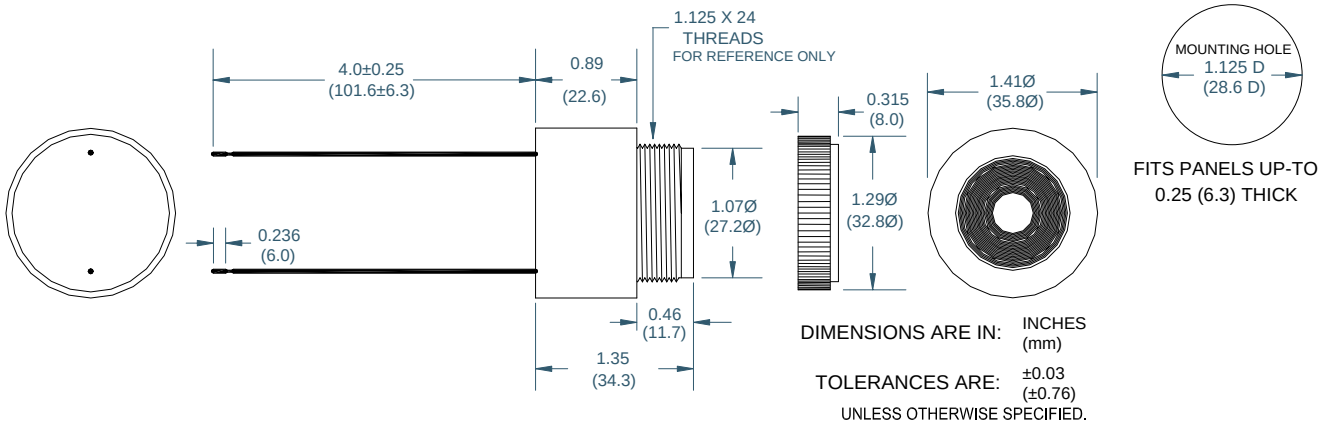
The UT-09-515-W is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The staccato tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Staccato Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 8±25% Cycles per second
Typical Operating Current:	30 mA at 5 Vdc 70 mA at 15 Vdc
Typical Sound Pressure:	100±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW | SIDE VIEW | RING | FRONT VIEW | PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

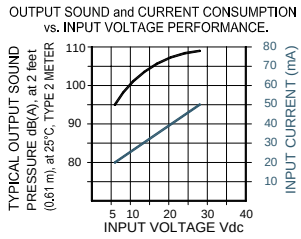
All specifications subject to change without notice.

UT-09-628-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

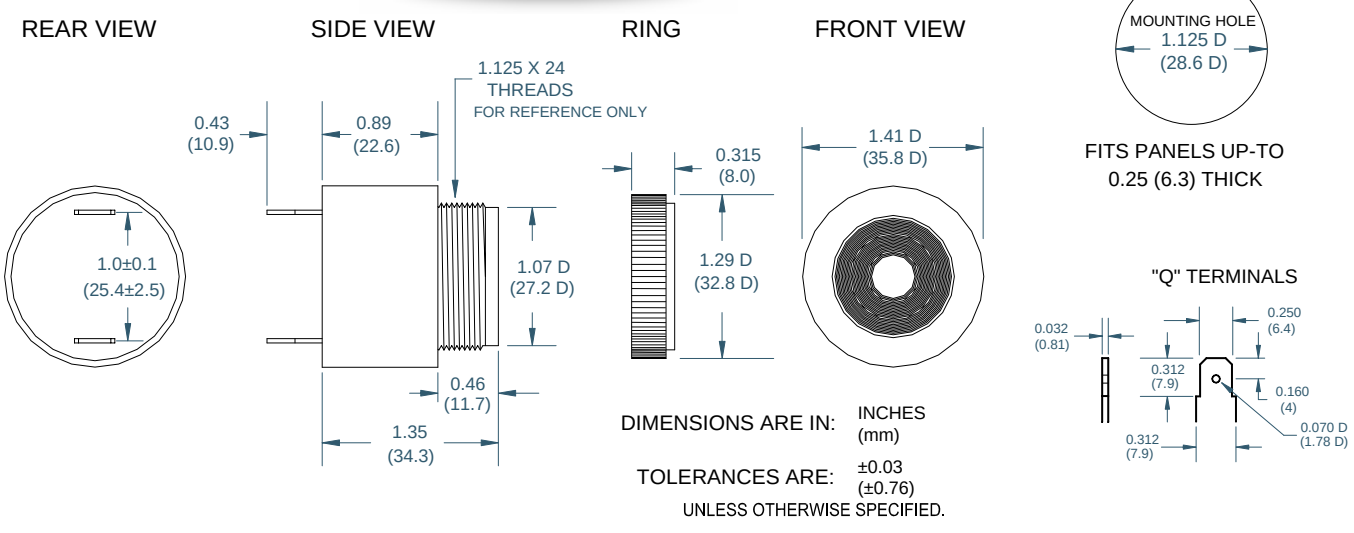


The UT-09-628-Q is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The staccato tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Staccato Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 8±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	95±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

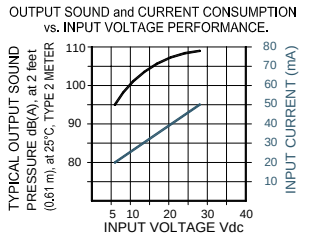
All specifications subject to change without notice.

UT-09-628-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

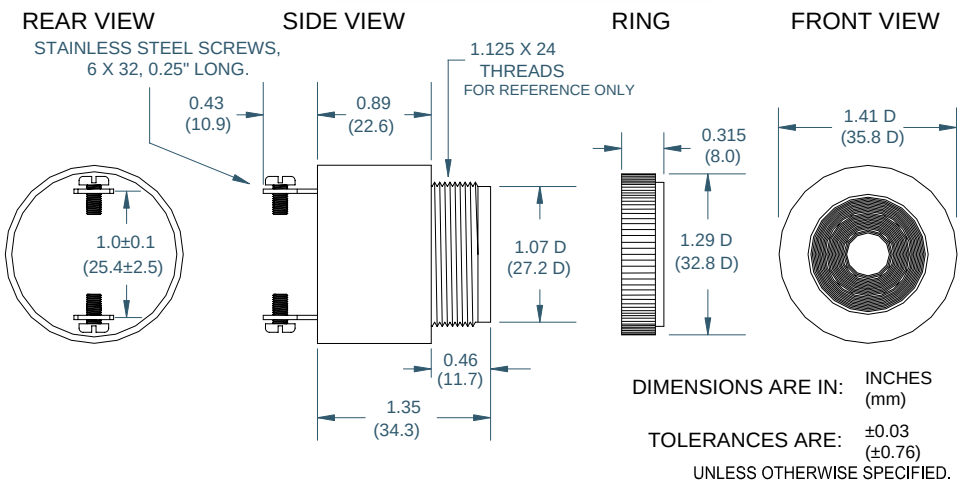


The UT-09-628-S is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The staccato tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

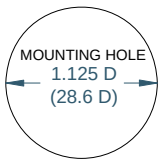
SPECIFICATIONS

Operating Mode:	Ultra Loud Staccato Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 8±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	95±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

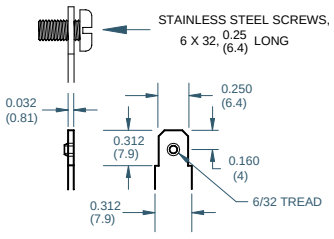


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

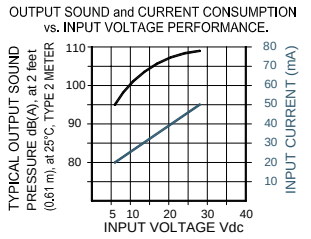
All specifications subject to change without notice.

UT-09-628-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

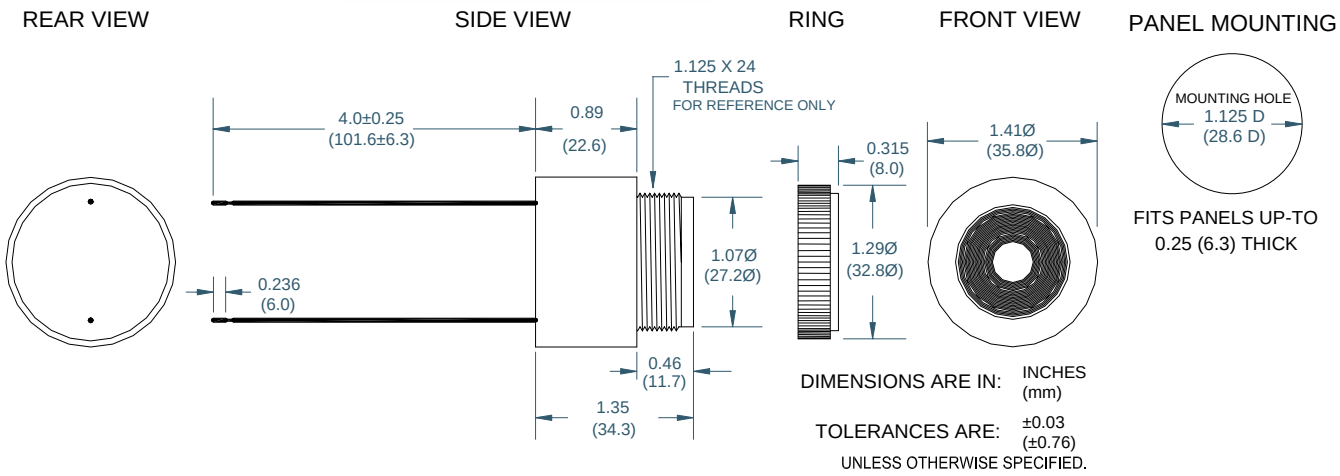


The UT-09-628-W is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The staccato tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Staccato Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 8±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	95±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

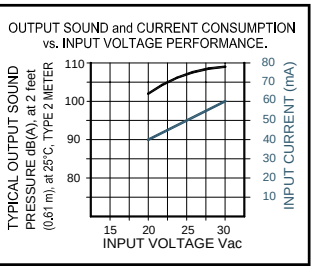
All specifications subject to change without notice.

UT-19-230-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily



The UT-19-230-Q is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The staccato tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Staccato Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. Center 8±25% Cycles per second
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	102±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

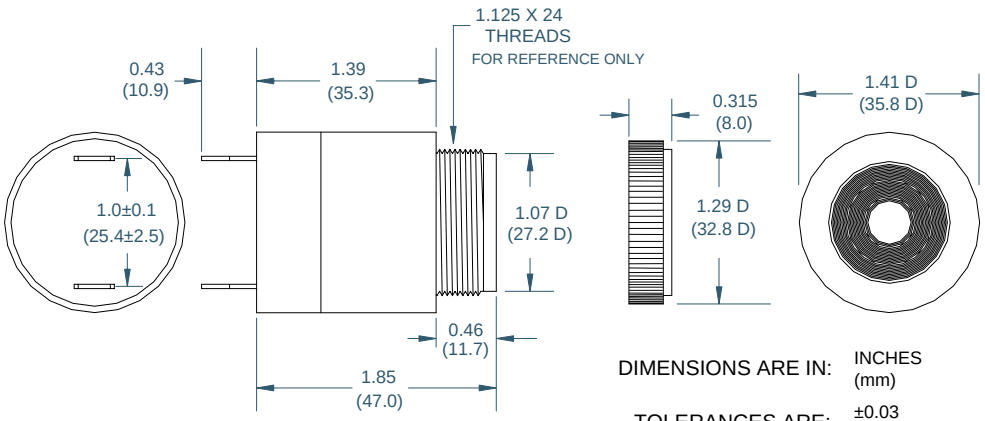
DIMENSIONS

REAR VIEW

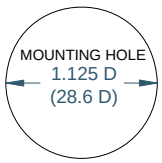
SIDE VIEW

RING

FRONT VIEW

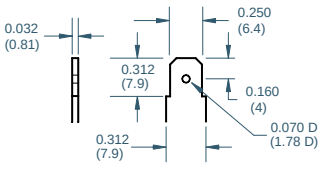


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

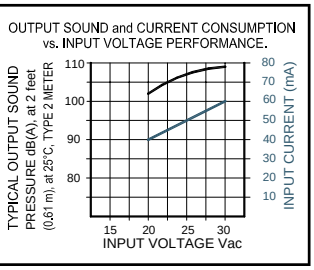
All specifications subject to change without notice.

UT-19-230-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily

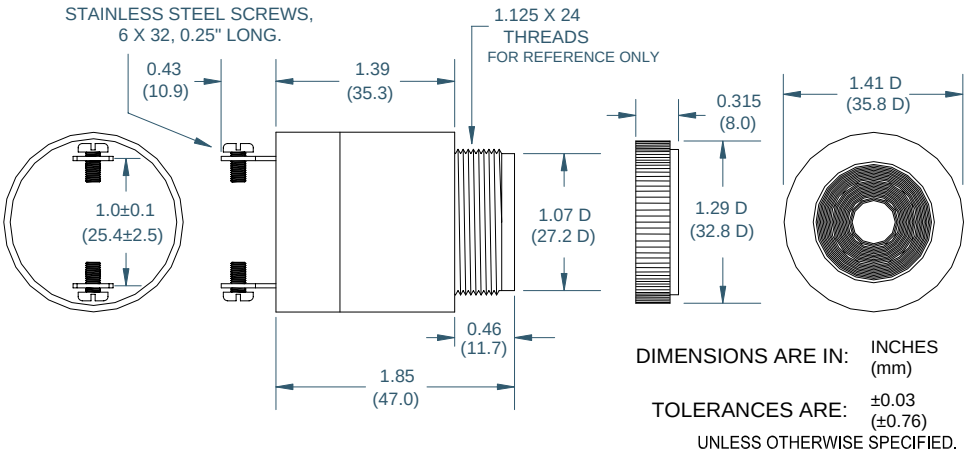


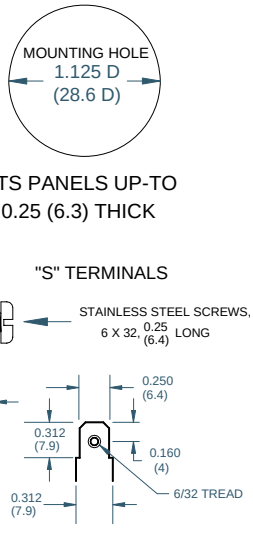
The UT-19-230-S is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The staccato tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Ultra Loud Staccato Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. Center 8±25% Cycles per second
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	102±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

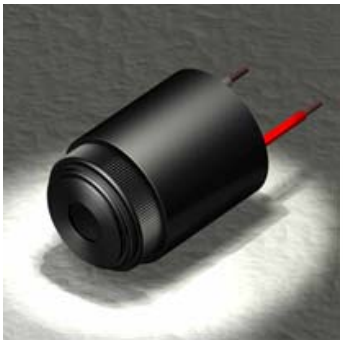
Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

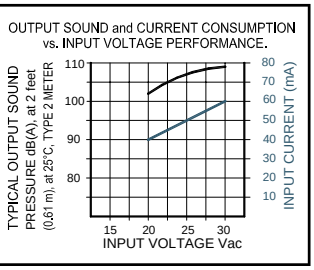
All specifications subject to change without notice.

UT-19-230-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily



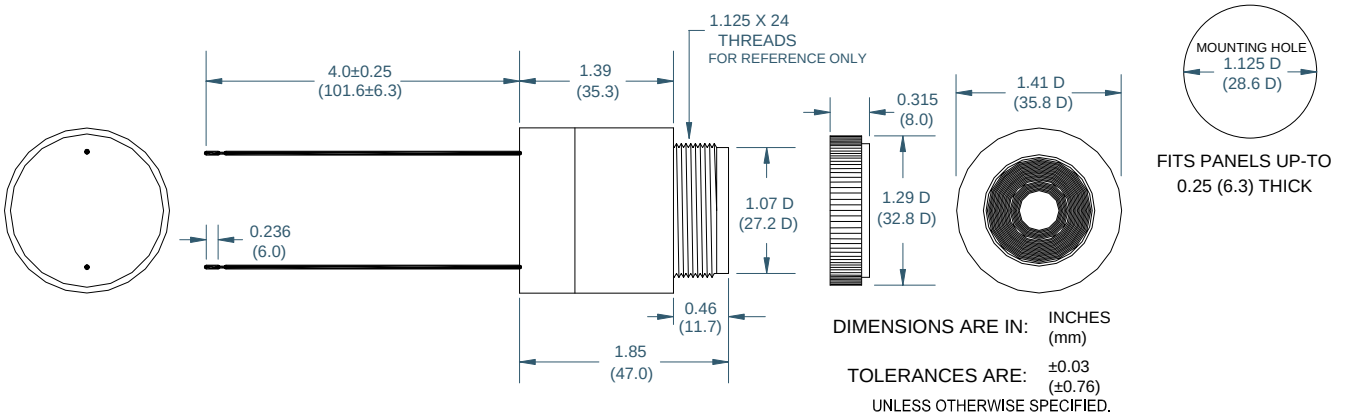
The UT-19-230-W is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The staccato tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Staccato Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. Center 8±25% Cycles per second
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	102±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW | SIDE VIEW | RING | FRONT VIEW | PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

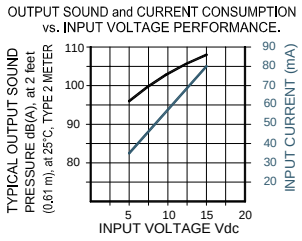
All specifications subject to change without notice.

UW-09-515-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected



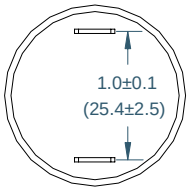
The UW-09-515-Q(F) is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The fast warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

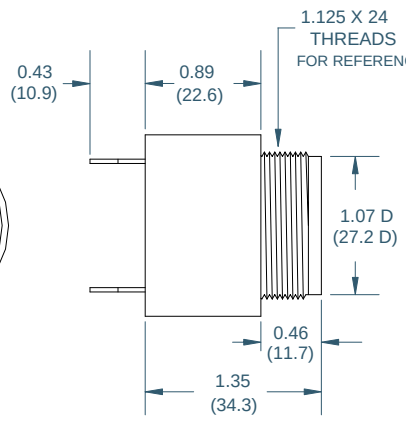
Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	35 mA at 5 Vdc 80 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

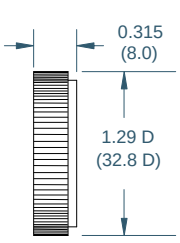
REAR VIEW



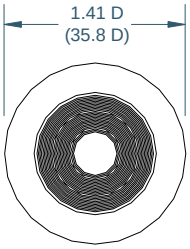
SIDE VIEW



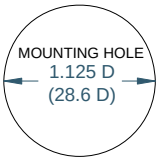
RING



FRONT VIEW

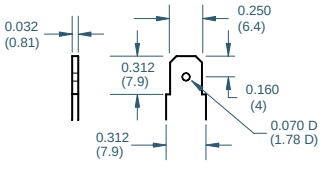


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

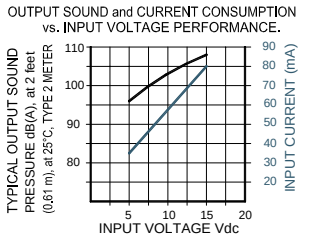
All specifications subject to change without notice.

UW-09-515-Q(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

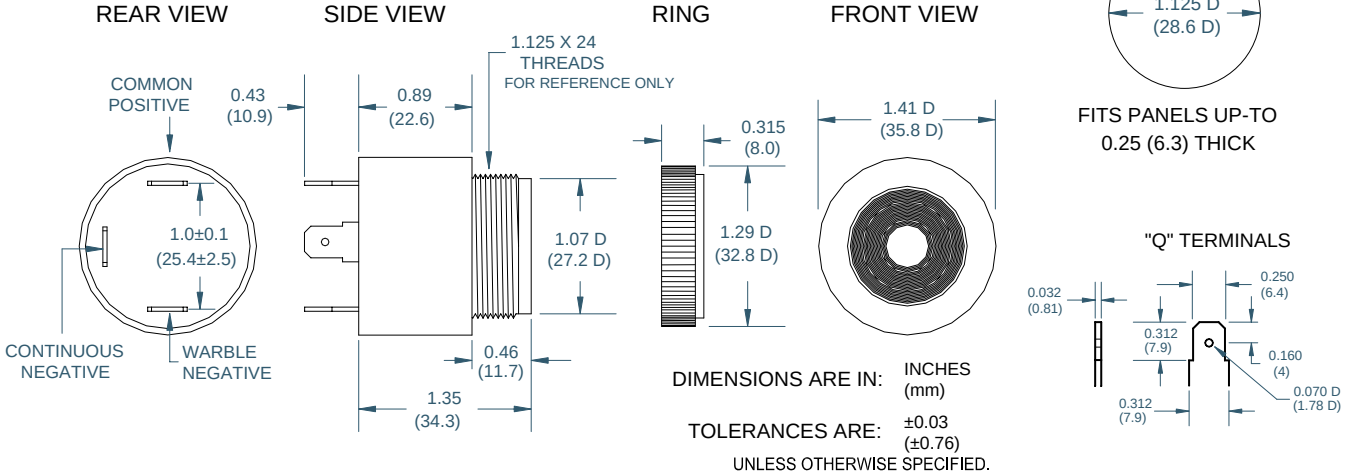


The UW-09-515-Q(F)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 5-15VDC. The alarm functions as a fast warble tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Warble/Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	35 mA at 5 Vdc 80 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

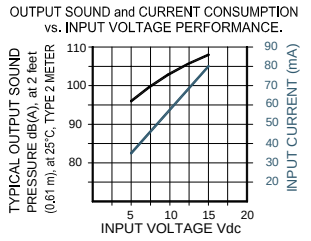
All specifications subject to change without notice.

UW-09-515-Q(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

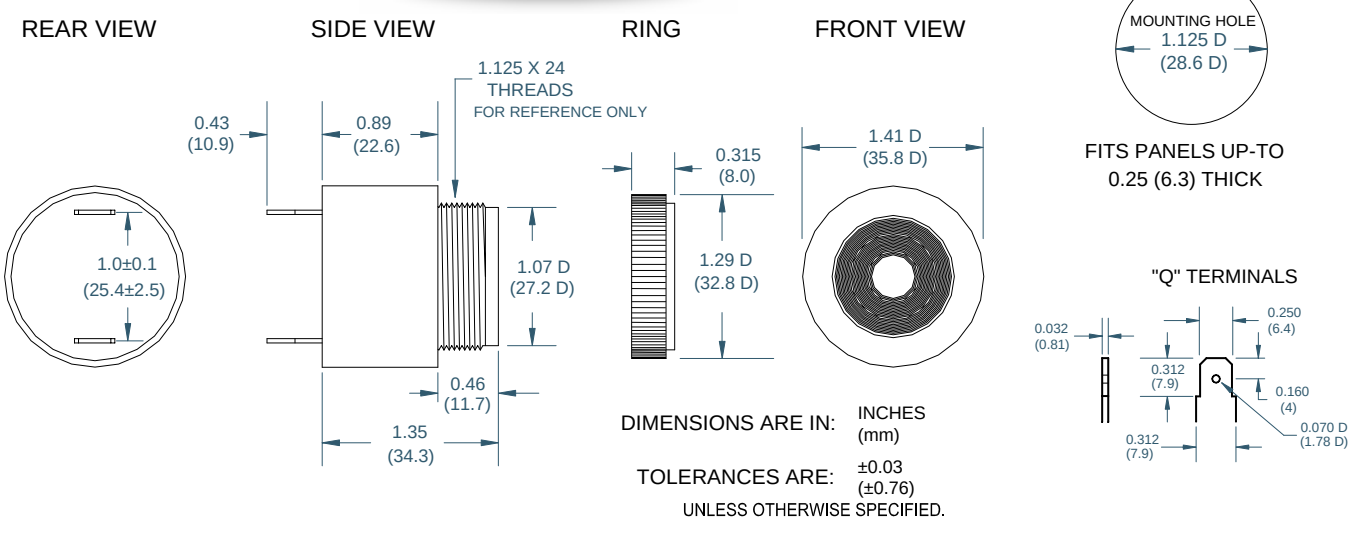


The UW-09-515-Q(S) is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The slow warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 1±25% Cycles per second
Typical Operating Current:	35 mA at 5 Vdc 80 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

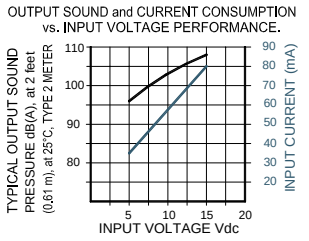
All specifications subject to change without notice.

UW-09-515-Q(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

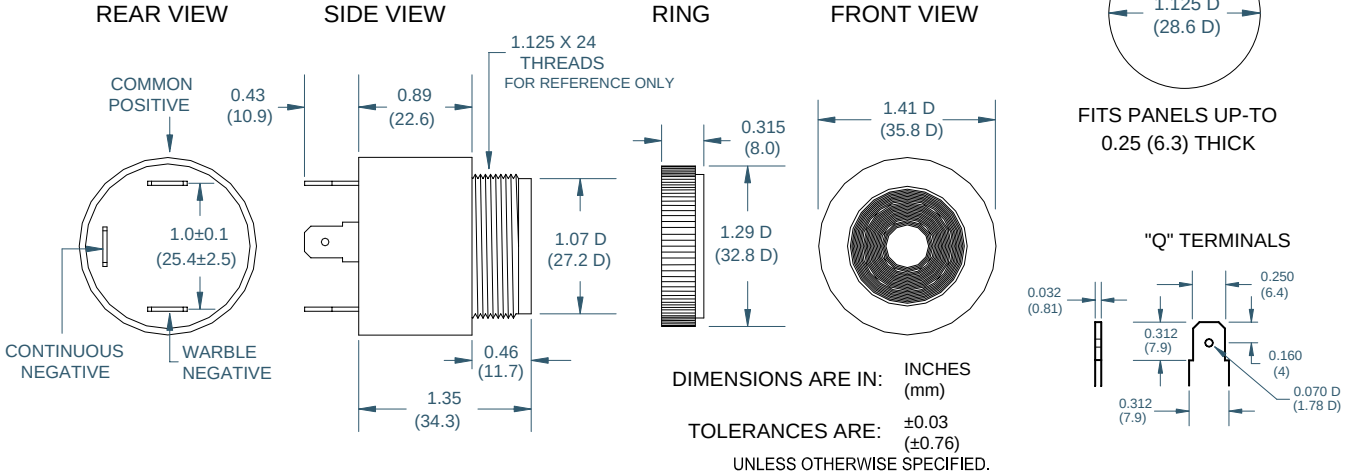


The UW-09-515-Q(S)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 5-15VDC. The alarm functions as a slow warble tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Warble/Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 1±25% Cycles per second
Typical Operating Current:	35 mA at 5 Vdc 80 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

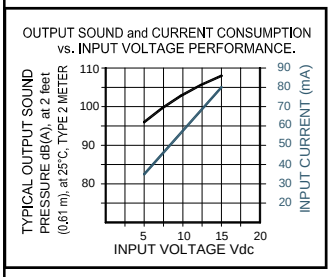
All specifications subject to change without notice.

UW-09-515-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

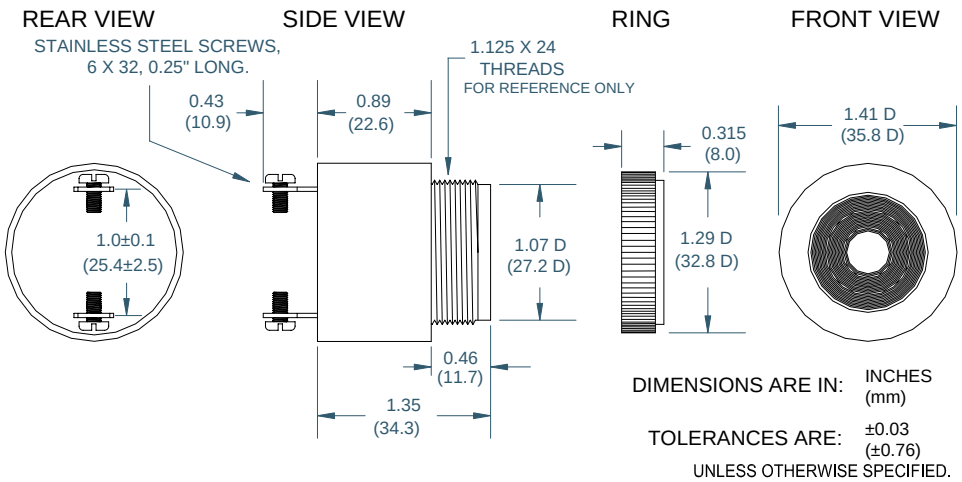


The UW-09-515-S(F) is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The fast warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

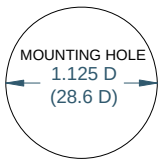
SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	35 mA at 5 Vdc 80 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

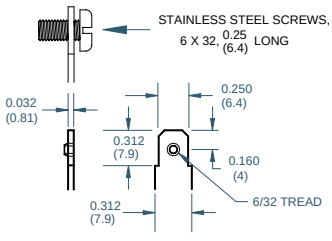


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

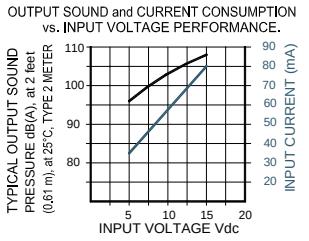
All specifications subject to change without notice.

UW-09-515-S(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

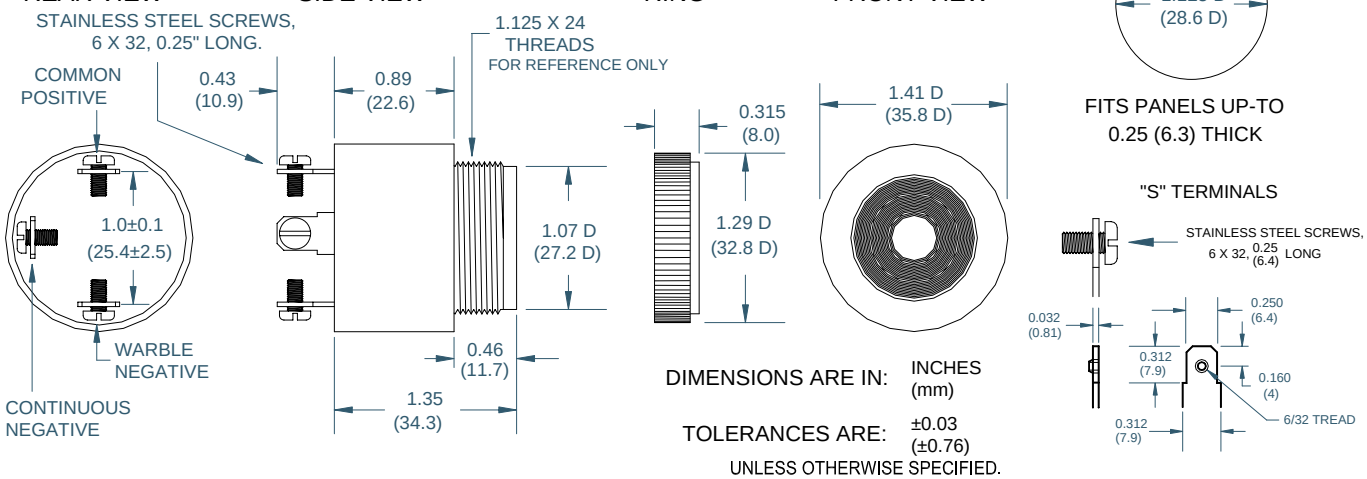


The UW-09-515-S(F)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 5-15VDC. The alarm functions as a fast warble tone and as a continuous tone. Both tone modes have a typical sound pressure level of 109 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Warble/Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	35 mA at 5 Vdc 80 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

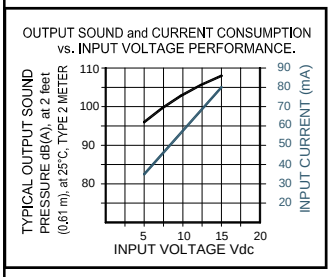
All specifications subject to change without notice.

UW-09-515-S(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

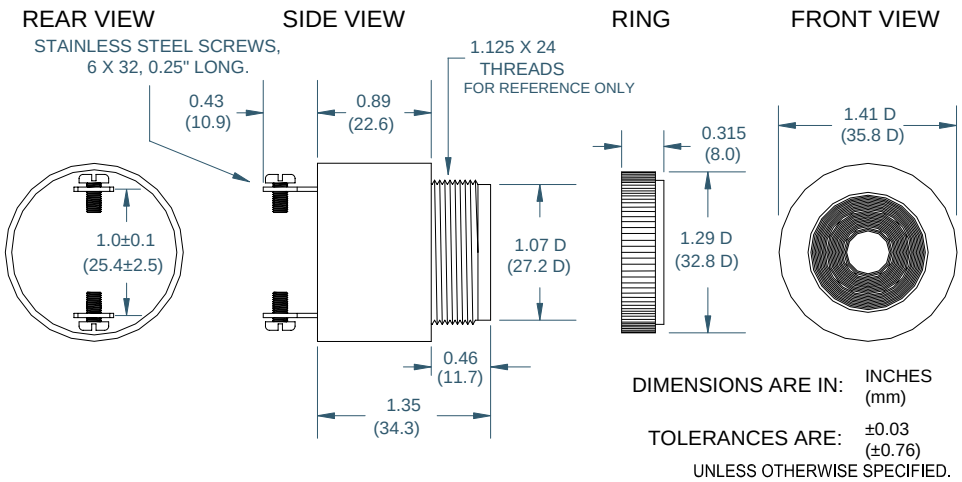


The UW-09-515-S(S) is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The slow warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

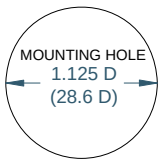
SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 1±25% Cycles per second
Typical Operating Current:	35 mA at 5 Vdc 80 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

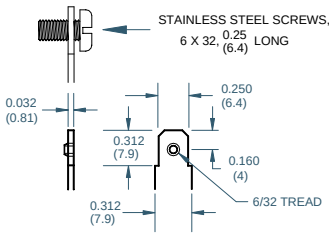


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

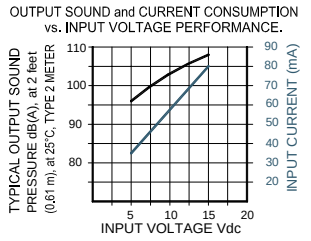
All specifications subject to change without notice.

UW-09-515-S(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

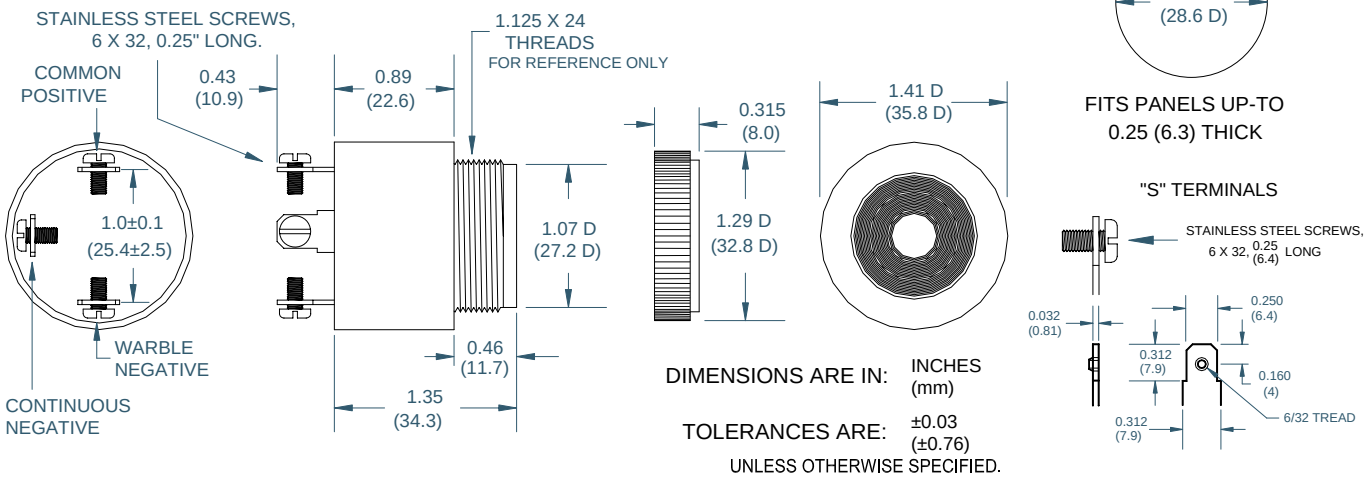


The UW-09-515-S(S)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 5-15VDC. The alarm functions as a slow warble tone and as a continuous tone. Both tone modes have a typical sound pressure level of 109 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Warble/Continuous Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 1±25% Cycles per second
Typical Operating Current:	35 mA at 5 Vdc 80 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

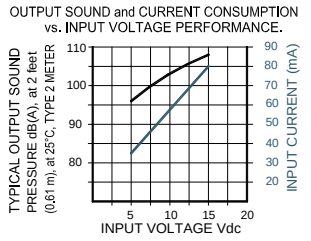
All specifications subject to change without notice.

UW-09-515-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

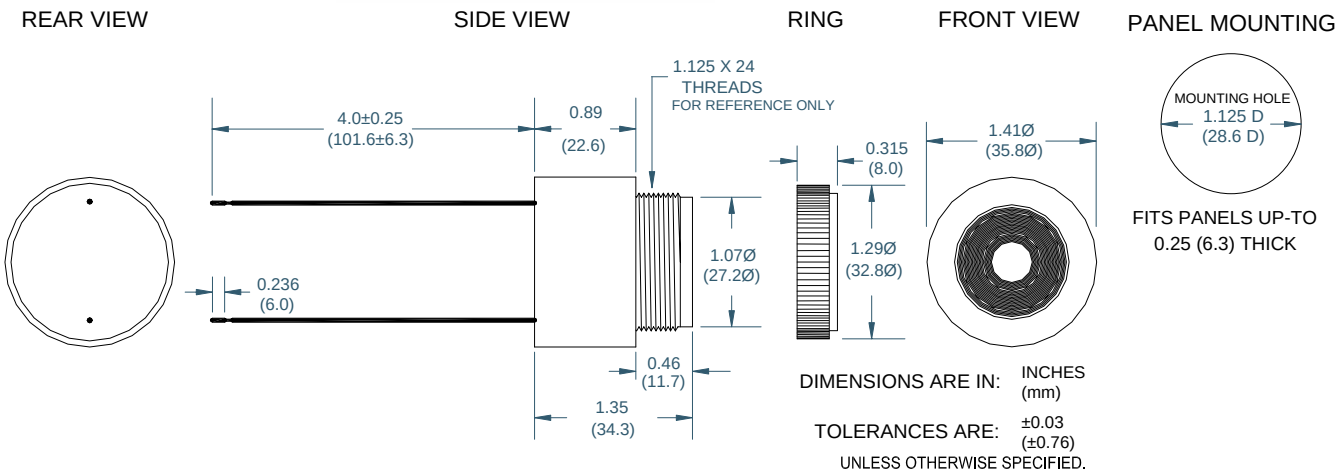


The UW-09-515-W(F) is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The fast warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	35 mA at 5 Vdc 80 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

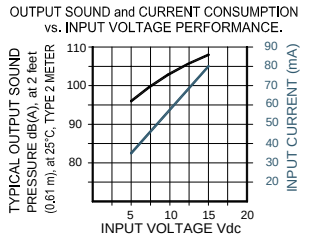
All specifications subject to change without notice.

UW-09-515-W(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected



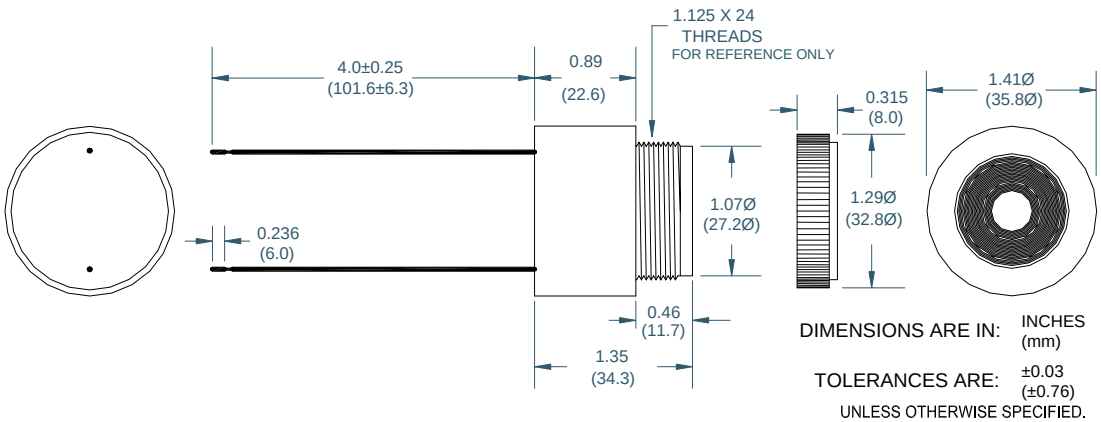
The UW-09-515-W(S) is an ultra loud output, panel mounted alarm for operating voltages of 5-15VDC. The slow warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

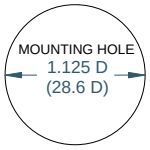
SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	5-15 Vdc
Nominal Operating Voltage:	15 Vdc
Operating Frequency:	2100±250 Hz. Center 1±25% Cycles per second
Typical Operating Current:	35 mA at 5 Vdc 80 mA at 15 Vdc
Typical Sound Pressure:	97±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 15 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING





FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

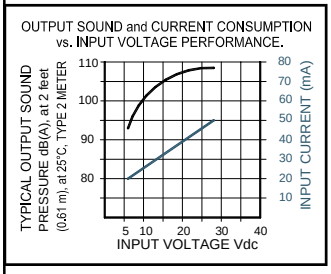
All specifications subject to change without notice.

UW-09-628-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

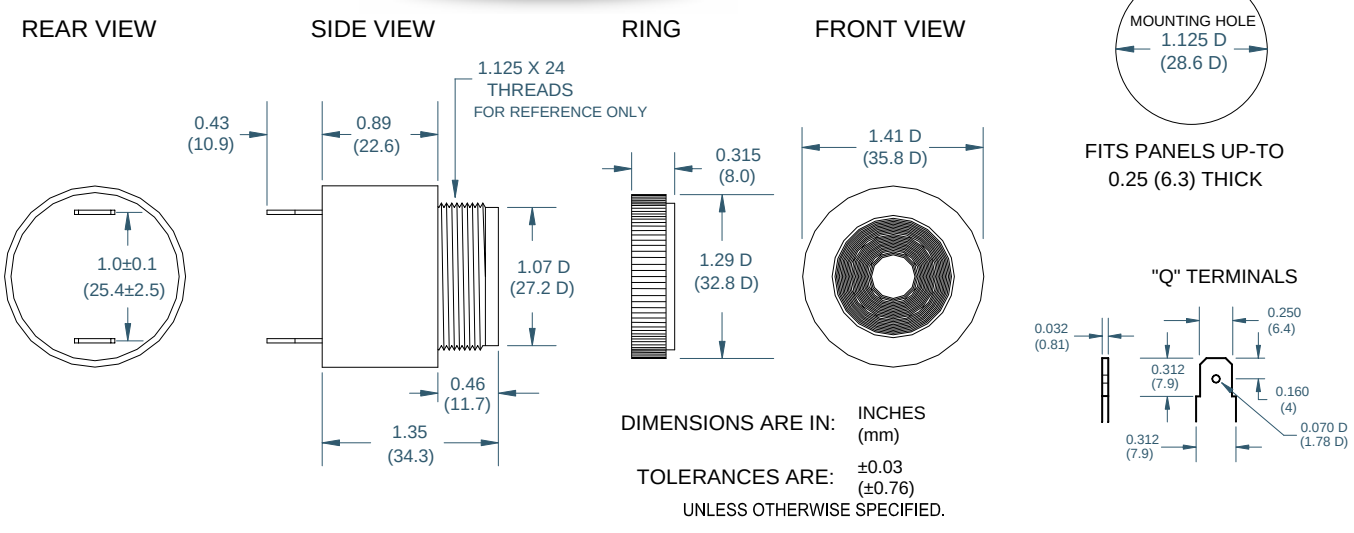


The UW-09-628-Q(F) is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The fast warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

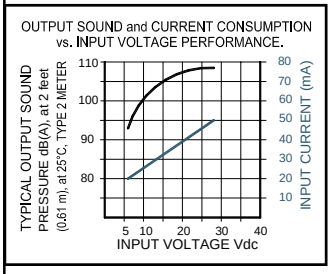
All specifications subject to change without notice.

UW-09-628-Q(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

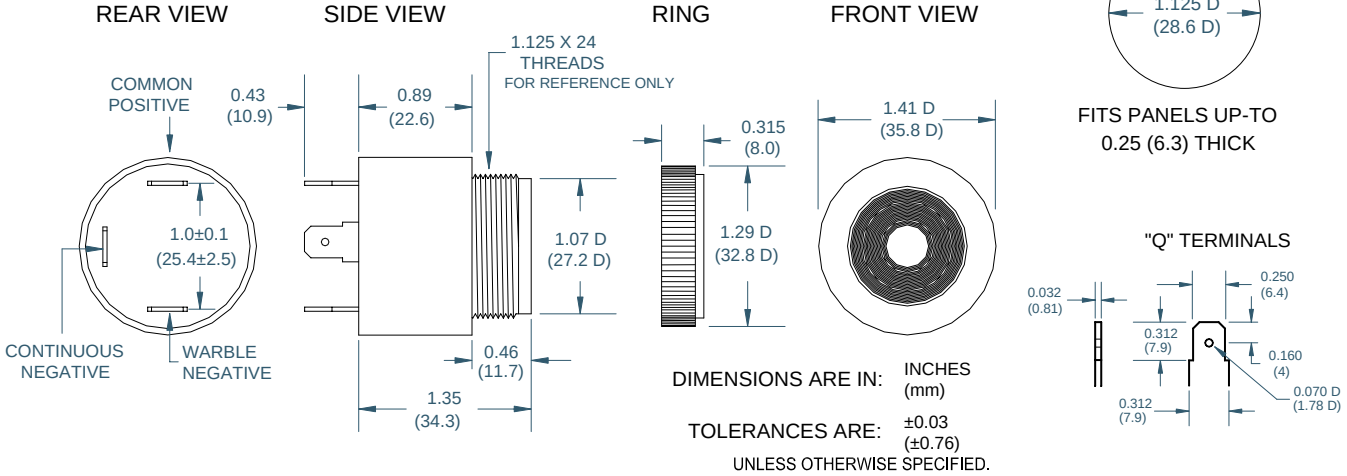


The UW-09-628-Q(F)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 6-28VDC. The alarm functions as a fast warble tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Warble/Continuous Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

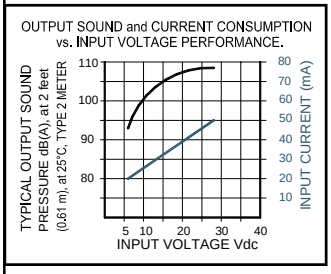
All specifications subject to change without notice.

UW-09-628-Q(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

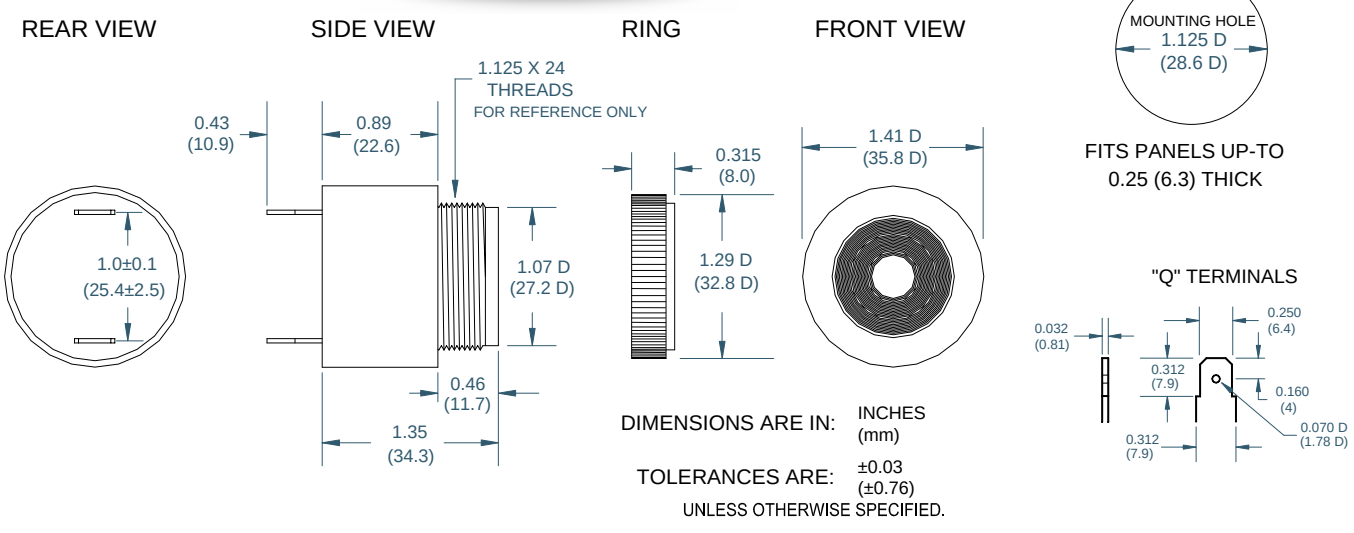


The UW-09-628-Q(S) is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The slow warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 1±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

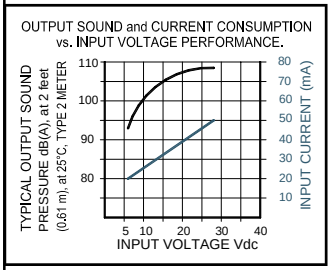
All specifications subject to change without notice.

UW-09-628-Q(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

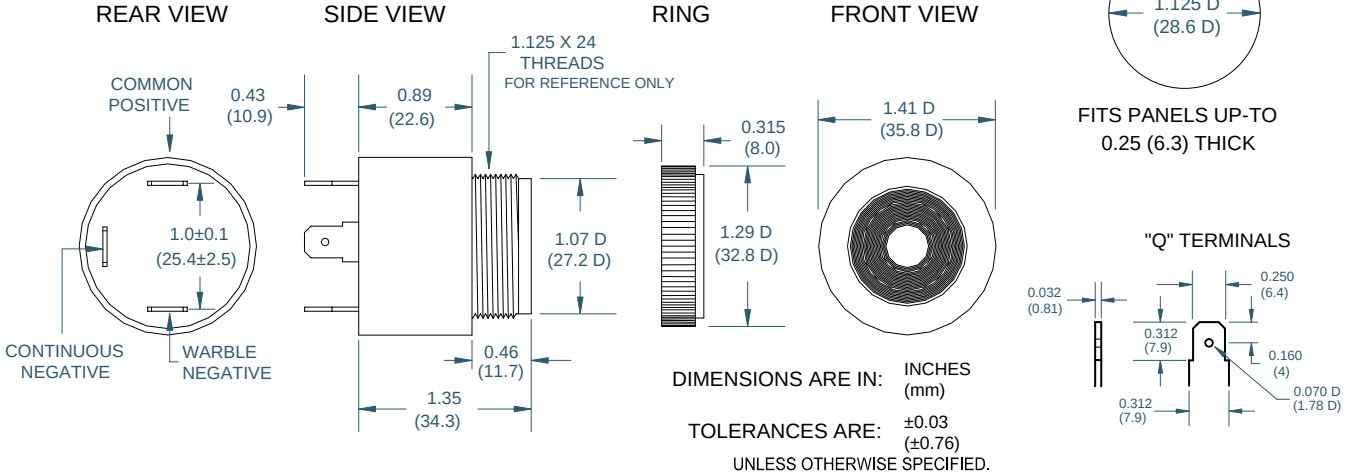


The UW-09-628-Q(S)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 6-28VDC. The alarm functions as a slow warble tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Warble/Continuous Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 1±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

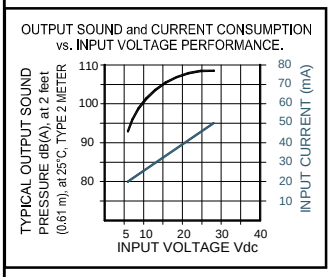
All specifications subject to change without notice.

UW-09-628-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

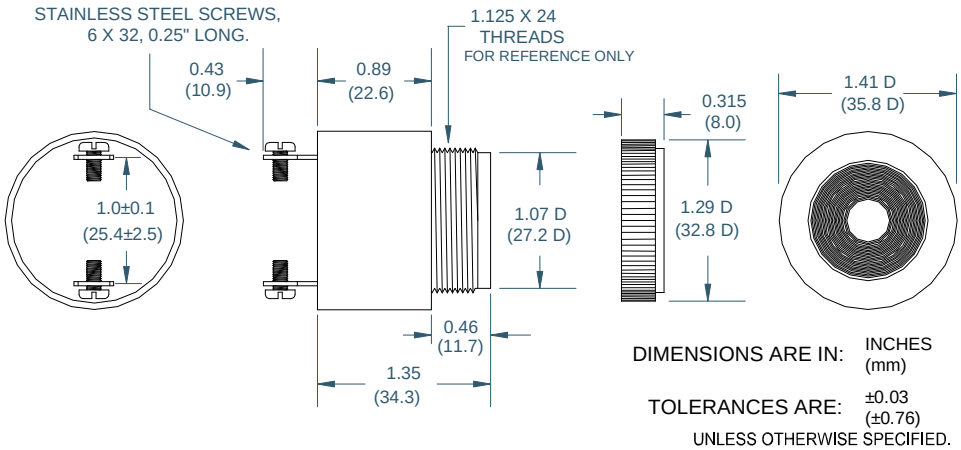


The UW-09-628-S(F) is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The fast warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

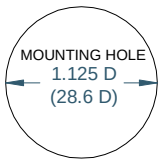
SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	Low Frequency— 2000±250 Hz High Frequency— 2100±250 Hz 3±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

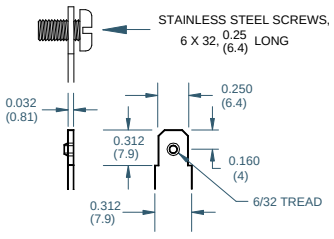


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

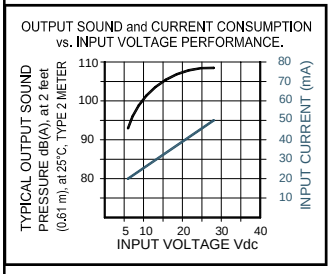
All specifications subject to change without notice.

UW-09-628-S(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

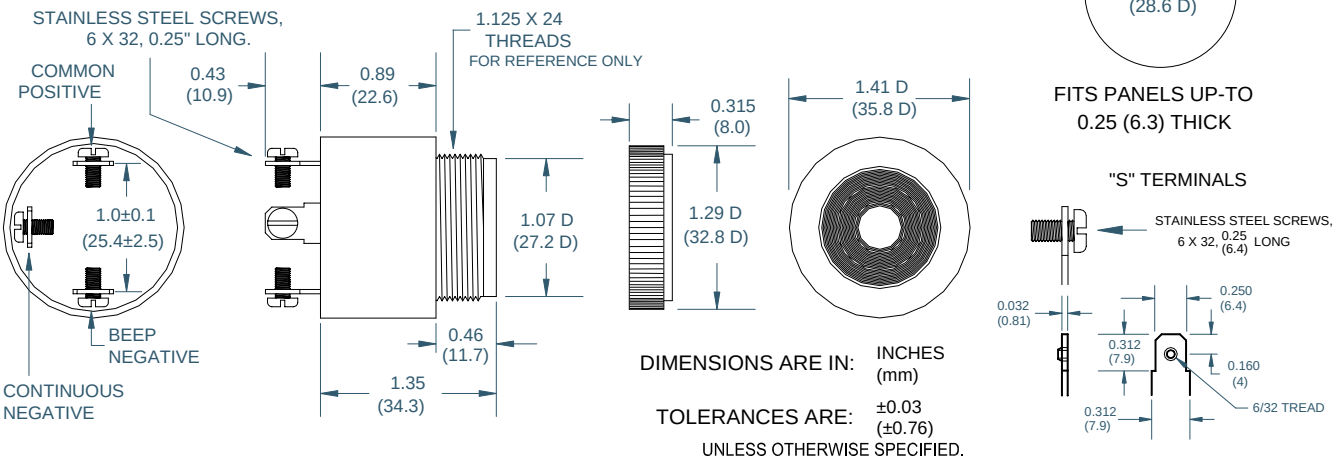


The UW-09-628-S(F)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 6-28VDC. The alarm functions as a fast warble tone and as a continuous tone. Both tone modes have a typical sound pressure level of 109 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Warble/Continuous Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

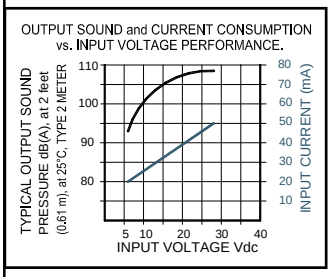
All specifications subject to change without notice.

UW-09-628-S(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

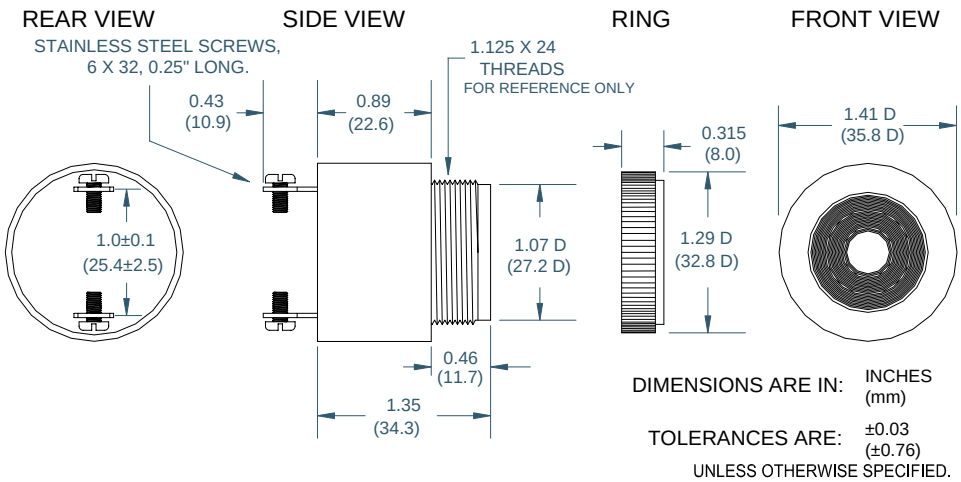


The UW-09-628-S(S) is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The slow warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

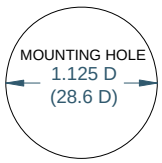
SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 1±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

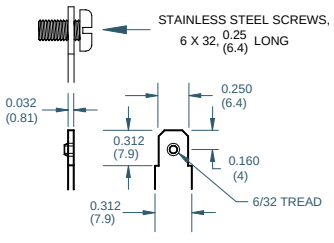


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

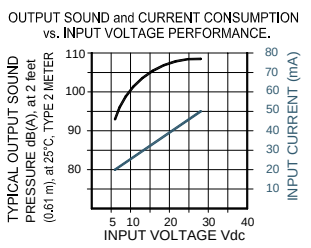
All specifications subject to change without notice.

UW-09-628-S(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

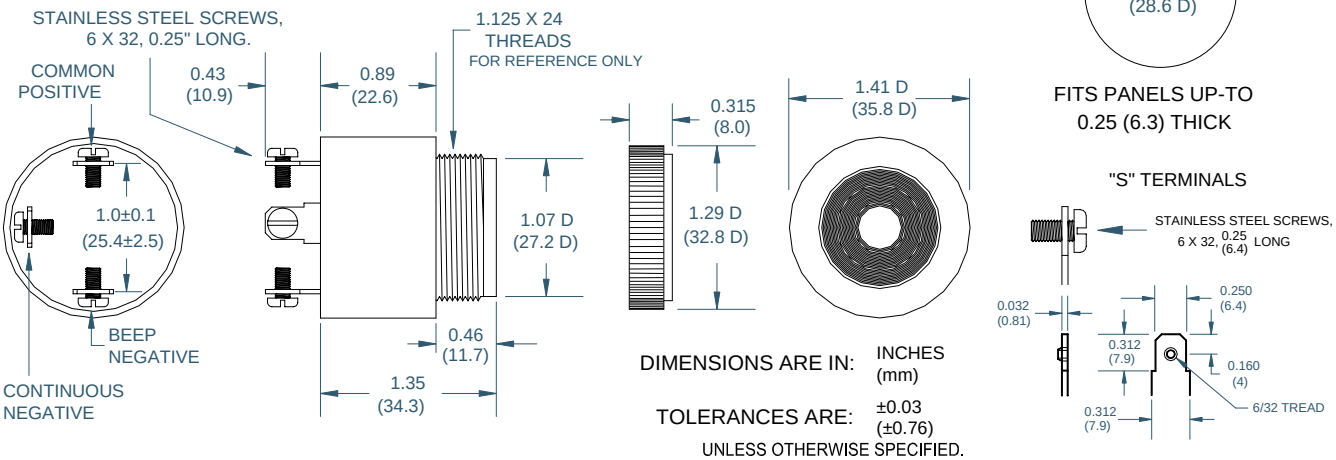


The UW-09-628-S(S)D is an ultra loud output, dual function, panel mounted alarm for operating voltages of 6-28VDC. The alarm functions as a slow warble tone and as a continuous tone. Both tone modes have a typical sound pressure level of 109 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Ultra Loud Dual Function Warble/Continuous Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 1±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

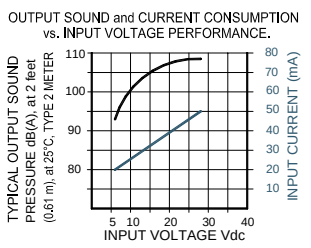
All specifications subject to change without notice.

UW-09-628-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

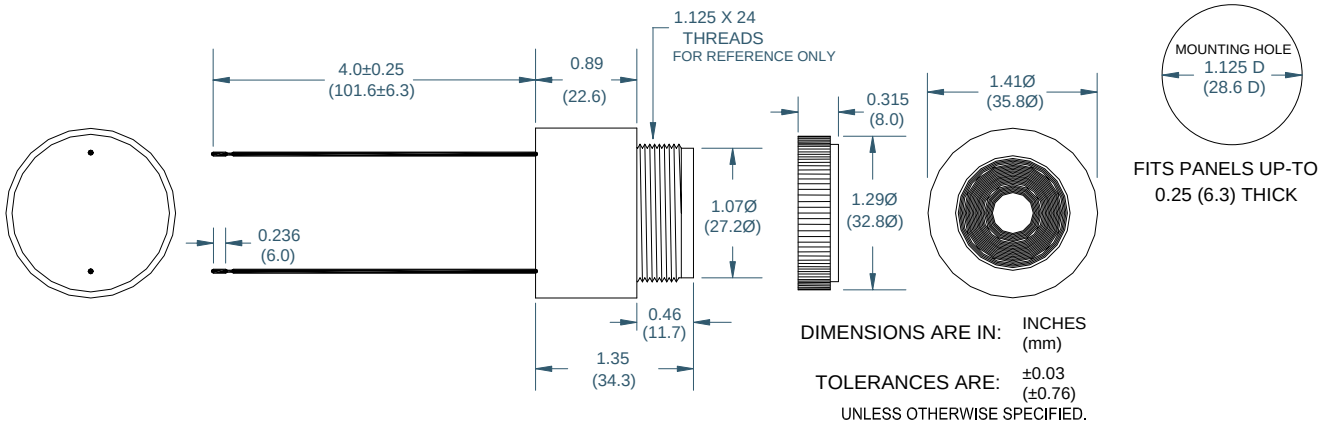


The UW-09-628-W(F) is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The fast warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

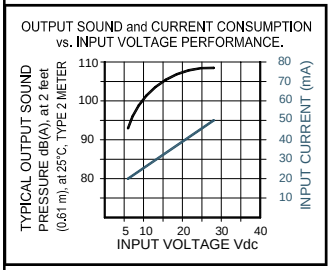
All specifications subject to change without notice.

UW-09-628-W(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology
- Polarity Protected

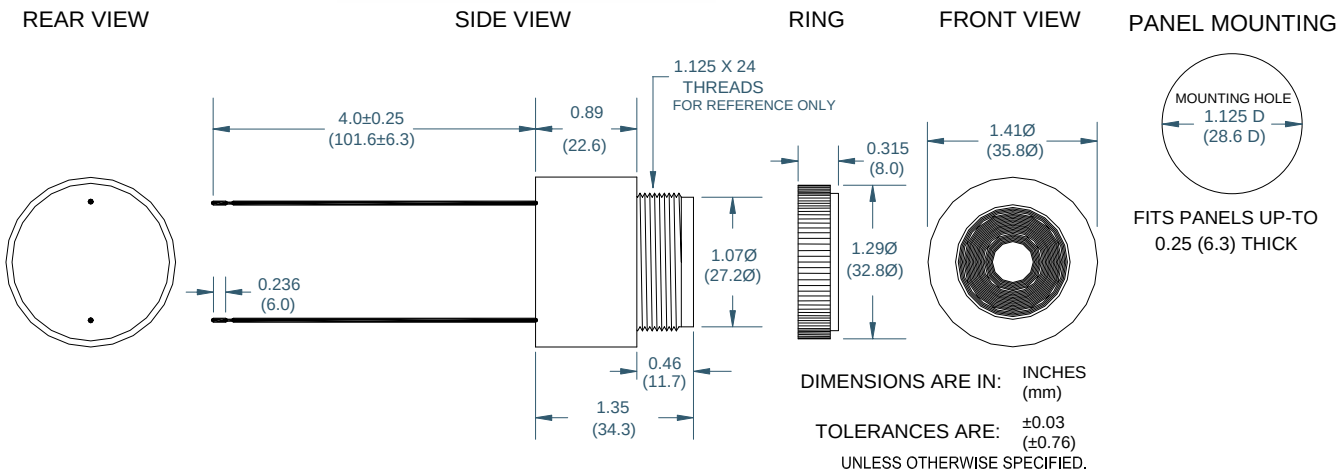


The UW-09-628-W(S) is an ultra loud output, panel mounted alarm for operating voltages of 6-28VDC. The slow warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	6-28 Vdc
Nominal Operating Voltage:	28 Vdc
Operating Frequency:	2100±250 Hz. Center 1±25% Cycles per second
Typical Operating Current:	20 mA at 6 Vdc 50 mA at 28 Vdc
Typical Sound Pressure:	93±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 28 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

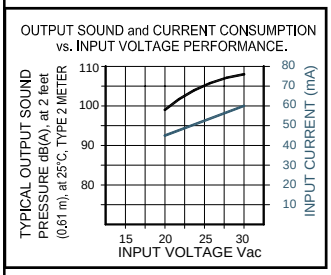
All specifications subject to change without notice.

UW-19-230-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily



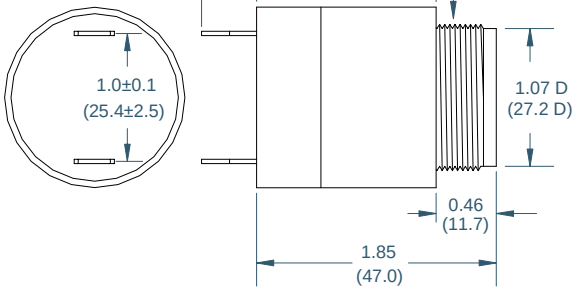
The UW-19-230-Q(F) is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The fast warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	100±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

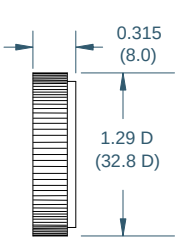
DIMENSIONS

REAR VIEW

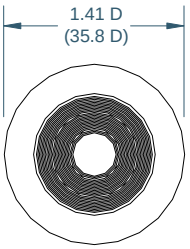


SIDE VIEW

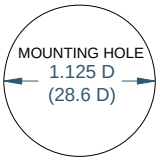
RING



FRONT VIEW

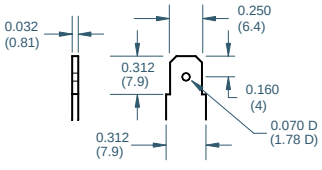


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

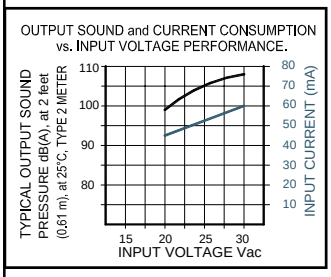
All specifications subject to change without notice.

UW-19-230-Q(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily

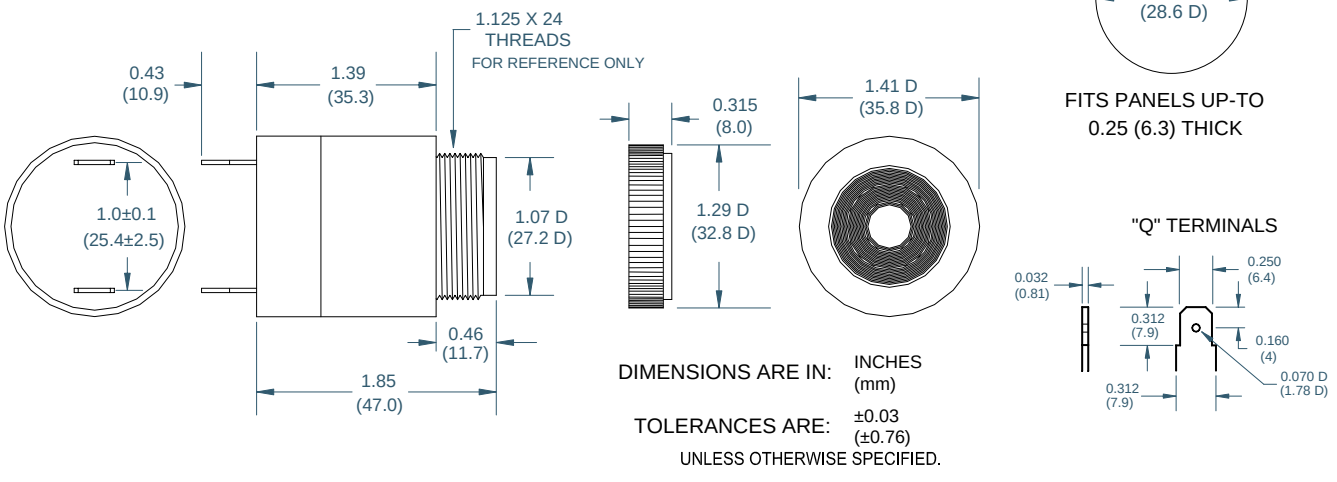


The UW-19-230-Q(S) is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The slow warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. Center 1±25% Cycles per second
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	100±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

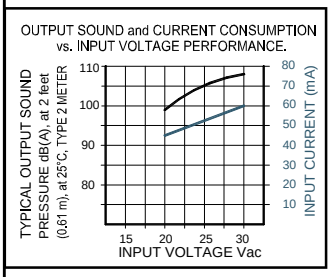
All specifications subject to change without notice.

UW-19-230-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily

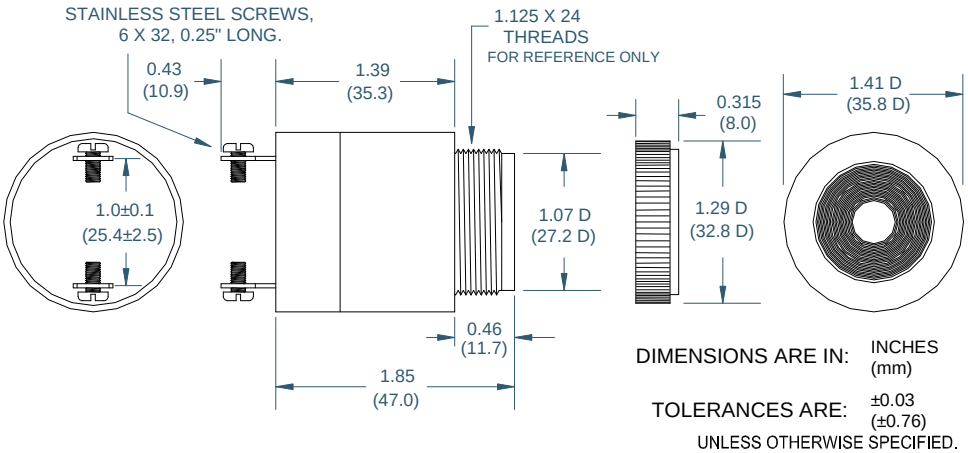


The UW-19-230-S(F) is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The fast warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

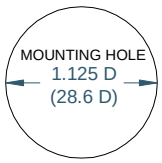
SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2000±250 Hz. 2100±250 Hz. 3±25% Cycles per second
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	100±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

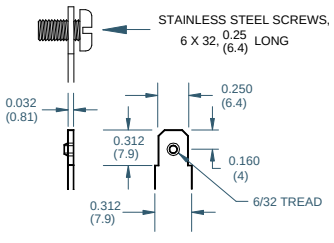


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

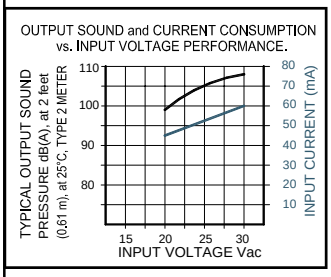
All specifications subject to change without notice.

UW-19-230-S(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily

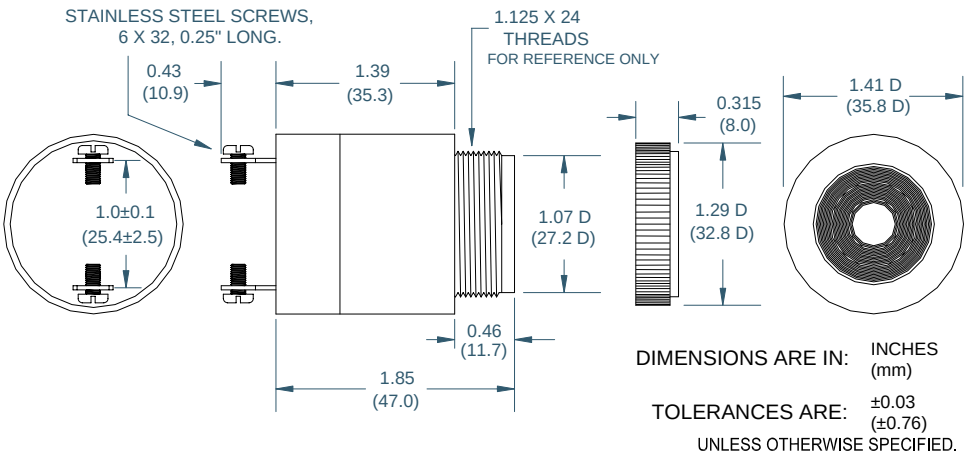


The UW-19-230-S(S) is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The slow warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

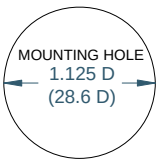
SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. Center 1±25% Cycles per second
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	100±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

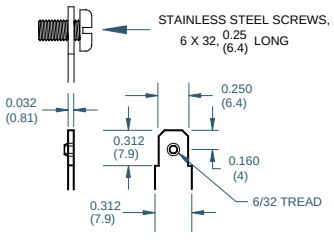


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

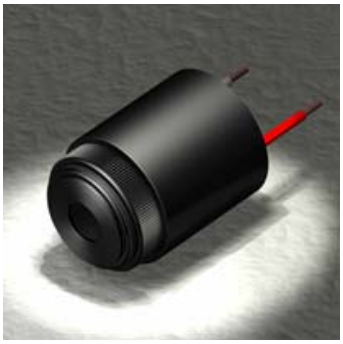
Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

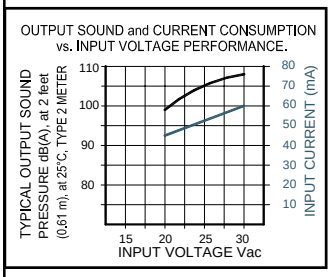
All specifications subject to change without notice.

UW-19-230-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily

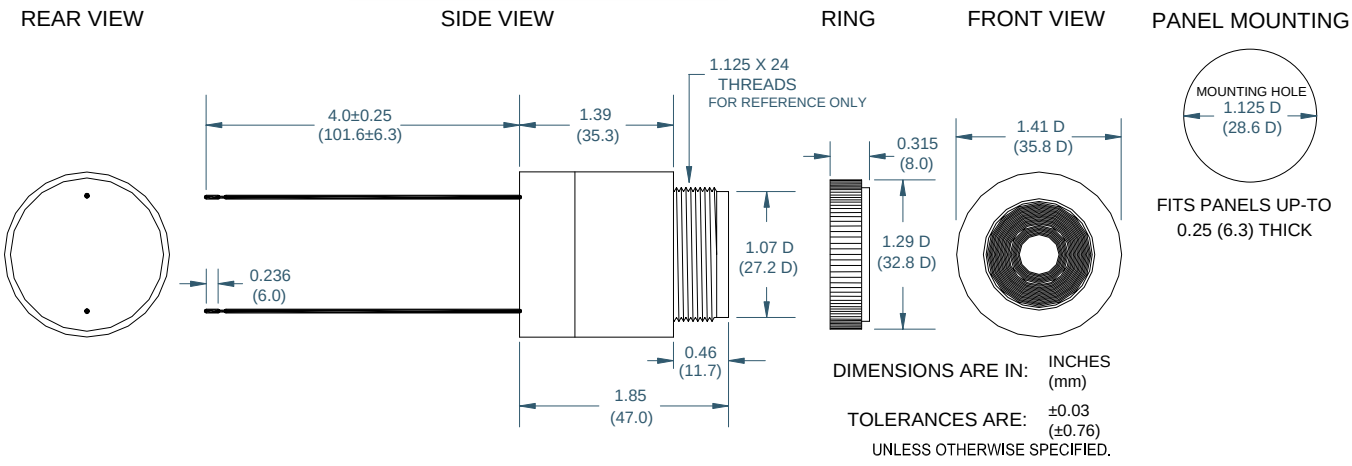


The UW-19-230-W(F) is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The fast warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. Center 3±25% Cycles per second
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	100±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

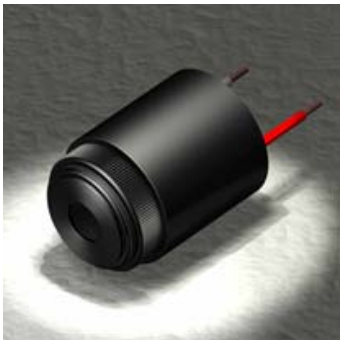
Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

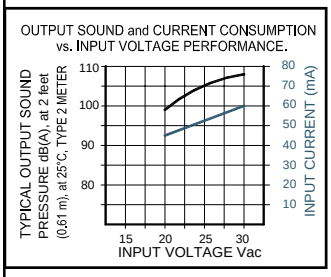
All specifications subject to change without notice.

UW-19-230-W(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- Superior Audibility
- NEMA 4X Certified
- Reliable Piezoelectric Technology
- Installs Easily

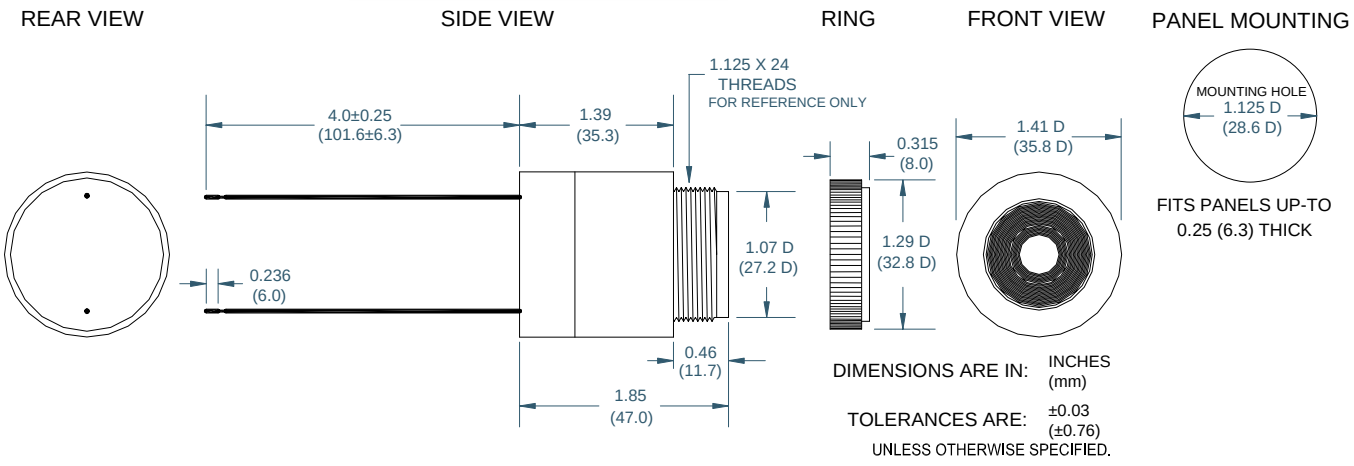


The UW-19-230-W(S) is an ultra loud output, panel mounted alarm for operating voltages of 20-30VAC/VDC. The slow warble tone has a typical sound pressure level of 109 dB(A) at maximum voltage. It is terminated with two 18AWG wires, 4" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Ultra Loud Warble Tone
Operating Voltage:	20-30 Vac/Vdc
Nominal Operating Voltage:	30 Vac
Operating Frequency:	2100±250 Hz. Center 1±25% Cycles per second
Typical Operating Current:	40 mA at 20 Vac 60 mA at 30 Vac
Typical Sound Pressure:	100±5 dB(A), at 20 Vac, at 24 inches (61 cm), at 25°C 109±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C.
Termination:	18AWG Wire, GXL, Copper, XPLE Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

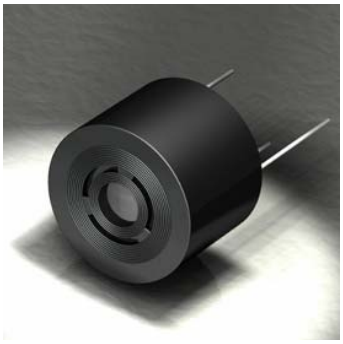
Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

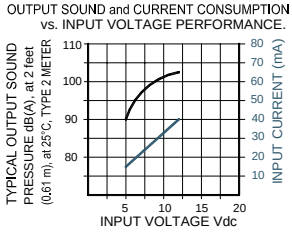
All specifications subject to change without notice.

XB-05-312-P(U)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- PCB Mountable
- Two Tones, One Package
- Polarity Protected Circuitry
- Reliable Piezoelectric Technology

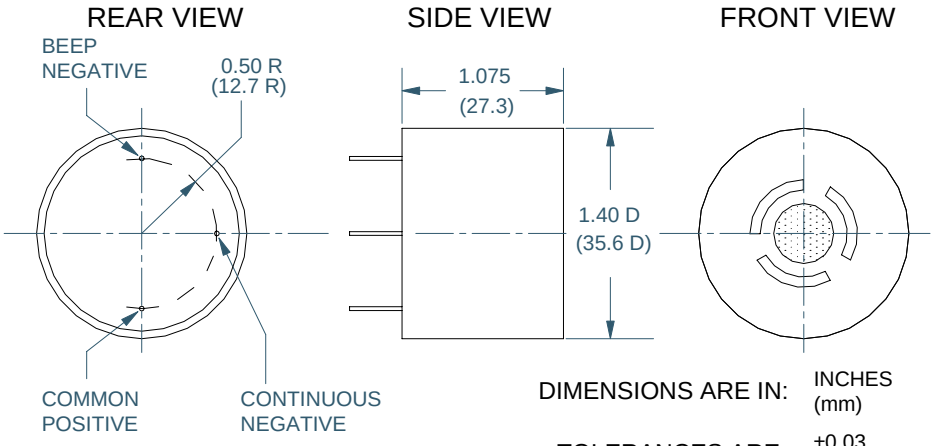


The XB-05-312-P(U)D is an extra loud output alarm for operating voltages of 5-12VDC. The alarm functions as an ultra fast beep tone and as a continuous tone. It is terminated with three 0.032" diameter pins for mounting to a printed circuit board.

SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	3 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

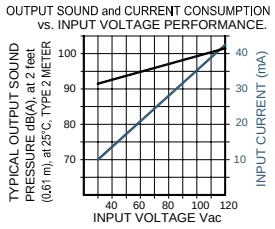
All specifications subject to change without notice.

XB-09-201-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



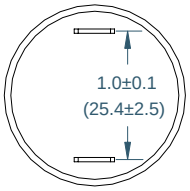
The XB-09-201-Q(F) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The three pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

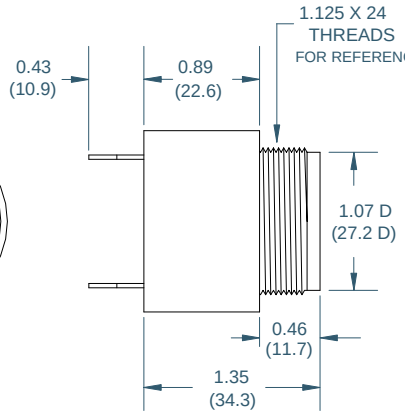
Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

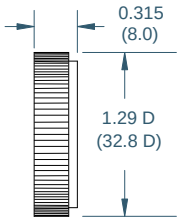
REAR VIEW



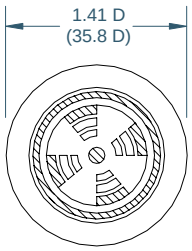
SIDE VIEW



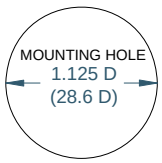
RING



FRONT VIEW

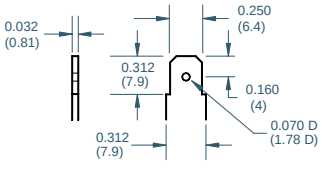


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

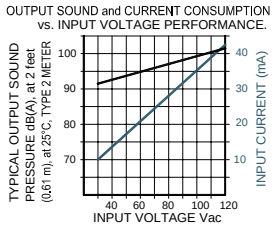
All specifications subject to change without notice.

XB-09-201-Q(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

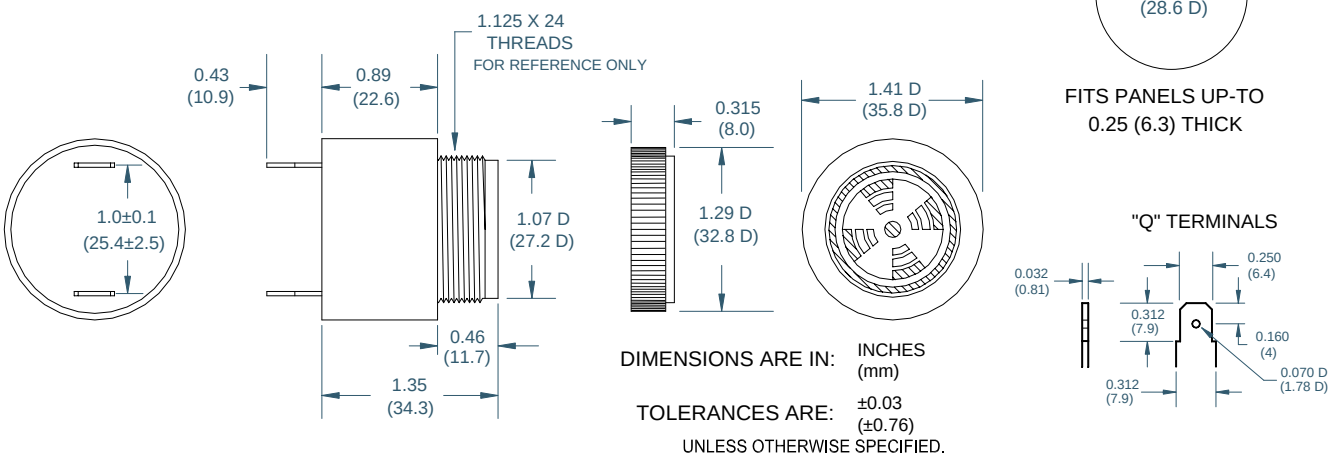


The XB-09-201-Q(M) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The two pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

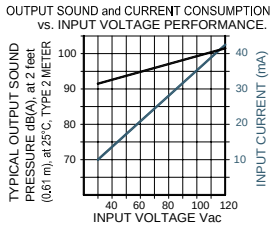
All specifications subject to change without notice.

XB-09-201-Q(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

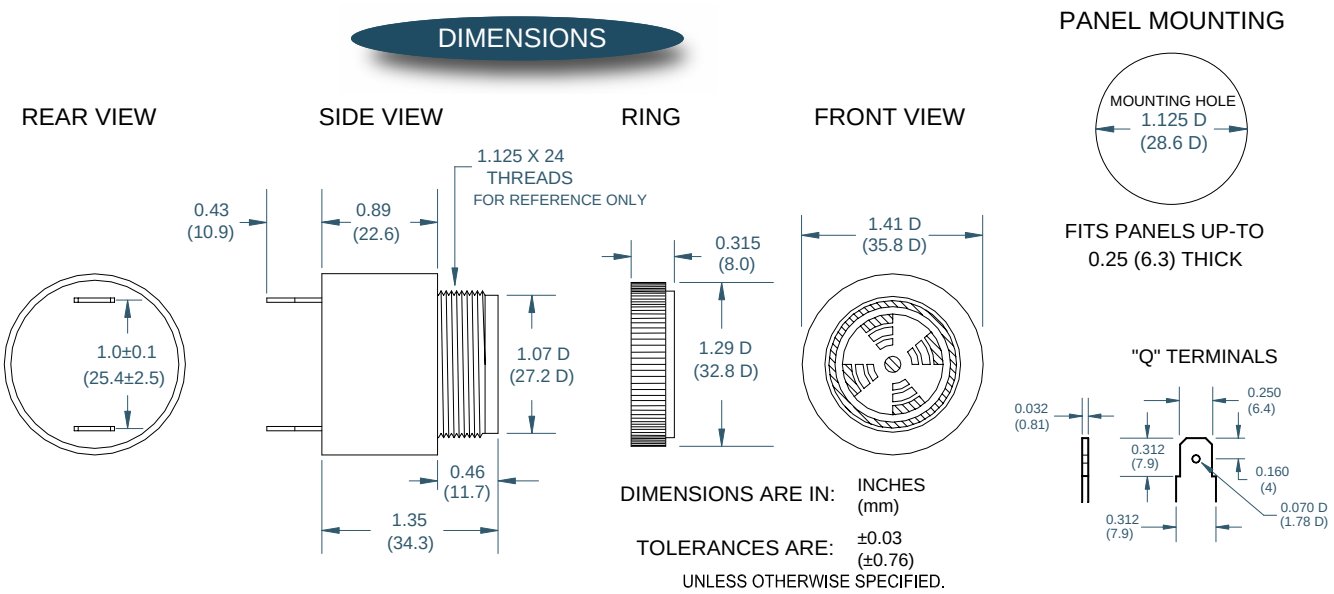


The XB-09-201-Q(S) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The one pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

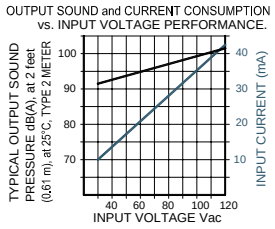
All specifications subject to change without notice.

XB-09-201-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

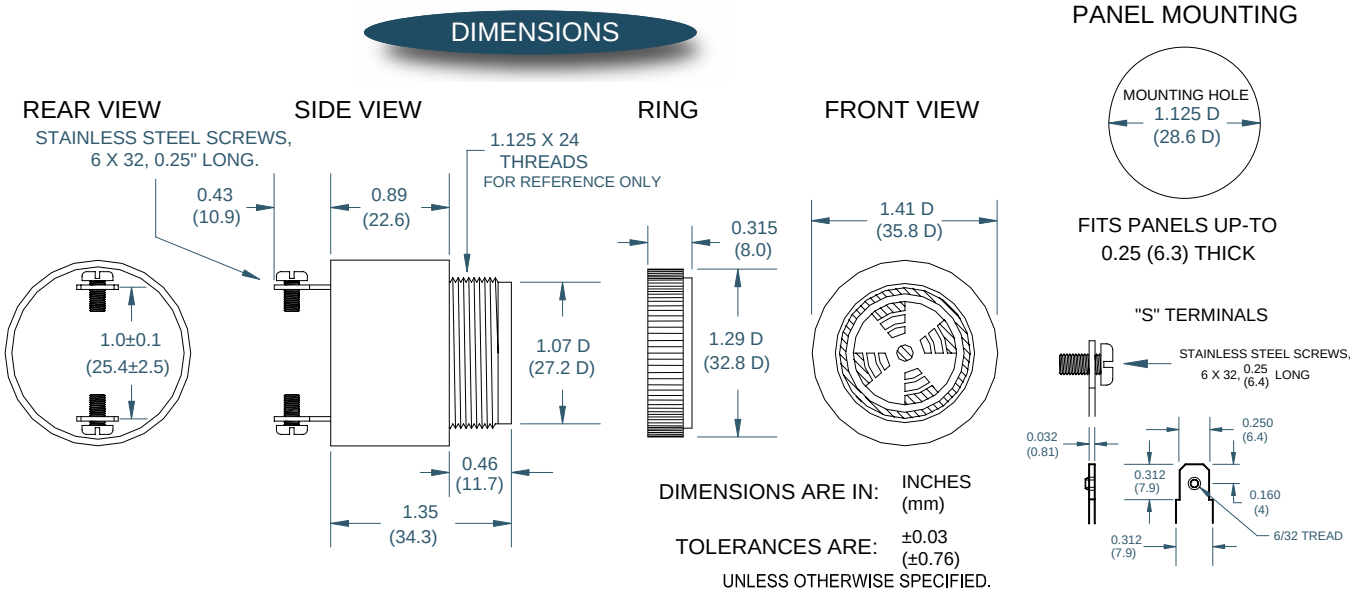


The XB-09-201-S(F) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The three pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

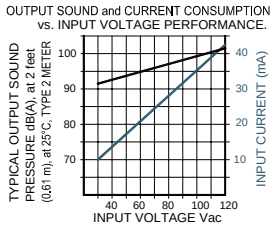
All specifications subject to change without notice.

XB-09-201-S(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

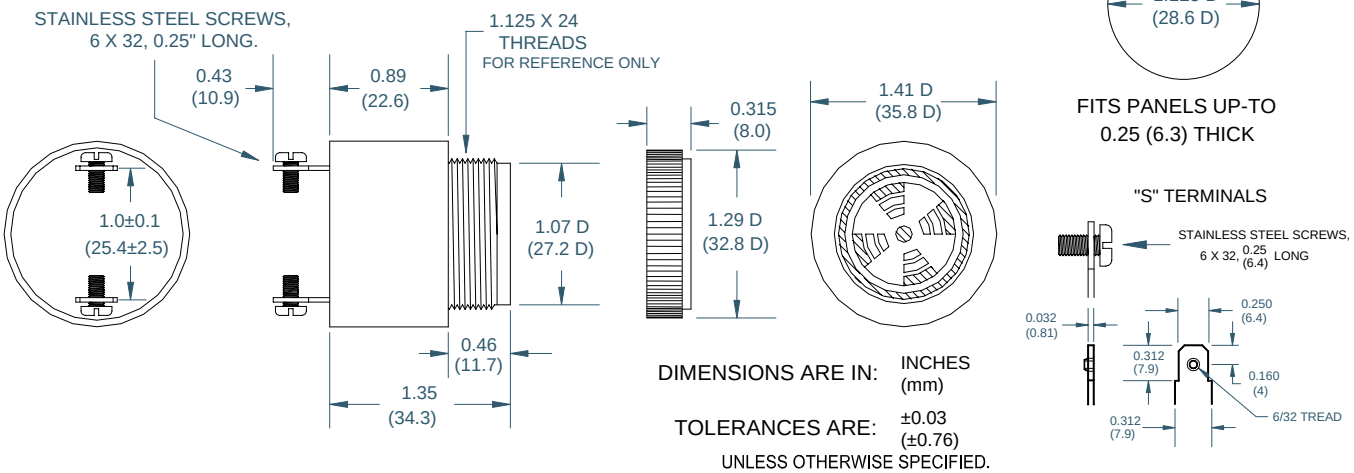


The XB-09-201-S(M) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The two pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76) UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

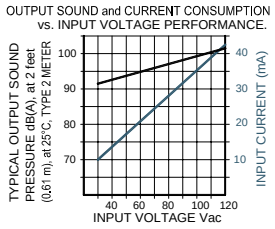
All specifications subject to change without notice.

XB-09-201-S(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

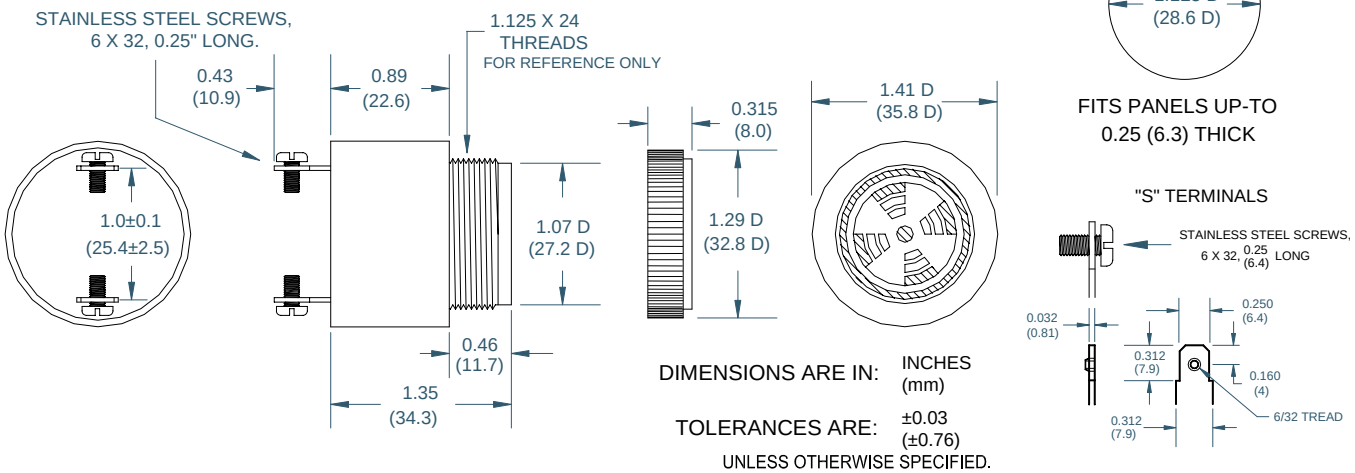


The XB-09-201-S(S) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The one pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

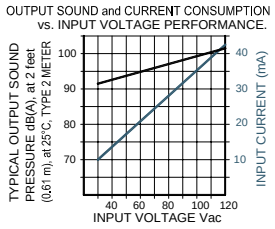
All specifications subject to change without notice.

XB-09-201-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



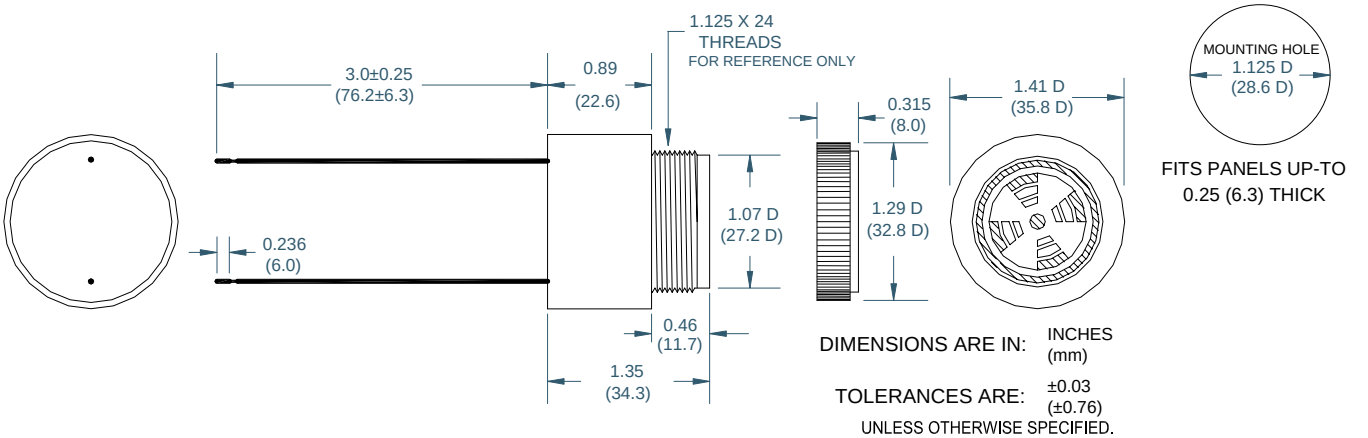
The XB-09-201-W(F) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The three pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

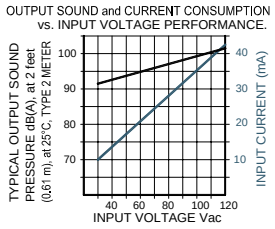
All specifications subject to change without notice.

XB-09-201-W(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



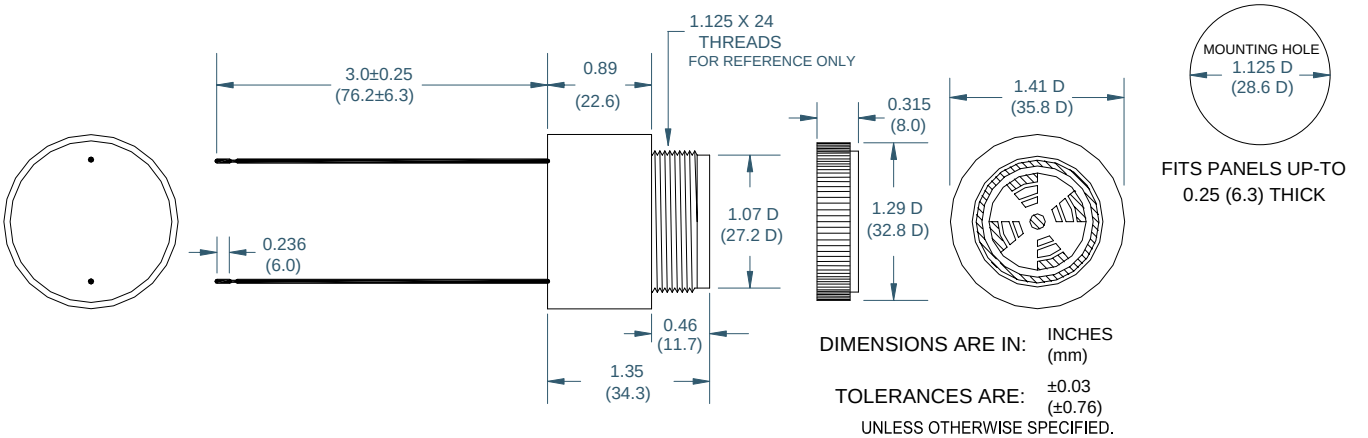
The XB-09-201-W(M) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The two pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

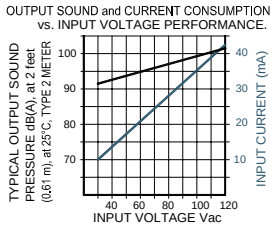
All specifications subject to change without notice.

XB-09-201-W(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



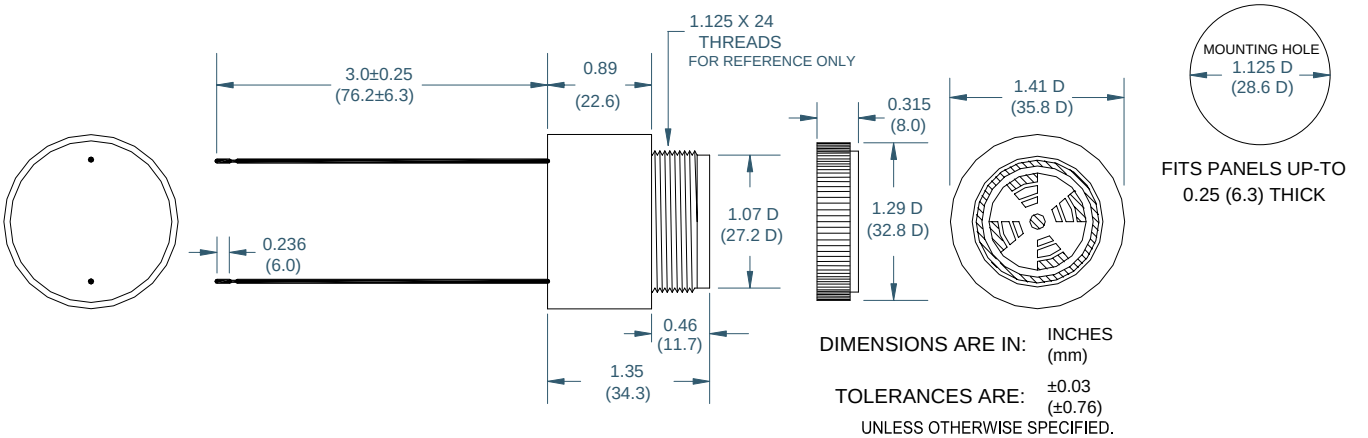
The XB-09-201-W(S) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The one pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW | SIDE VIEW | RING | FRONT VIEW | PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

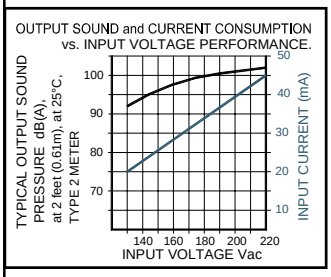
All specifications subject to change without notice.

XB-09-301-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



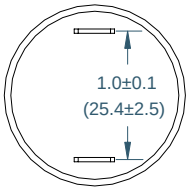
The XB-09-301-Q(F) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The three pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

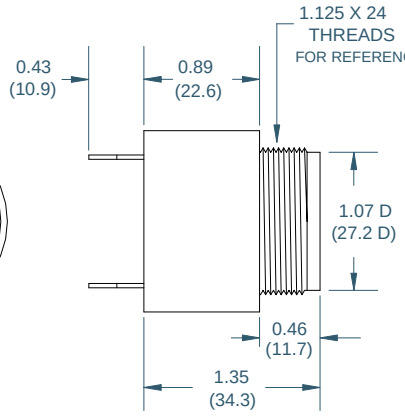
Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

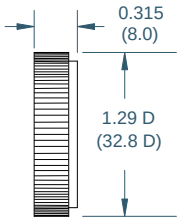
REAR VIEW



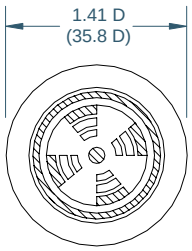
SIDE VIEW



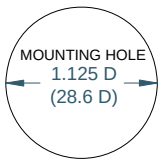
RING



FRONT VIEW

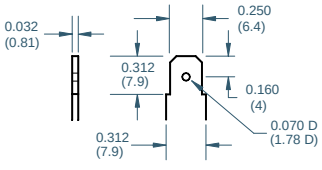


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

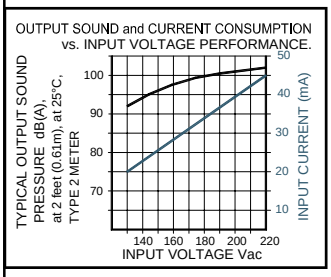
All specifications subject to change without notice.

XB-09-301-Q(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



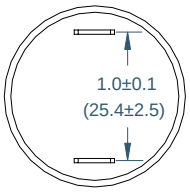
The XB-09-301-Q(M) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The two pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

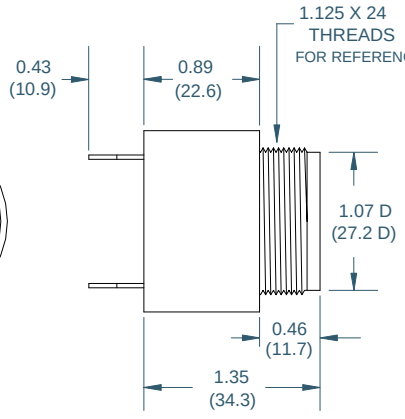
Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

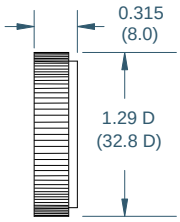
REAR VIEW



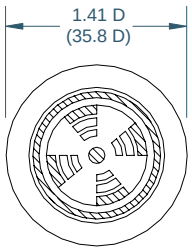
SIDE VIEW



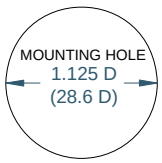
RING



FRONT VIEW

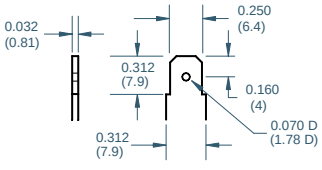


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

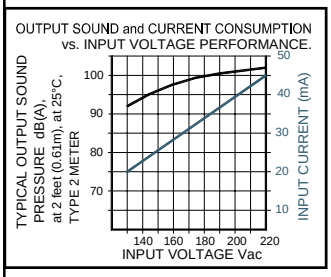
All specifications subject to change without notice.

XB-09-301-Q(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

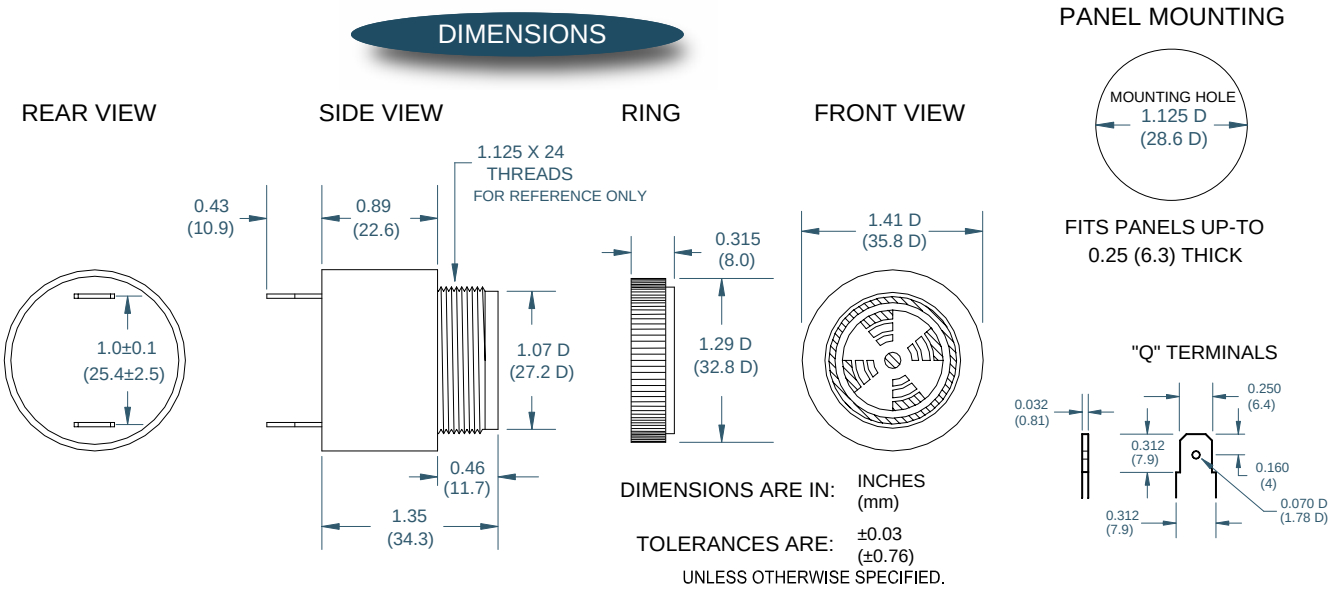


The XB-09-301-Q(S) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The one pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

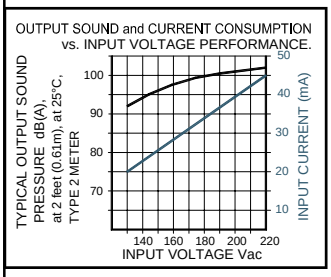
All specifications subject to change without notice.

XB-09-301-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

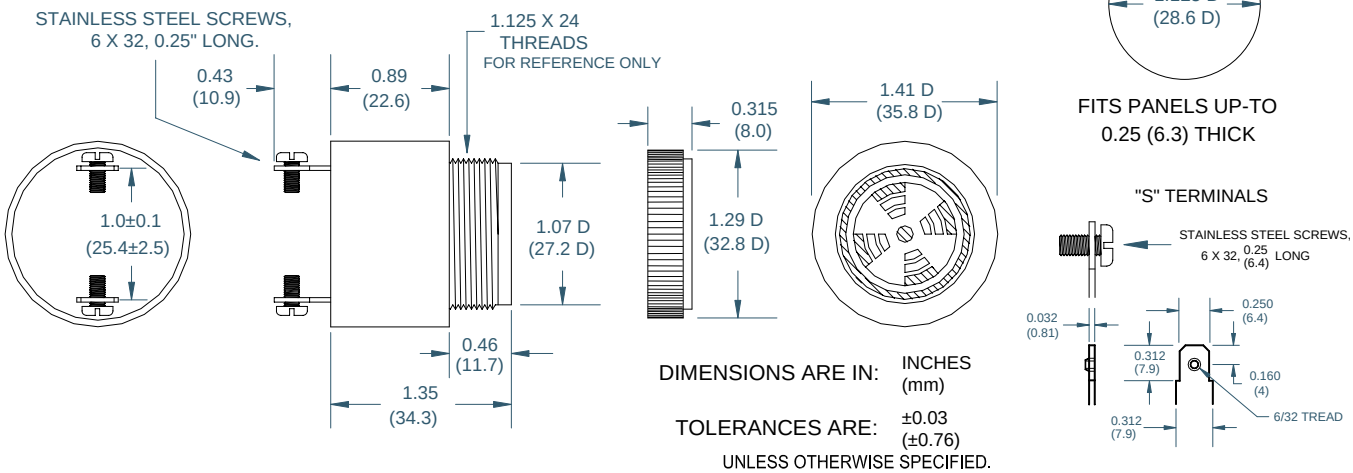


The XB-09-301-S(F) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The three pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

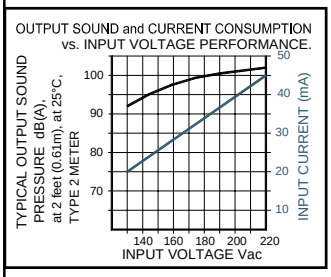
All specifications subject to change without notice.

XB-09-301-S(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

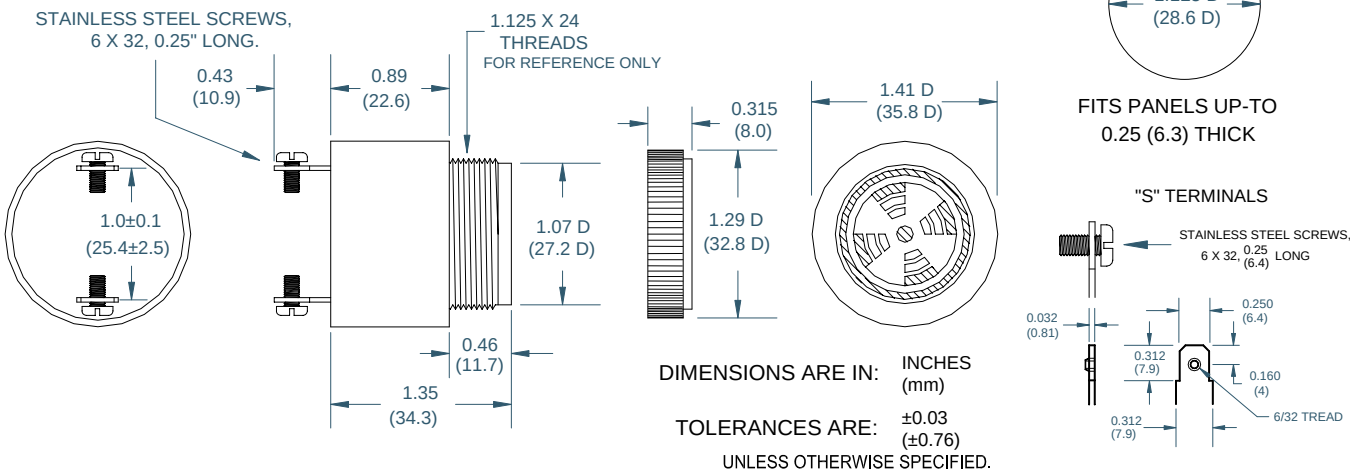


The XB-09-301-S(M) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The two pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

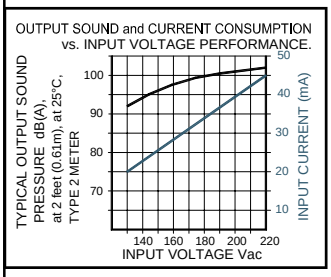
All specifications subject to change without notice.

XB-09-301-S(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

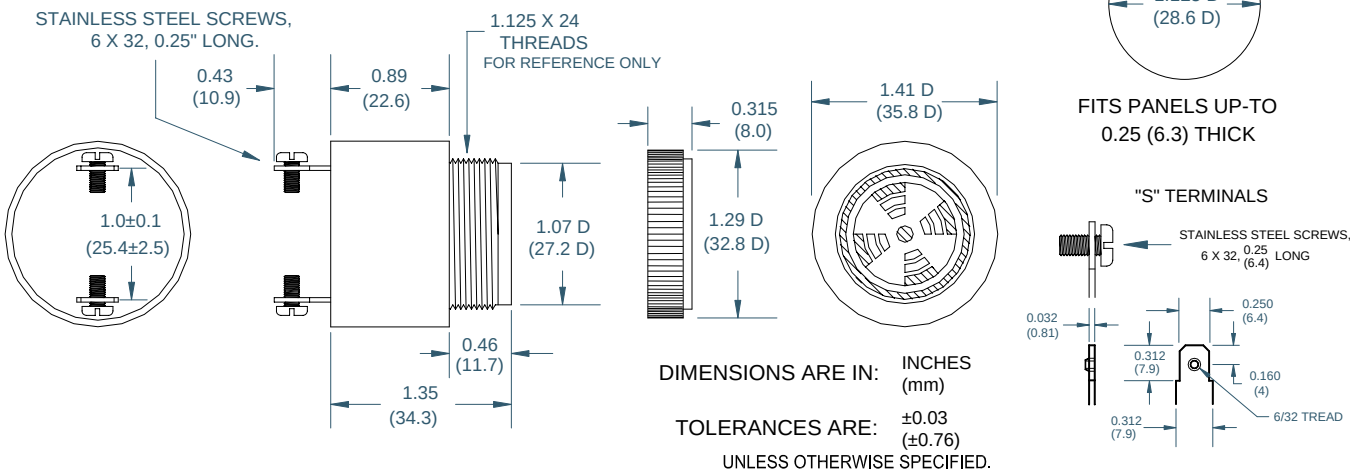


The XB-09-301-S(S) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The one pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

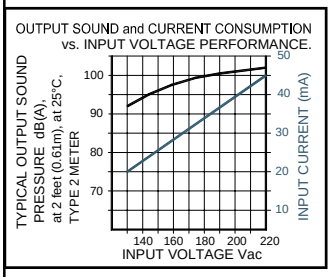
All specifications subject to change without notice.

XB-09-301-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



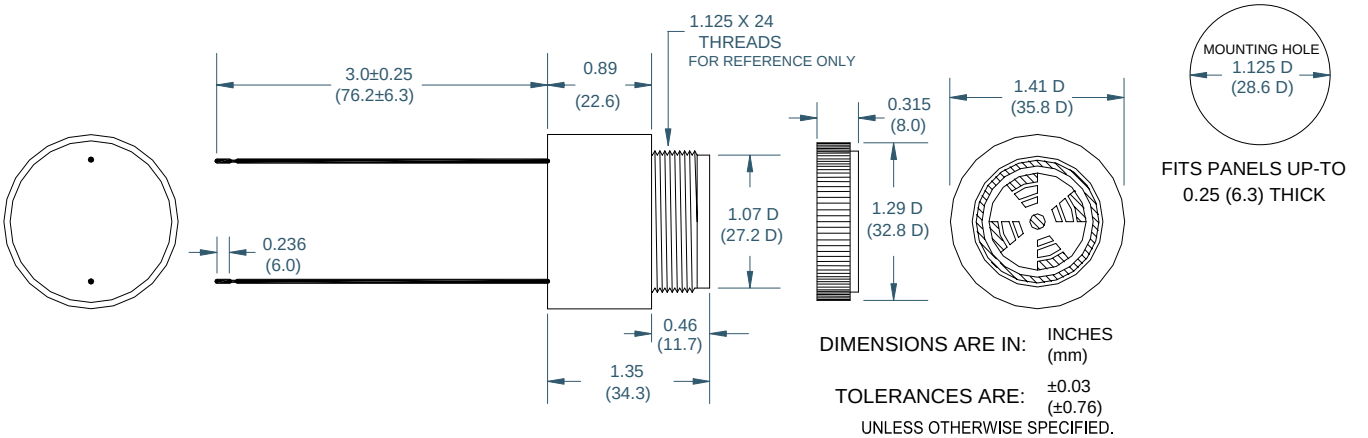
The XB-09-301-W(F) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The three pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

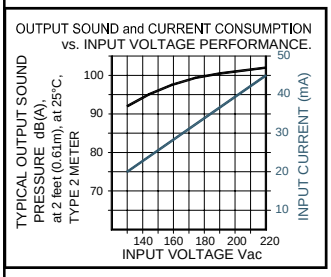
All specifications subject to change without notice.

XB-09-301-W(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



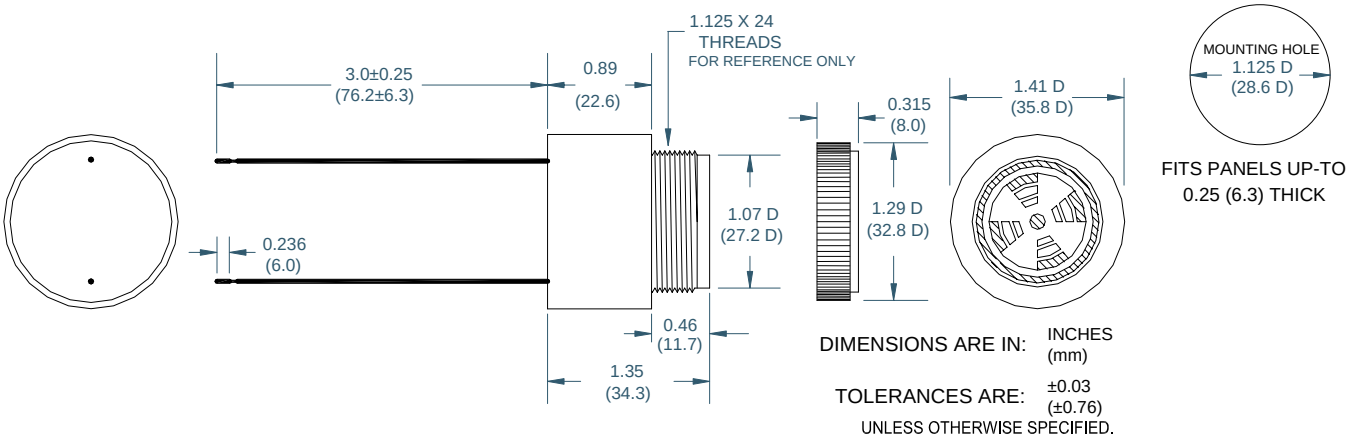
The XB-09-301-W(M) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The two pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW | SIDE VIEW | RING | FRONT VIEW | PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

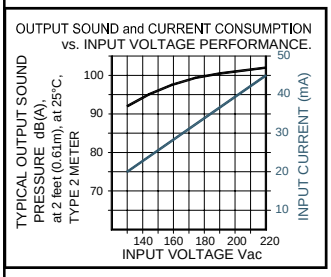
All specifications subject to change without notice.

XB-09-301-W(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



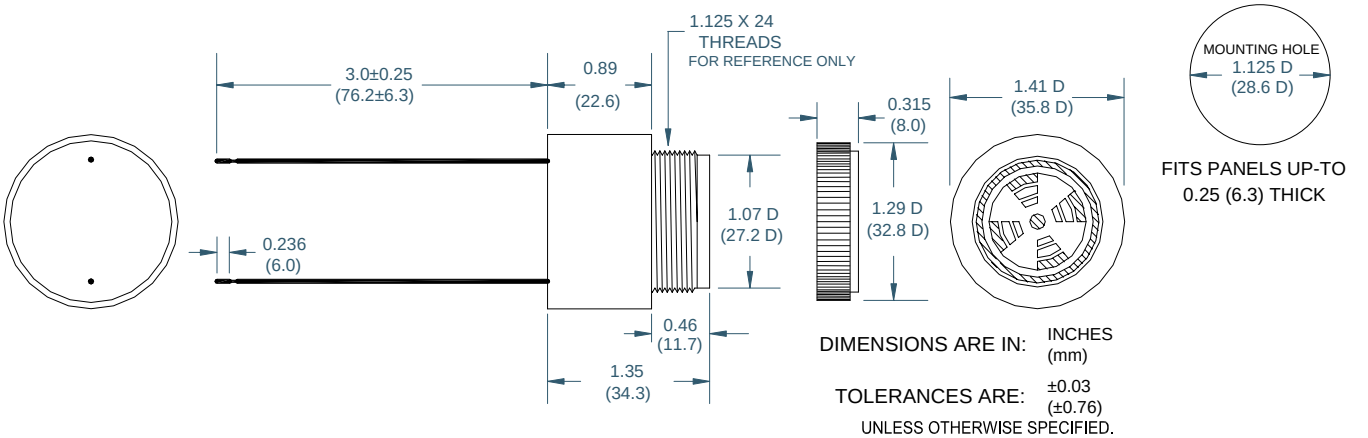
The XB-09-301-W(S) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The one pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW | SIDE VIEW | RING | FRONT VIEW | PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

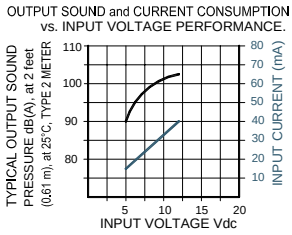
All specifications subject to change without notice.

XB-09-312-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

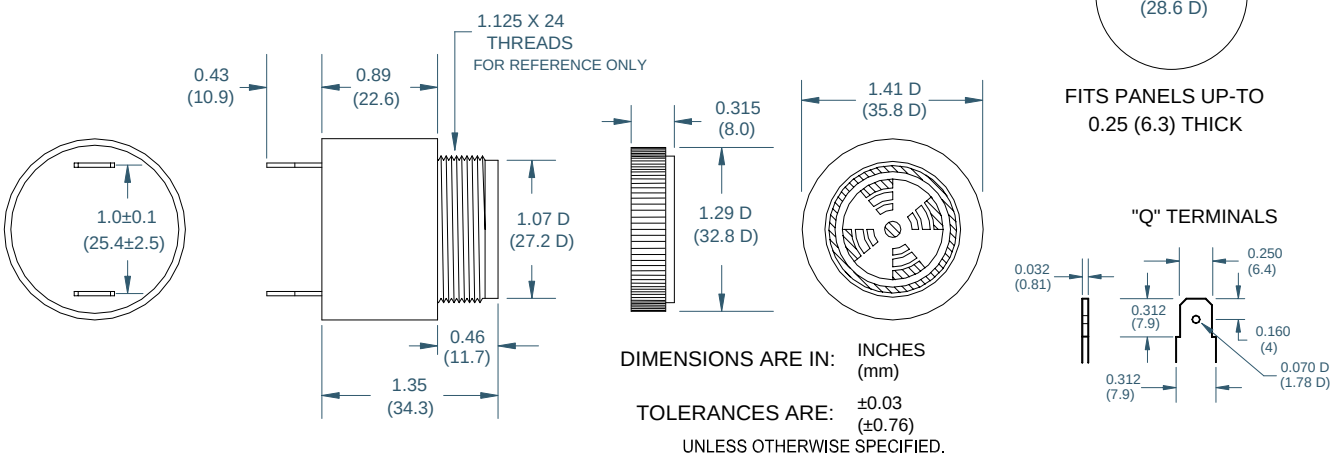


The XB-09-312-Q(F) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The three pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

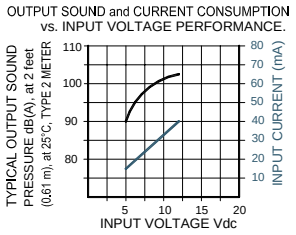
All specifications subject to change without notice.

XB-09-312-Q(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

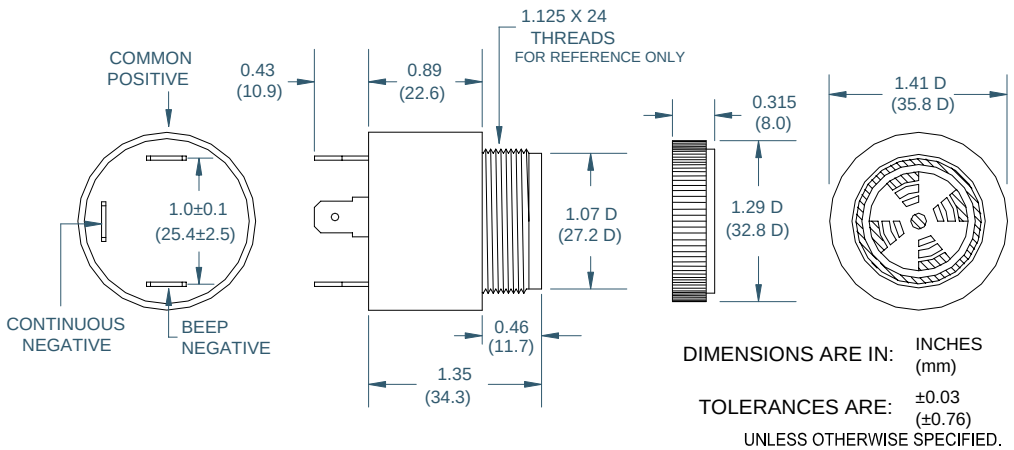


The XB-09-312-Q(F)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as a fast beep tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

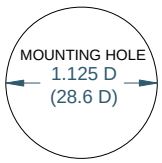


DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

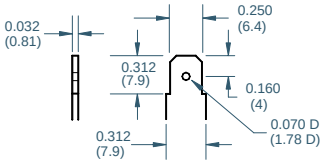
UNLESS OTHERWISE SPECIFIED.

PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

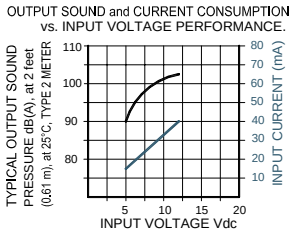
All specifications subject to change without notice.

XB-09-312-Q(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

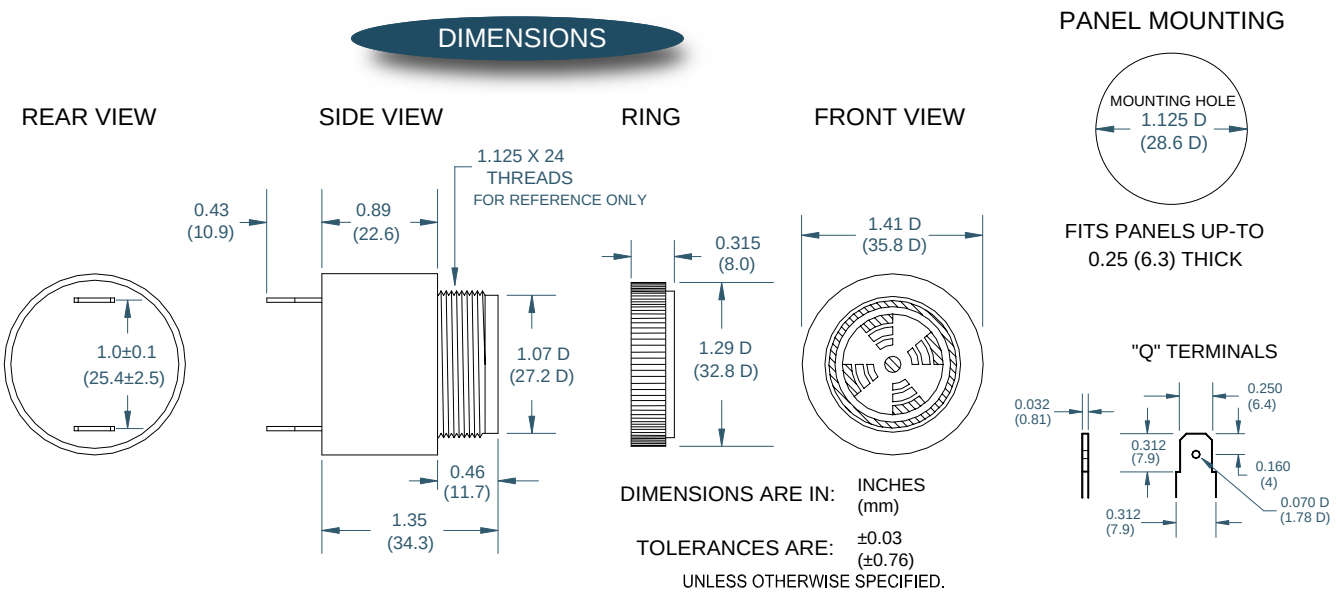


The XB-09-312-Q(M) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The two pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

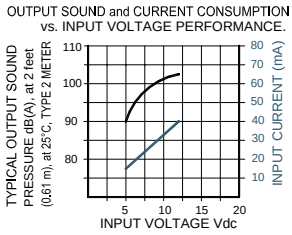
All specifications subject to change without notice.

XB-09-312-Q(M)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

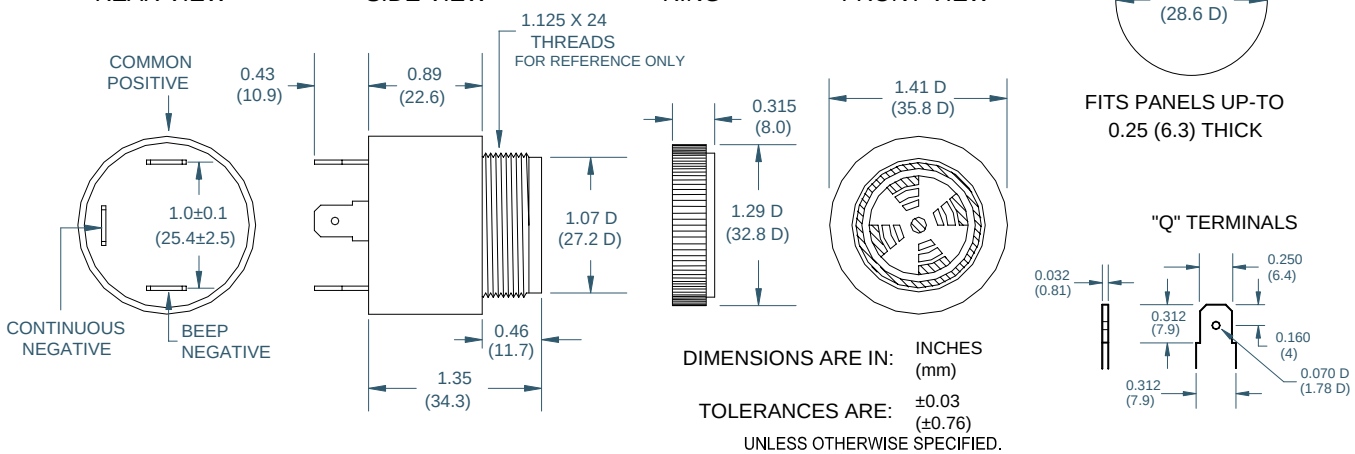


The XB-09-312-Q(M)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as a medium beep tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

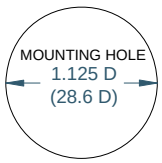
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

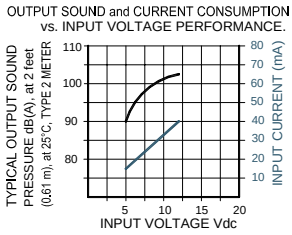
All specifications subject to change without notice.

XB-09-312-Q(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

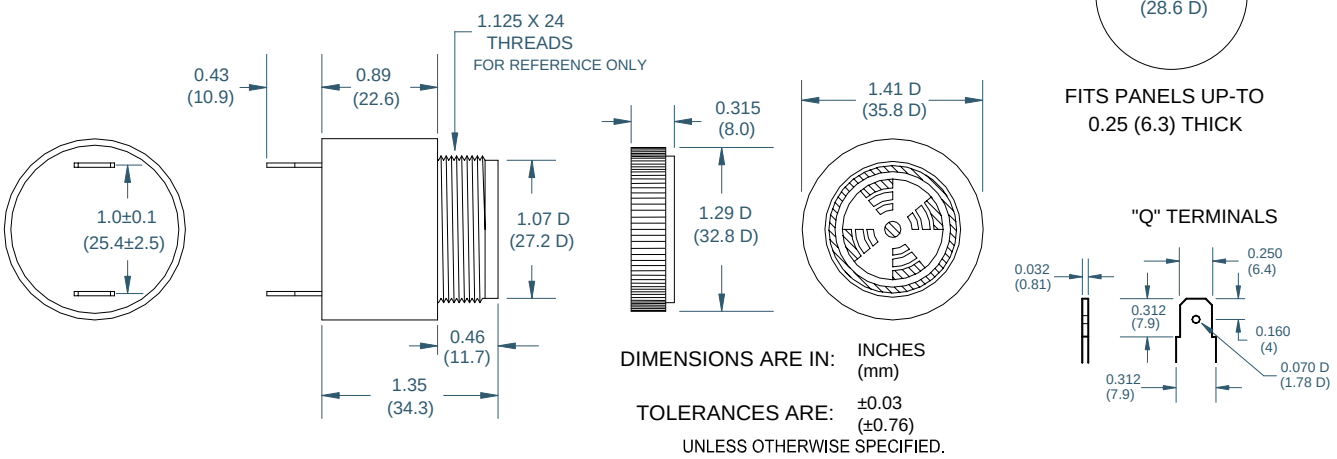


The XB-09-312-Q(S) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The one pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

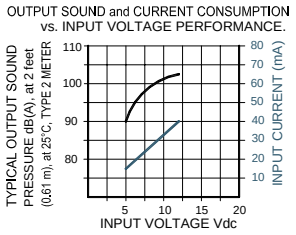
All specifications subject to change without notice.

XB-09-312-Q(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

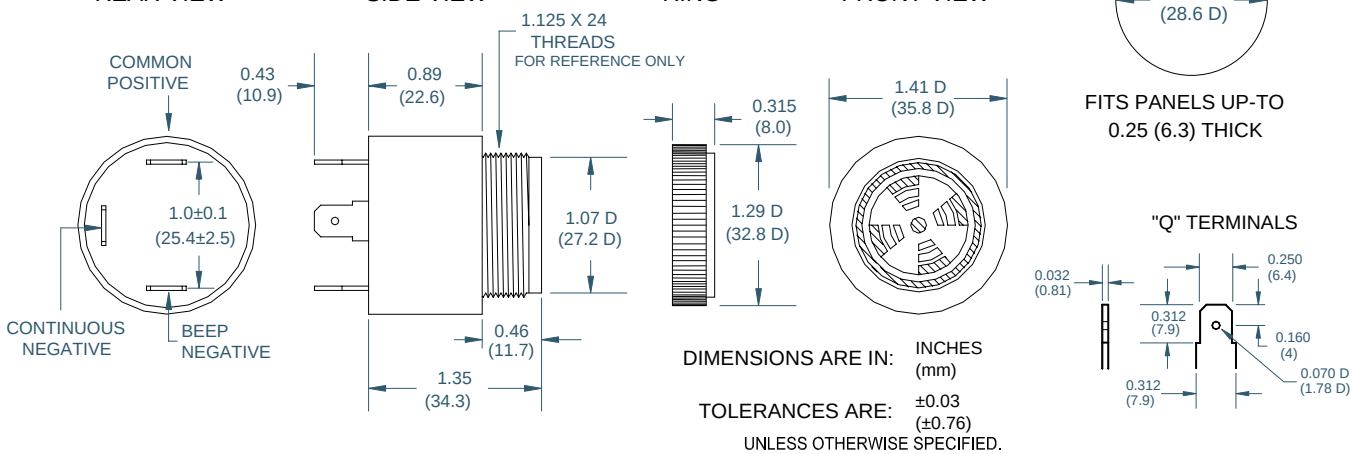


The XB-09-312-Q(S)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as a slow beep tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

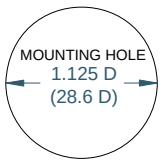
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

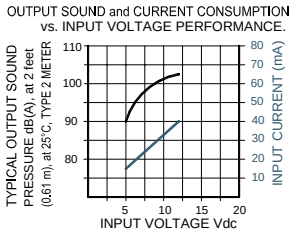
All specifications subject to change without notice.

XB-09-312-Q(U)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

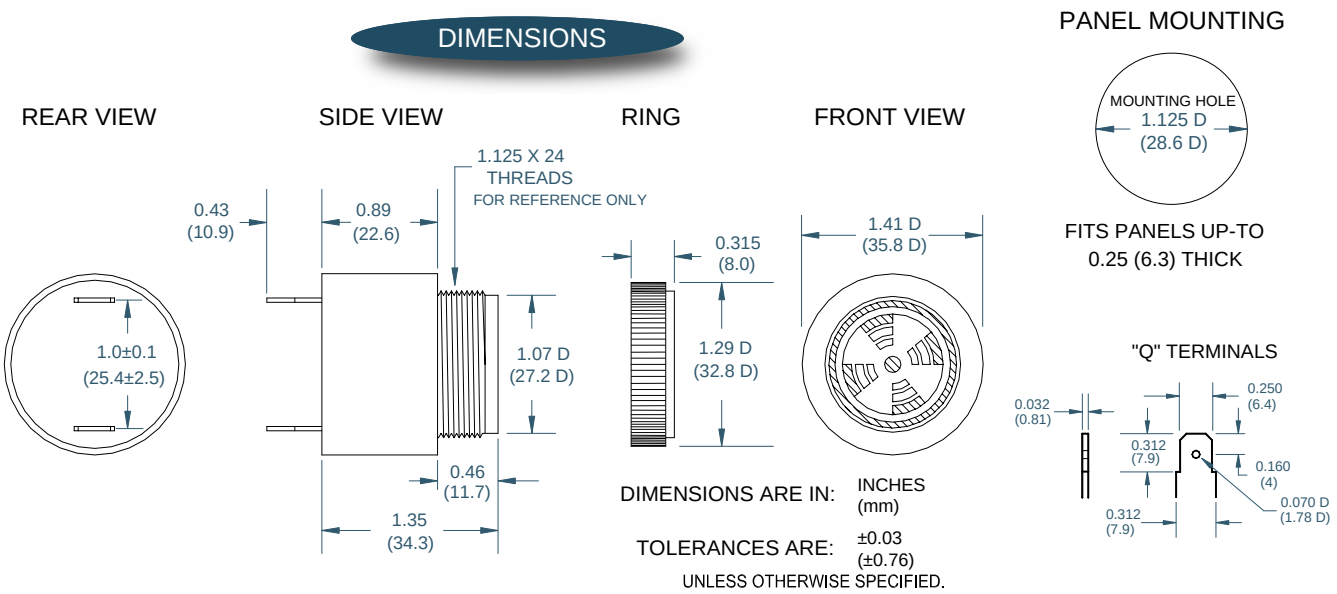


The XB-09-312-Q(U) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The six pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

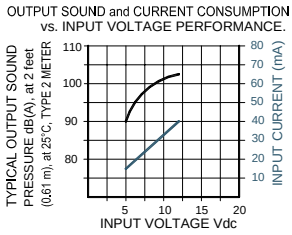
All specifications subject to change without notice.

XB-09-312-Q(U)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

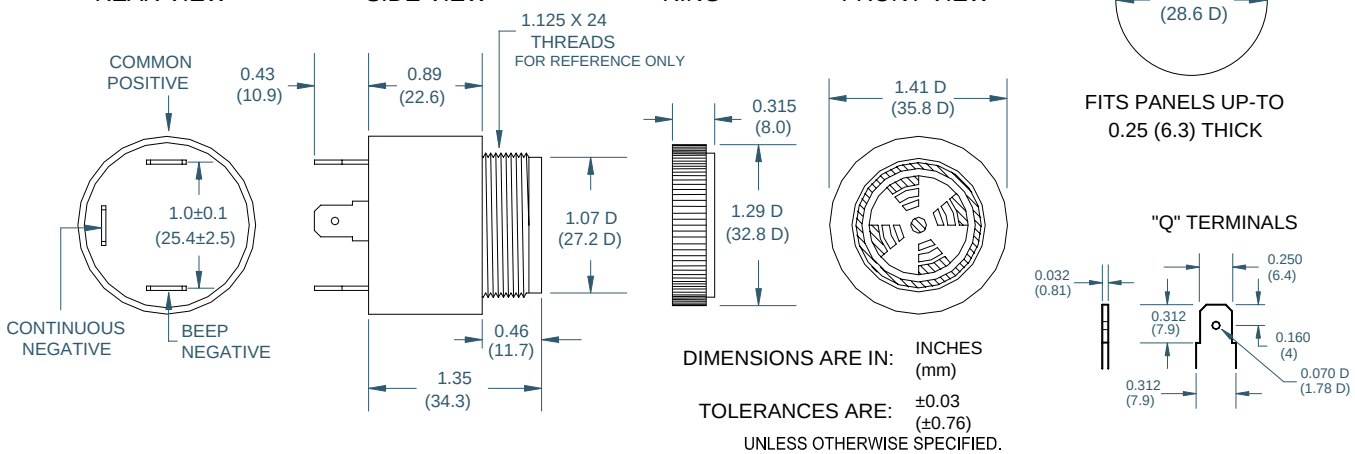


The XB-09-312-Q(U)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as an ultra fast beep tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

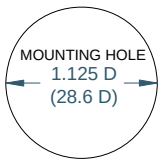
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

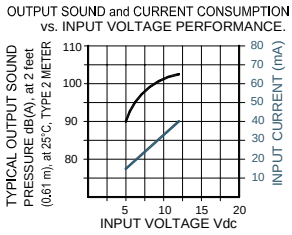
All specifications subject to change without notice.

XB-09-312-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

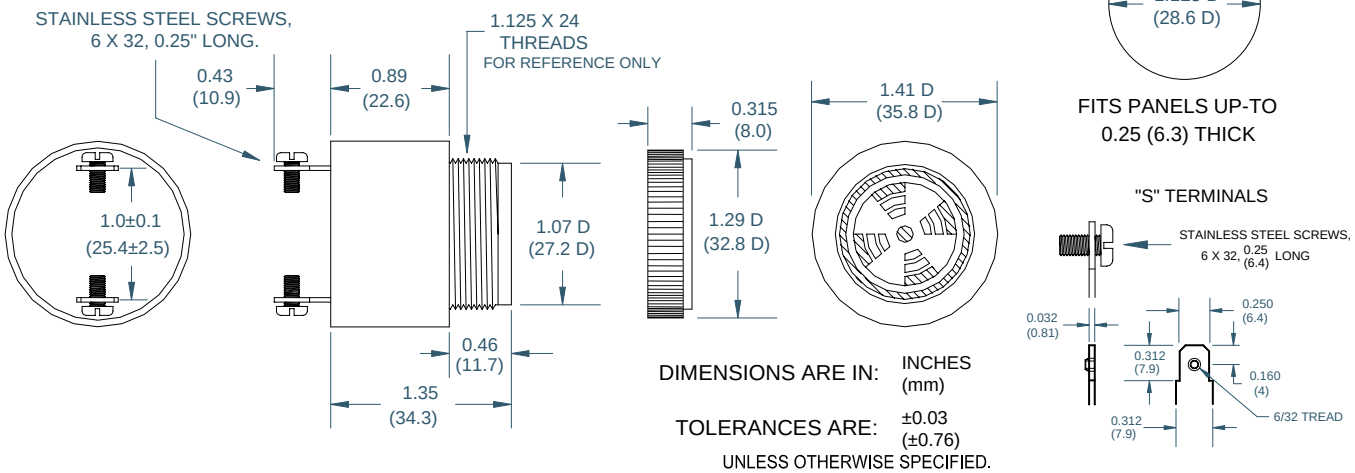


The XB-09-312-S(F) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The three pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

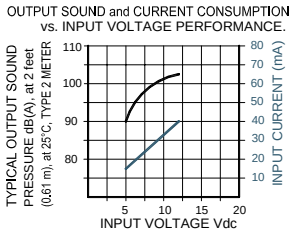
All specifications subject to change without notice.

XB-09-312-S(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

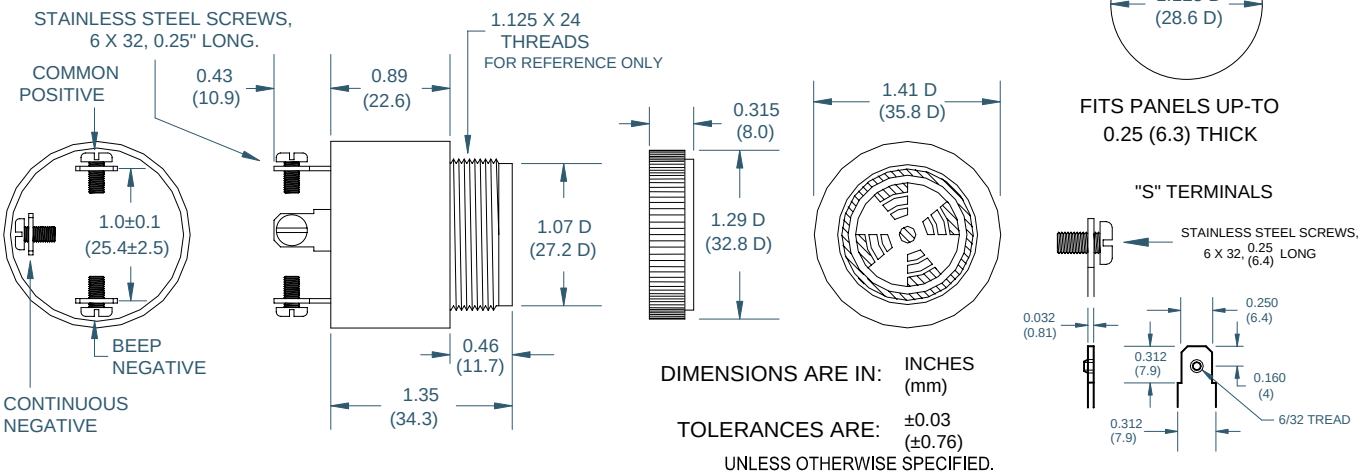


The XB-09-312-S(F)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as a fast beep tone and as a continuous tone. Both tone modes have a typical sound pressure level of 103 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

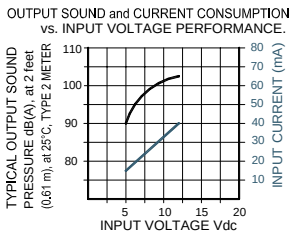
All specifications subject to change without notice.

XB-09-312-S(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

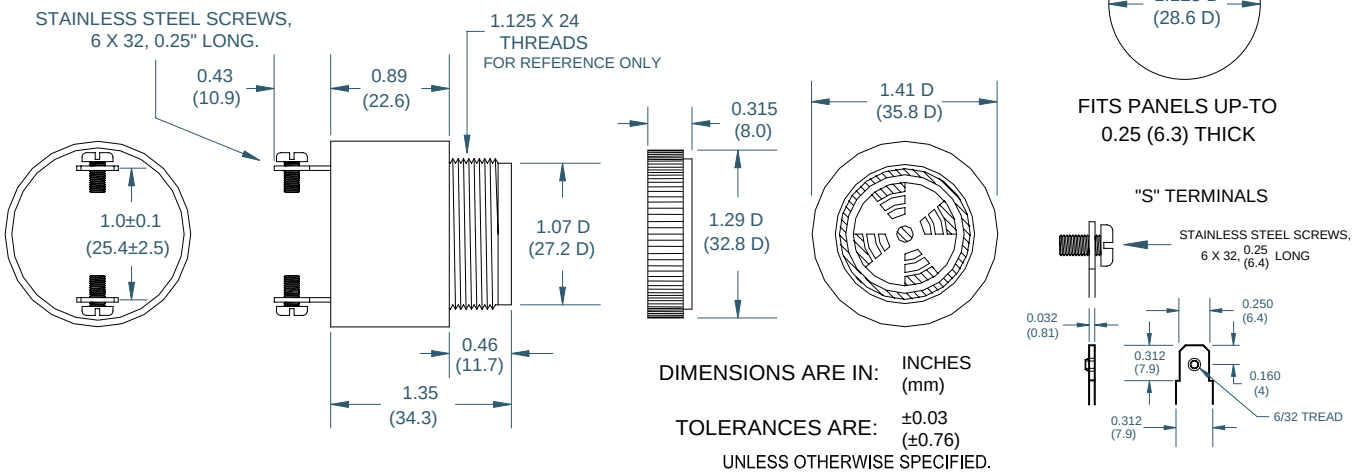


The XB-09-312-S(M) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The two pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

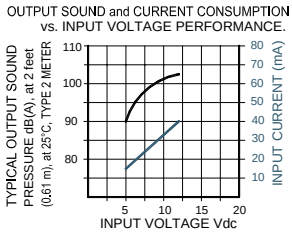
All specifications subject to change without notice.

XB-09-312-S(M)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

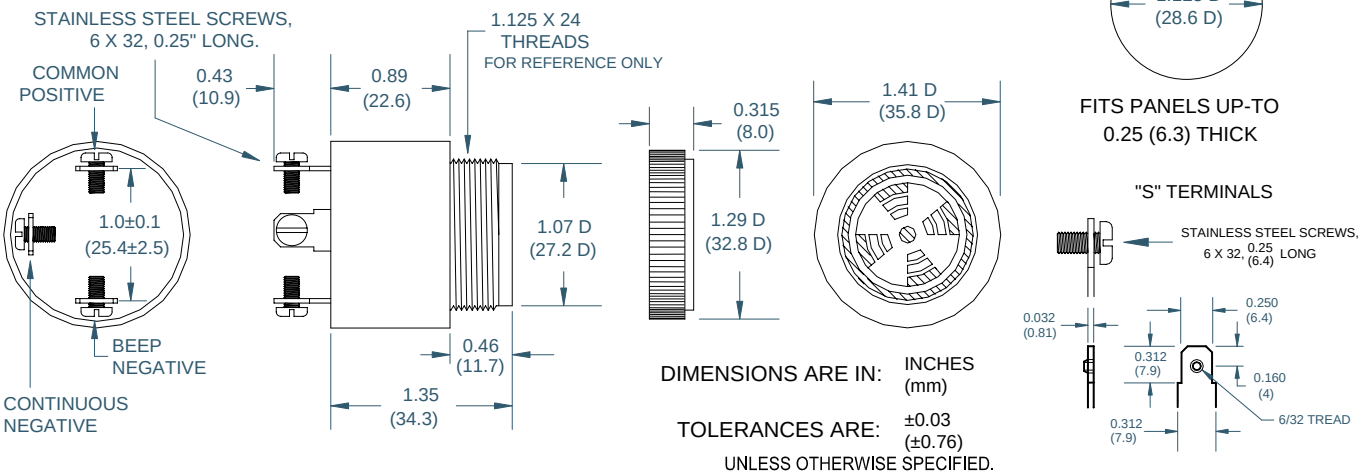


The XB-09-312-S(M)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as a medium beep tone and as a continuous tone. Both tone modes have a typical sound pressure level of 103 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

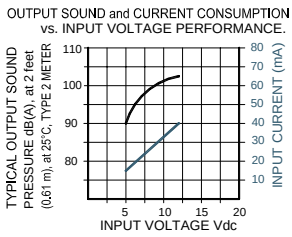
All specifications subject to change without notice.

XB-09-312-S(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

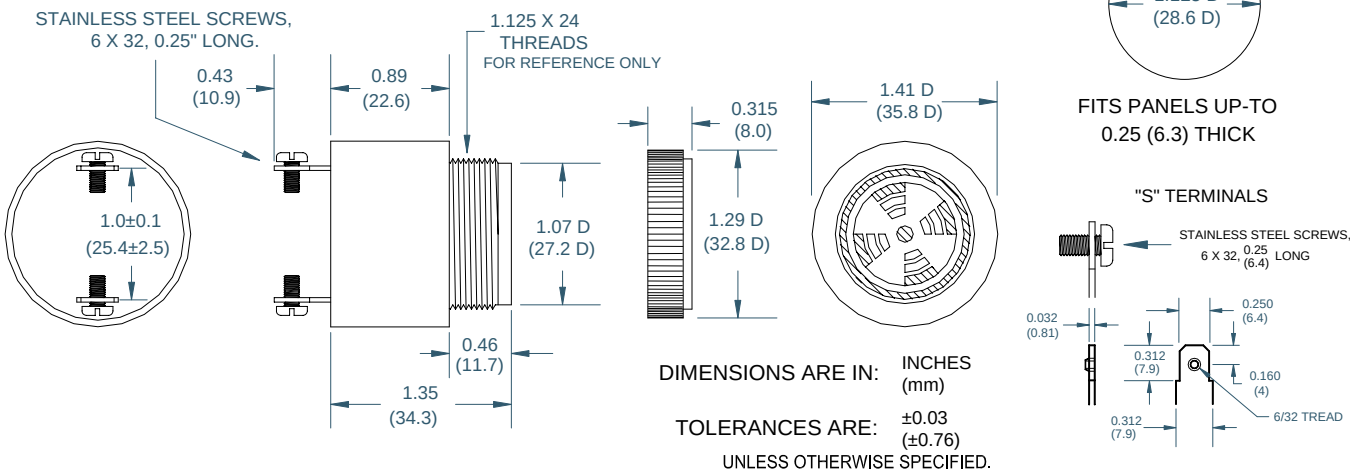


The XB-09-312-S(S) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The one pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

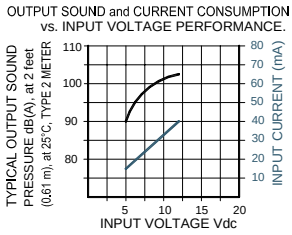
All specifications subject to change without notice.

XB-09-312-S(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

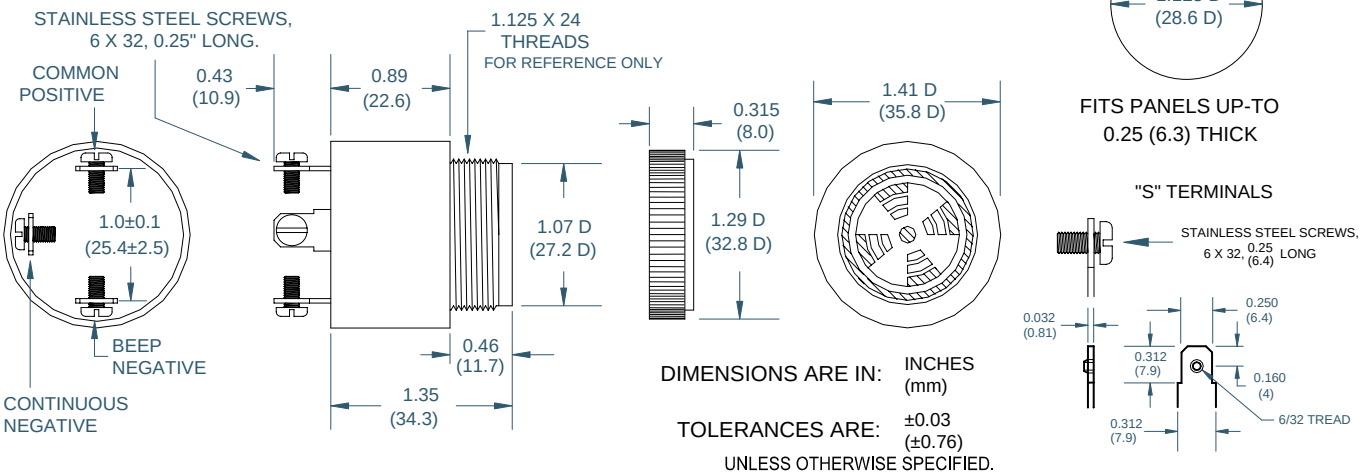


The XB-09-312-S(S)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as a slow beep tone and as a continuous tone. Both tone modes have a typical sound pressure level of 103 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

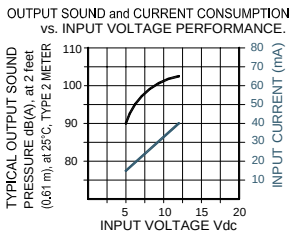
All specifications subject to change without notice.

XB-09-312-S(U)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

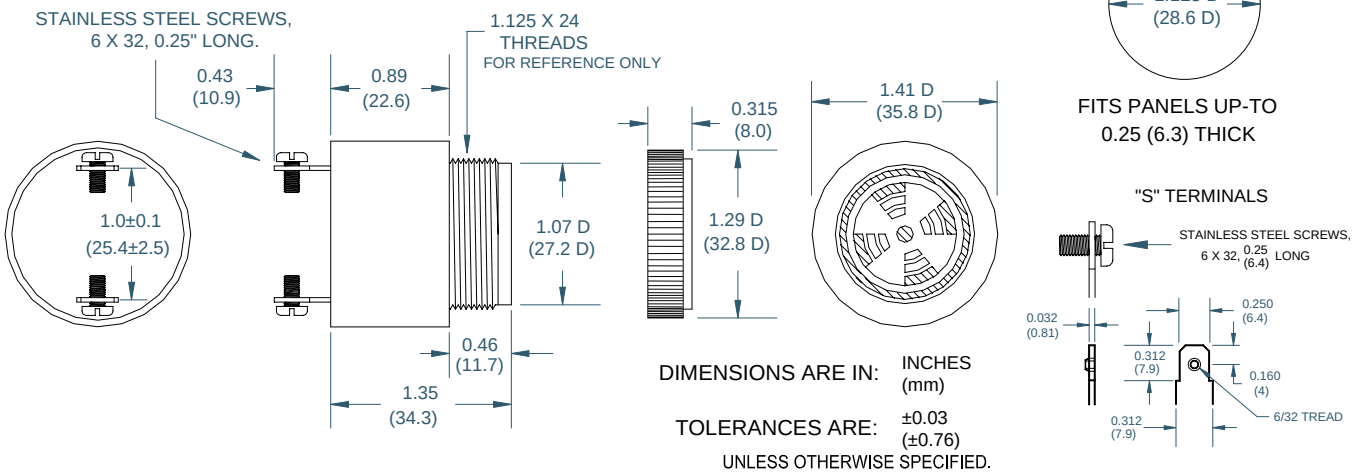


The XB-09-312-S(U) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The six pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

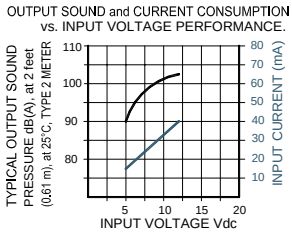
All specifications subject to change without notice.

XB-09-312-S(U)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

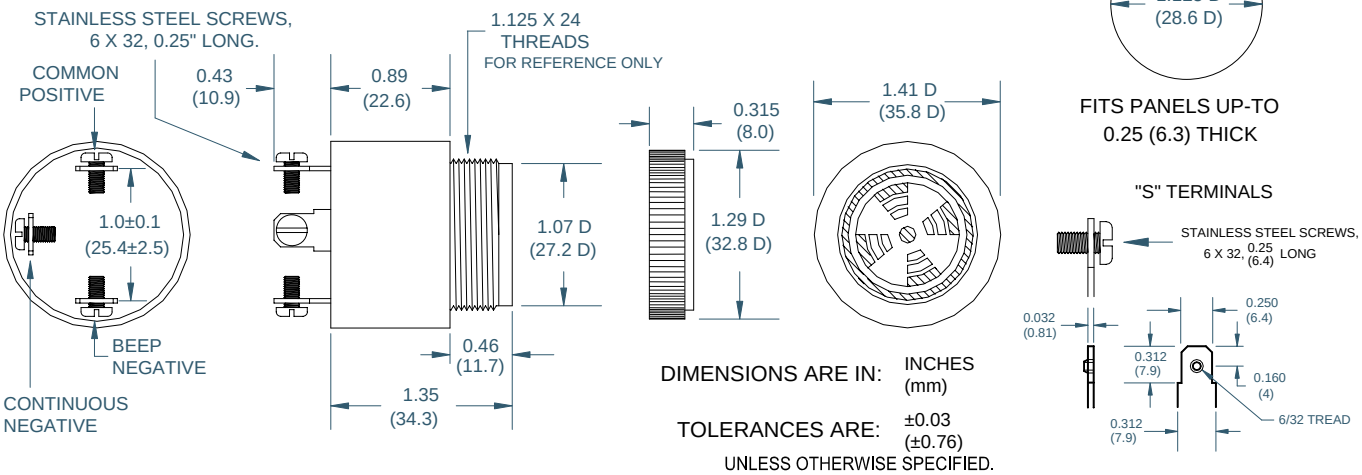


The XB-09-312-S(U)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as an ultra fast beep tone and as a continuous tone. Both tone modes have a typical sound pressure level of 103 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

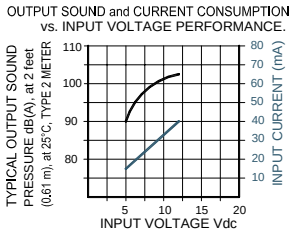
All specifications subject to change without notice.

XB-09-312-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



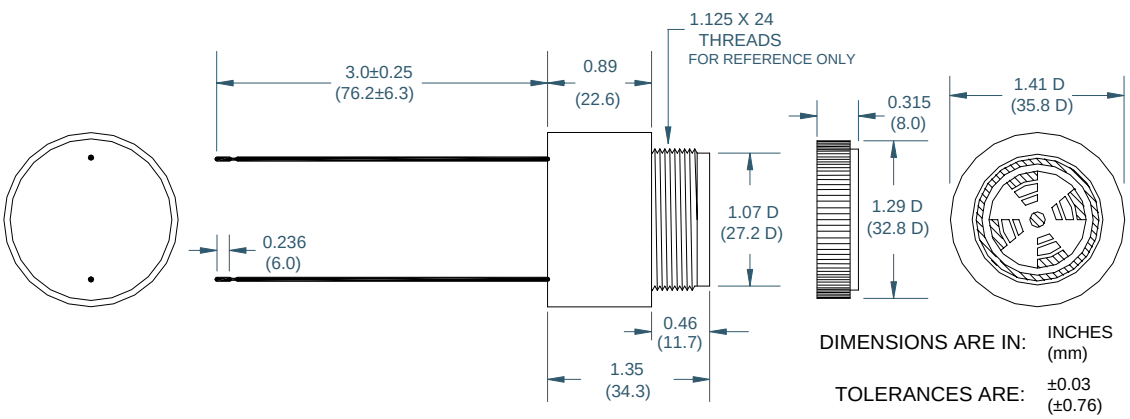
The XB-09-312-W(F) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The three pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

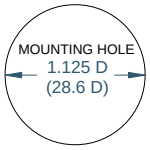
SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING





FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

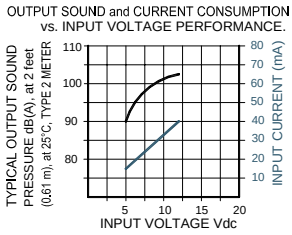
All specifications subject to change without notice.

XB-09-312-W(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



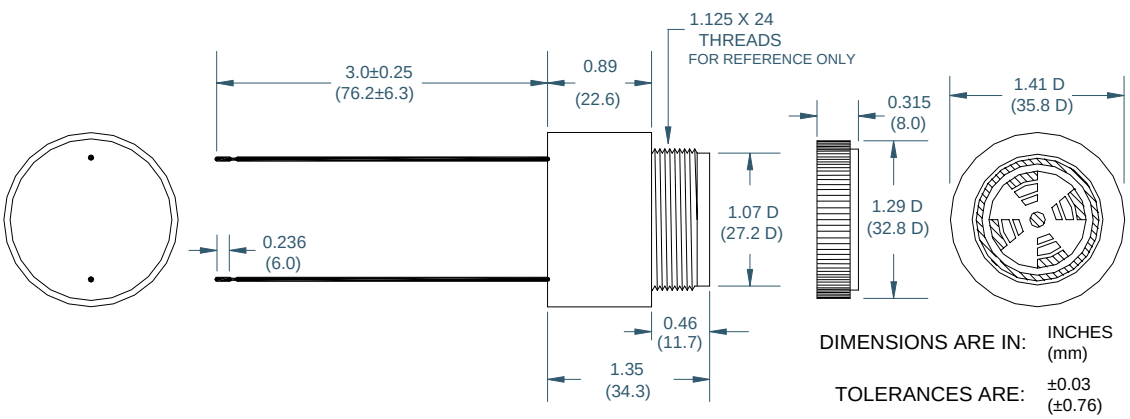
The XB-09-312-W(M) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The two pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

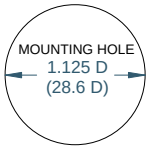
SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING





FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

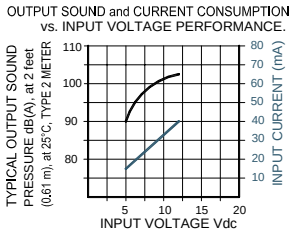
All specifications subject to change without notice.

XB-09-312-W(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



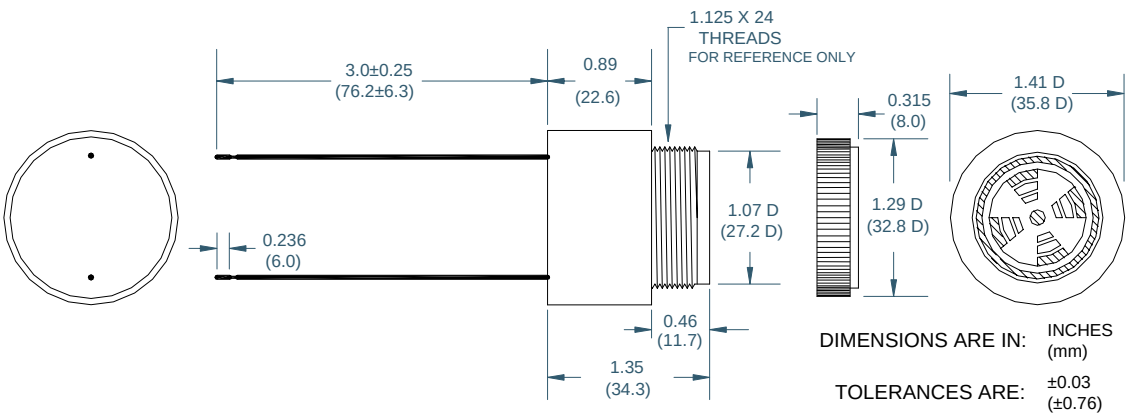
The XB-09-312-W(S) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The one pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

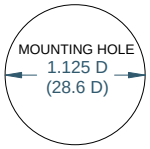
SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING





FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

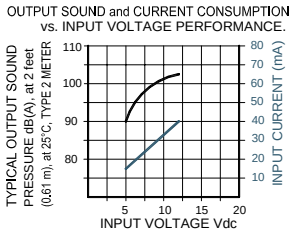
All specifications subject to change without notice.

XB-09-312-W(U)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



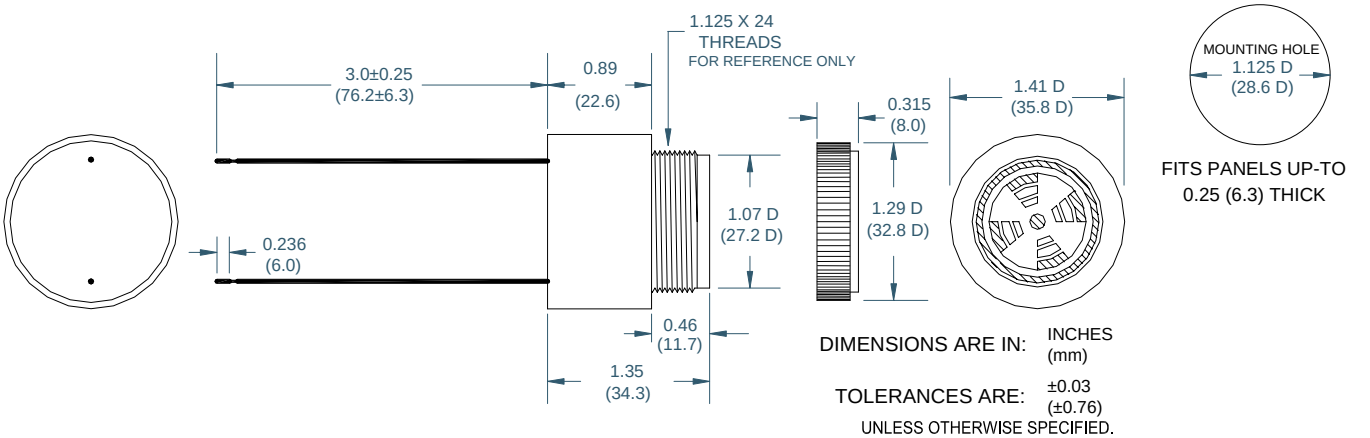
The XB-09-312-W(U) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The six pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc, 40 mA at 12 Vdc
Typical Sound Pressure:	90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

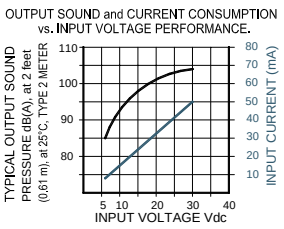
All specifications subject to change without notice.

XB-09-630-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

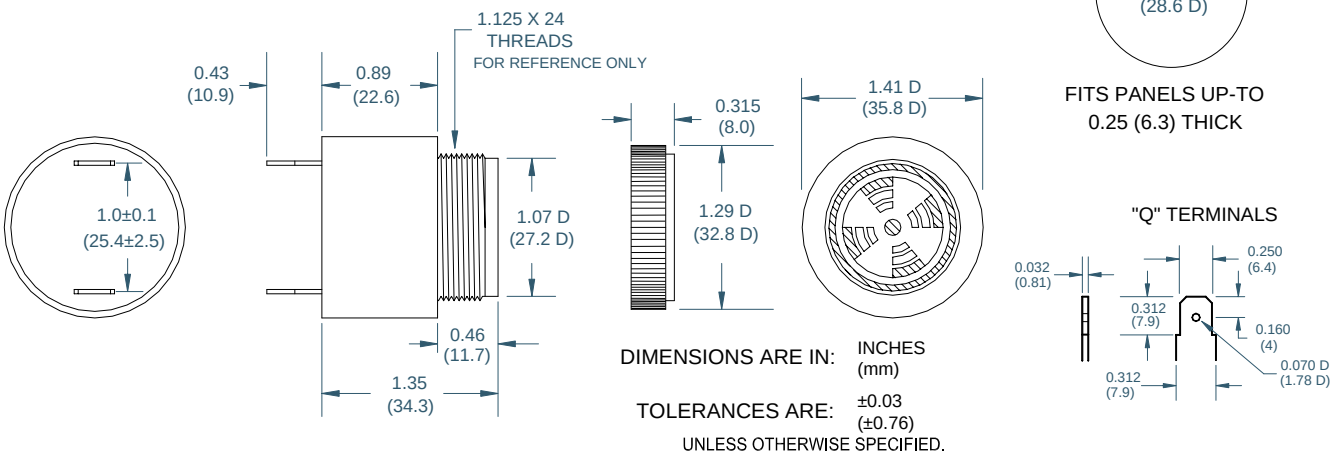


The XB-09-630-Q(F) is an extra loud output, panel mounted alarm for operating voltages of 6-30VDC. The three pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

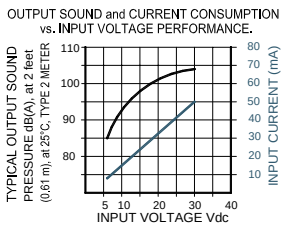
All specifications subject to change without notice.

XB-09-630-Q(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

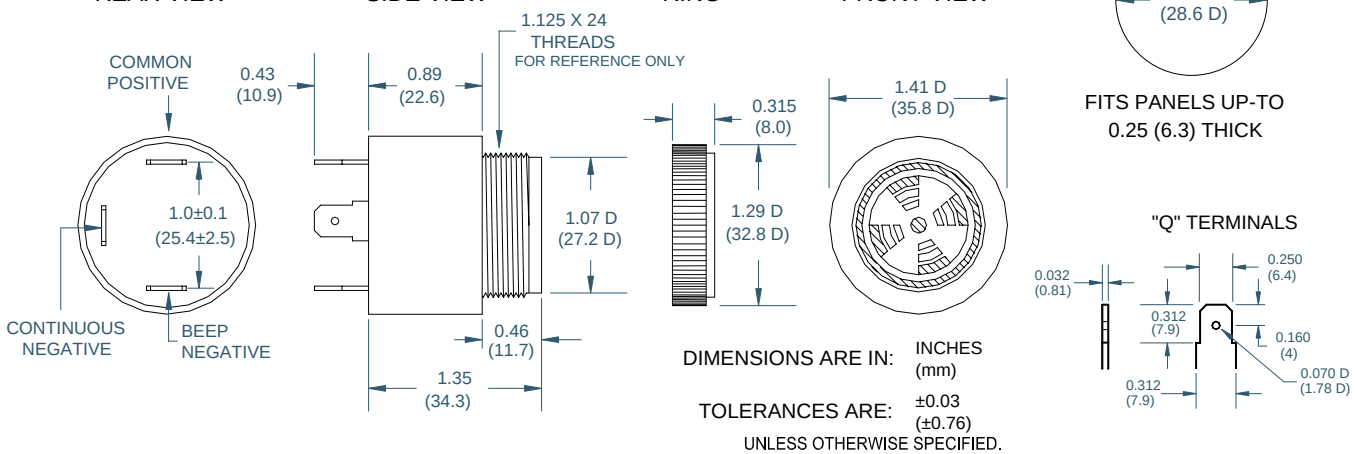


The XB-09-630-Q(F)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as a fast beep tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

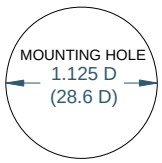
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

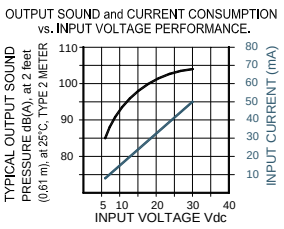
All specifications subject to change without notice.

XB-09-630-Q(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

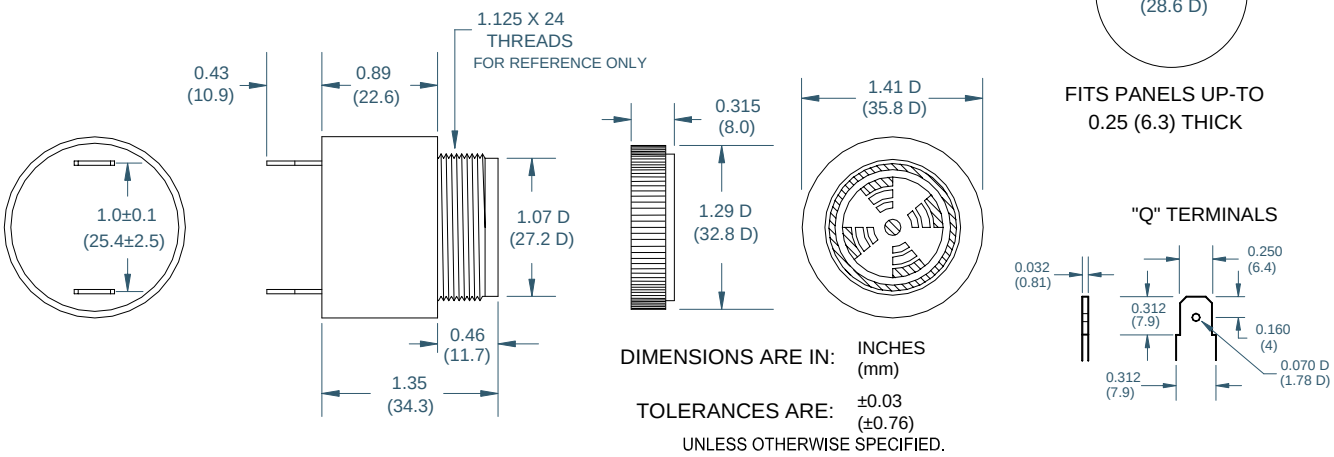


The XB-09-630-Q(M) is an extra loud output, panel mounted alarm for operating voltages of 6-30VDC. The two pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

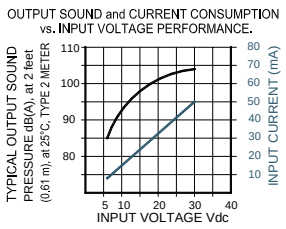
All specifications subject to change without notice.

XB-09-630-Q(M)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

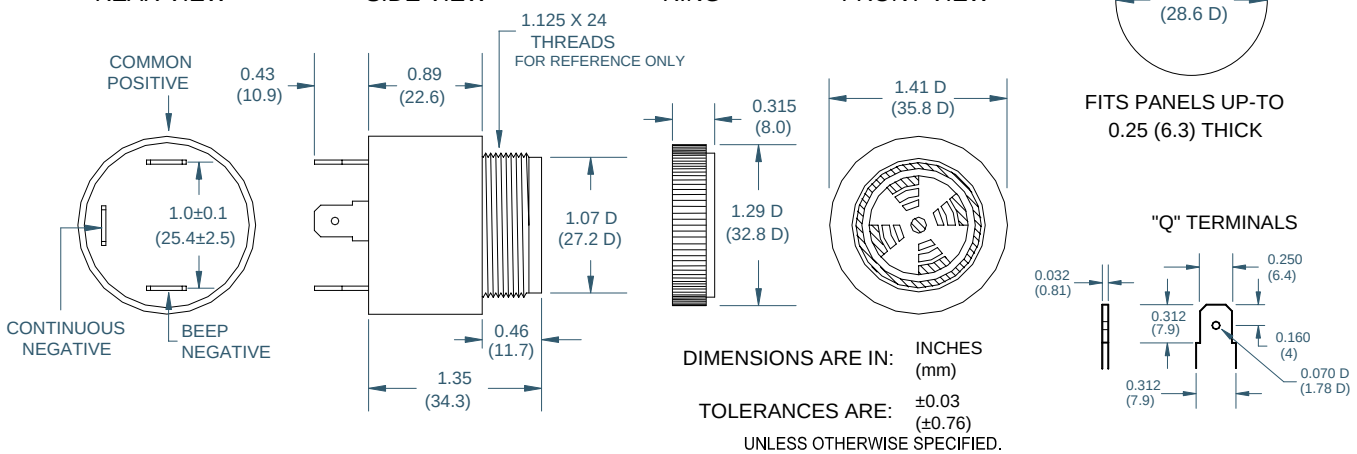


The XB-09-630-Q(M)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as a medium beep tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

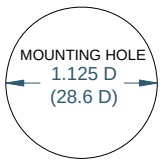
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

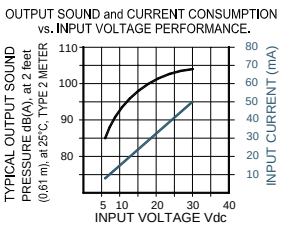
All specifications subject to change without notice.

XB-09-630-Q(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

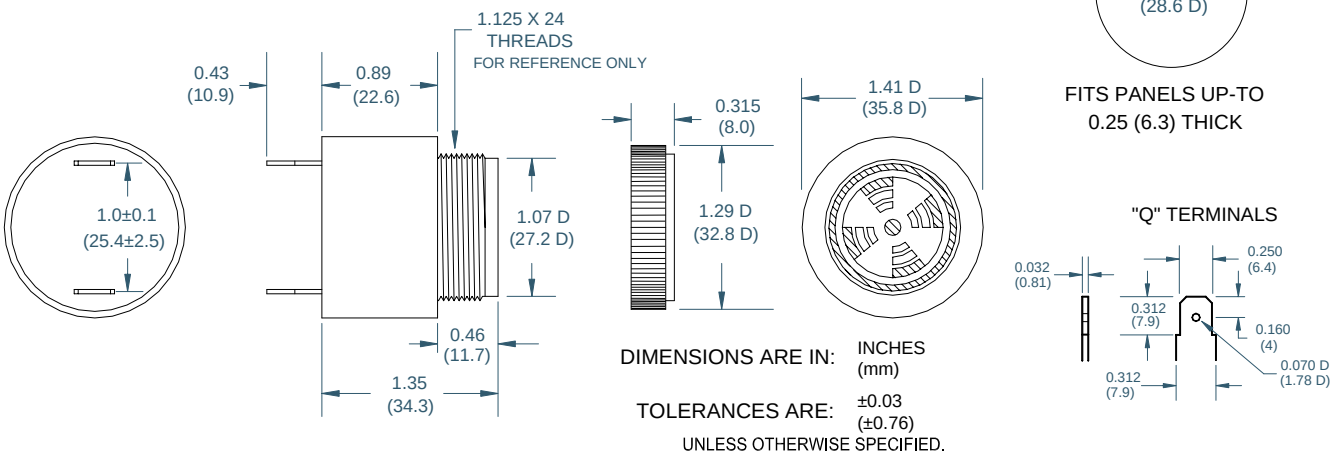


The XB-09-630-Q(S) is an extra loud output, panel mounted alarm for operating voltages of 6-30VDC. The one pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

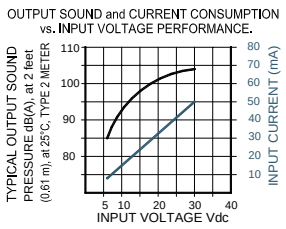
All specifications subject to change without notice.

XB-09-630-Q(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

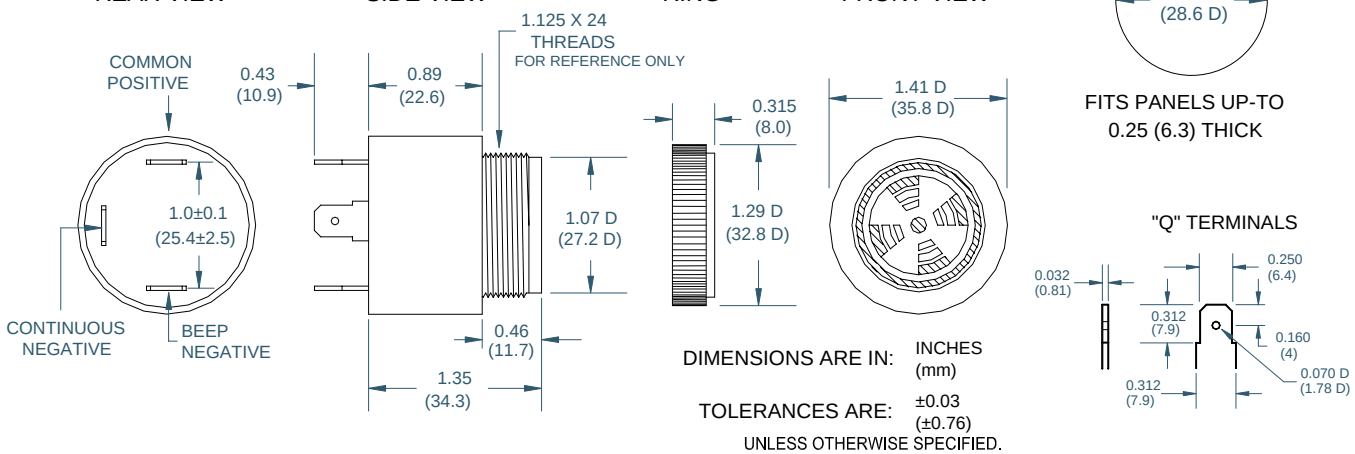


The XB-09-630-Q(S)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as a slow beep tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

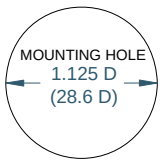
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

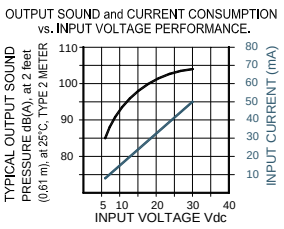
All specifications subject to change without notice.

XB-09-630-Q(U)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

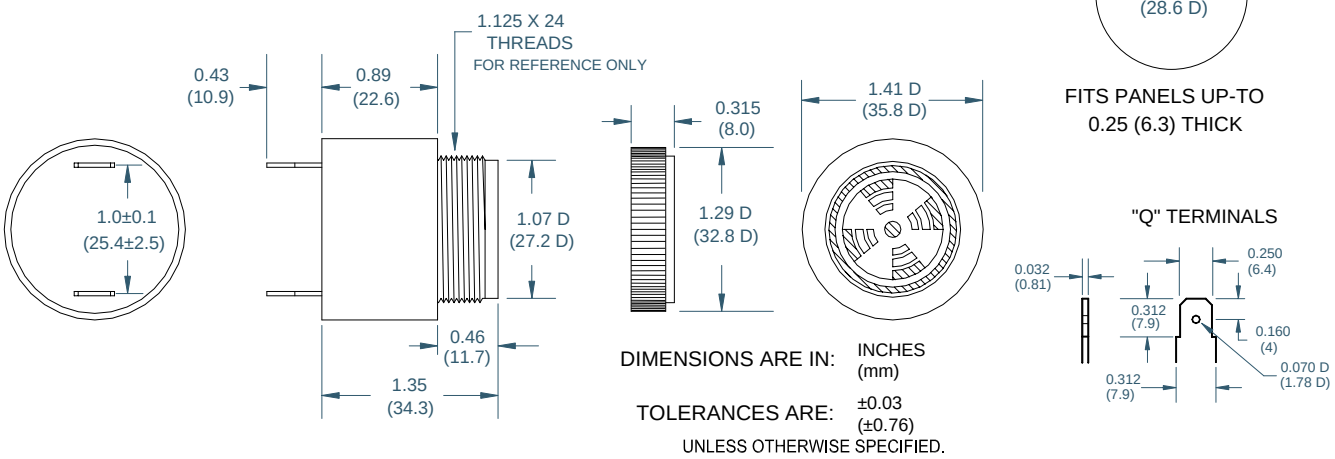


The XB-09-630-Q(U) is an extra loud output, panel mounted alarm for operating voltages of 6-30VDC. The six pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

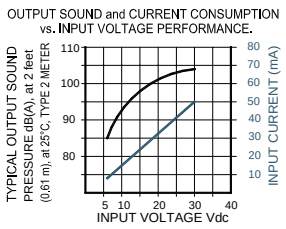
All specifications subject to change without notice.

XB-09-630-Q(U)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

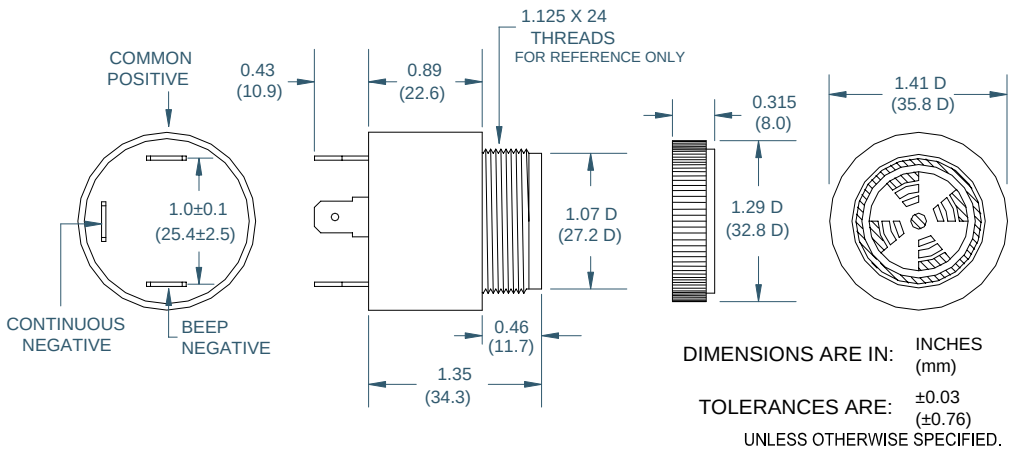


The XB-09-630-Q(U)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as an ultra fast beep tone and as a continuous tone. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

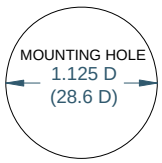
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

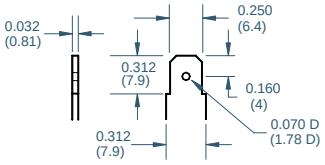


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

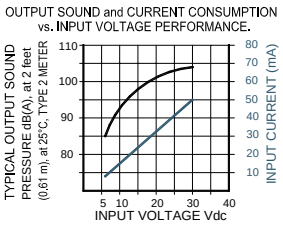
All specifications subject to change without notice.

XB-09-630-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

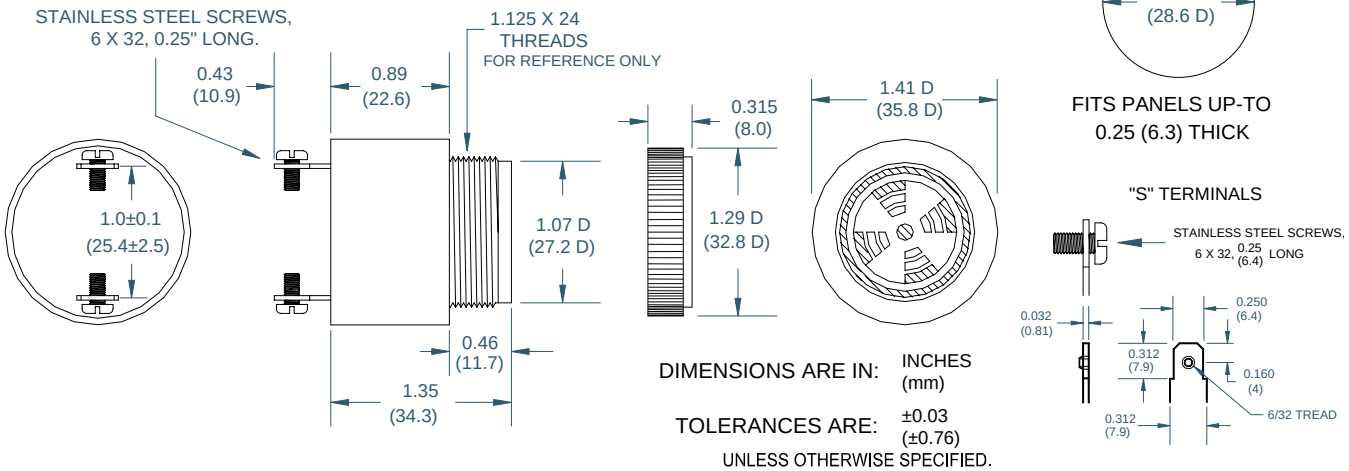


The XB-09-630-S(F) is an extra loud output, panel mounted alarm for operating voltages of 6-30VDC. The three pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

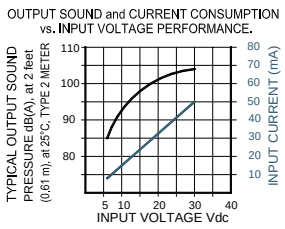
All specifications subject to change without notice.

XB-09-630-S(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

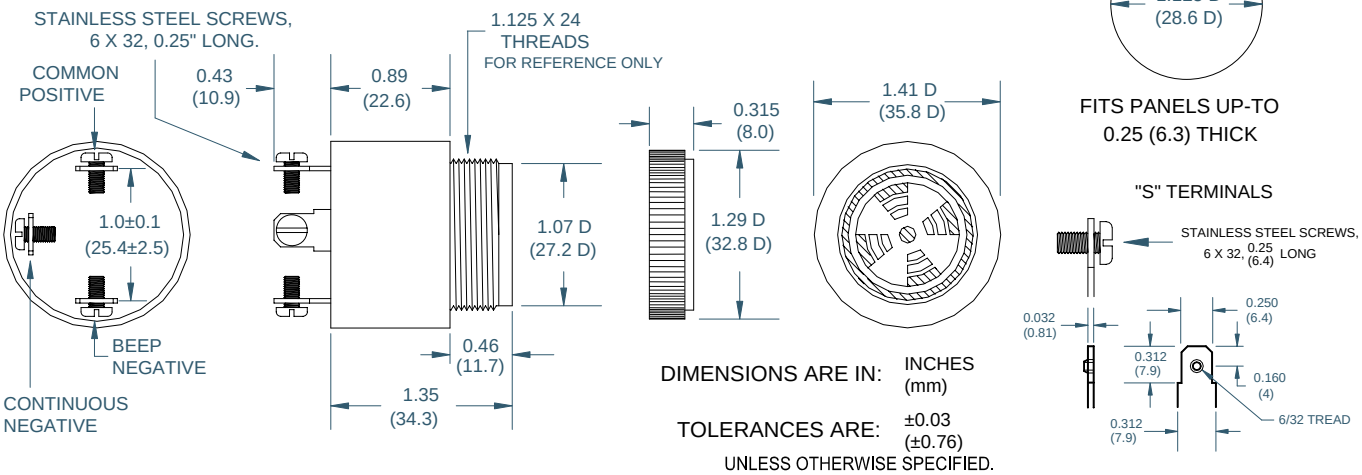


The XB-09-630-S(F)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as a fast beep tone and as a continuous tone. Both tone modes have a typical sound pressure level of 103 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

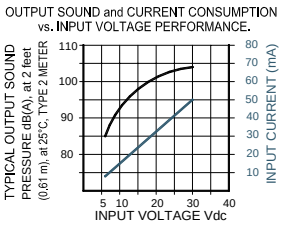
All specifications subject to change without notice.

XB-09-630-S(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

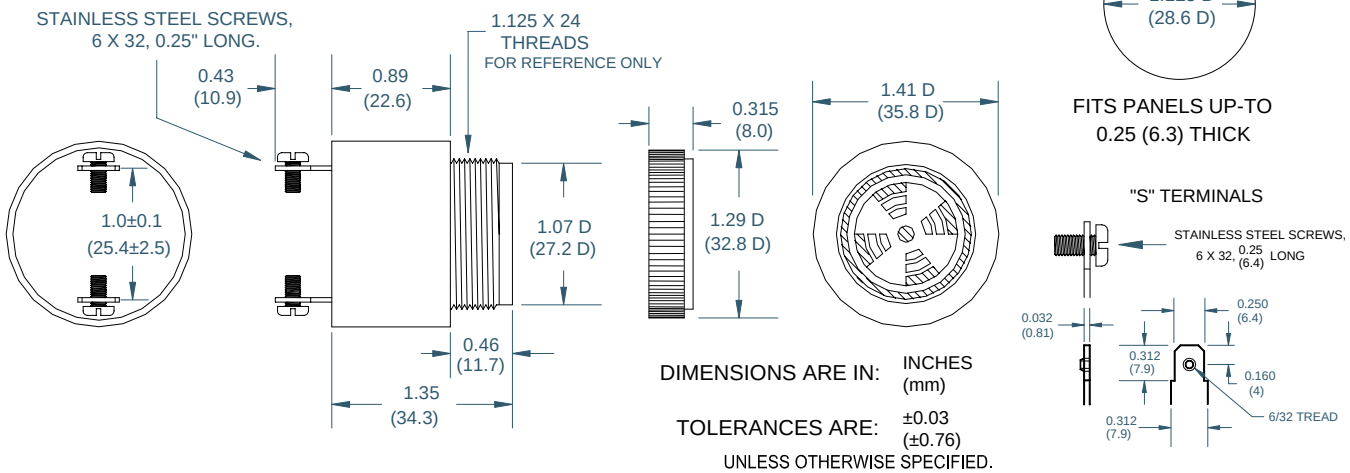


The XB-09-630-S(M) is an extra loud output, panel mounted alarm for operating voltages of 6-30VDC. The two pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76) UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

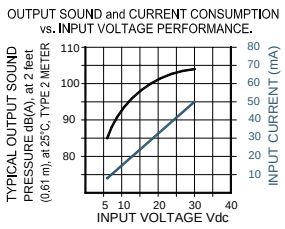
All specifications subject to change without notice.

XB-09-630-S(M)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

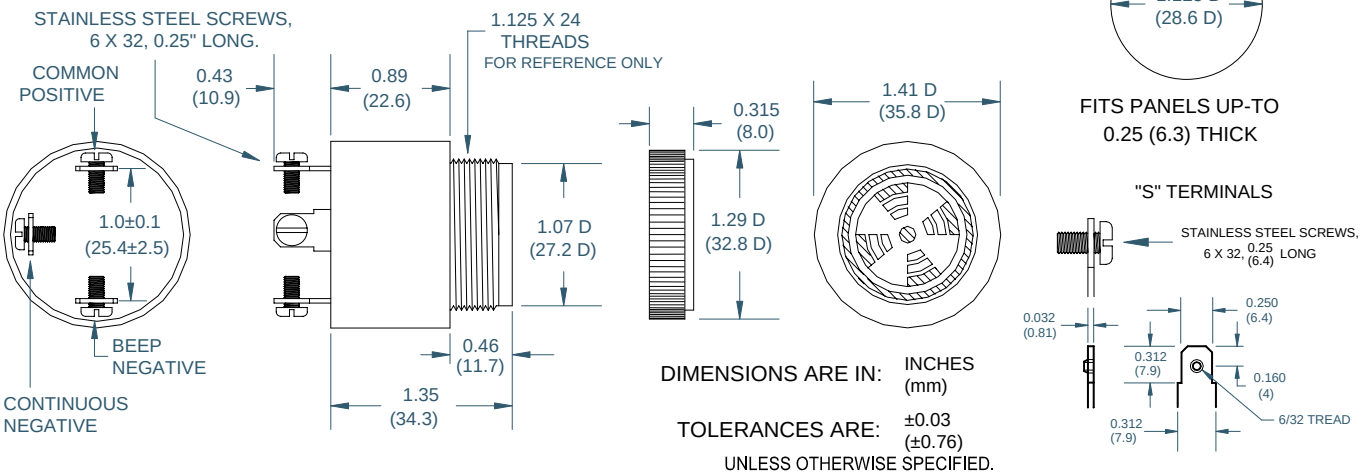


The XB-09-630-S(M)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as a medium beep tone and as a continuous tone. Both tone modes have a typical sound pressure level of 103 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

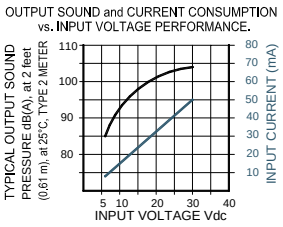
All specifications subject to change without notice.

XB-09-630-S(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

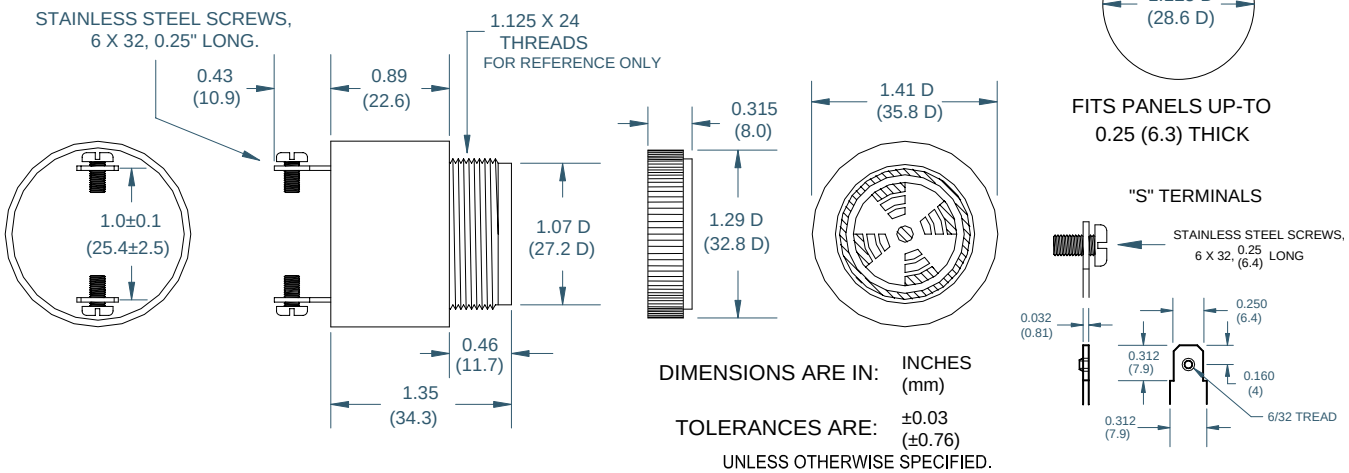


The XB-09-630-S(S) is an extra loud output, panel mounted alarm for operating voltages of 6-30VDC. The one pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

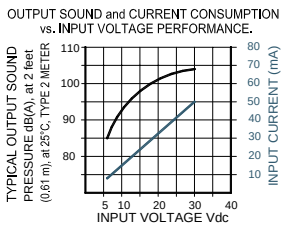
All specifications subject to change without notice.

XB-09-630-S(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

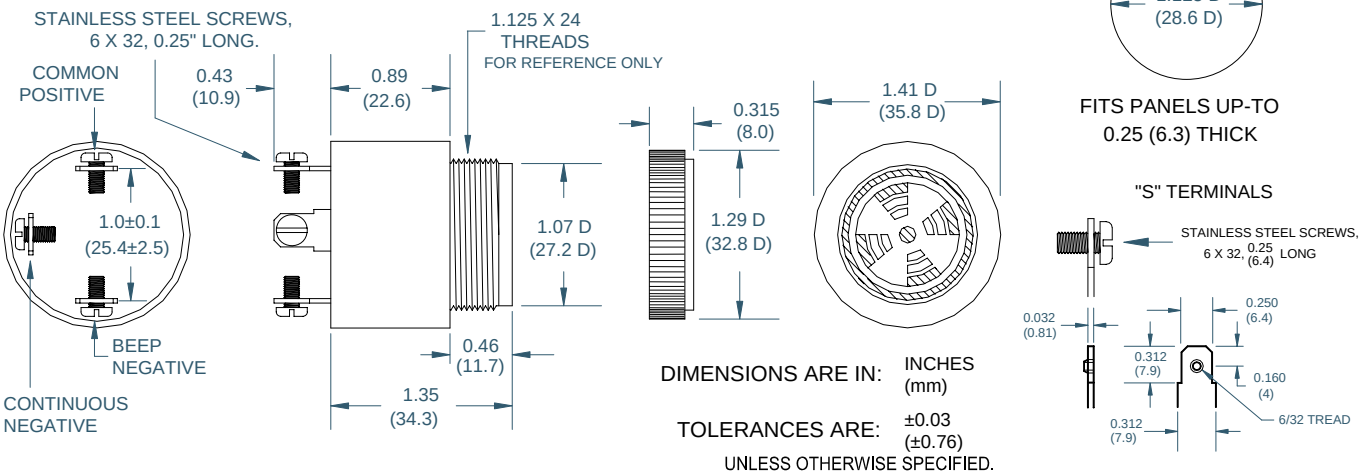


The XB-09-630-S(S)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as a slow beep tone and as a continuous tone. Both tone modes have a typical sound pressure level of 103 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

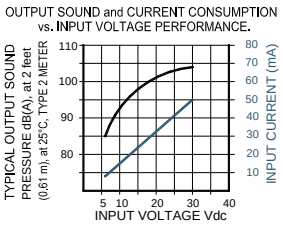
All specifications subject to change without notice.

XB-09-630-S(U)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

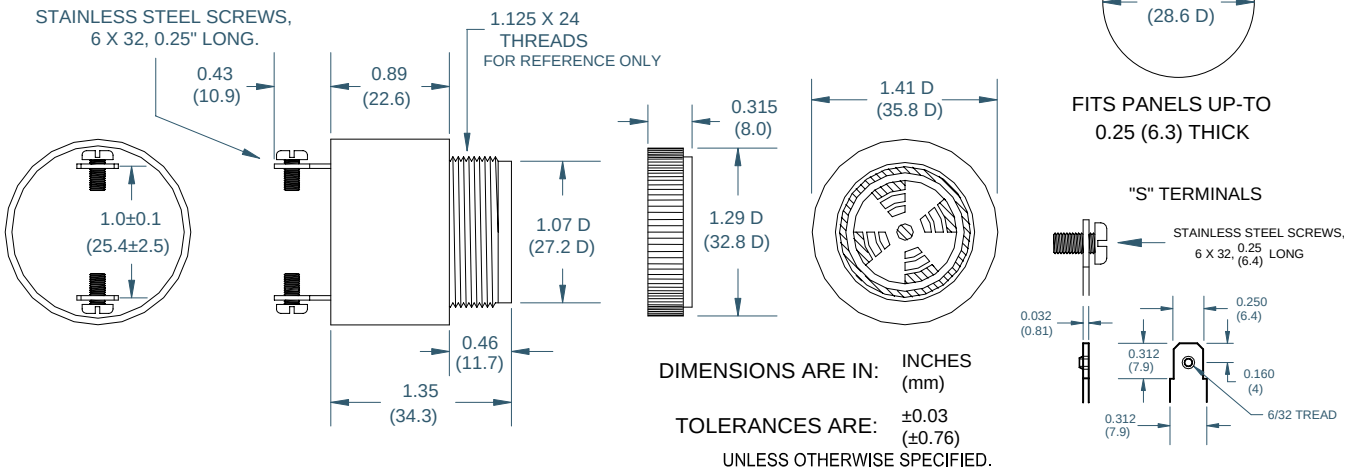


The XB-09-630-S(U) is an extra loud output, panel mounted alarm for operating voltages of 6-30VDC. The six pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

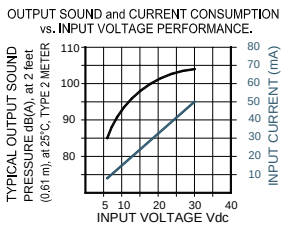
All specifications subject to change without notice.

XB-09-630-S(U)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

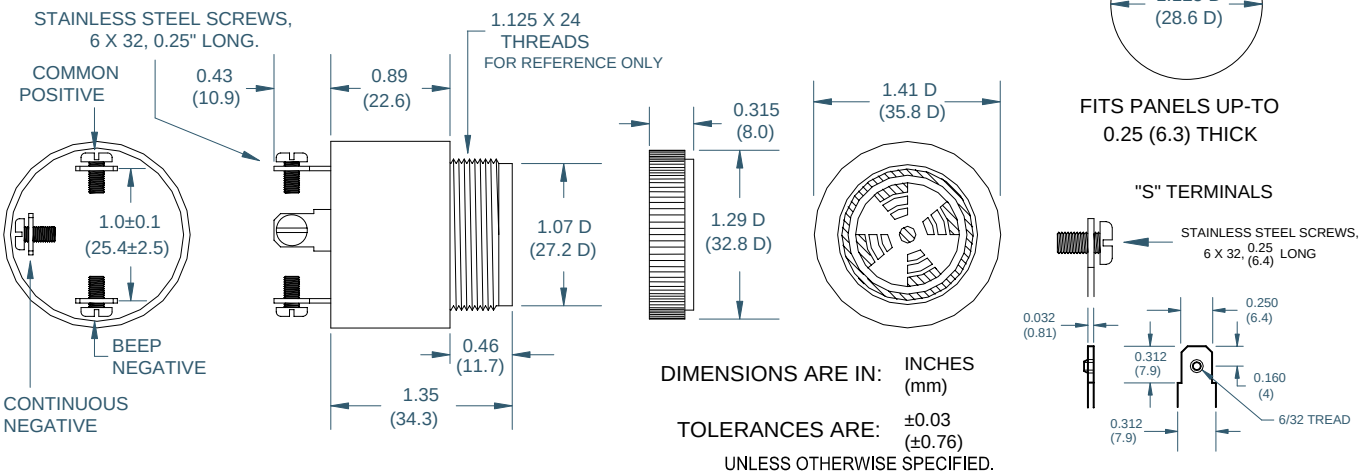


The XB-09-630-S(U)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as an ultra fast beep tone and as a continuous tone. Both tone modes have a typical sound pressure level of 103 dB(A) at maximum voltage.

SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

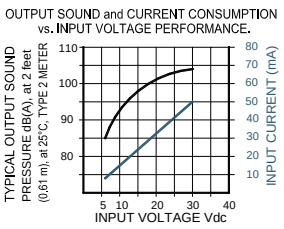
All specifications subject to change without notice.

XB-09-630-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



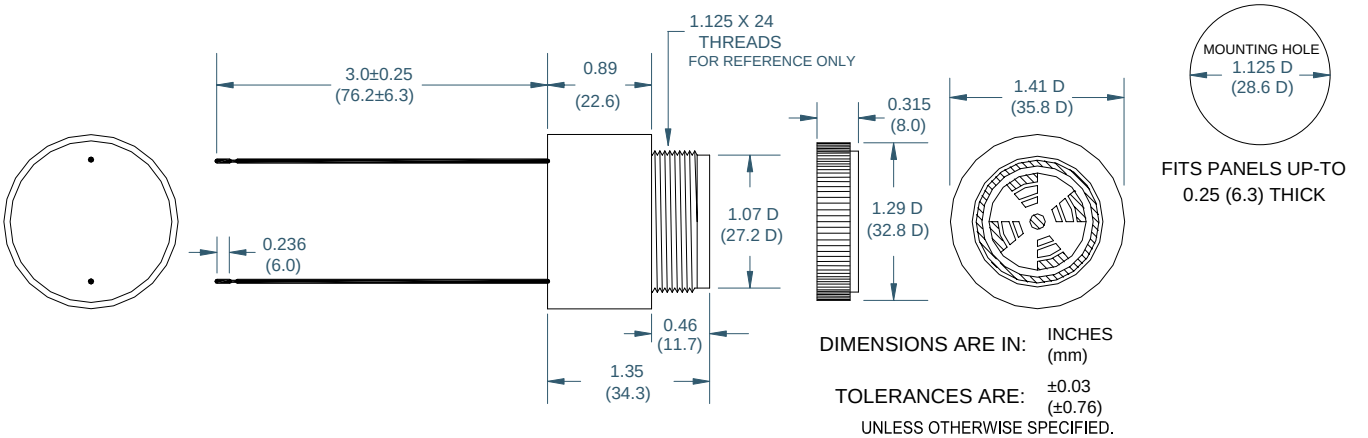
The XB-09-630-W(F) is an extra loud output, panel mounted alarm for operating voltages of 6-30VDC. The three pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

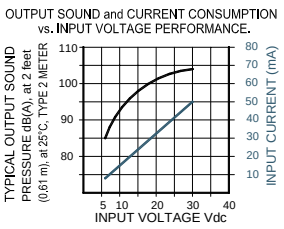
All specifications subject to change without notice.

XB-09-630-W(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



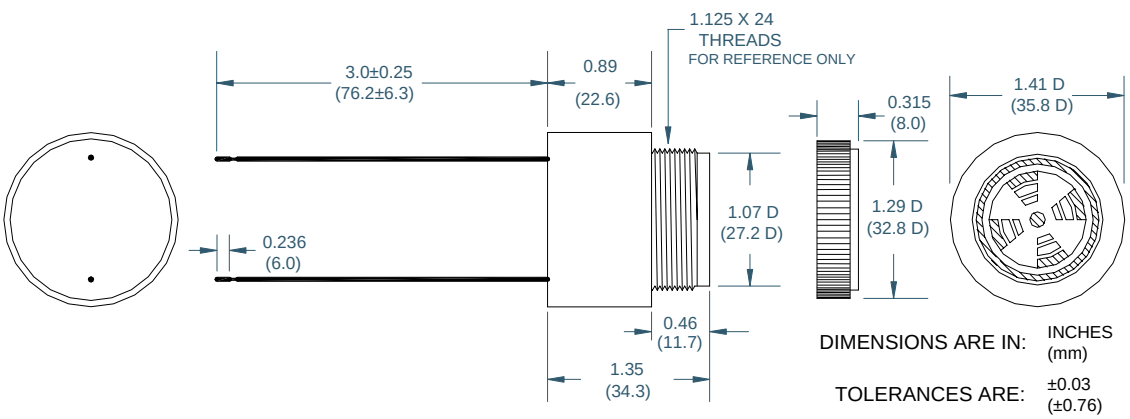
The XB-09-630-W(M) is an extra loud output, panel mounted alarm for operating voltages of 6-30VDC. The two pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

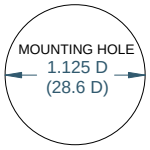
SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW | SIDE VIEW | RING | FRONT VIEW | PANEL MOUNTING





FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

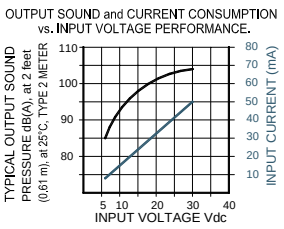
All specifications subject to change without notice.

XB-09-630-W(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



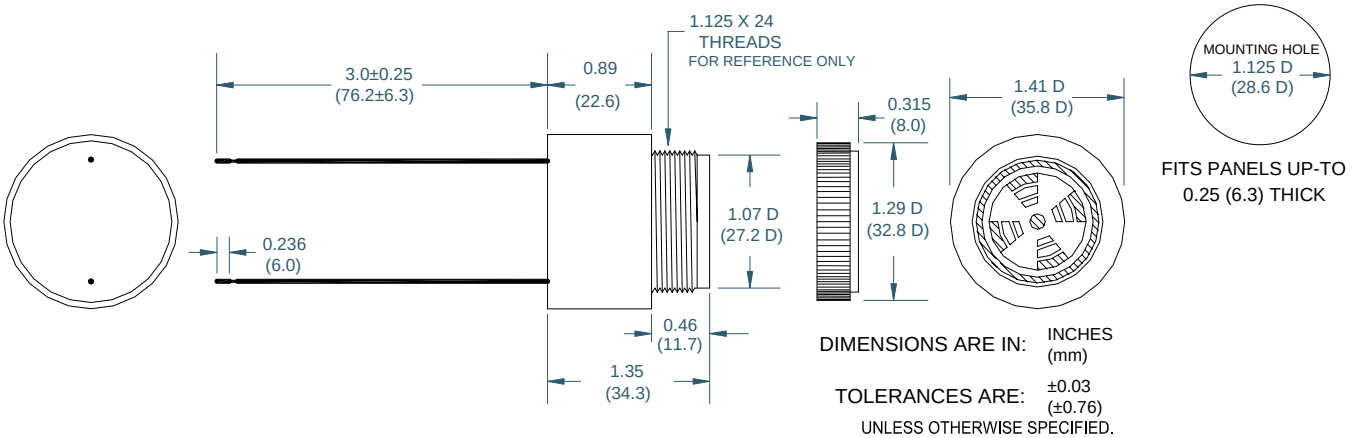
The XB-09-630-W(S) is an extra loud output, panel mounted alarm for operating voltages of 6-30VDC. The one pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW | SIDE VIEW | RING | FRONT VIEW | PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

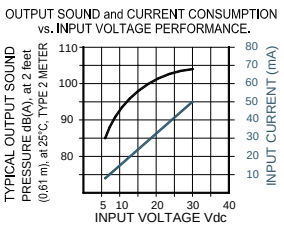
All specifications subject to change without notice.

XB-09-630-W(U)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



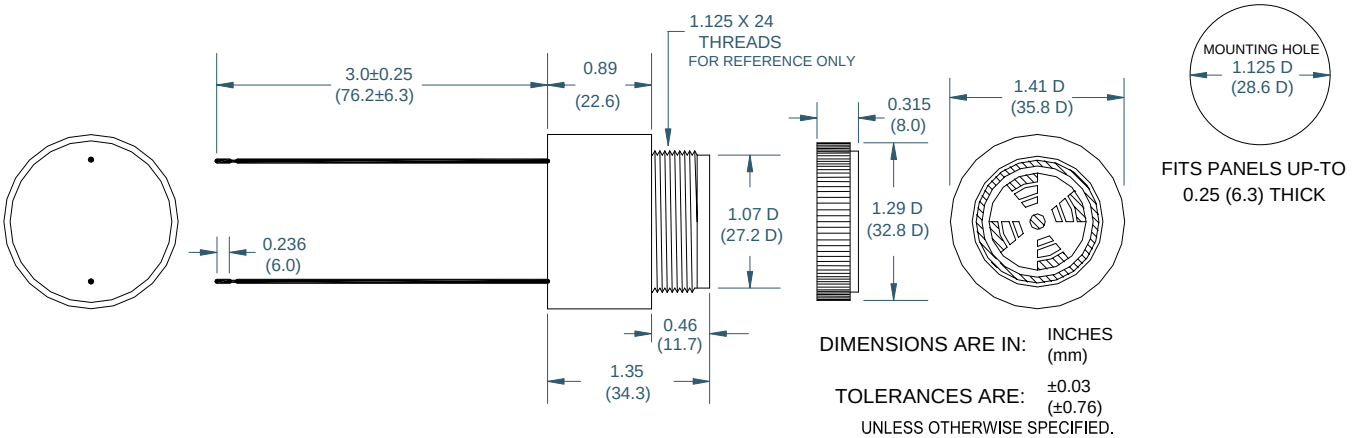
The XB-09-630-W(U) is an extra loud output, panel mounted alarm for operating voltages of 6-30VDC. The six pulse per second beep tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

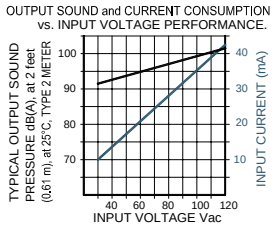
All specifications subject to change without notice.

XB-V09-201-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

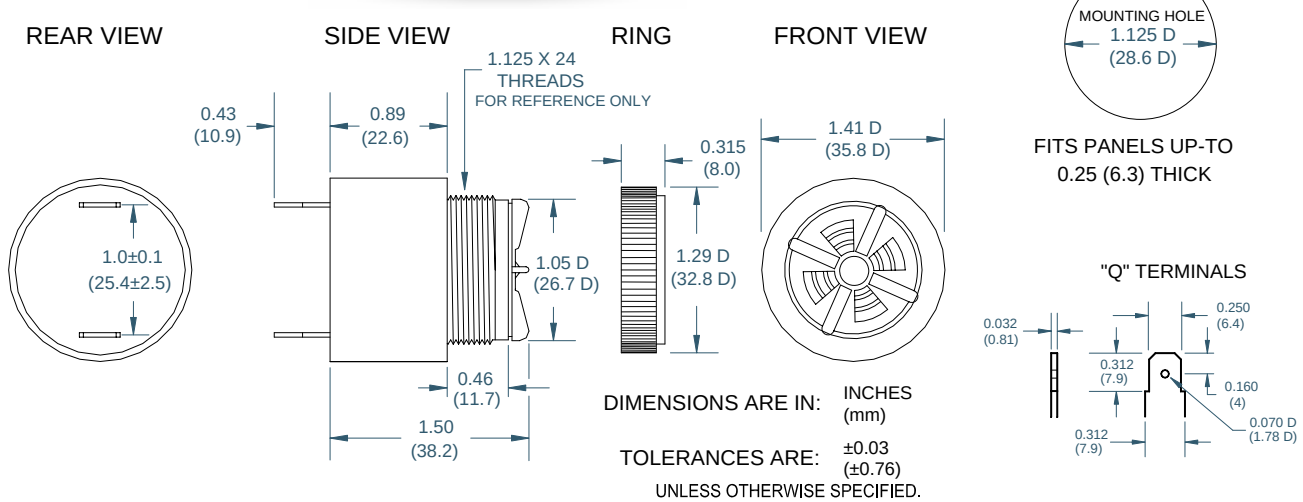


The XB-V09-201-Q(F) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades. The case is designed for panel mounting in a 1.125" hole.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

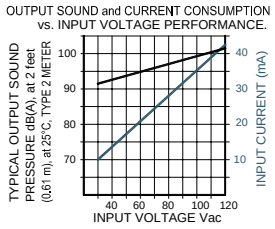
All specifications subject to change without notice.

XB-V09-201-Q(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

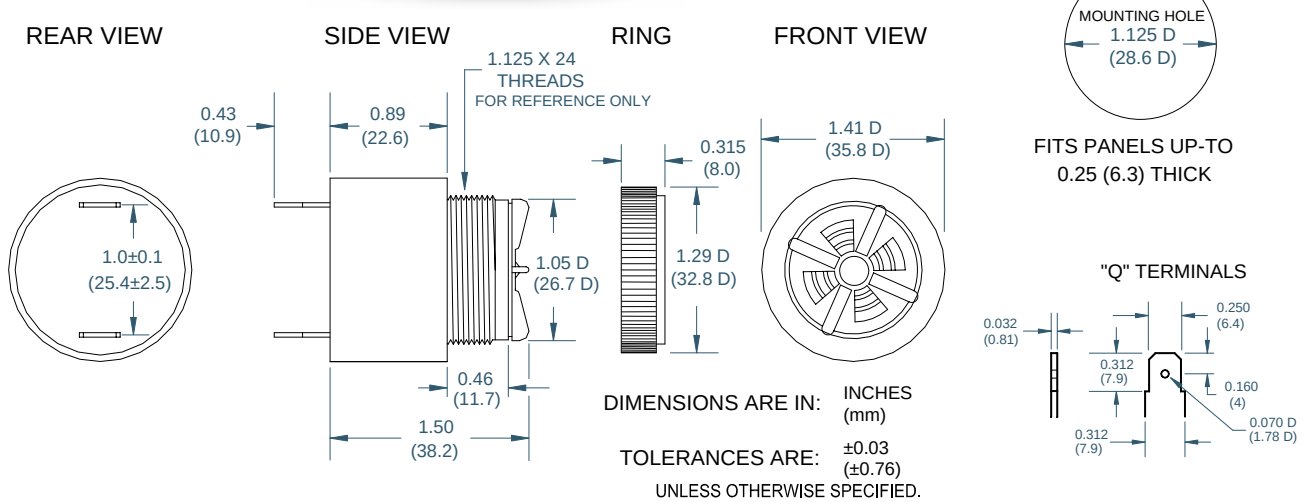


The XB-V09-201-Q(M) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades. The case is designed for panel mounting in a 1.125" hole.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

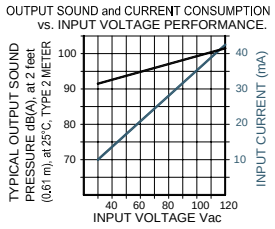
All specifications subject to change without notice.

XB-V09-201-Q(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

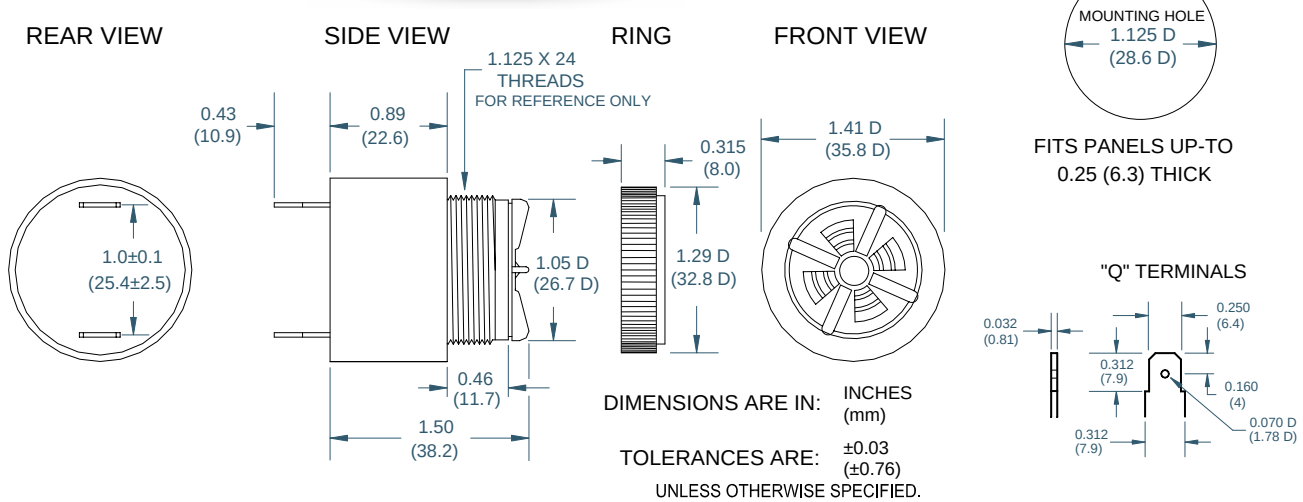


The XB-V09-201-Q(S) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades. The case is designed for panel mounting in a 1.125" hole.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

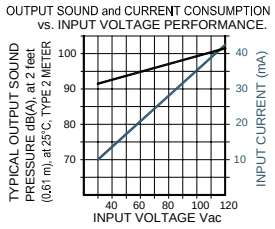
All specifications subject to change without notice.

XB-V09-201-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

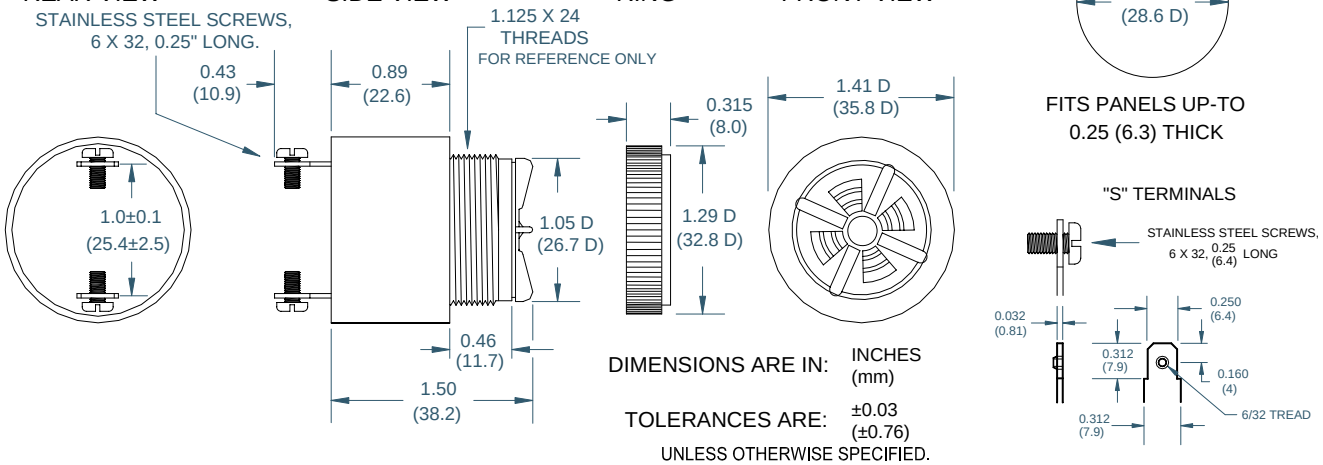


The XB-V09-201-S(F) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

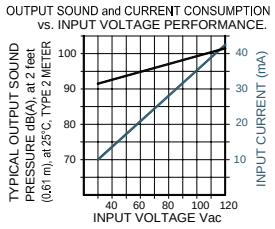
All specifications subject to change without notice.

XB-V09-201-S(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

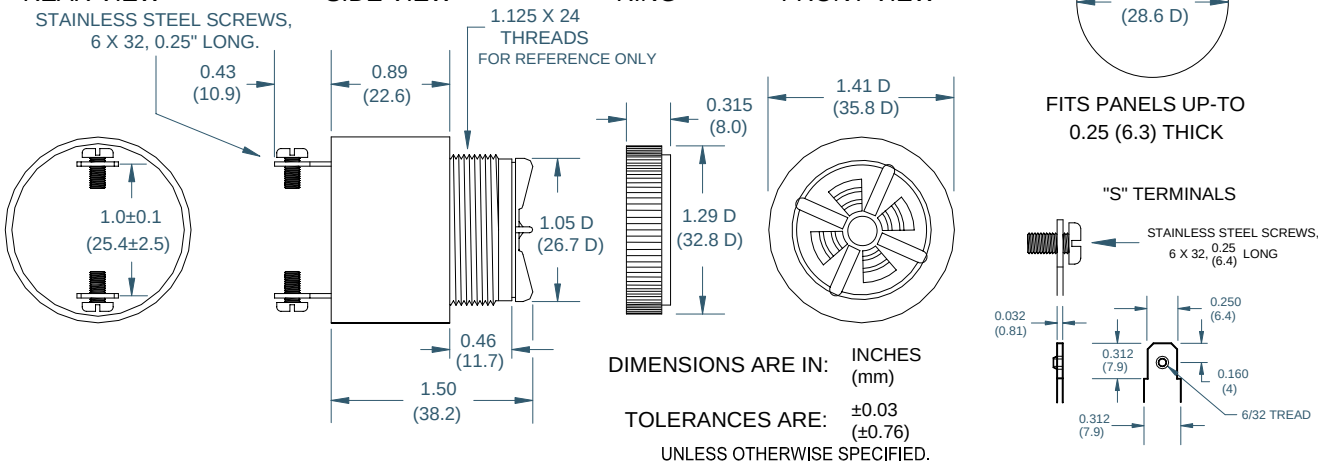


The XB-V09-201-S(M) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

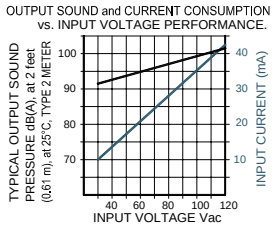
All specifications subject to change without notice.

XB-V09-201-S(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

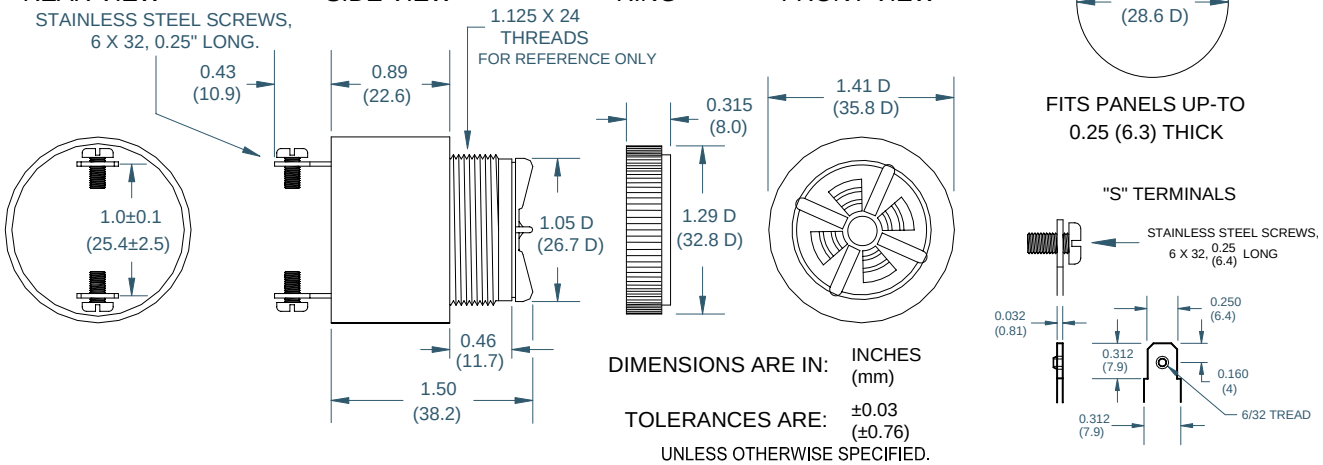


The XB-V09-201-S(S) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

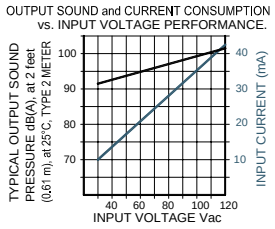
All specifications subject to change without notice.

XB-V09-201-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



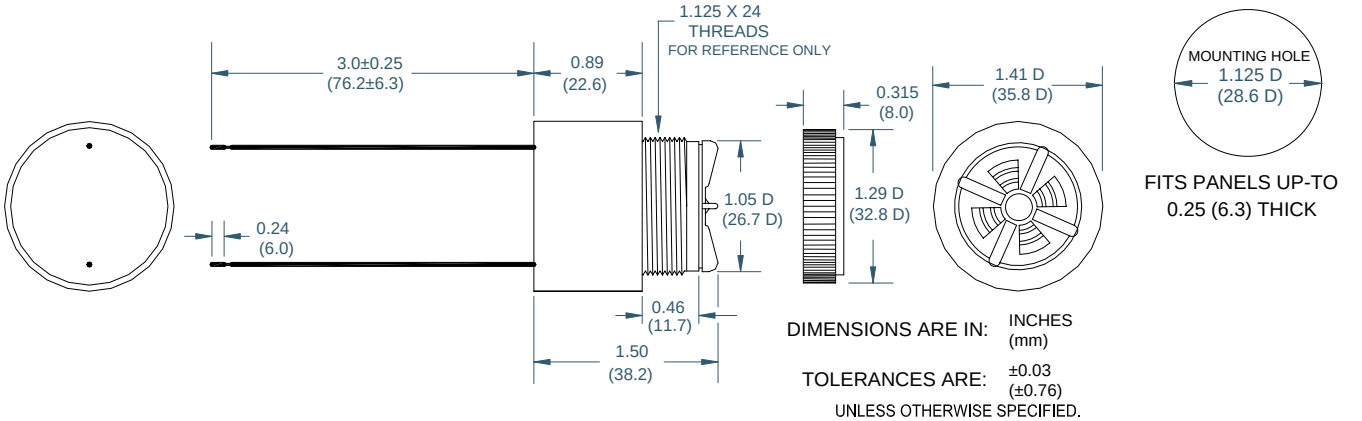
The XB-V09-201-W(F) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

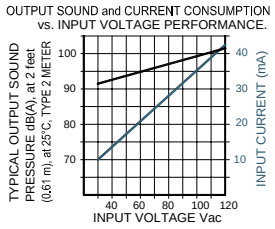
All specifications subject to change without notice.

XB-V09-201-W(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



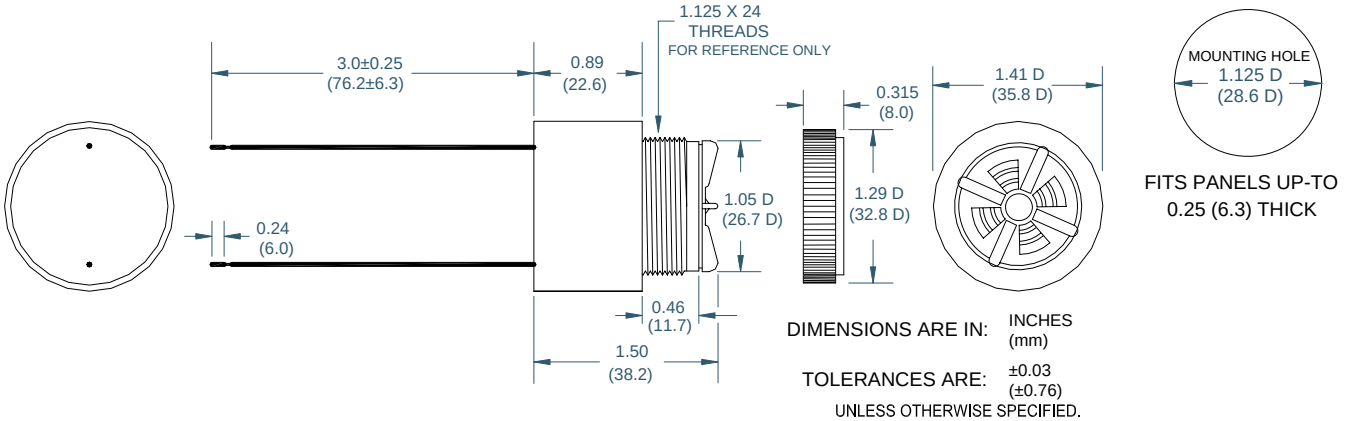
The XB-V09-201-W(M) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

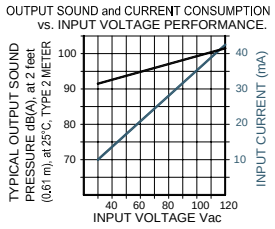
All specifications subject to change without notice.

XB-V09-201-W(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



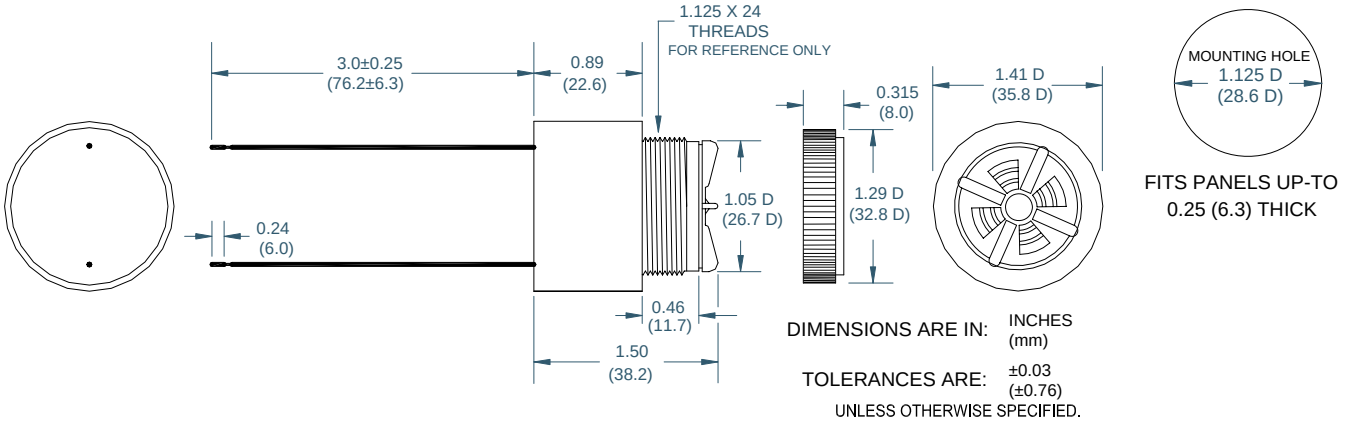
The XB-V09-201-W(S) is an extra loud output, panel mounted alarm for operating voltages of 30-120VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

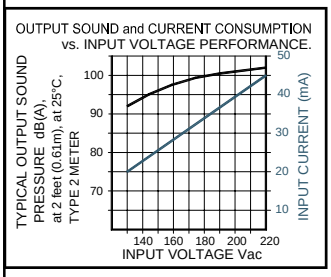
All specifications subject to change without notice.

XB-V09-301-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

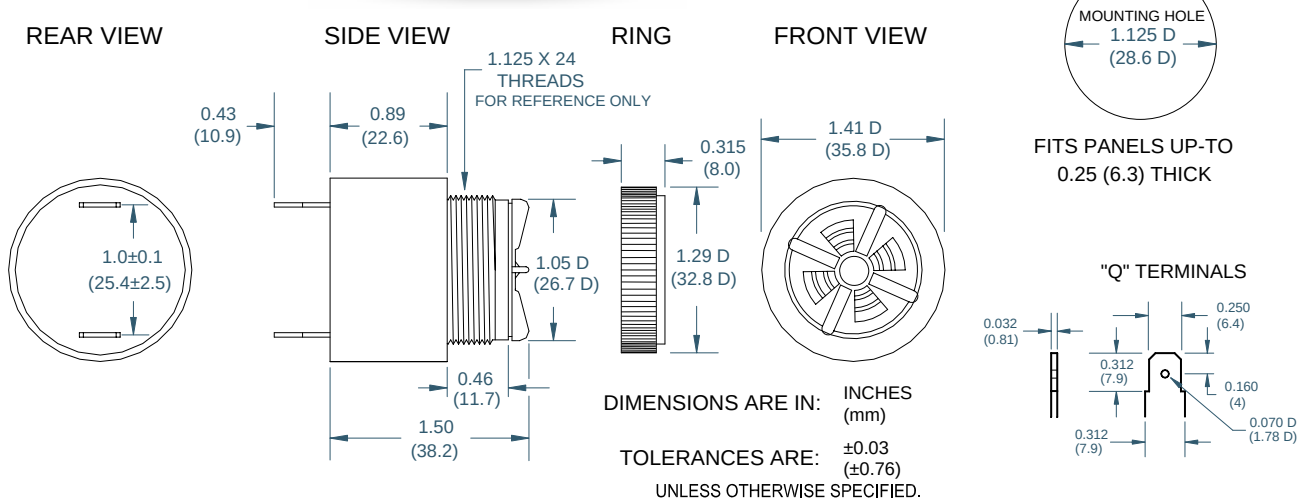


The XB-V09-301-Q(F) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades. The case is designed for panel mounting in a 1.125" hole.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

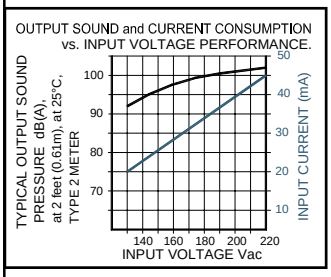
All specifications subject to change without notice.

XB-V09-301-Q(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

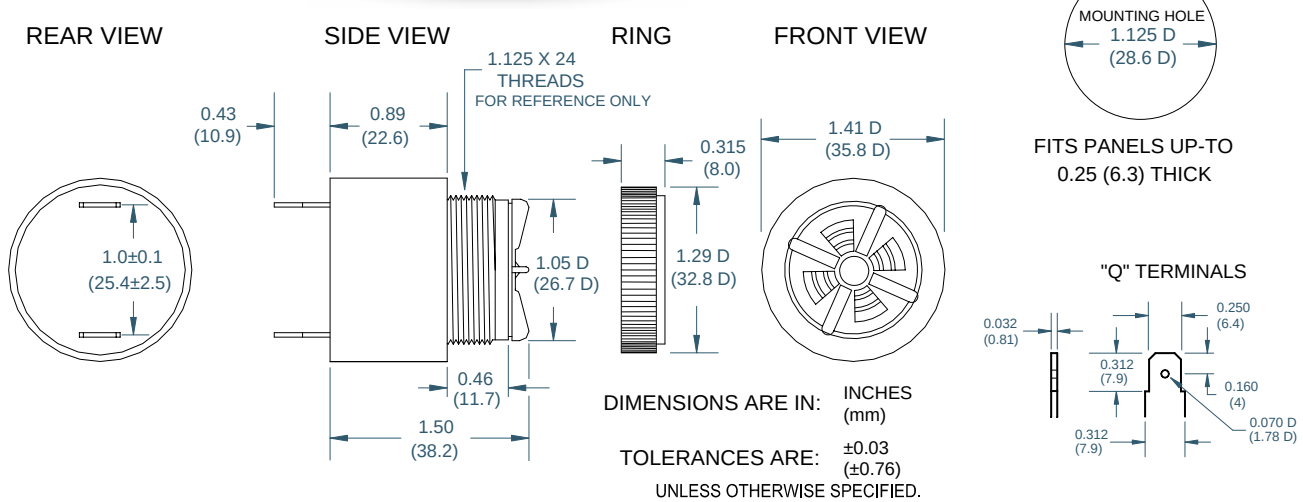


The XB-V09-301-Q(M) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades. The case is designed for panel mounting in a 1.125" hole.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

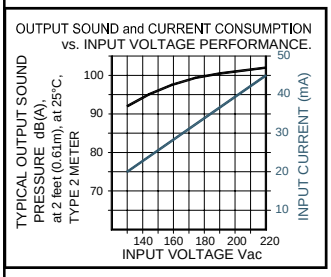
All specifications subject to change without notice.

XB-V09-301-Q(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

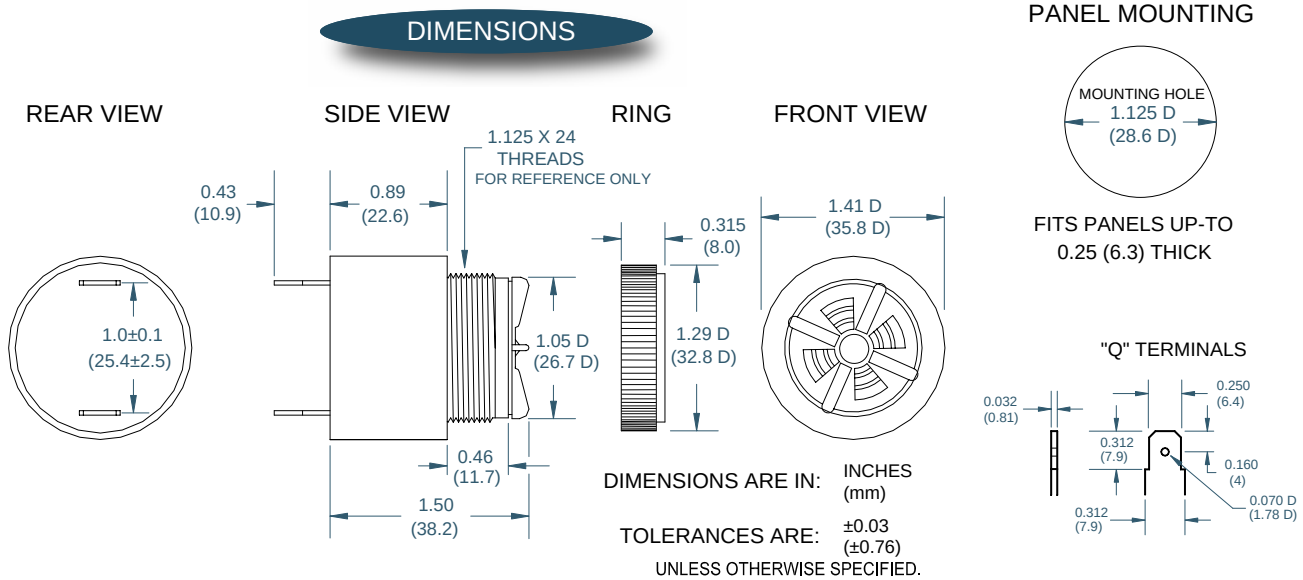


The XB-V09-301-Q(S) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades. The case is designed for panel mounting in a 1.125" hole.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

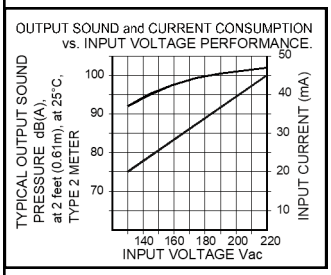
All specifications subject to change without notice.

XB-V09-301-Q(U)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

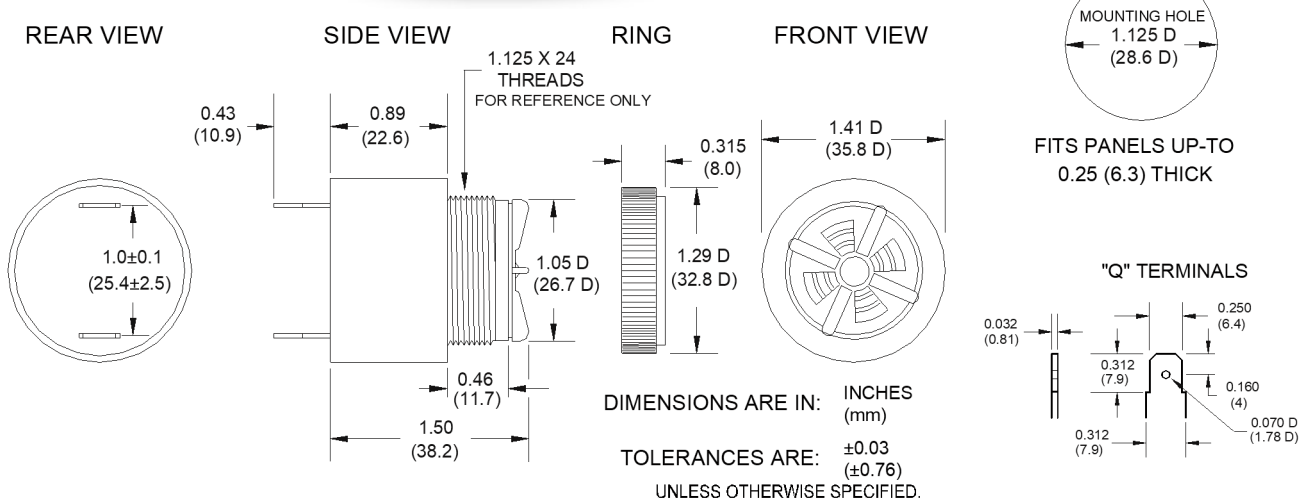


The XB-V09-301-Q(U) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades. The case is designed for panel mounting in a 1.125" hole.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

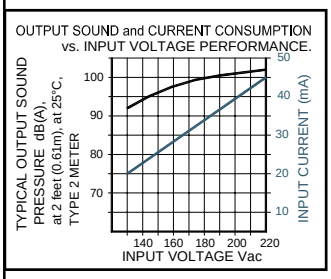
All specifications subject to change without notice.

XB-V09-301-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

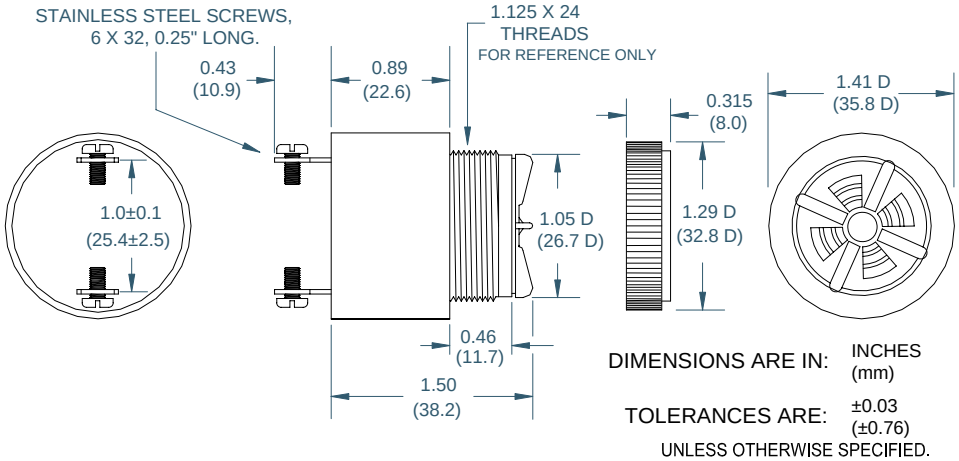


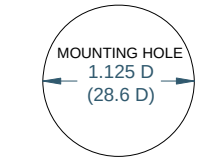
The XB-V09-301-S(F) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

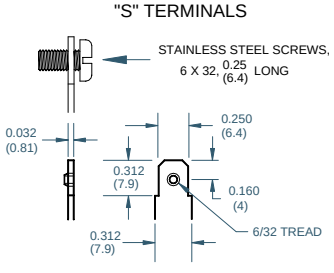
SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS







DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

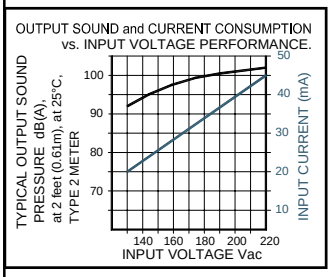
All specifications subject to change without notice.

XB-V09-301-S(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

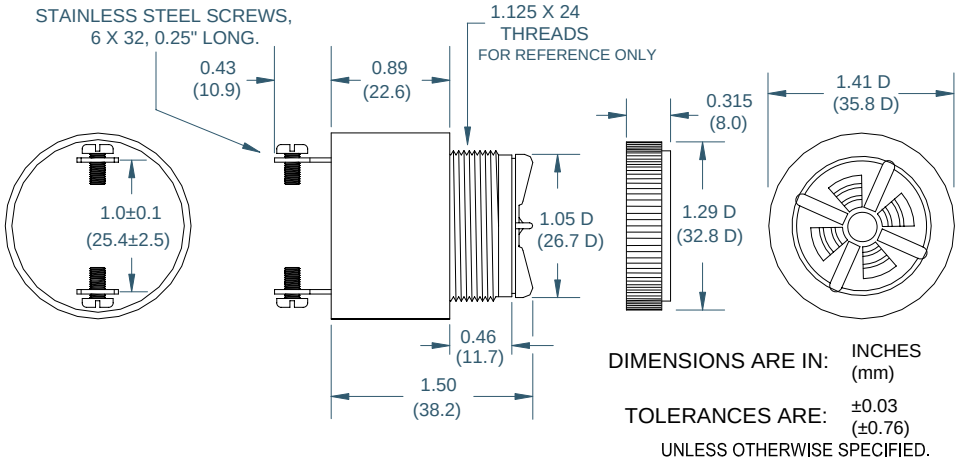


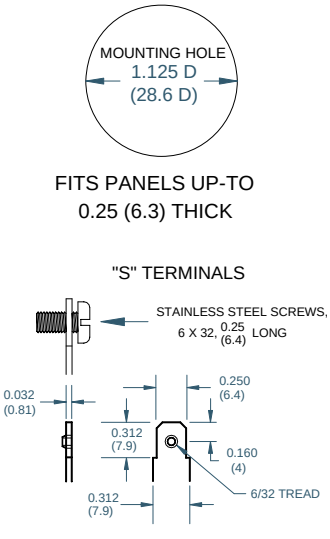
The XB-V09-301-S(M) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

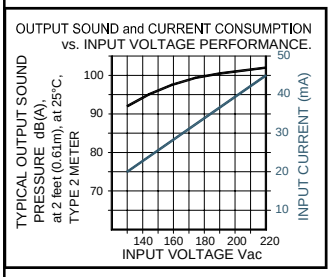
All specifications subject to change without notice.

XB-V09-301-S(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

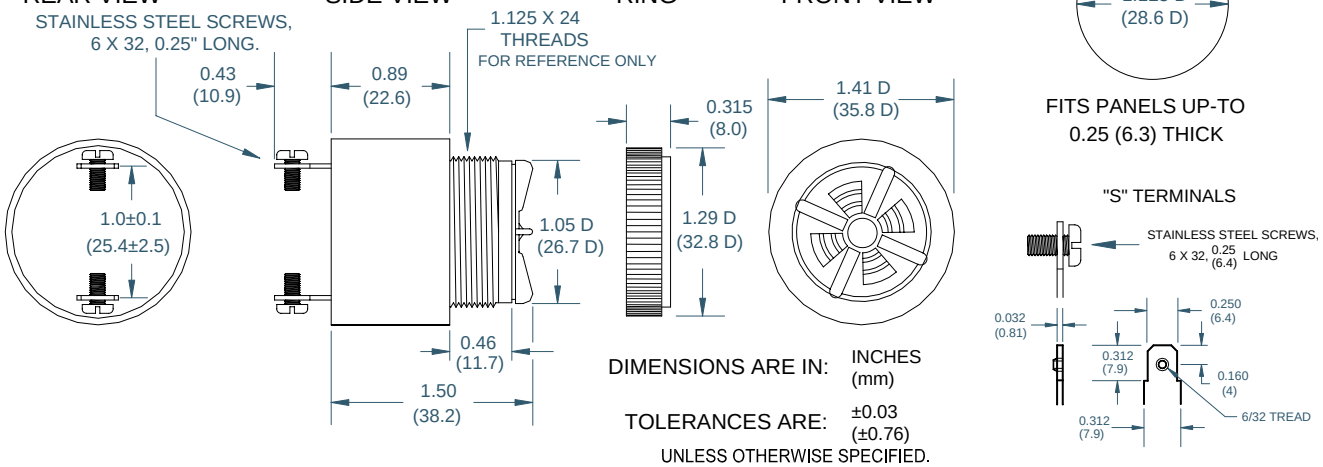


The XB-V09-301-S(S) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

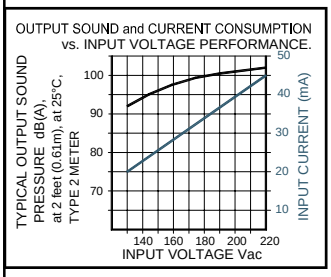
All specifications subject to change without notice.

XB-V09-301-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



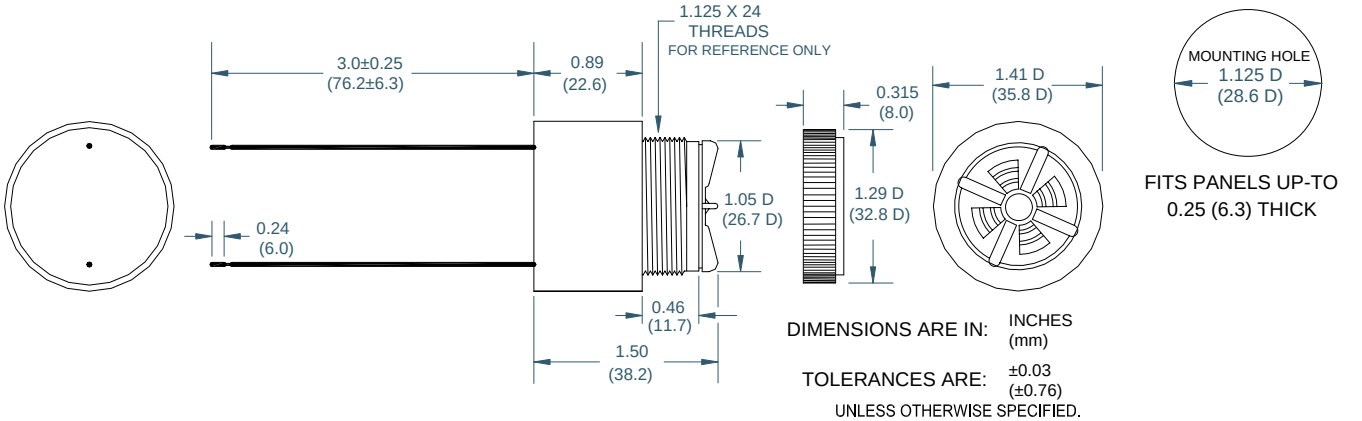
The XB-V09-301-W(F) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

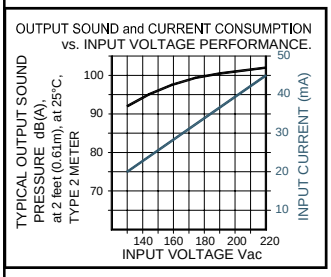
All specifications subject to change without notice.

XB-V09-301-W(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



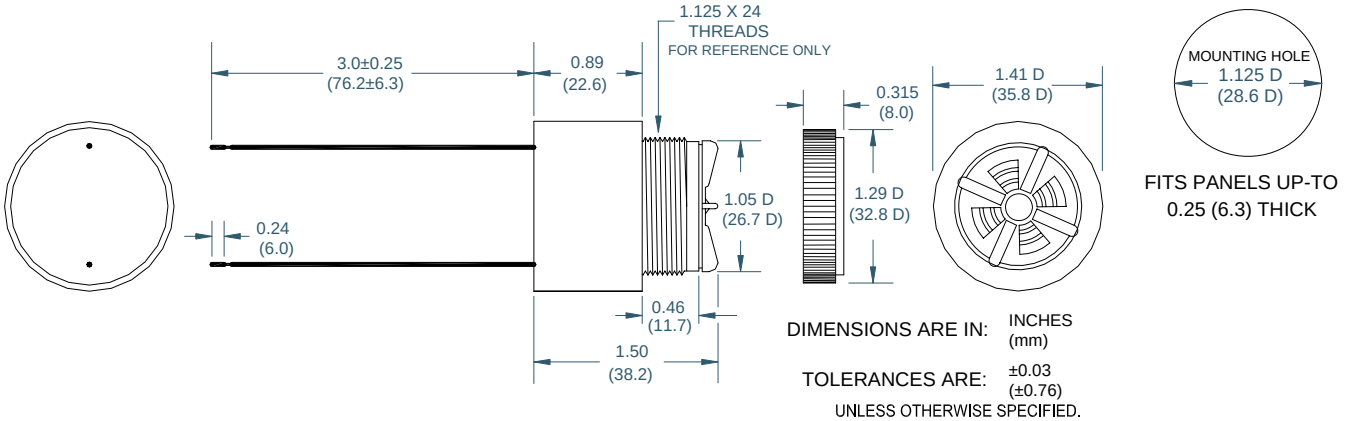
The XB-V09-301-W(M) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

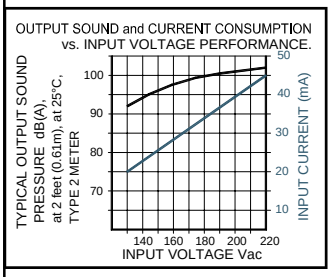
All specifications subject to change without notice.

XB-V09-301-W(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



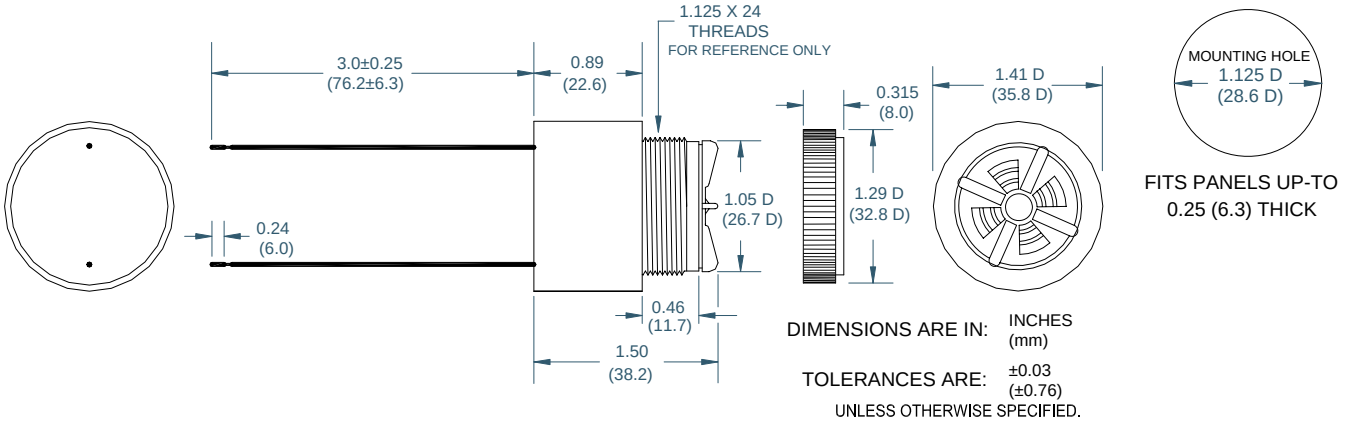
The XB-V09-301-W(S) is an extra loud output, panel mounted alarm for operating voltages of 130-220VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	20 mA at 130 Vac 45 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

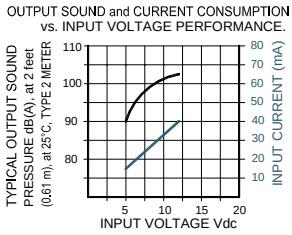
All specifications subject to change without notice.

XB-V09-312-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

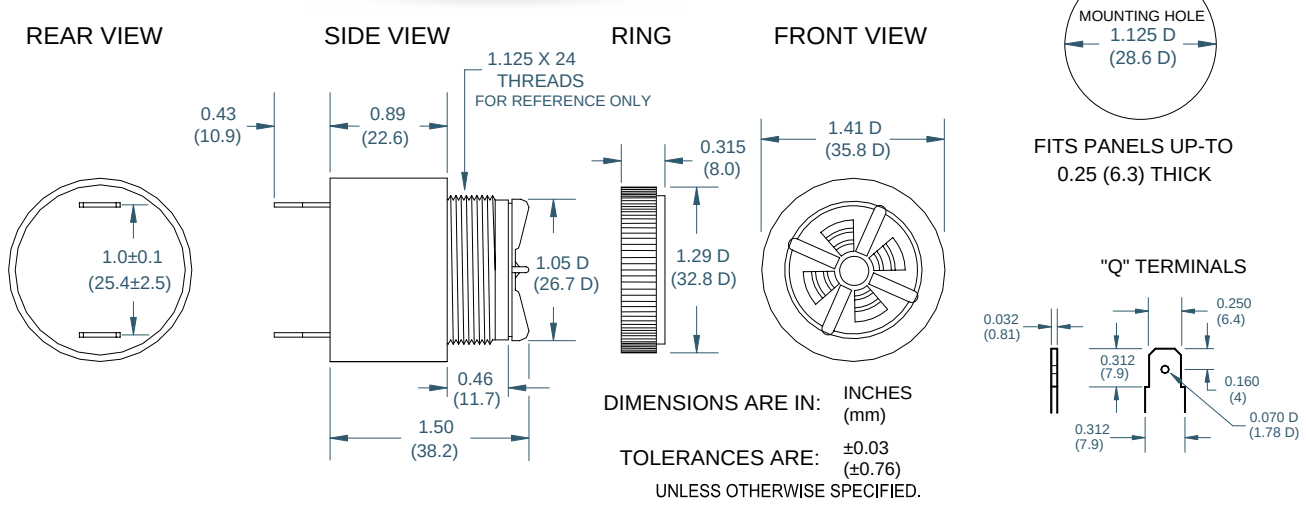


The XB-V09-312-Q(F) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

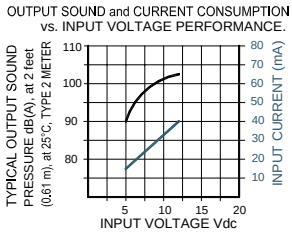
All specifications subject to change without notice.

XB-V09-312-Q(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

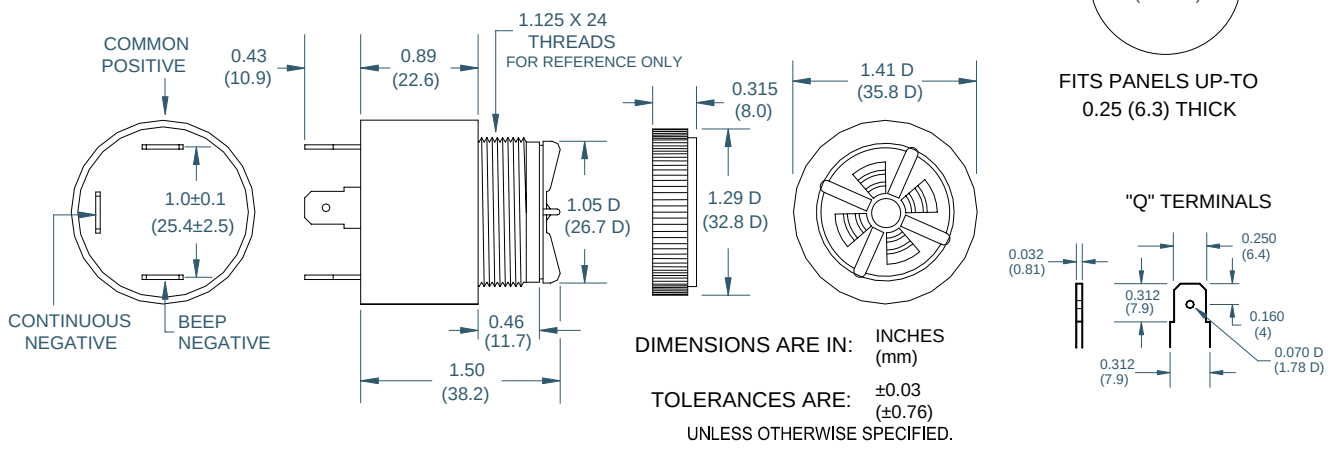


The XB-V09-312-Q(F)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as a fast beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

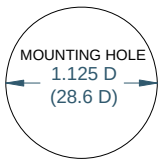
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

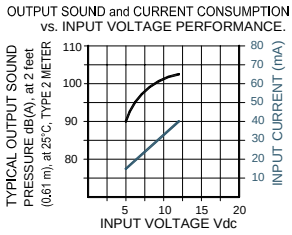
All specifications subject to change without notice.

XB-V09-312-Q(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

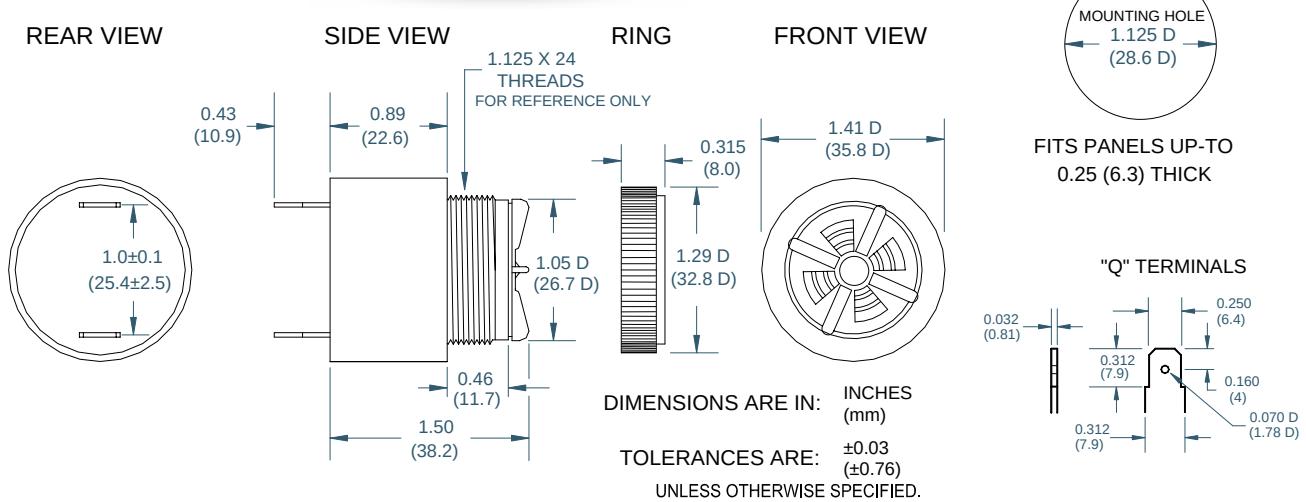


The XB-V09-312-Q(M) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

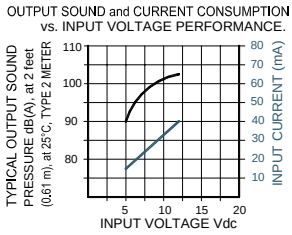
All specifications subject to change without notice.

XB-V09-312-Q(M)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

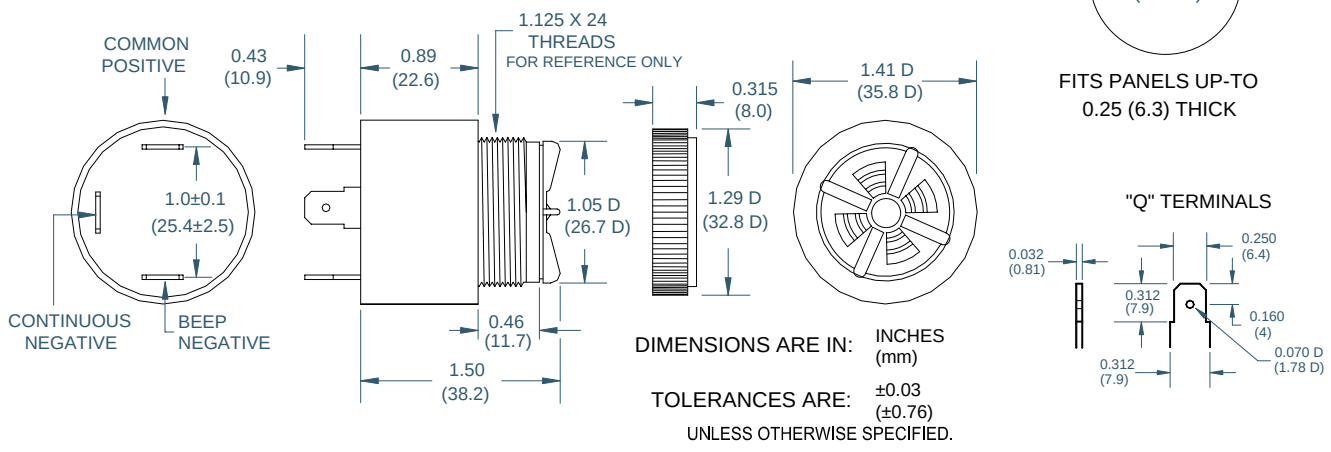


The XB-V09-312-Q(M)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as a medium beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

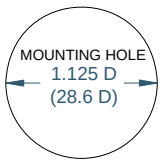
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

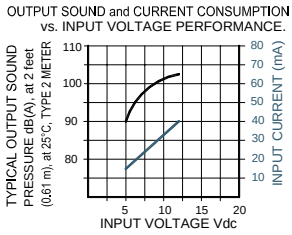
All specifications subject to change without notice.

XB-V09-312-Q(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

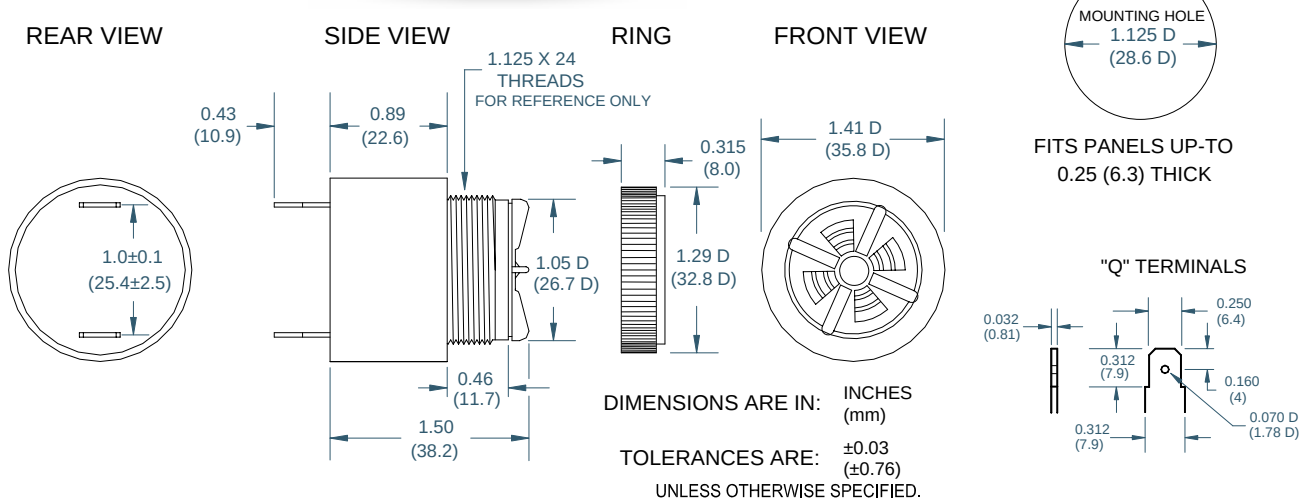


The XB-V09-312-Q(S) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

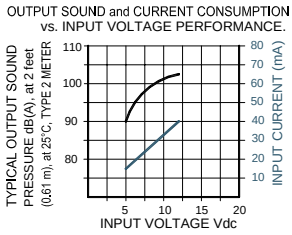
All specifications subject to change without notice.

XB-V09-312-Q(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

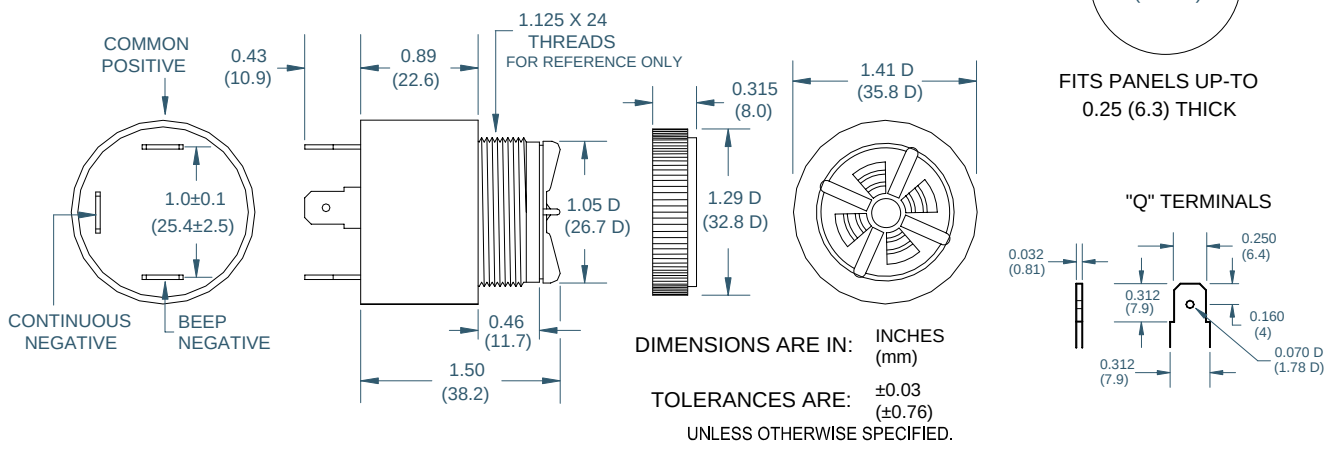


The XB-V09-312-Q(S)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as a slow beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

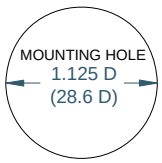
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

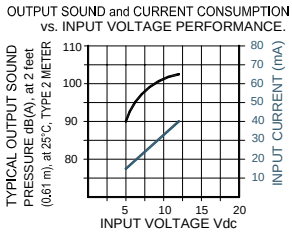
All specifications subject to change without notice.

XB-V09-312-Q(U)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

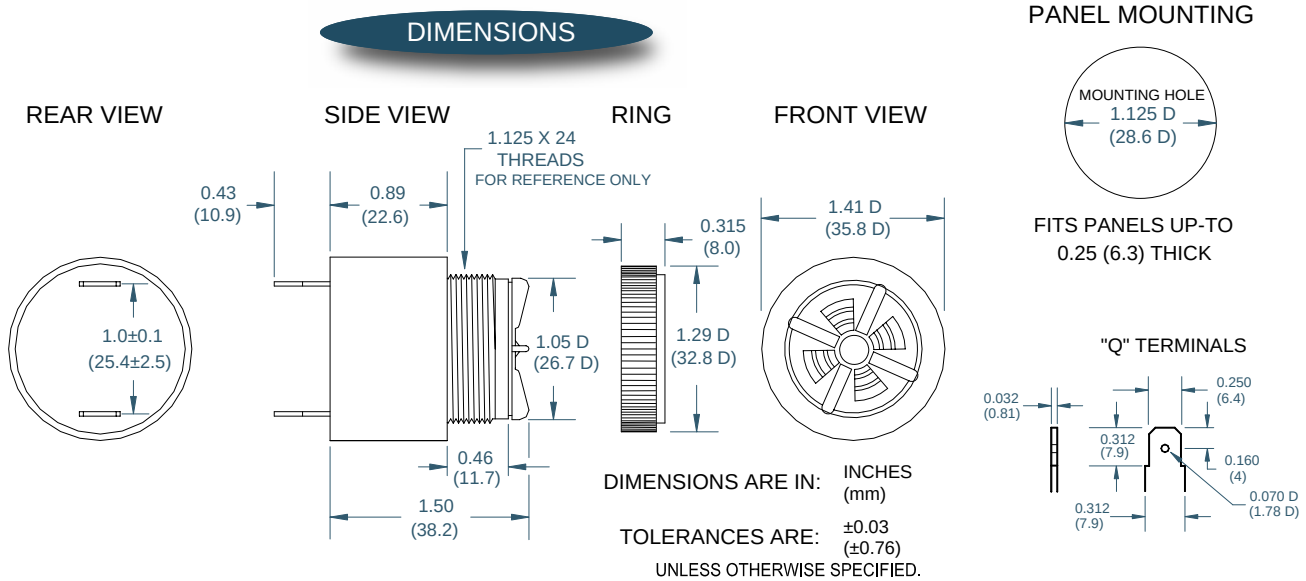


The XB-V09-312-Q(U) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

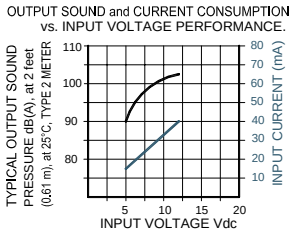
All specifications subject to change without notice.

XB-V09-312-Q(U)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

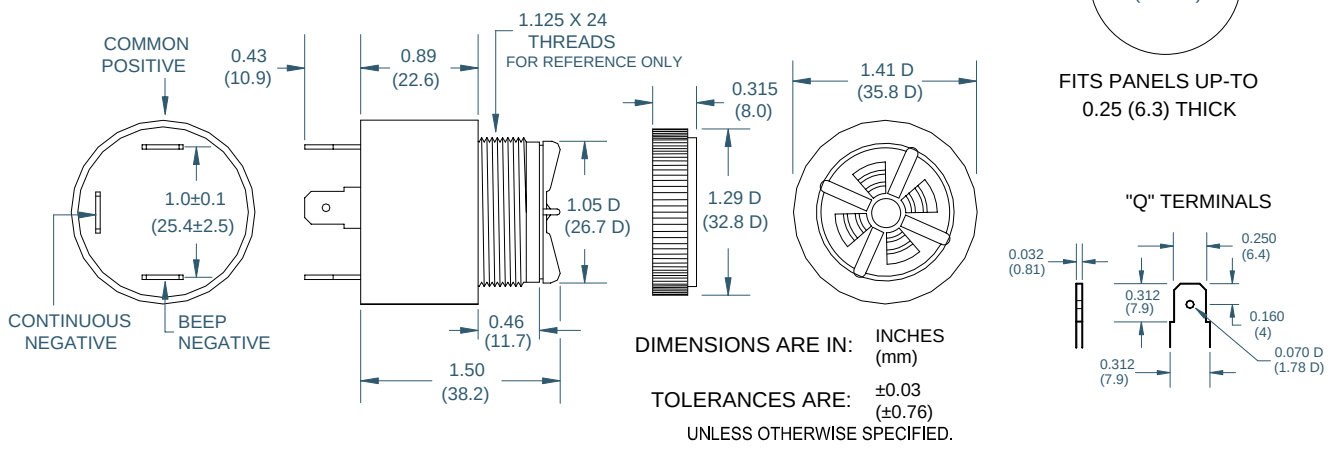


The XB-V09-312-Q(U)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as an ultra fast beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

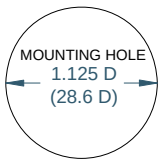
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

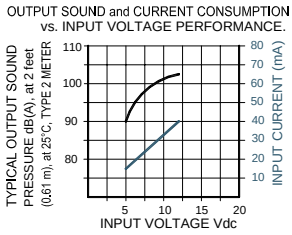
All specifications subject to change without notice.

XB-V09-312-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

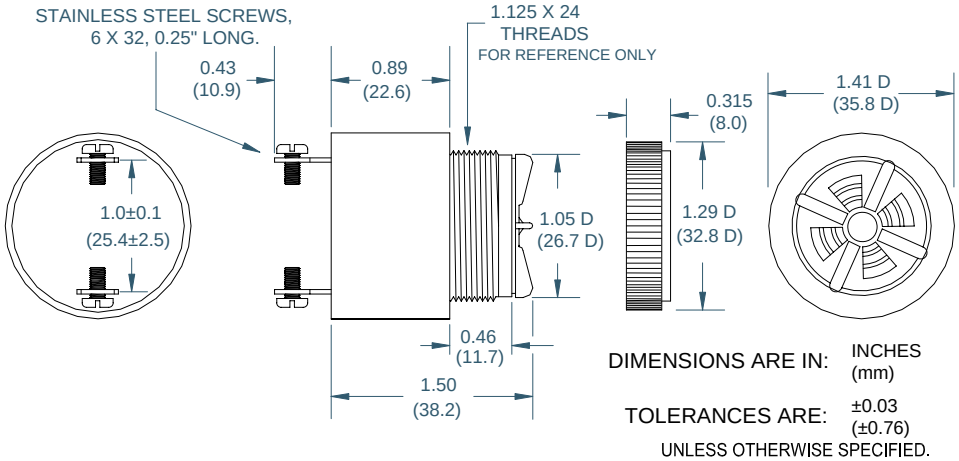


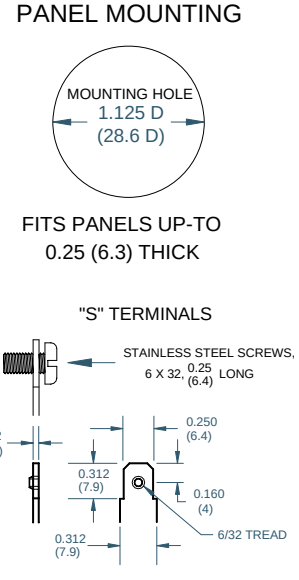
The XB-V09-312-S(F) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

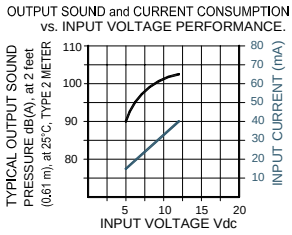
All specifications subject to change without notice.

XB-V09-312-S(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

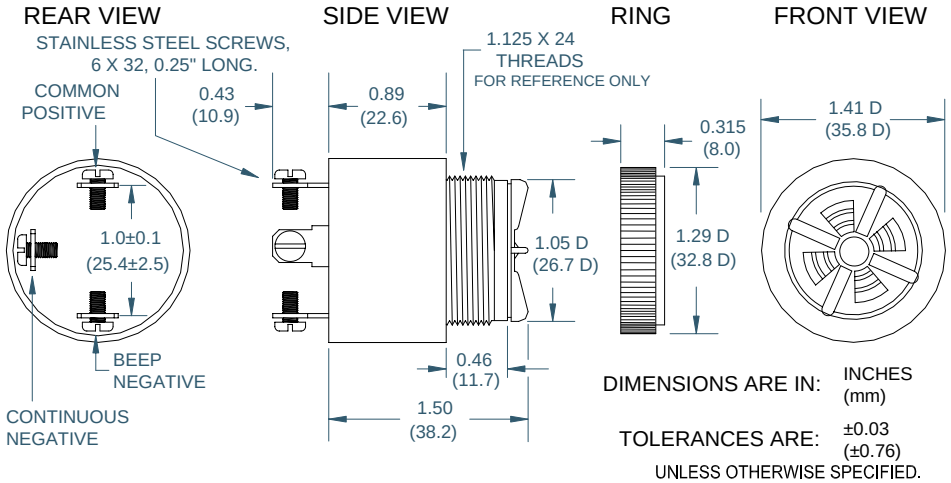


The XB-V09-312-S(F)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as a fast beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

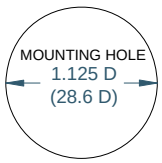
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

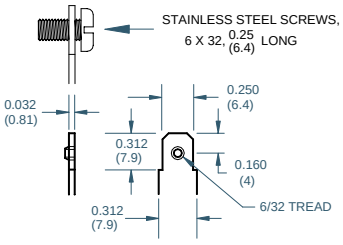


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

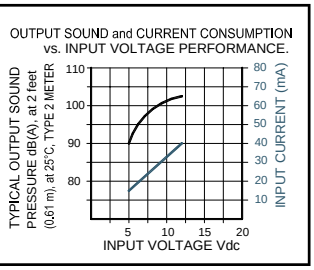
All specifications subject to change without notice.

XB-V09-312-S(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

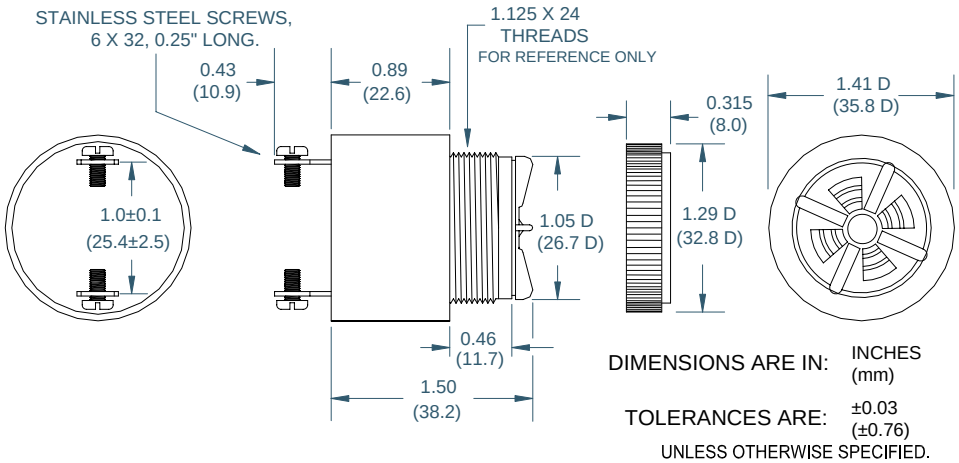


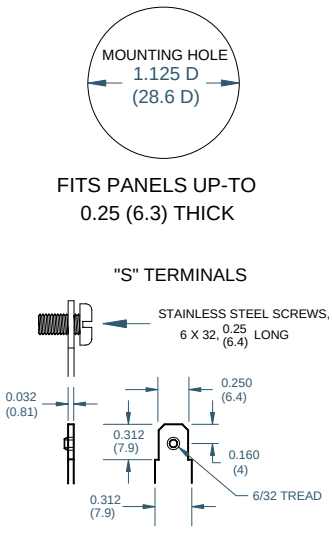
The XB-V09-312-S(M) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

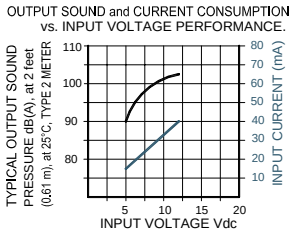
All specifications subject to change without notice.

XB-V09-312-S(M)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

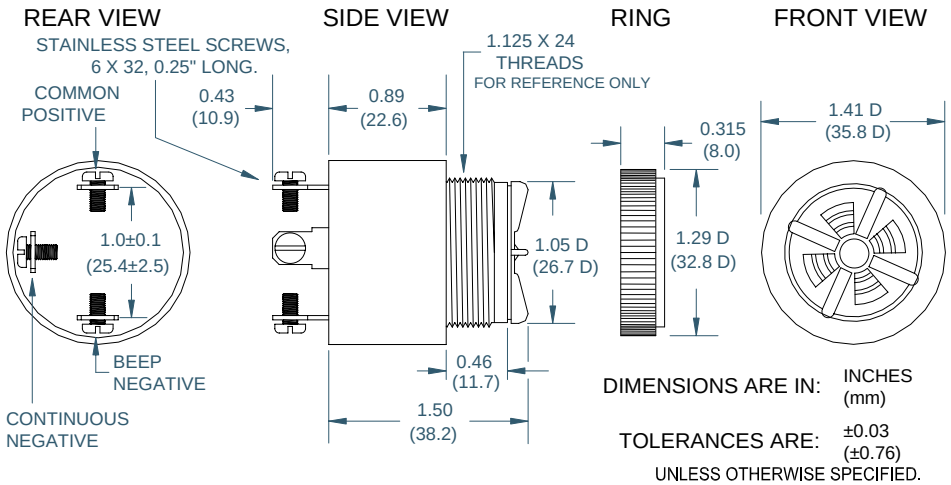


The XB-V09-312-S(M)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as a medium beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

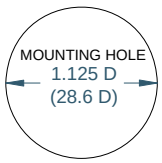
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

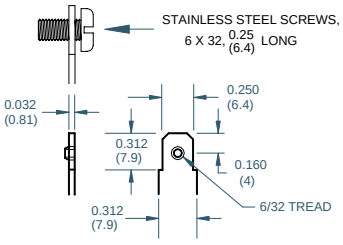


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

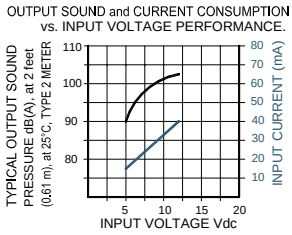
All specifications subject to change without notice.

XB-V09-312-S(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

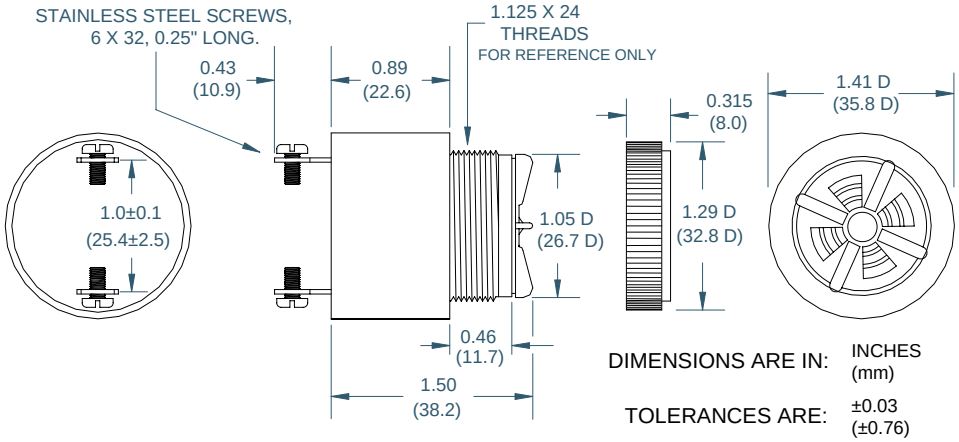


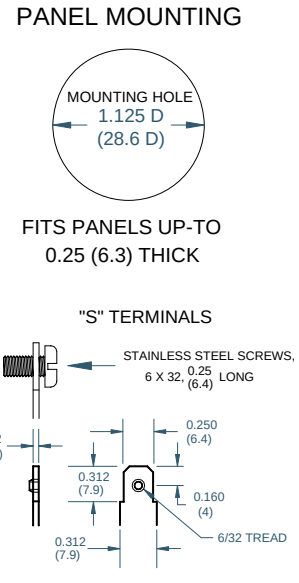
The XB-V09-312-S(S) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

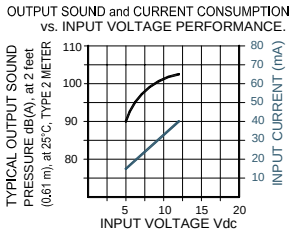
All specifications subject to change without notice.

XB-V09-312-S(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

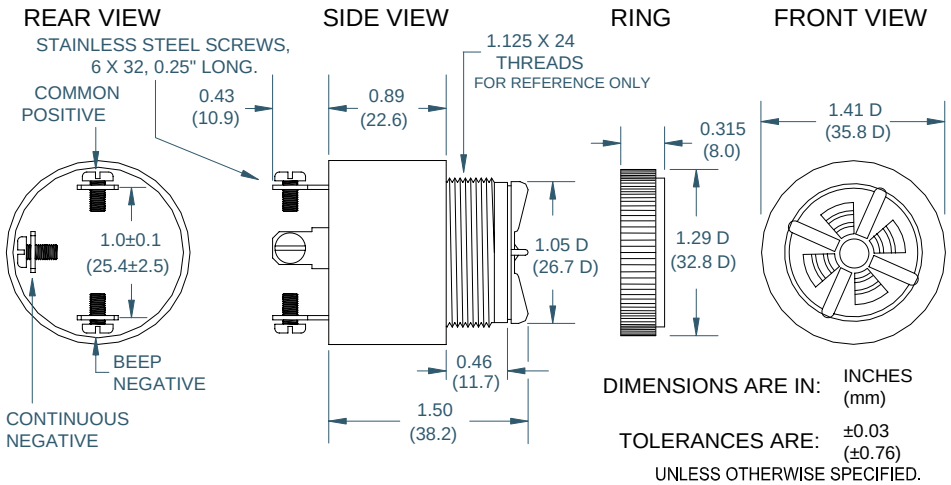


The XB-V09-312-S(S)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as a slow beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

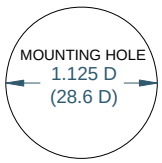
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

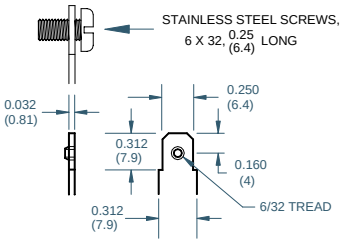


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

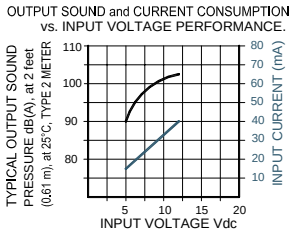
All specifications subject to change without notice.

XB-V09-312-S(U)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

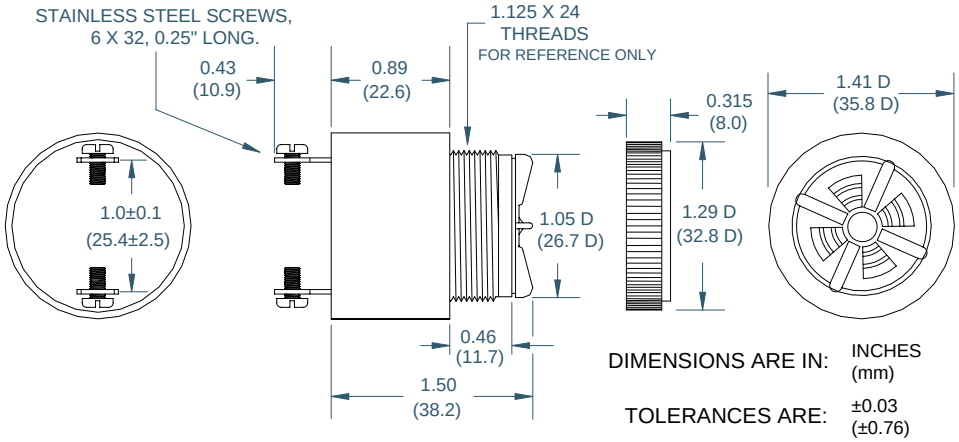


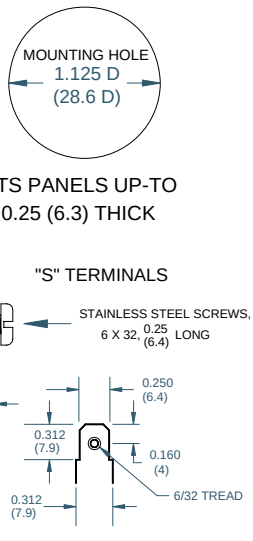
The XB-V09-312-S(U) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

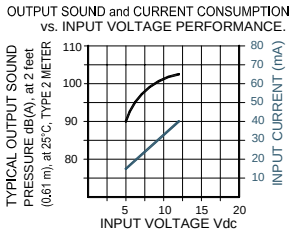
All specifications subject to change without notice.

XB-V09-312-S(U)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

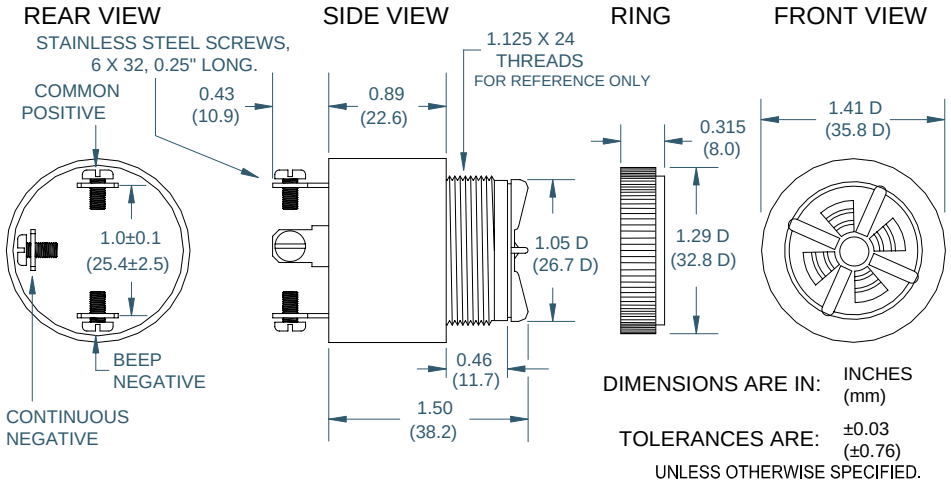


The XB-V09-312-S(U)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 5-12VDC. The alarm functions as an ultra fast beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

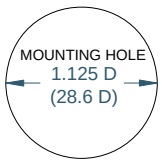
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second in Beep Mode
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

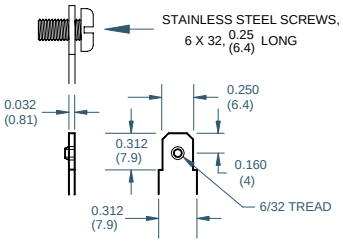


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

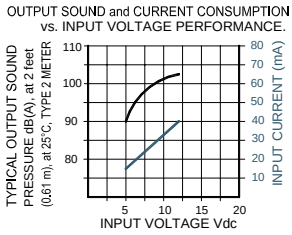
All specifications subject to change without notice.

XB-V09-312-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



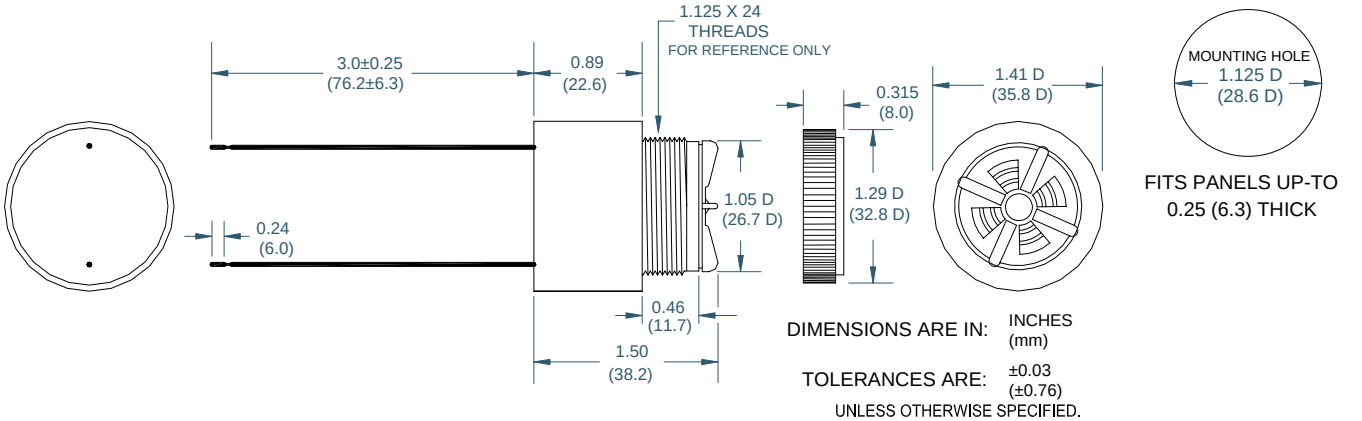
The XB-V09-312-W(F) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

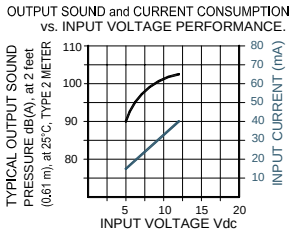
All specifications subject to change without notice.

XB-V09-312-W(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



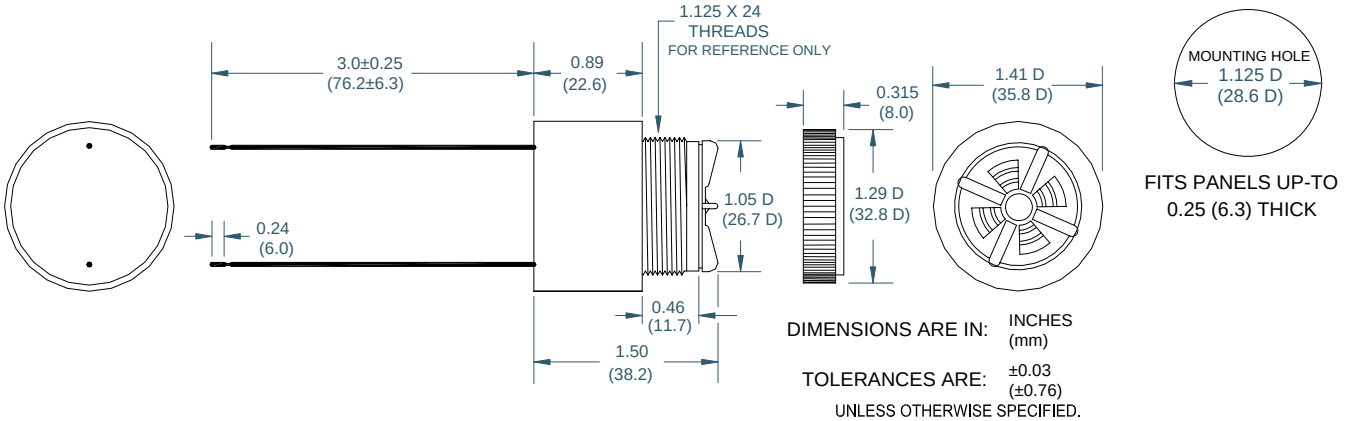
The XB-V09-312-W(M) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

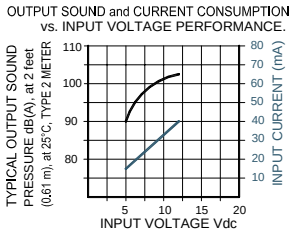
All specifications subject to change without notice.

XB-V09-312-W(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

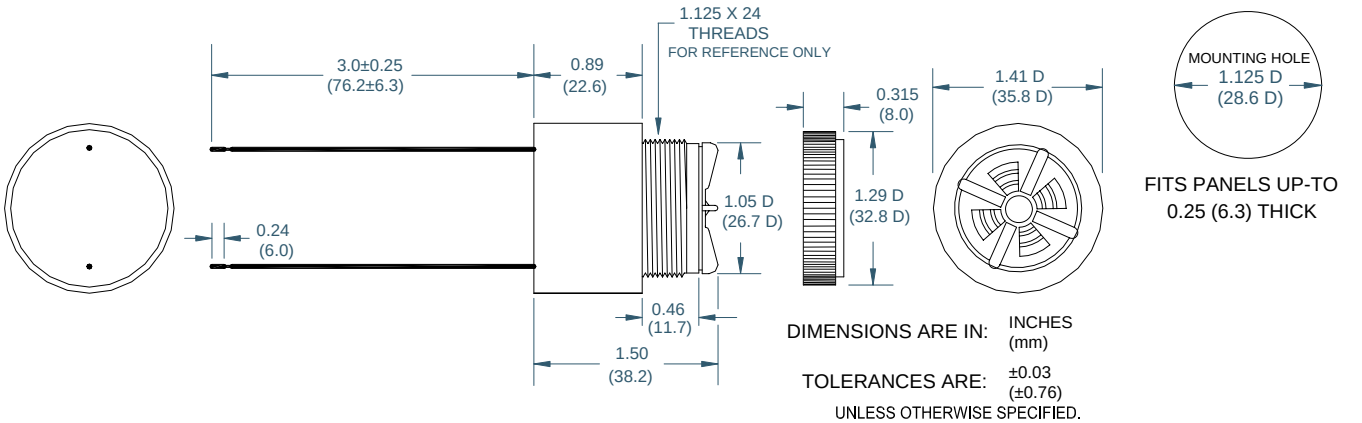


The XB-V09-312-W(S) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

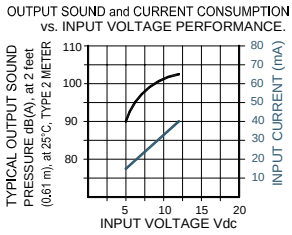
All specifications subject to change without notice.

XB-V09-312-W(U)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

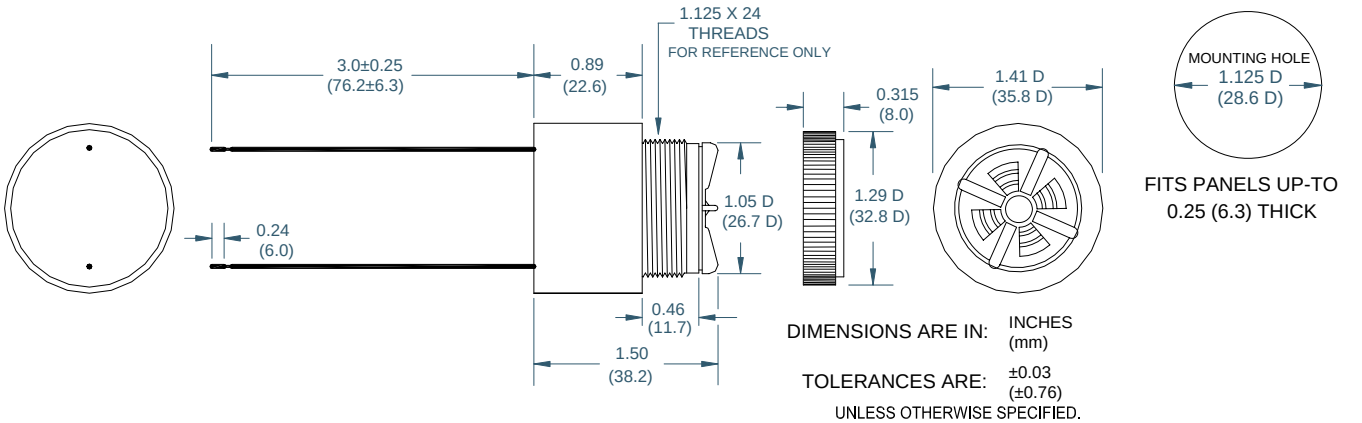


The XB-V09-312-W(U) is an extra loud output, panel mounted alarm for operating voltages of 5-12VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	5-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second
Typical Operating Current:	15 mA at 5 Vdc 40 mA at 12 Vdc
Typical Sound Pressure:	With volume control fully open: 90±5 dB(A), at 5 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

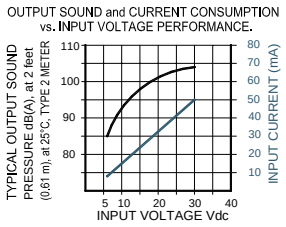
All specifications subject to change without notice.

XB-V09-630-Q(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

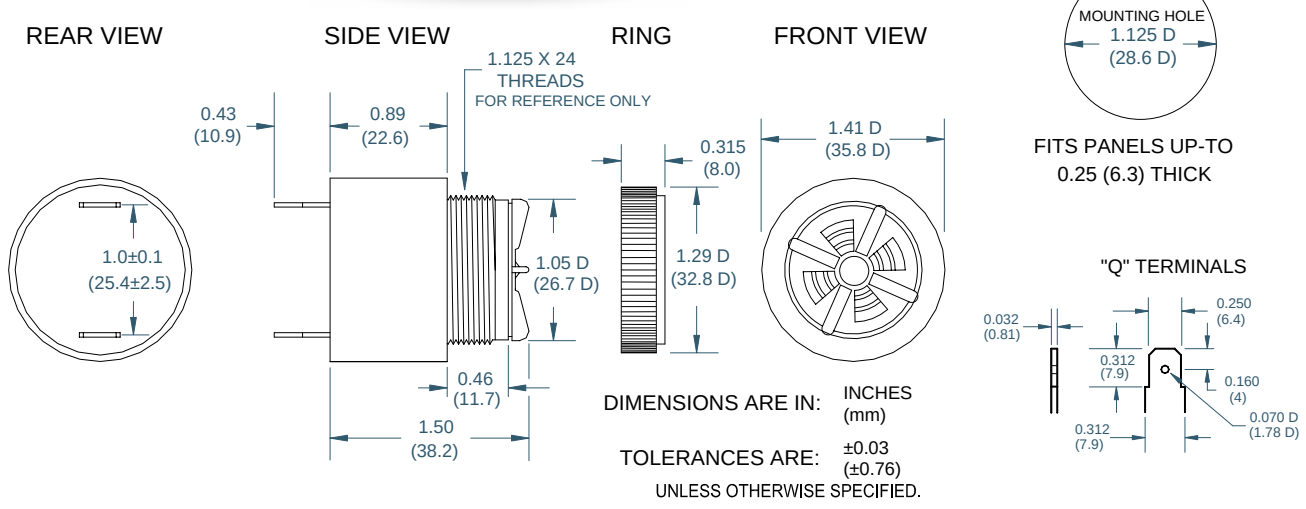


The XB-V09-630-Q(F) is an extra loud output, beep tone, panel mounted alarm for operating voltages of 6-30VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

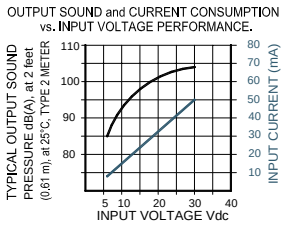
All specifications subject to change without notice.

XB-V09-630-Q(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

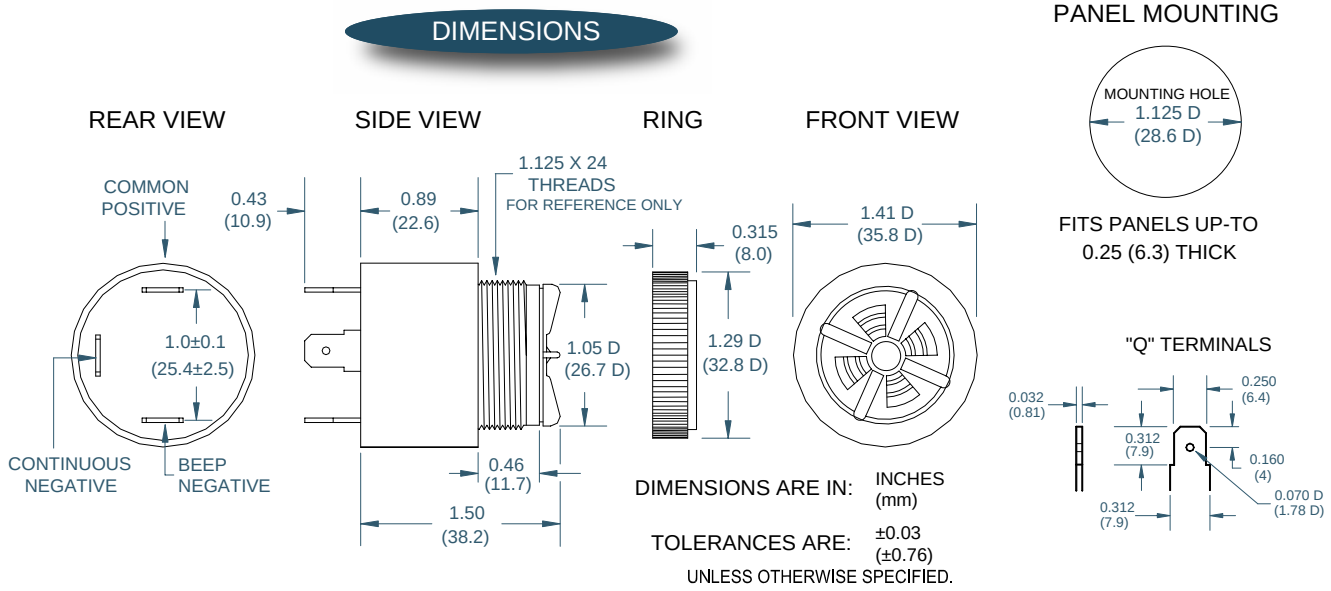


The XB-V09-630-Q(F)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as a fast beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

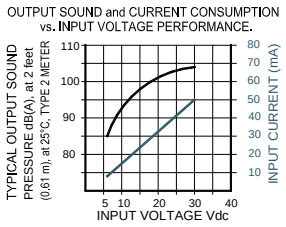
All specifications subject to change without notice.

XB-V09-630-Q(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

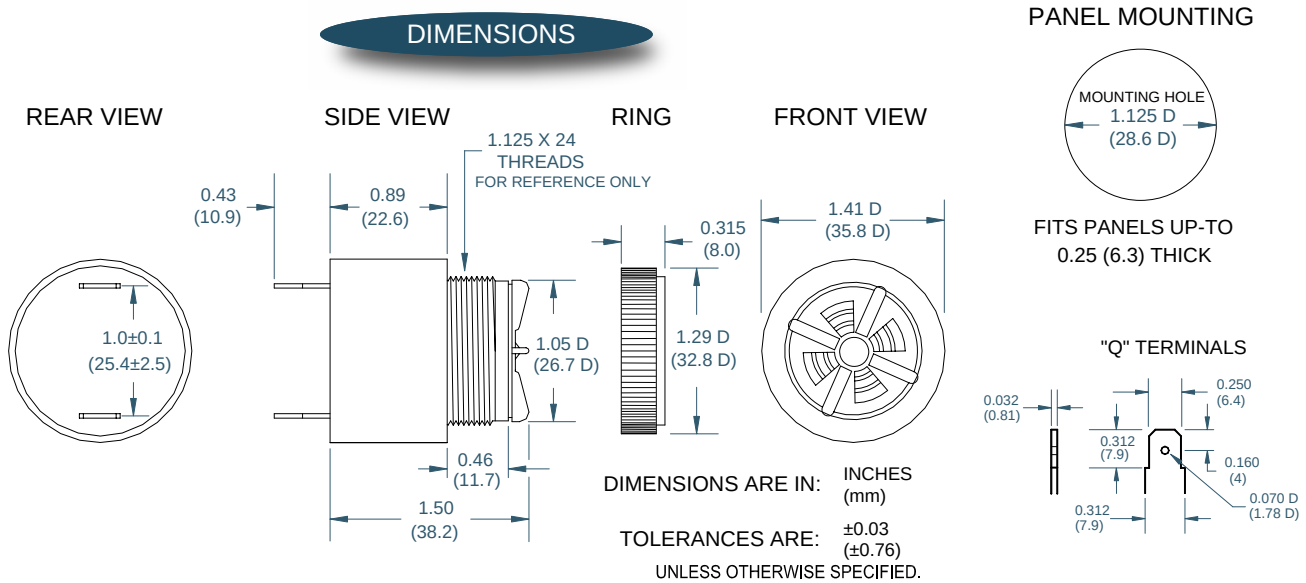


The XB-V09-630-Q(M) is an extra loud output, beep tone, panel mounted alarm for operating voltages of 6-30VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

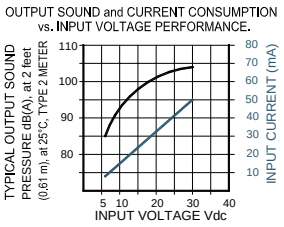
All specifications subject to change without notice.

XB-V09-630-Q(M)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

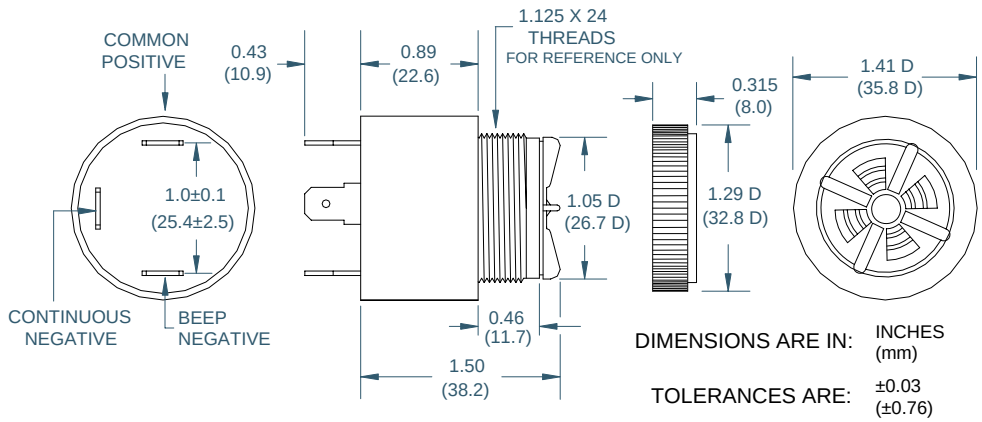


The XB-V09-630-Q(M)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as a medium beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

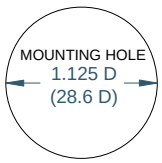
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

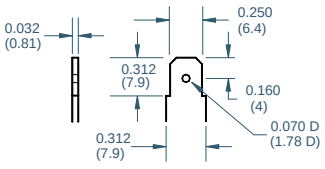


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

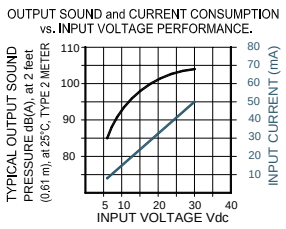
All specifications subject to change without notice.

XB-V09-630-Q(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

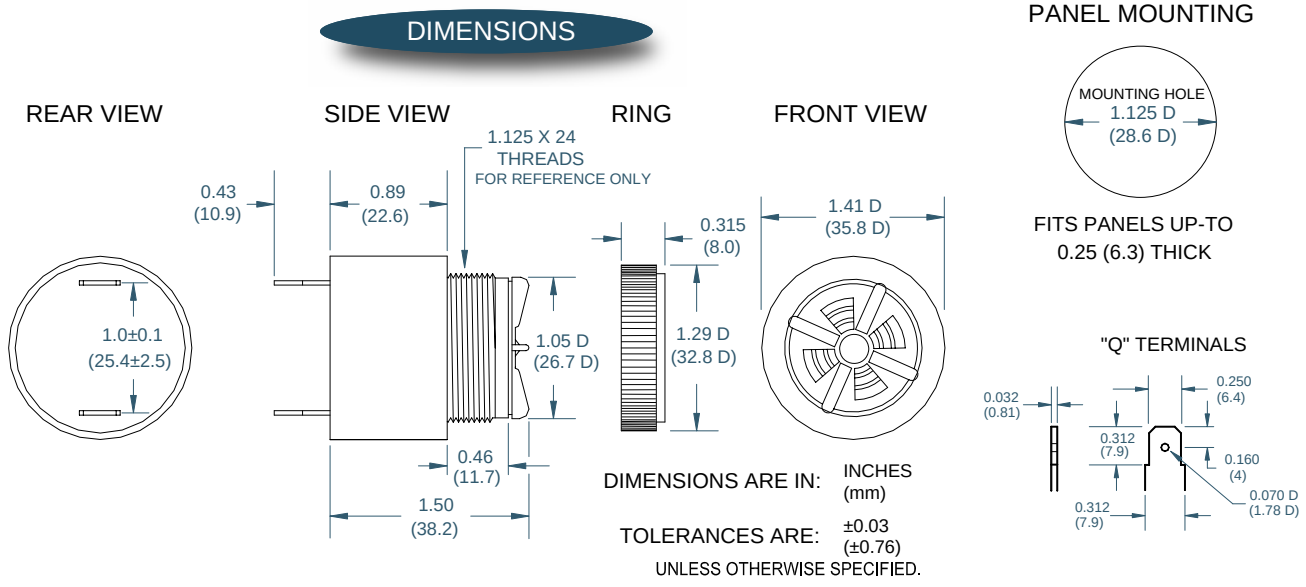


The XB-V09-630-Q(S) is an extra loud output, beep tone, panel mounted alarm for operating voltages of 6-30VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

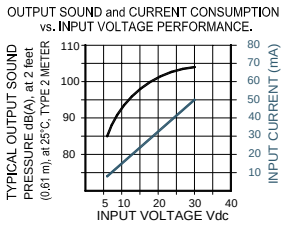
All specifications subject to change without notice.

XB-V09-630-Q(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

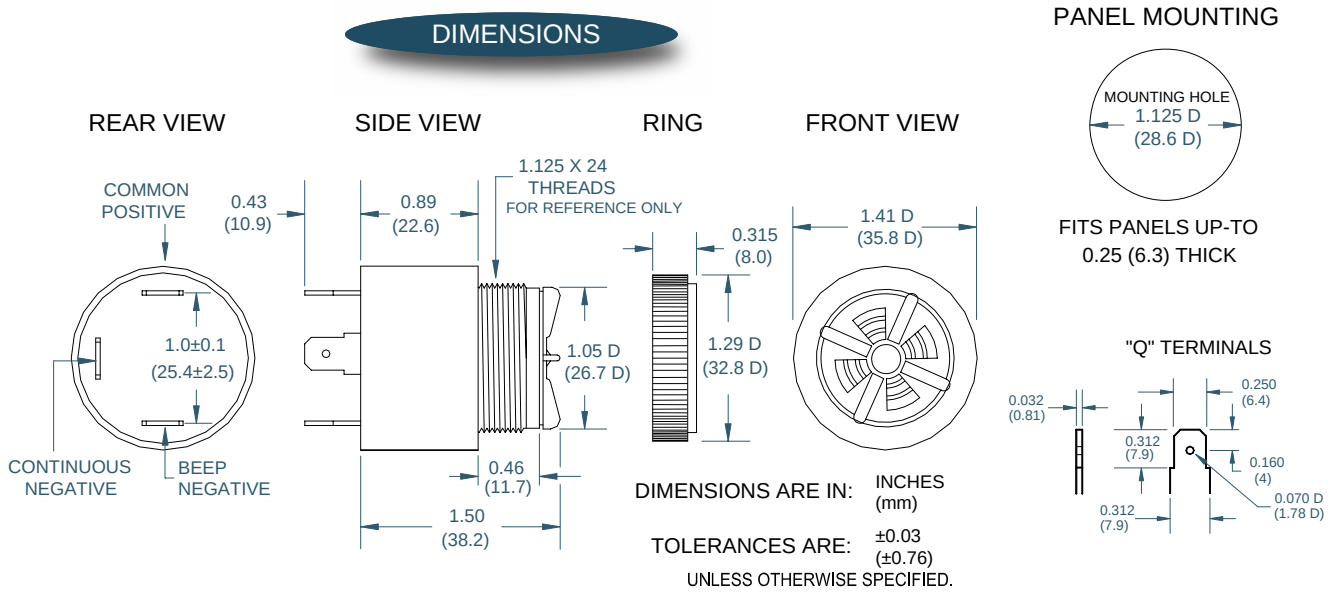


The XB-V09-630-Q(S)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as a slow beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

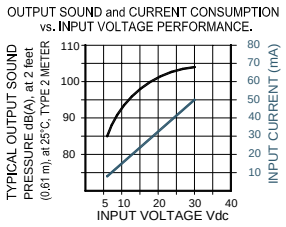
All specifications subject to change without notice.

XB-V09-630-Q(U)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

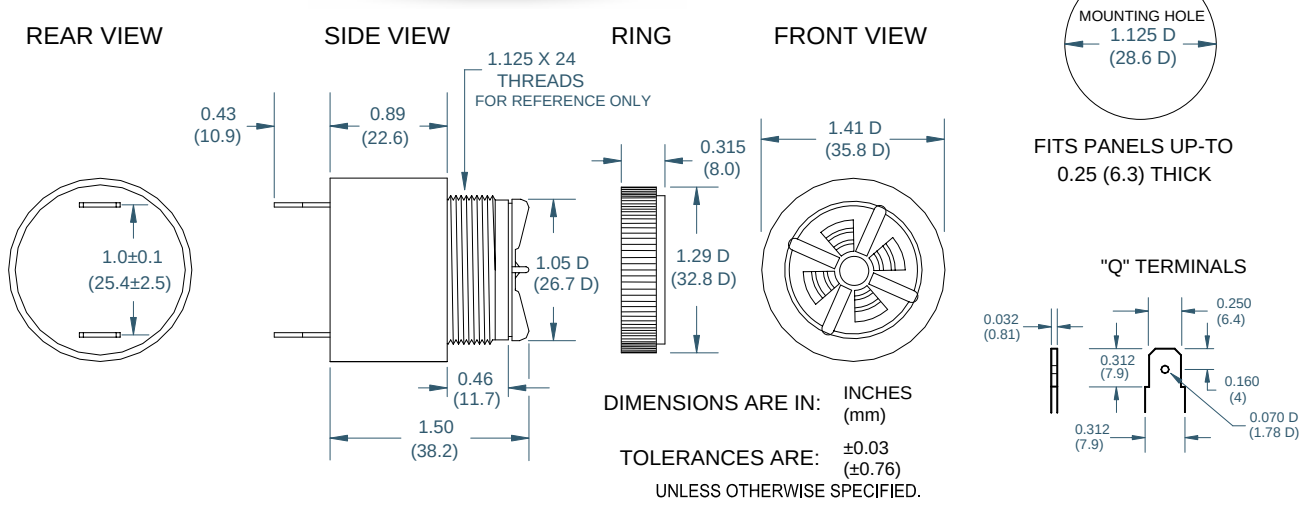


The XB-V09-630-Q(U) is an extra loud output, beep tone, panel mounted alarm for operating voltages of 6-30VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

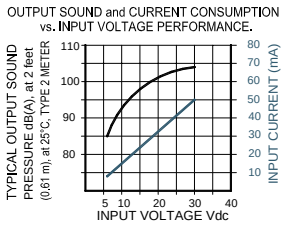
All specifications subject to change without notice.

XB-V09-630-Q(U)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

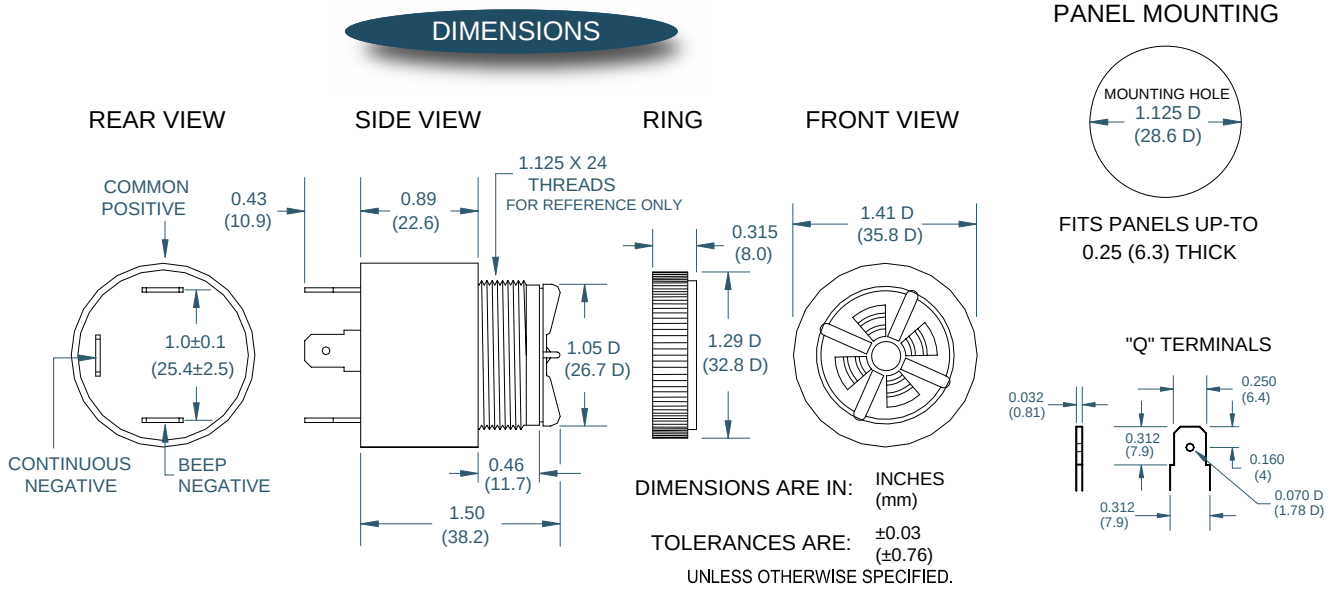


The XB-V09-630-Q(U)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as an ultra fast beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING

FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

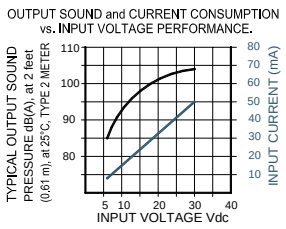
All specifications subject to change without notice.

XB-V09-630-S(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

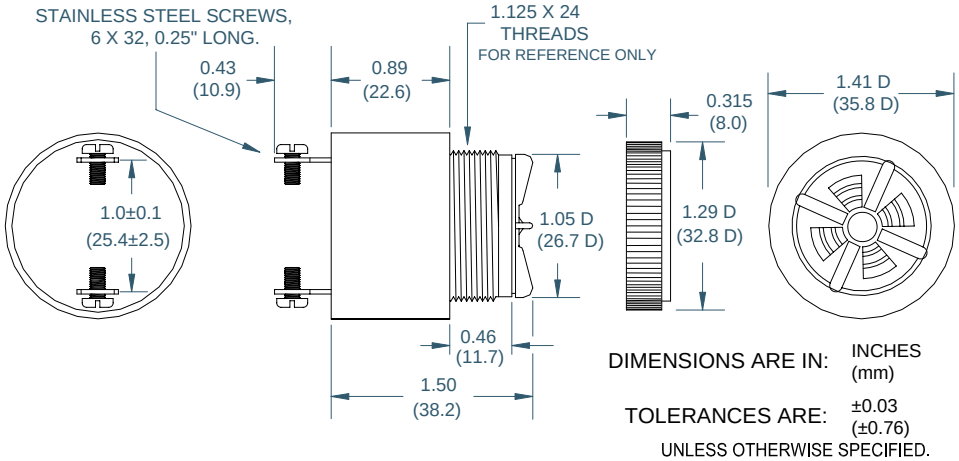


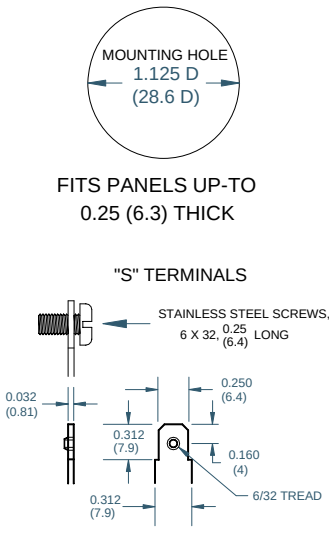
The XB-V09-630-S(F) is an extra loud output, beep tone, panel mounted alarm for operating voltages of 6-30VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

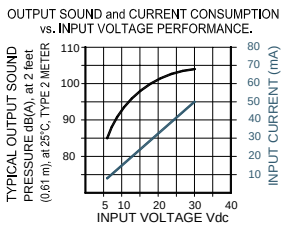
All specifications subject to change without notice.

XB-V09-630-S(F)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

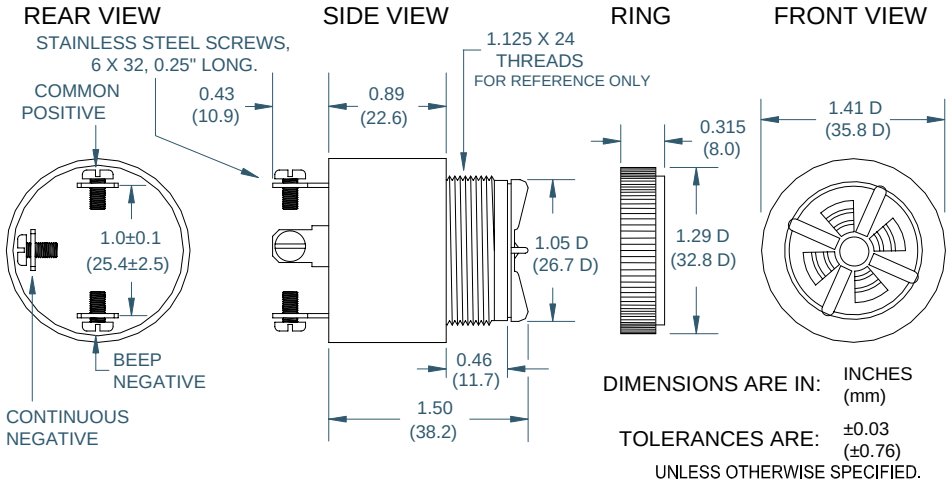


The XB-V09-630-S(F)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as a fast beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

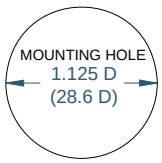
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

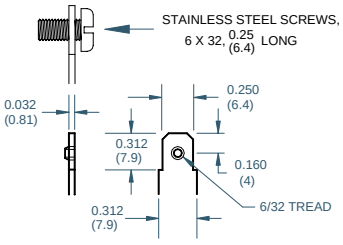


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

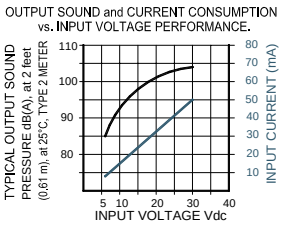
All specifications subject to change without notice.

XB-V09-630-S(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

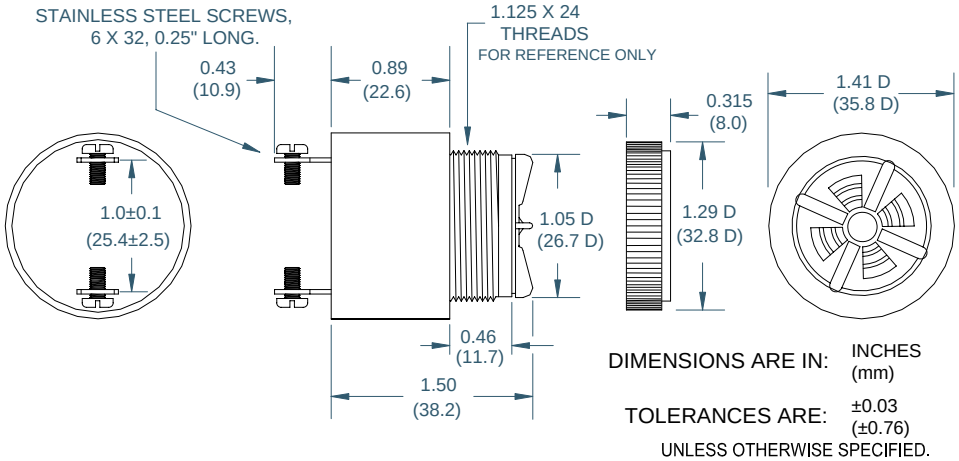


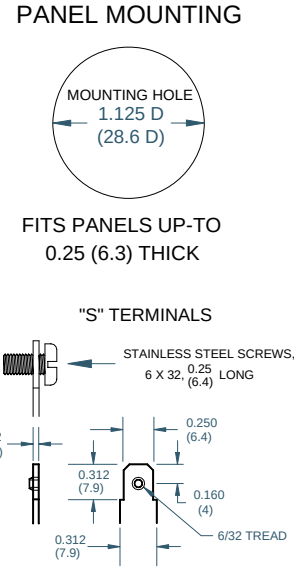
The XB-V09-630-S(M) is an extra loud output, beep tone, panel mounted alarm for operating voltages of 6-30VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

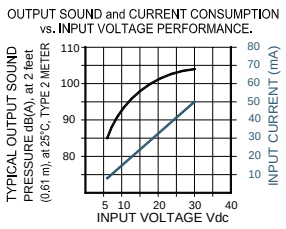
All specifications subject to change without notice.

XB-V09-630-S(M)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

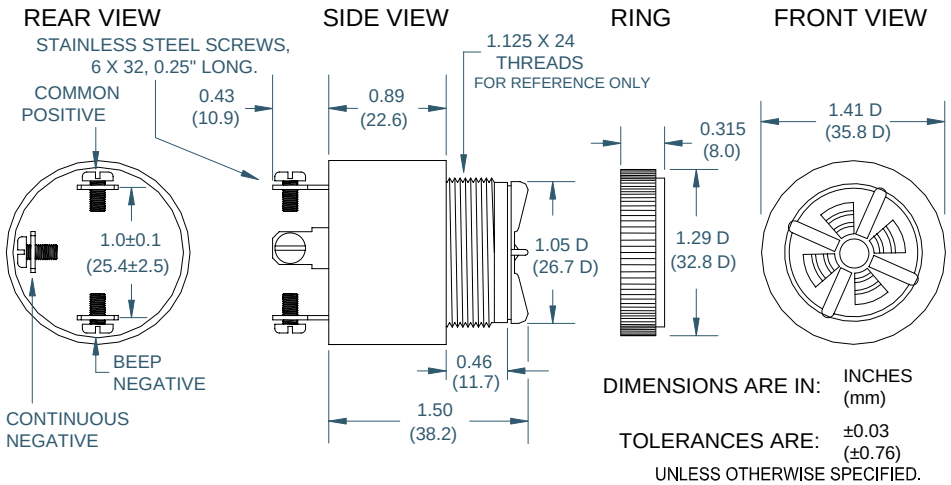


The XB-V09-630-S(M)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as a medium beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

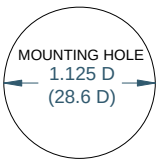
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

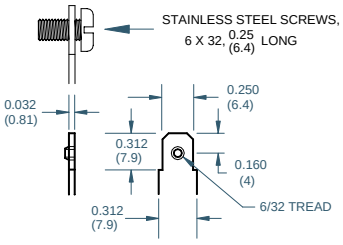


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

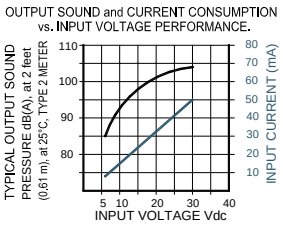
All specifications subject to change without notice.

XB-V09-630-S(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

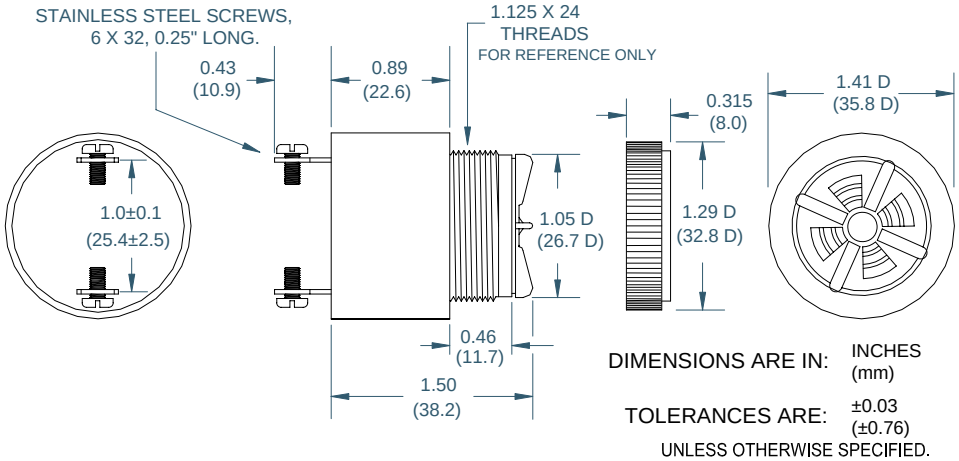


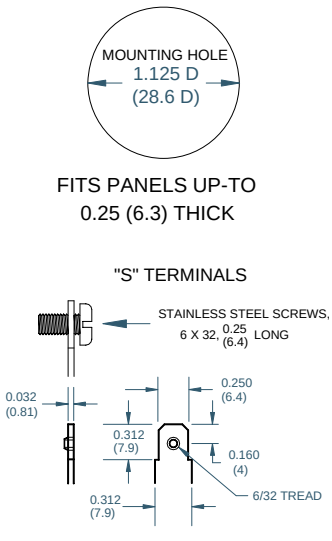
The XB-V09-630-S(S) is an extra loud output, beep tone, panel mounted alarm for operating voltages of 6-30VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

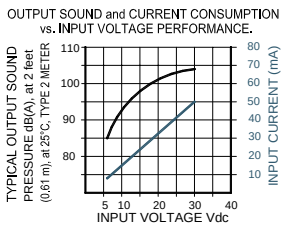
All specifications subject to change without notice.

XB-V09-630-S(S)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

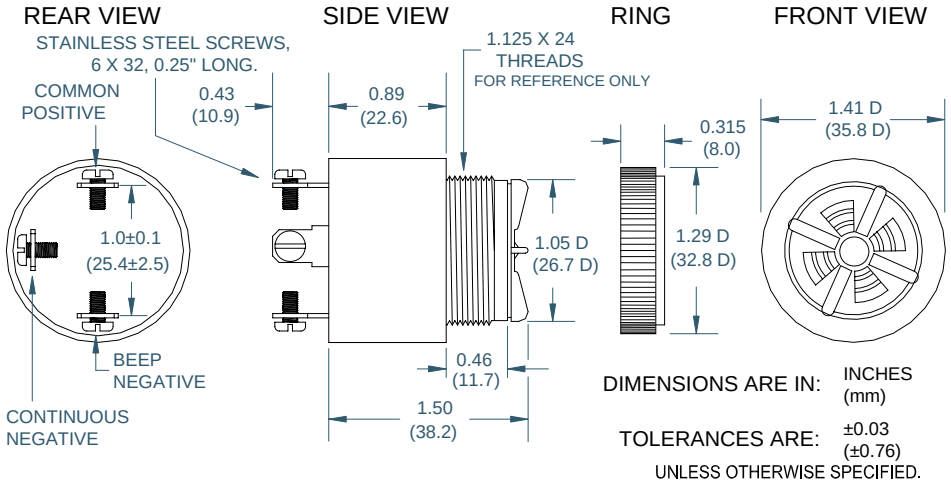


The XB-V09-630-S(S)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as a slow beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

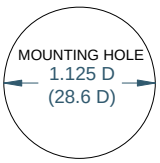
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

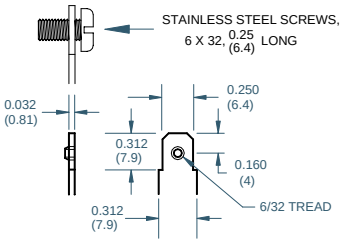


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

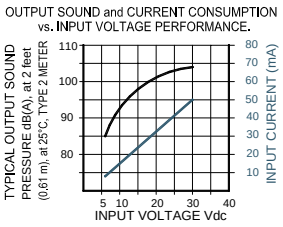
All specifications subject to change without notice.

XB-V09-630-S(U)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

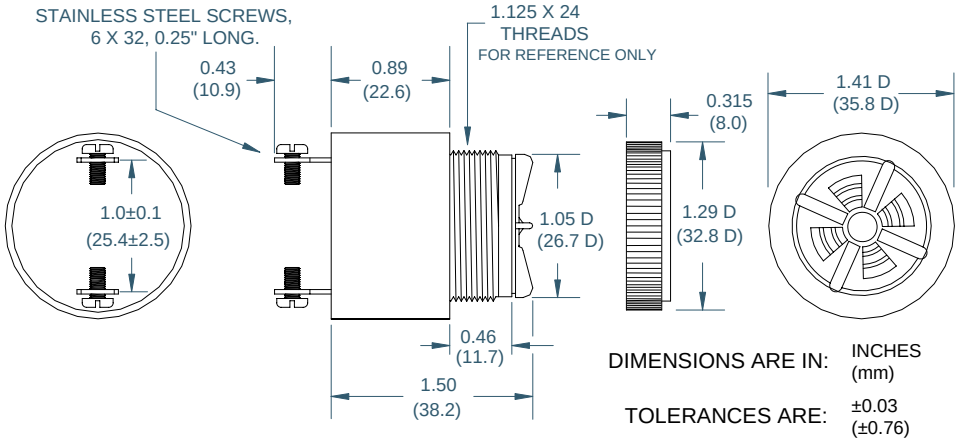


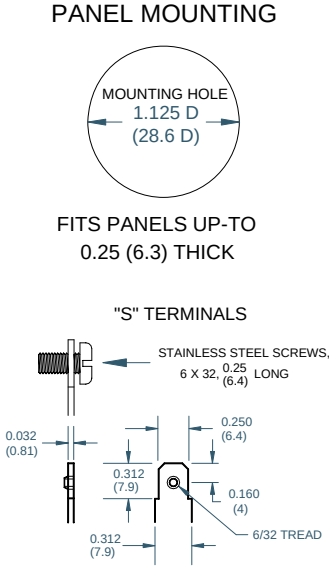
The XB-V09-630-S(U) is an extra loud output, beep tone, panel mounted alarm for operating voltages of 6-30VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

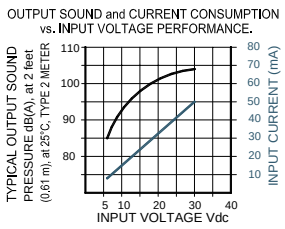
All specifications subject to change without notice.

XB-V09-630-S(U)D

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Polarity Protected Circuitry
- Two Tones, One Package

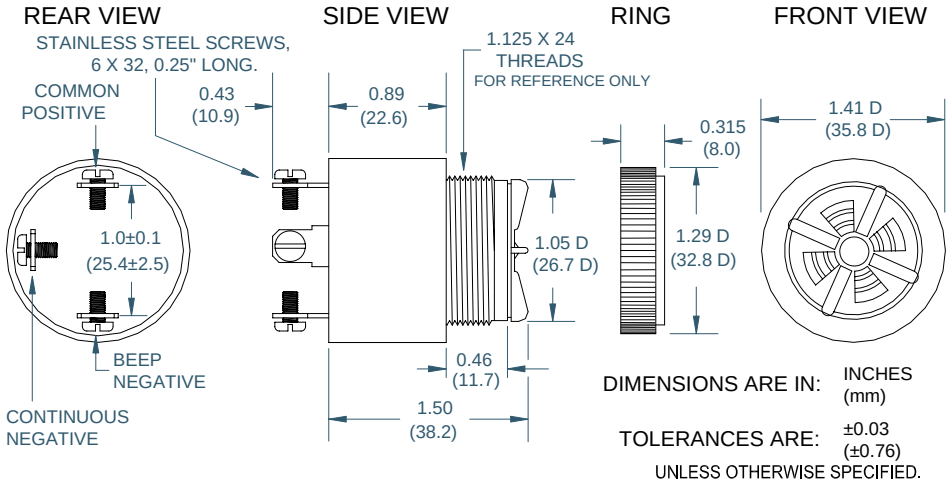


The XB-V09-630-S(U)D is an extra loud output, dual function, panel mounted alarm for operating voltages of 6-30VDC. The alarm functions as an ultra fast beep tone and as a continuous tone. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

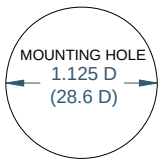
SPECIFICATIONS

Operating Mode:	Extra Loud Dual Function Beep/Continuous Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second in Beep Mode
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

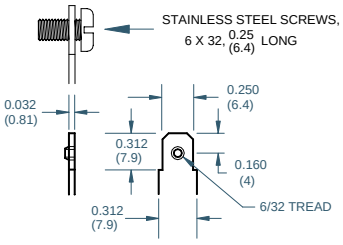


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

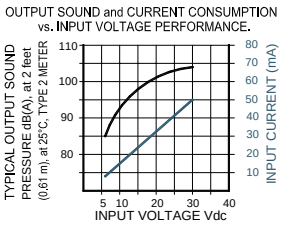
All specifications subject to change without notice.

XB-V09-630-W(F)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



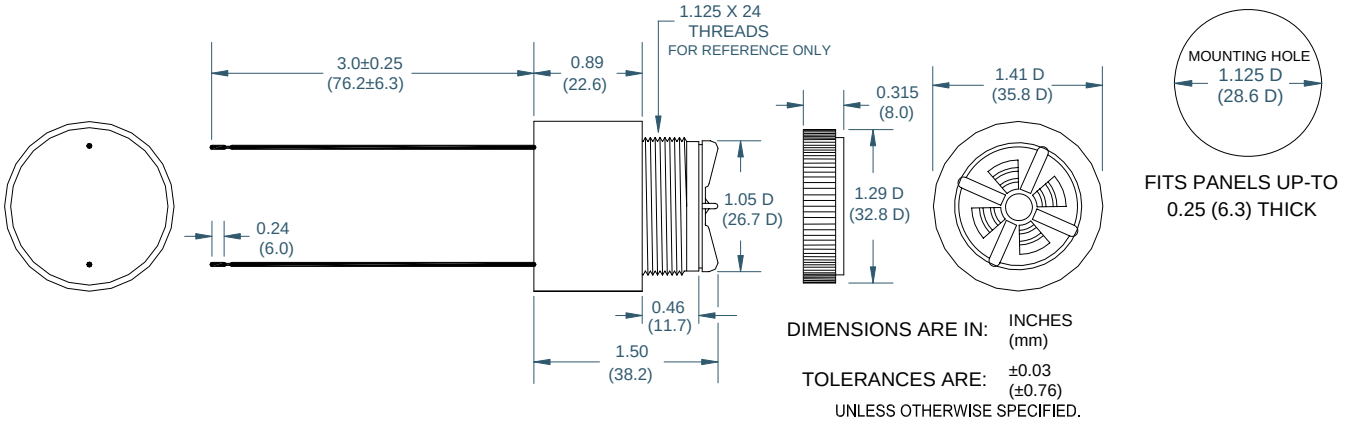
The XB-V09-630-W(F) is an extra loud output, beep tone, panel mounted alarm for operating voltages of 6-30VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 3±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

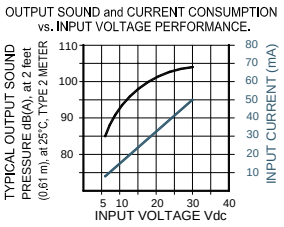
All specifications subject to change without notice.

XB-V09-630-W(M)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



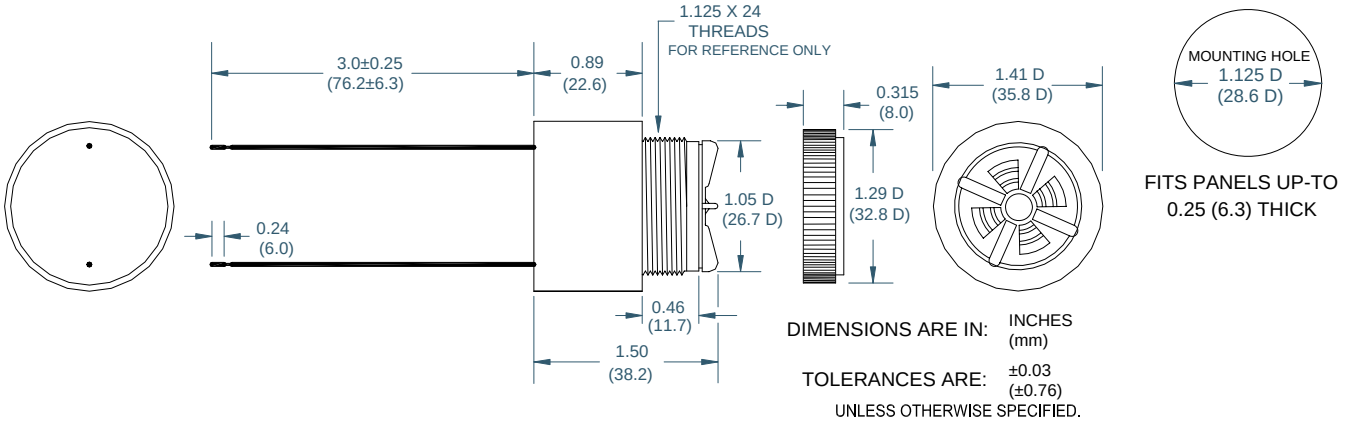
The XB-V09-630-W(M) is an extra loud output, beep tone, panel mounted alarm for operating voltages of 6-30VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 2±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

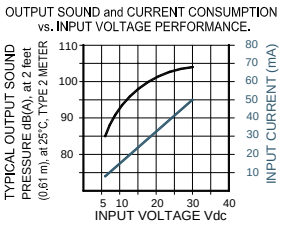
All specifications subject to change without notice.

XB-V09-630-W(S)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



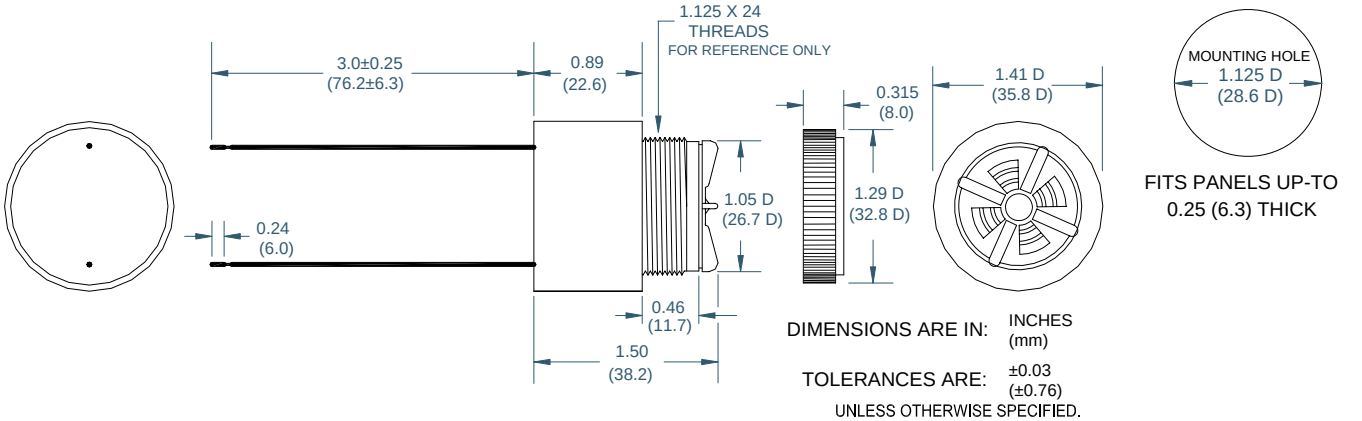
The XB-V09-630-W(S) is an extra loud output, beep tone, panel mounted alarm for operating voltages of 6-30VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 1±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

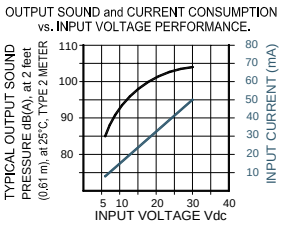
All specifications subject to change without notice.

XB-V09-630-W(U)

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



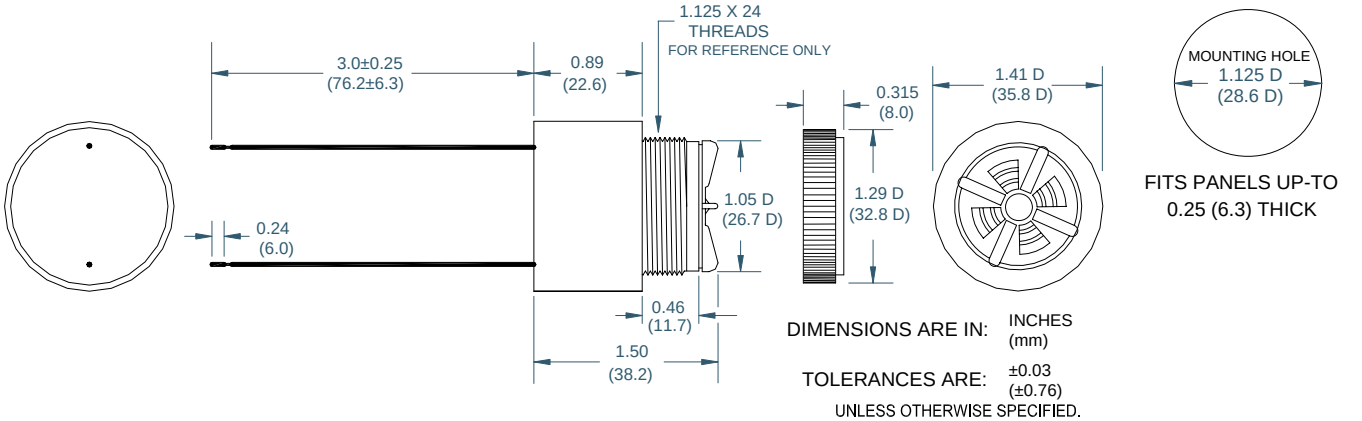
The XB-V09-630-W(U) is an extra loud output, beep tone, panel mounted alarm for operating voltages of 6-30VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Beep Tone
Operating Voltage:	6-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±250 Hz. 6±25% Pulses per second
Typical Operating Current:	10 mA at 6 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 85±5 dB(A), at 6 Vdc, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

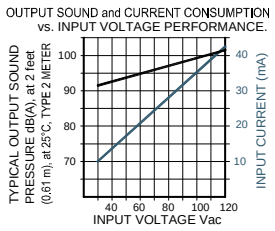
All specifications subject to change without notice.

XC-05-201-P

Made in USA

Image Not Available

- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- PCB Mountable
- Installs Easily
- Reliable Piezoelectric Technology

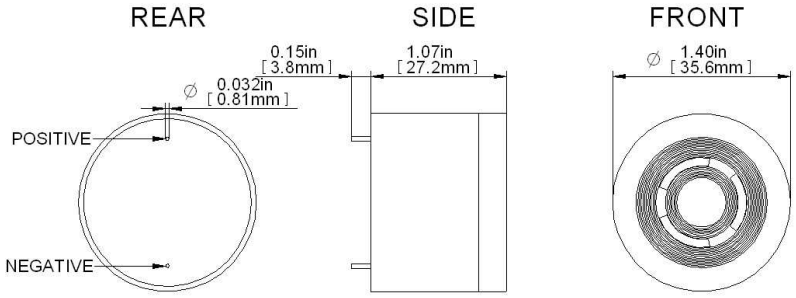


The XC-05-201-P is an extra loud continuous tone alarm for operating voltages of 30-120VAC. It has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 0.032" diameter pins for mounting to a printed circuit board.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.14

Copyright © 2014 Floyd Bell Inc.

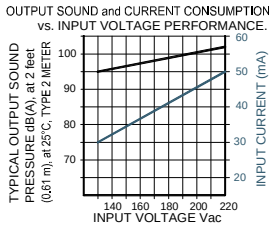
All specifications subject to change without notice.

XC-05-301-P

Made in USA

Image Not Available

- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- PCB Mountable
- Installs Easily
- Reliable Piezoelectric Technology

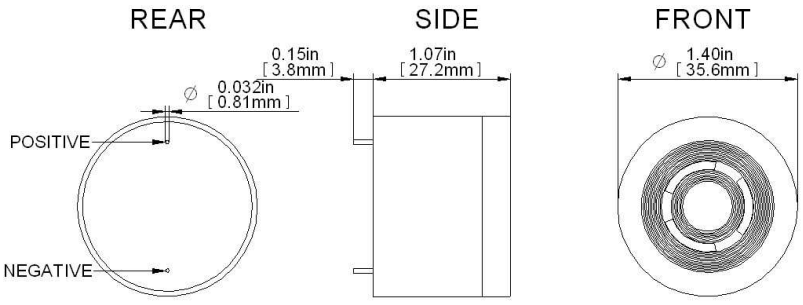


The XC-05-301-P is an extra loud continuous tone alarm for operating voltages of 130-220VAC. It has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 0.032" diameter pins for mounting to a printed circuit board.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	30 mA at 130 Vac 50 mA at 220 Vac
Typical Sound Pressure:	95±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	2 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



TOLERANCES ARE ±0.03in [±0.76mm] UNLESS OTHERWISE SPECIFIED

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

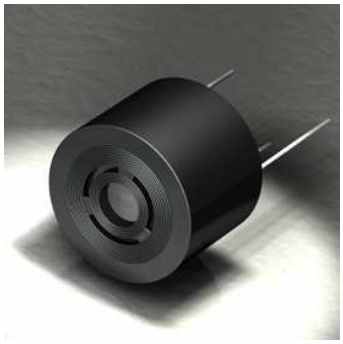
Revision: 2.14

Copyright © 2014 Floyd Bell Inc.

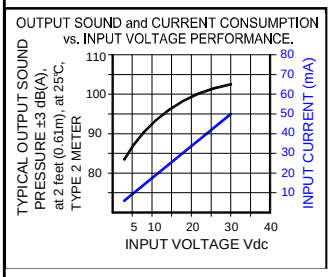
All specifications subject to change without notice.

XC-05-330-P

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- PCB Mountable
- Reliable Piezoelectric Technology
- Installs Easily

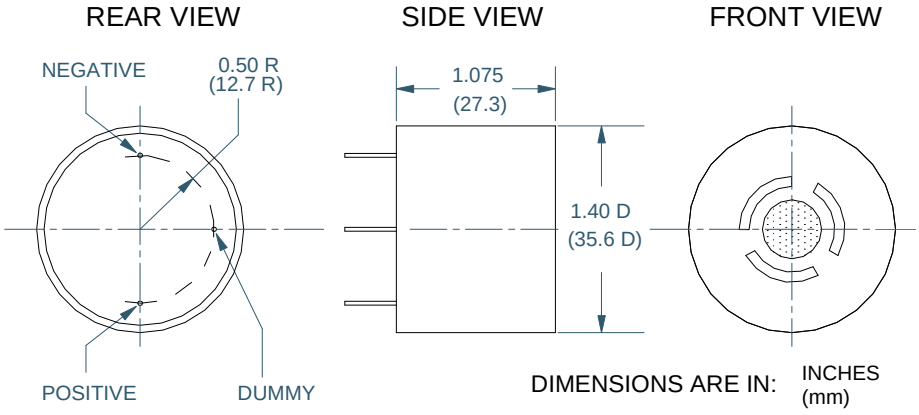


The XC-05-330-P is an extra loud continuous tone alarm for operating voltages of 3-30VDC. It has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with three 0.032" diameter pins for mounting to a printed circuit board.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	3-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±500 Hz.
Typical Operating Current:	6 mA at 3 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	82±5 dB(A), at 3 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	3 PC pins, 0.032" (0.8 mm) diameter, electro-tin plated brass
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 3.12

Copyright © 2012 Floyd Bell Inc.

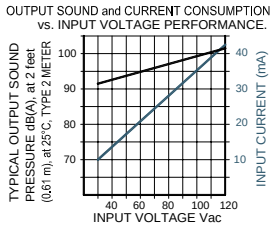
All specifications subject to change without notice.

XC-09-201-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

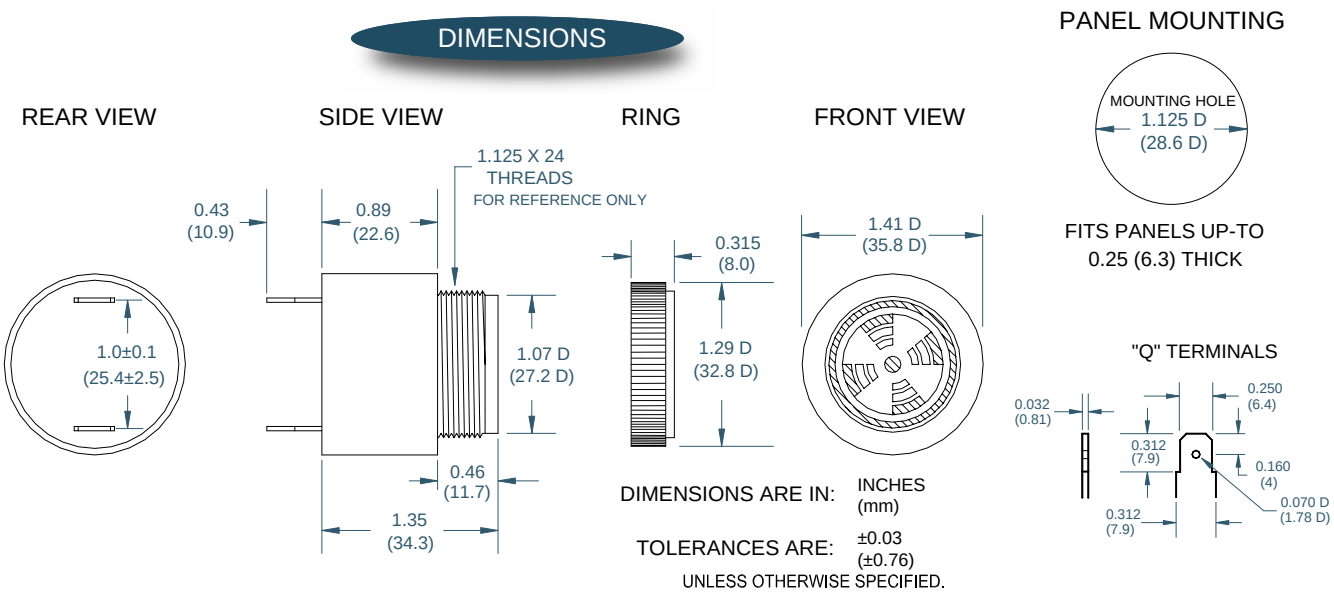


The XC-09-201-Q is a panel mounted alarm for operating voltages of 30-120VAC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

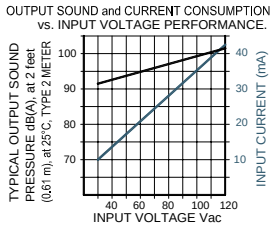
All specifications subject to change without notice.

XC-09-201-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

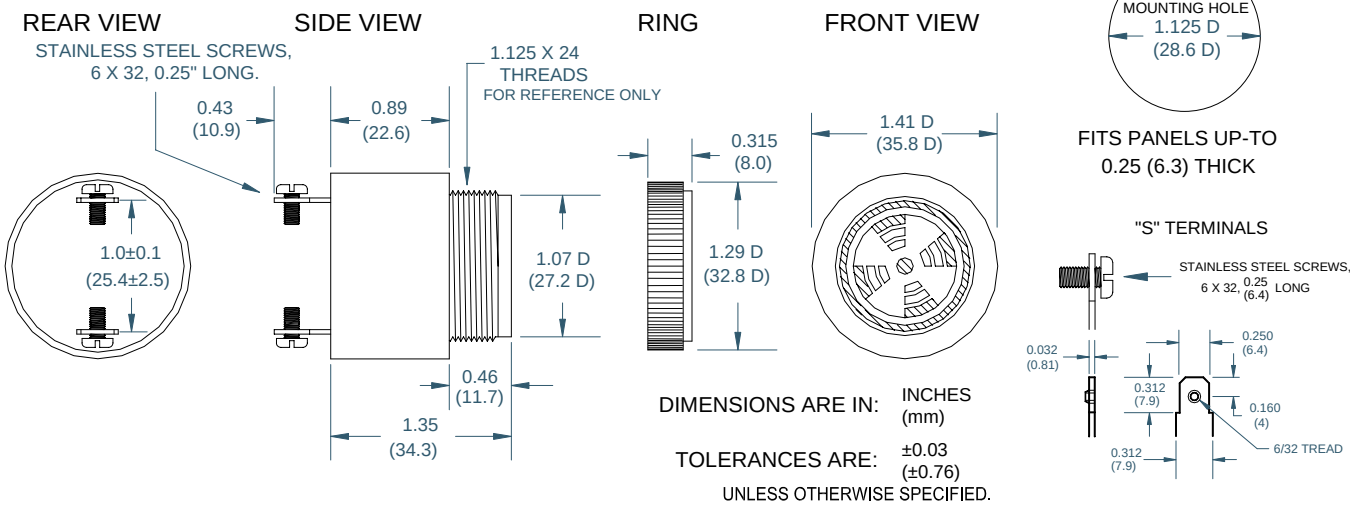


The XC-09-201-S is a panel mounted alarm for operating voltages of 30-120VAC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

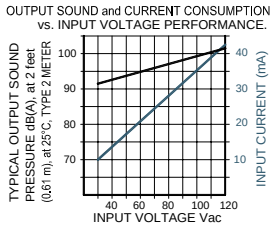
All specifications subject to change without notice.

XC-09-201-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



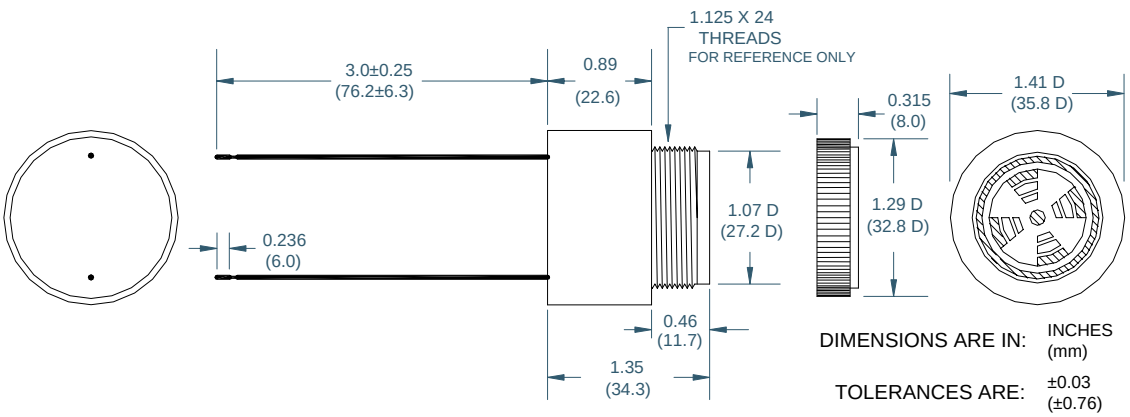
The XC-09-201-W is a panel mounted alarm for operating voltages of 30-120VAC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25". The case is designed for panel mounting in a 1.125" hole with a knurled ring nut.

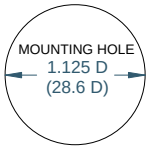
SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING





FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

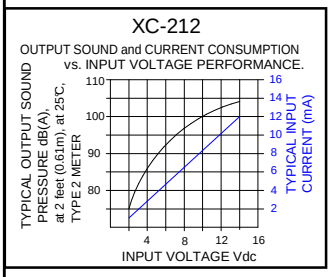
All specifications subject to change without notice.

XC-09-212-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



The XC-09-212-Q is an extra loud output, panel mounted alarm for operating voltages of 2-12VDC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

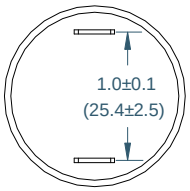
SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	2-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±500 Hz.
Typical Operating Current:	1 mA at 2 Vdc, 5mA max 8 mA at 12 Vdc, 20mA max
Typical Sound Pressure:	75±5 dB(A), at 2 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

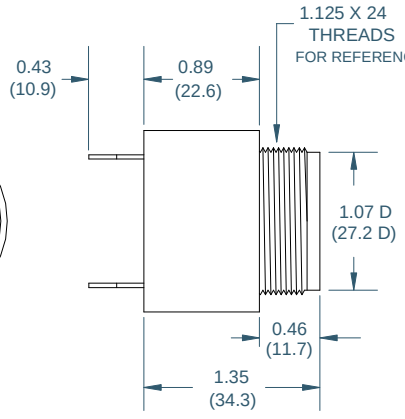
RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS

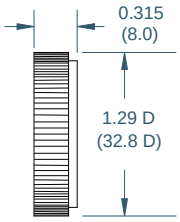
REAR VIEW



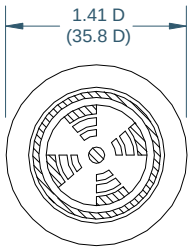
SIDE VIEW



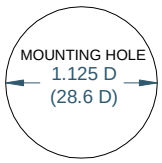
RING



FRONT VIEW

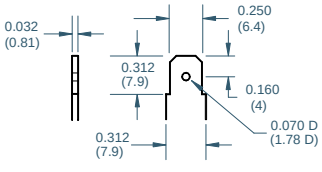


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.12

Copyright © 2012 Floyd Bell Inc.

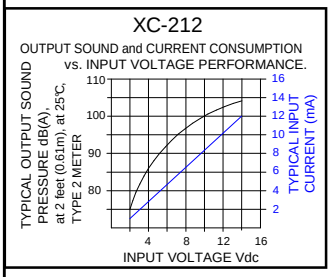
All specifications subject to change without notice.

XC-09-212-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



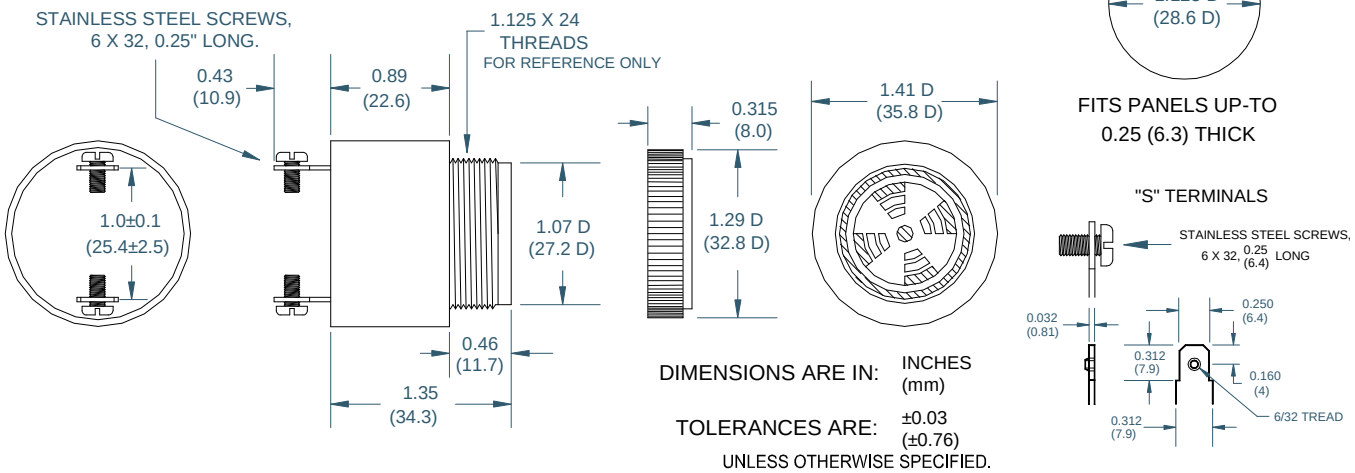
The XC-09-212-S is an extra loud output, panel mounted alarm for operating voltages of 2-12VDC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

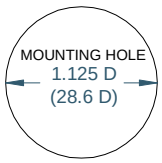
Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	2-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±500 Hz.
Typical Operating Current:	1 mA at 2 Vdc, 5mA max 8 mA at 12 Vdc, 20mA max
Typical Sound Pressure:	75±5 dB(A), at 2 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **RoHS Compliant**

DIMENSIONS



PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"S" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.12

Copyright © 2012 Floyd Bell Inc.

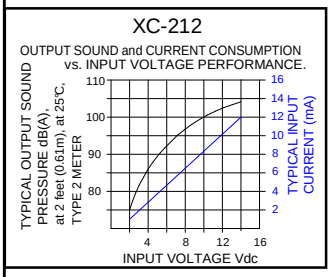
All specifications subject to change without notice.

XC-09-212-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



The XC-09-212-W is an extra loud output, panel mounted alarm for operating voltages of 2-12VDC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

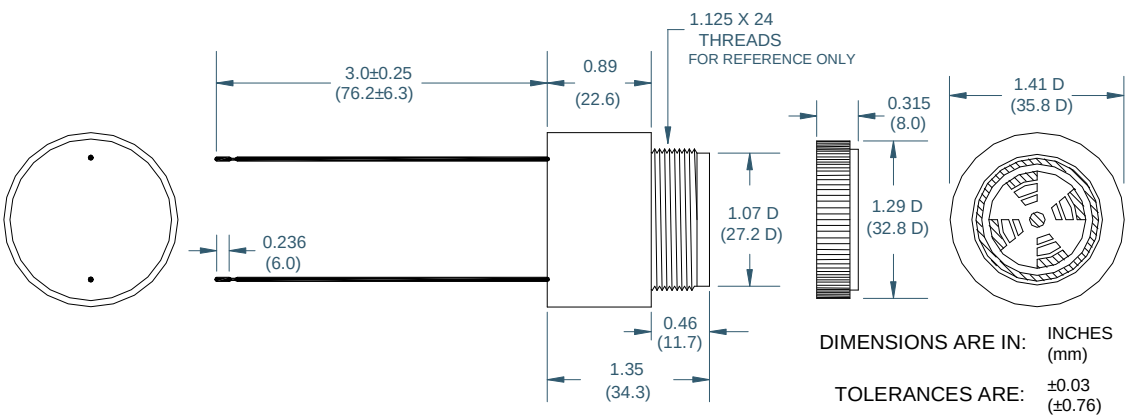
SPECIFICATIONS

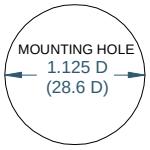
Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	2-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±500 Hz.
Typical Operating Current:	1 mA at 2 Vdc, 5mA max 8 mA at 12 Vdc, 20mA max
Typical Sound Pressure:	75±5 dB(A), at 2 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING





FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.12

Copyright © 2012 Floyd Bell Inc.

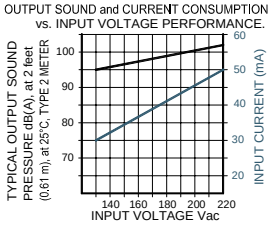
All specifications subject to change without notice.

XC-09-301-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

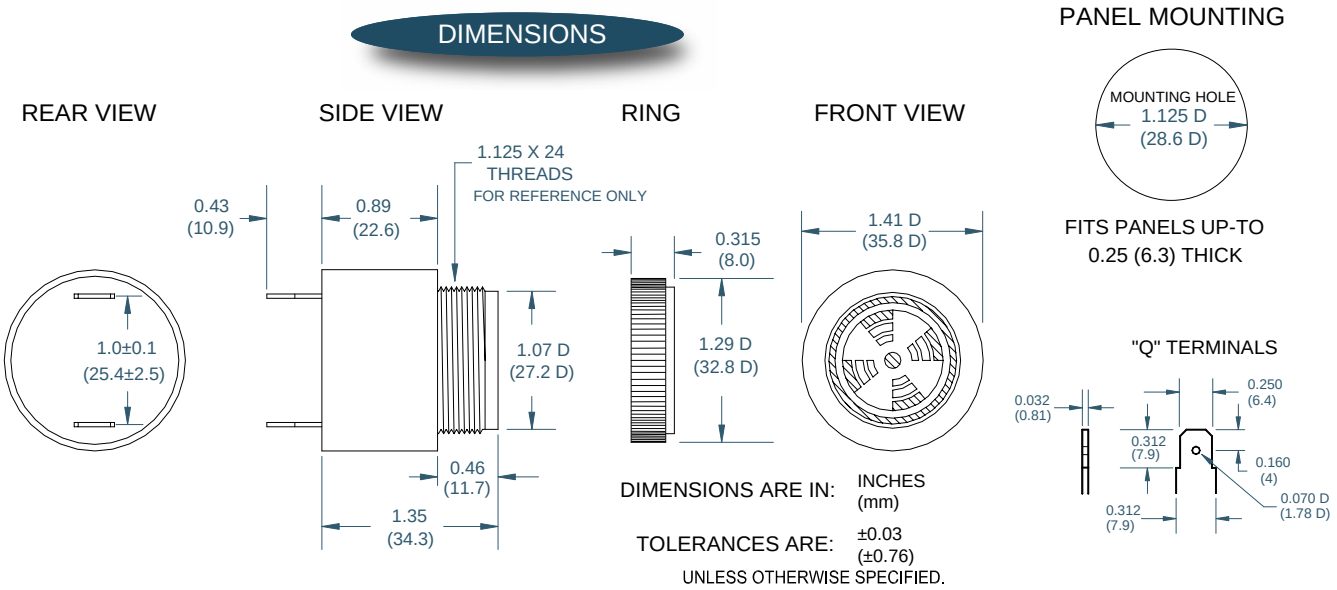


The XC-09-301-Q is a panel mounted alarm for operating voltages of 130-220VAC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	30 mA at 130 Vac 50 mA at 220 Vac
Typical Sound Pressure:	95±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

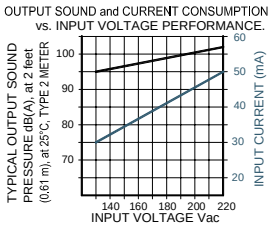
All specifications subject to change without notice.

XC-09-301-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

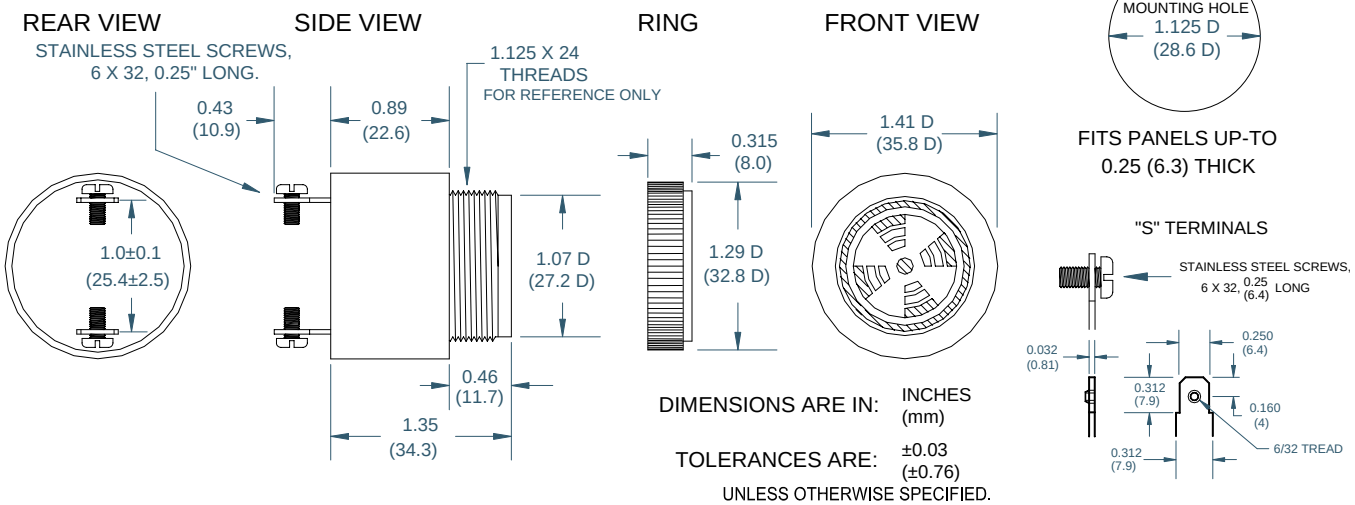


The XC-09-301-S is a panel mounted alarm for operating voltages of 130-220VAC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	30 mA at 130 Vac 50 mA at 220 Vac
Typical Sound Pressure:	95±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

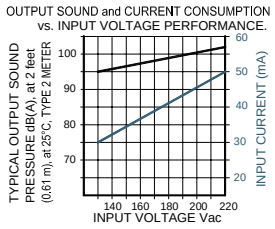
All specifications subject to change without notice.

XC-09-301-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



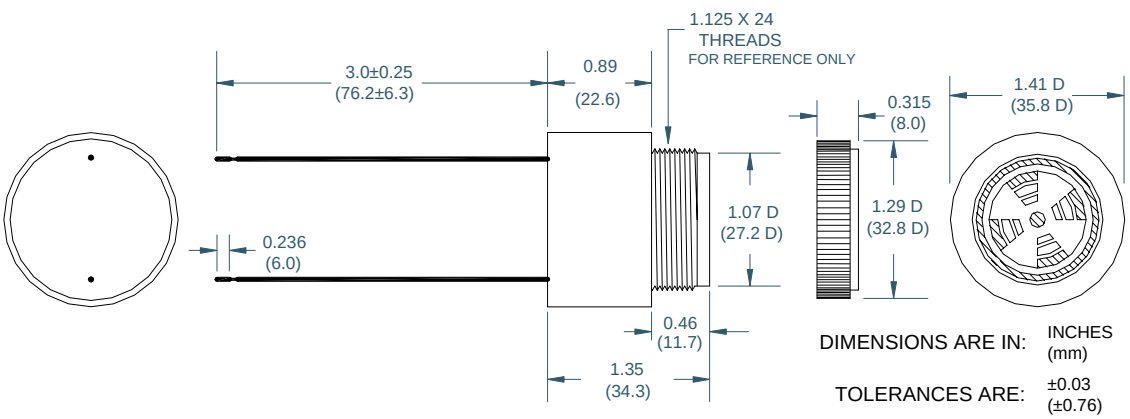
The XC-09-301-W is a panel mounted alarm for operating voltages of 130-220VAC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25". The case is designed for panel mounting in a 1.125" hole with a knurled ring nut.

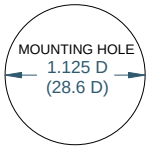
SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	30 mA at 130 Vac 50 mA at 220 Vac
Typical Sound Pressure:	95±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING





FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

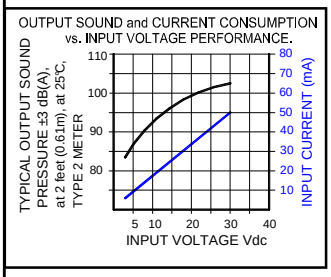
All specifications subject to change without notice.

XC-09-330-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



The XC-09-330-Q is an extra loud output, panel mounted alarm for operating voltages of 3-30VDC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

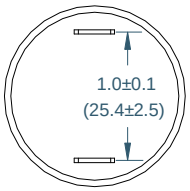
SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	3-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±500 Hz.
Typical Operating Current:	6 mA at 3 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	82±5 dB(A), at 3 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

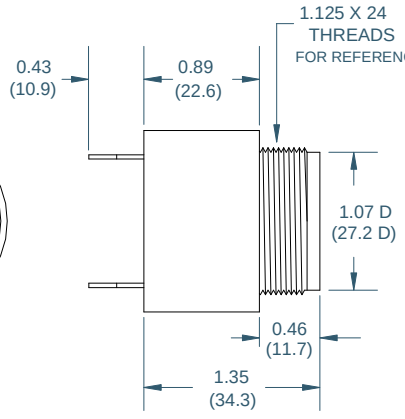
RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS

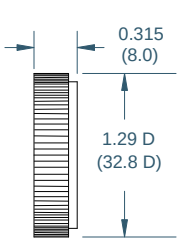
REAR VIEW



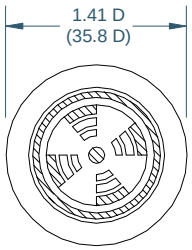
SIDE VIEW



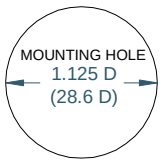
RING



FRONT VIEW

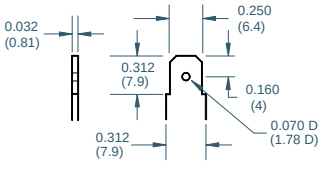


PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76) UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 03.12

Copyright © 2012 Floyd Bell Inc.

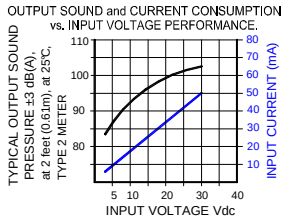
All specifications subject to change without notice.

XC-09-330-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

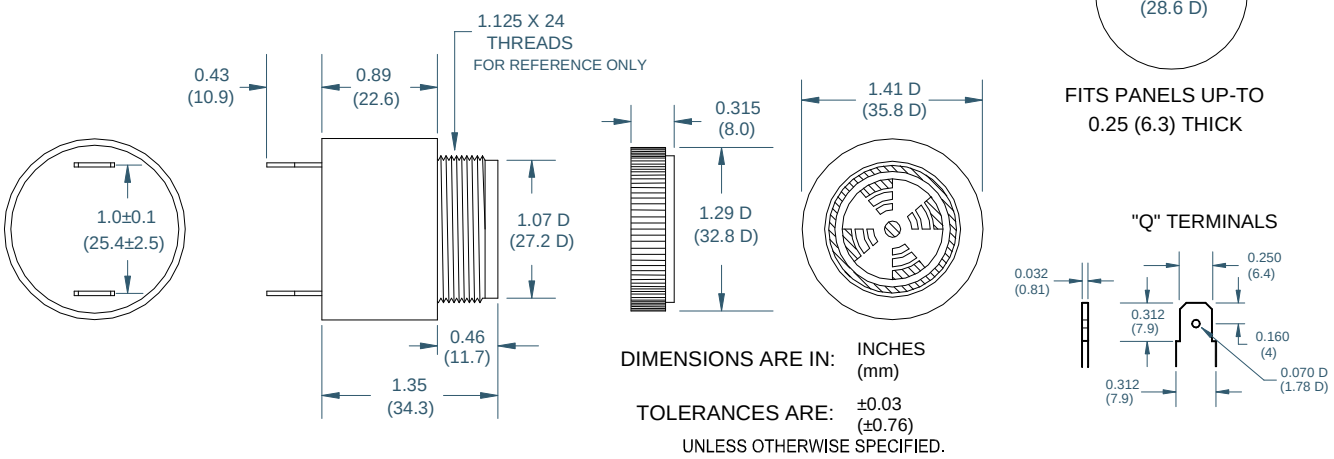


The XC-09-330-Q is an extra loud output, panel mounted alarm for operating voltages of 3-30VDC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

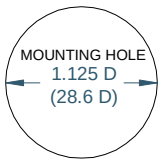
SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	3-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±500 Hz.
Typical Operating Current:	6 mA at 3 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	82±5 dB(A), at 3 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

"Q" TERMINALS

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 03.12

Copyright © 2012 Floyd Bell Inc.

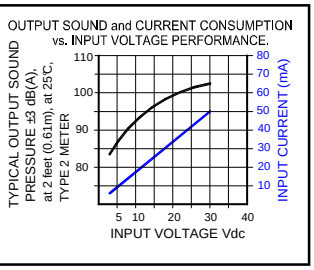
All specifications subject to change without notice.

XC-09-330-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



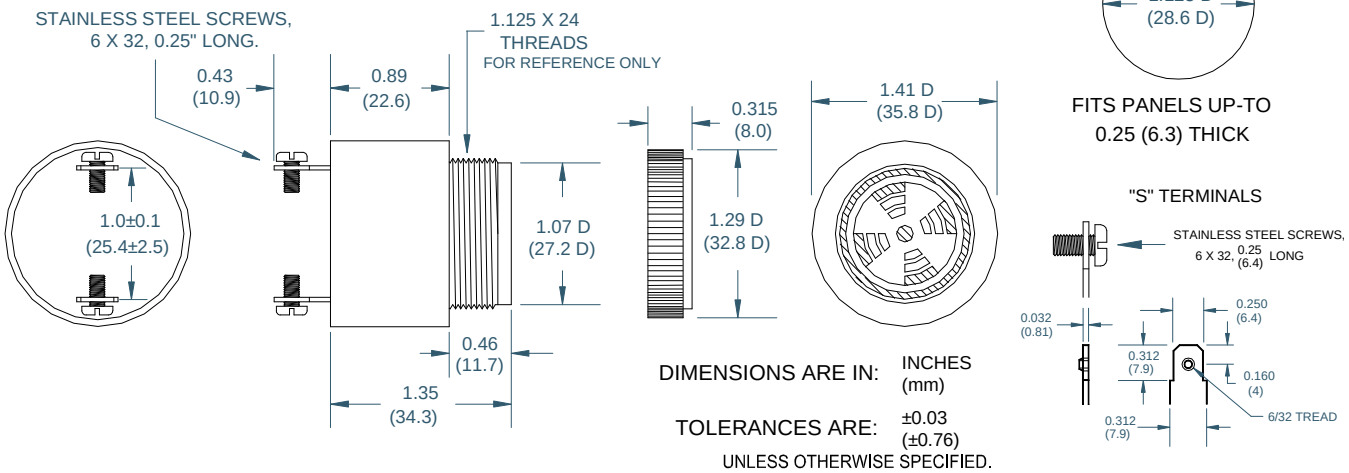
The XC-09-330-S is an extra loud output, panel mounted alarm for operating voltages of 3-30VDC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	3-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±500 Hz.
Typical Operating Current:	6 mA at 3 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	82±5 dB(A), at 3 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 03.12

Copyright © 2012 Floyd Bell Inc.

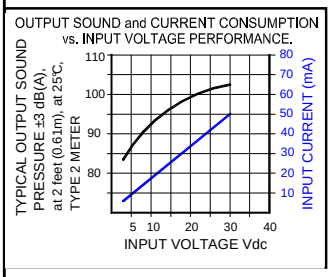
All specifications subject to change without notice.

XC-09-330-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

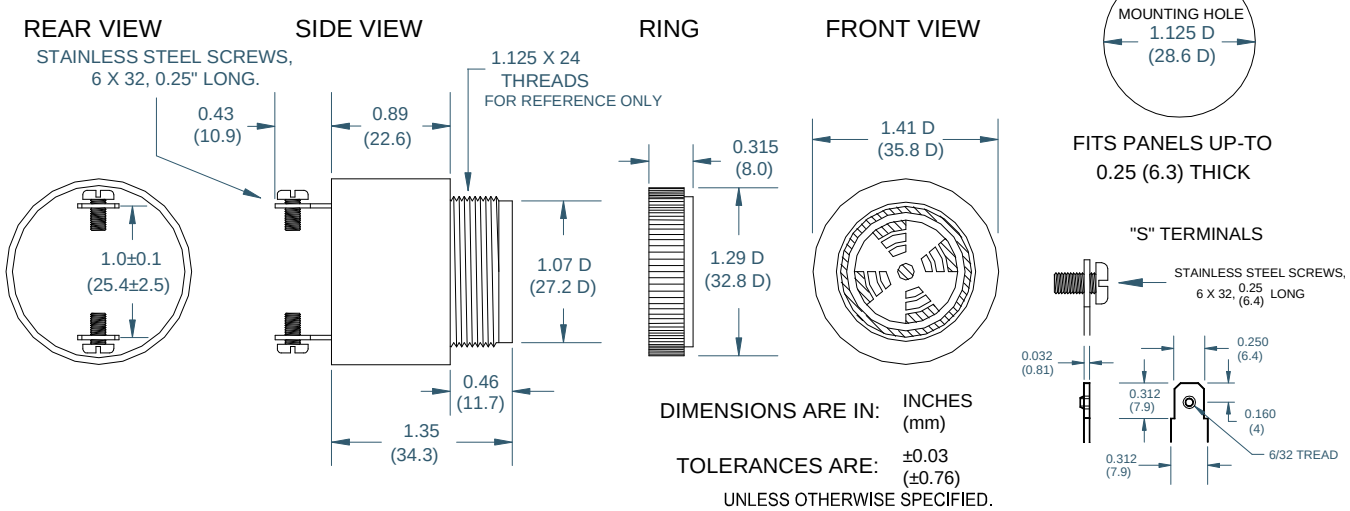


The XC-09-330-S is an extra loud output, panel mounted alarm for operating voltages of 3-30VDC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	3-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±500 Hz.
Typical Operating Current:	6 mA at 3 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	82±5 dB(A), at 3 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 03.12

Copyright © 2012Floyd Bell Inc.

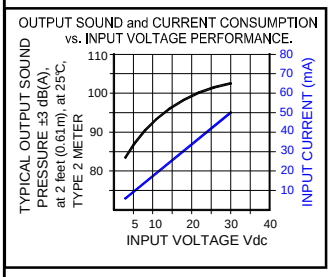
All specifications subject to change without notice.

XC-09-330-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

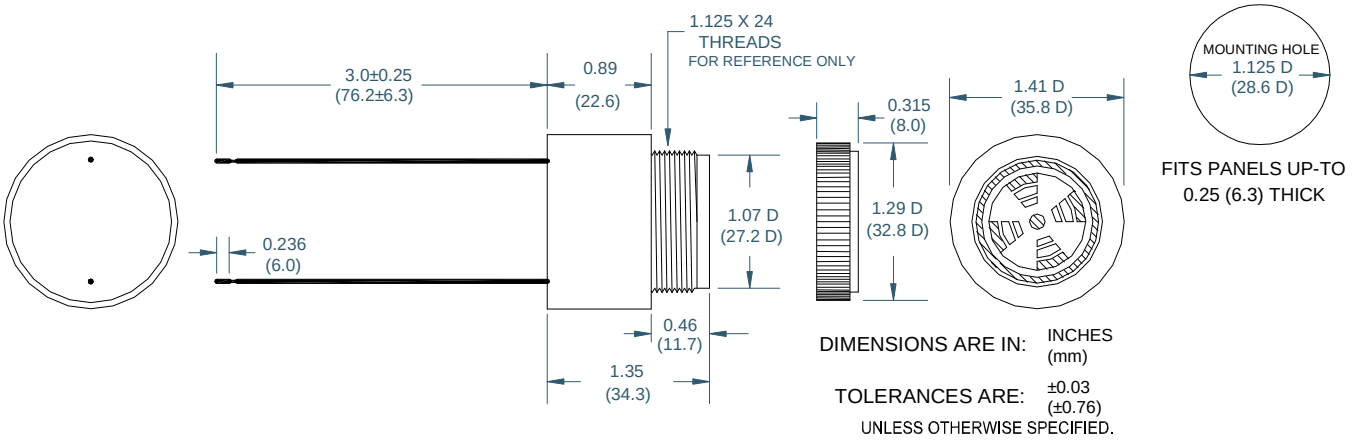


The XC-09-330-W is an extra loud output, panel mounted alarm for operating voltages of 3-30VDC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	3-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±500 Hz.
Typical Operating Current:	6 mA at 3 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	82±5 dB(A), at 3 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 03.12

Copyright © 2012 Floyd Bell Inc.

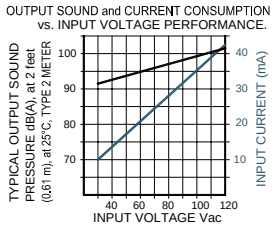
All specifications subject to change without notice.

XC-V09-201-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

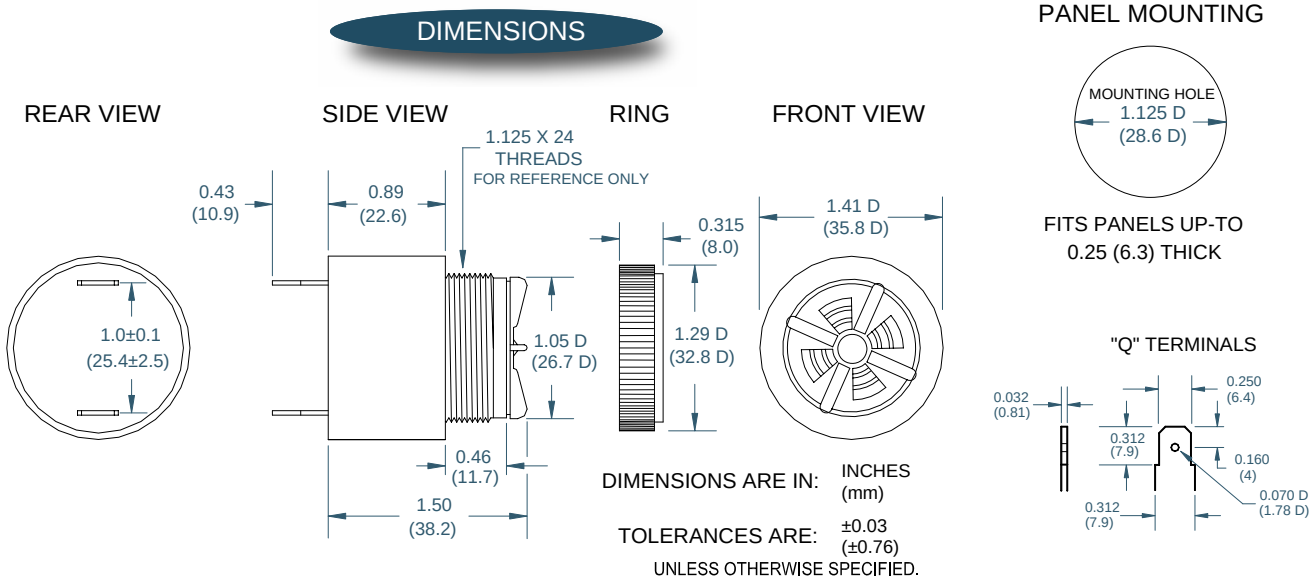


The XC-V09-201-Q is a panel mounted alarm for operating voltages of 30-120VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

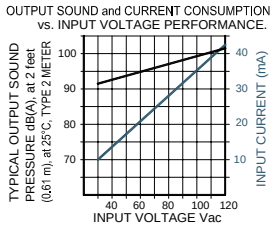
All specifications subject to change without notice.

XC-V09-201-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

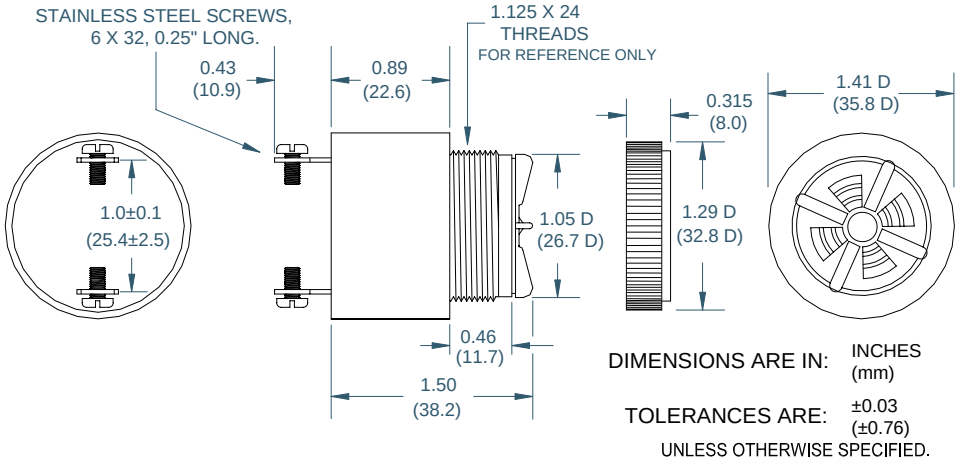


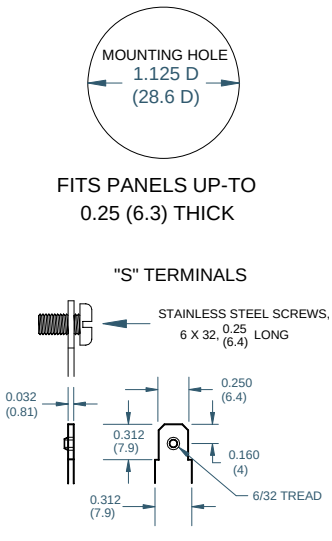
The XC-V09-201-S is a panel mounted alarm for operating voltages of 30-120VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

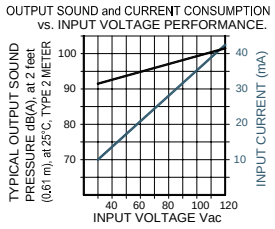
All specifications subject to change without notice.

XC-V09-201-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



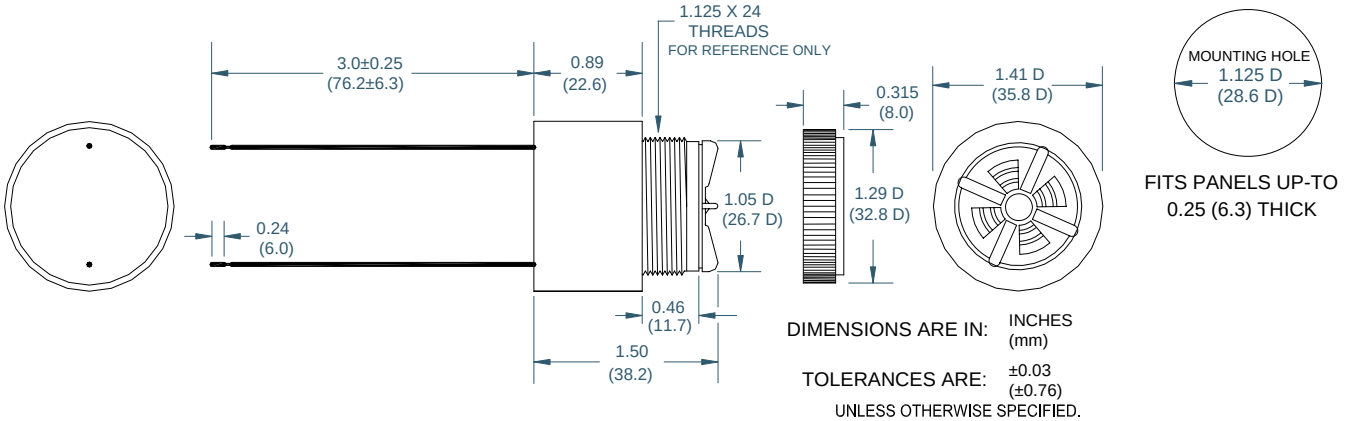
The XC-V09-201-W is a panel mounted alarm for operating voltages of 30-120VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25". The case is designed for panel mounting in a 1.125" hole with a knurled ring nut.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	30-120 Vac
Nominal Operating Voltage:	110 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	10 mA at 30 Vac 45 mA at 120 Vac
Typical Sound Pressure:	With volume control fully open: 92±5 dB(A), at 30 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 120 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

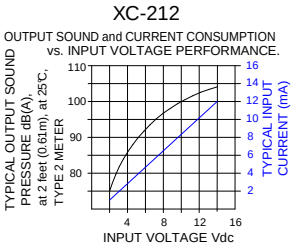
All specifications subject to change without notice.

XC-V09-212-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



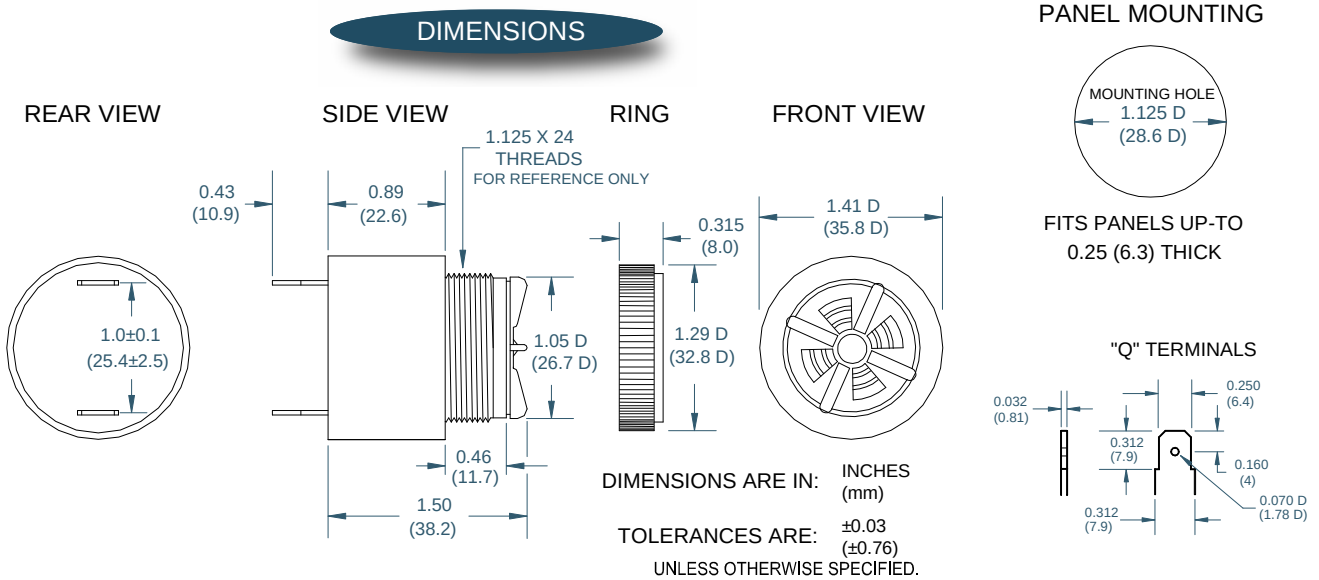
The XC-V09-212-Q is an extra loud output, panel mounted alarm for operating voltages of 2-12VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	2-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±500 Hz.
Typical Operating Current:	1 mA at 2 Vdc, 5mA max 8 mA at 12 Vdc, 20mA max
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 2 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.12

Copyright © 2012 Floyd Bell Inc.

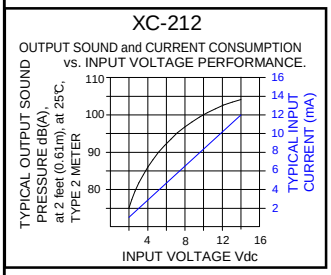
All specifications subject to change without notice.

XC-V09-212-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



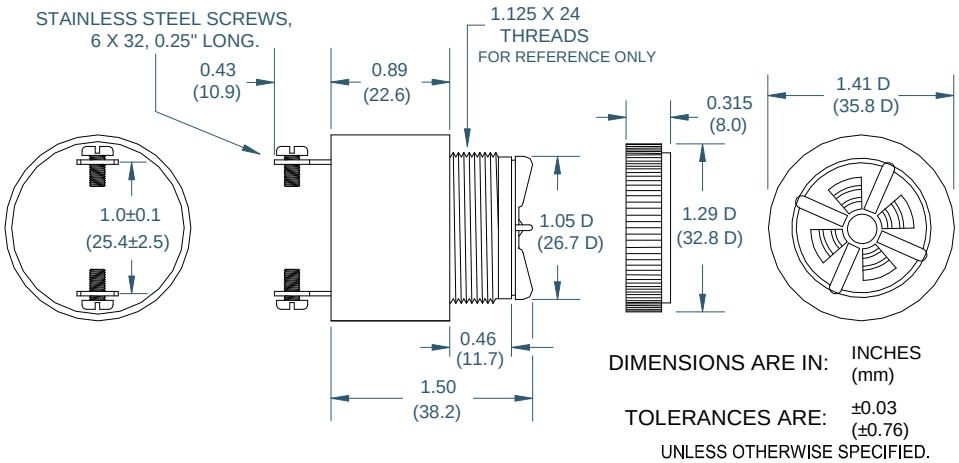
The XC-V09-212-S is an extra loud output, panel mounted alarm for operating voltages of 2-12VDC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

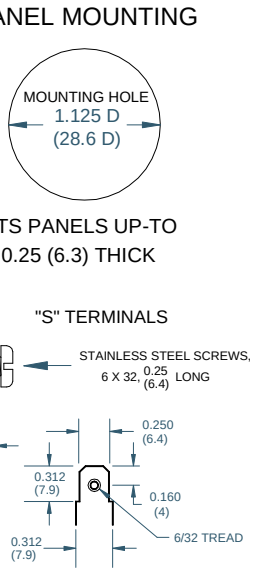
SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	2-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±500 Hz.
Typical Operating Current:	1 mA at 2 Vdc, 5mA max 8 mA at 12 Vdc, 20mA max
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 2 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

RoHS **Also available RoHS Compliant — Add "R" to end of part number.**

DIMENSIONS





Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.12

Copyright © 2012 Floyd Bell Inc.

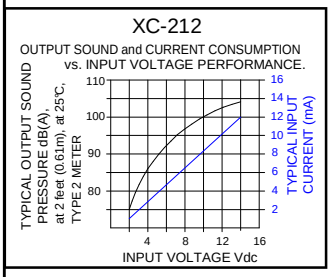
All specifications subject to change without notice.

XC-V09-212-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

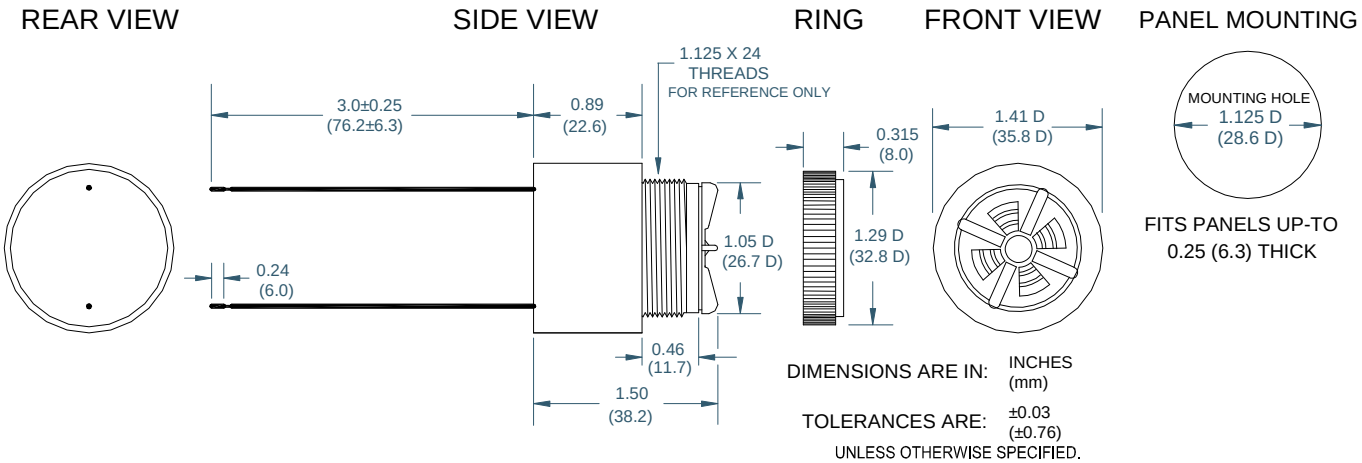


The XC-V09-212-W is an extra loud output, continuous tone, panel mounted alarm for operating voltages of 2-12VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25". The case is designed for panel mounting in a 1.125" hole.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	2-12 Vdc
Nominal Operating Voltage:	12 Vdc
Operating Frequency:	2900±500 Hz.
Typical Operating Current:	1 mA at 2 Vdc, 5mA max 8 mA at 12 Vdc, 20mA max
Typical Sound Pressure:	With volume control fully open: 75±5 dB(A), at 2 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 12 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.12

Copyright © 2012 Floyd Bell Inc.

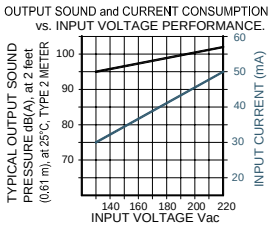
All specifications subject to change without notice.

XC-V09-301-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

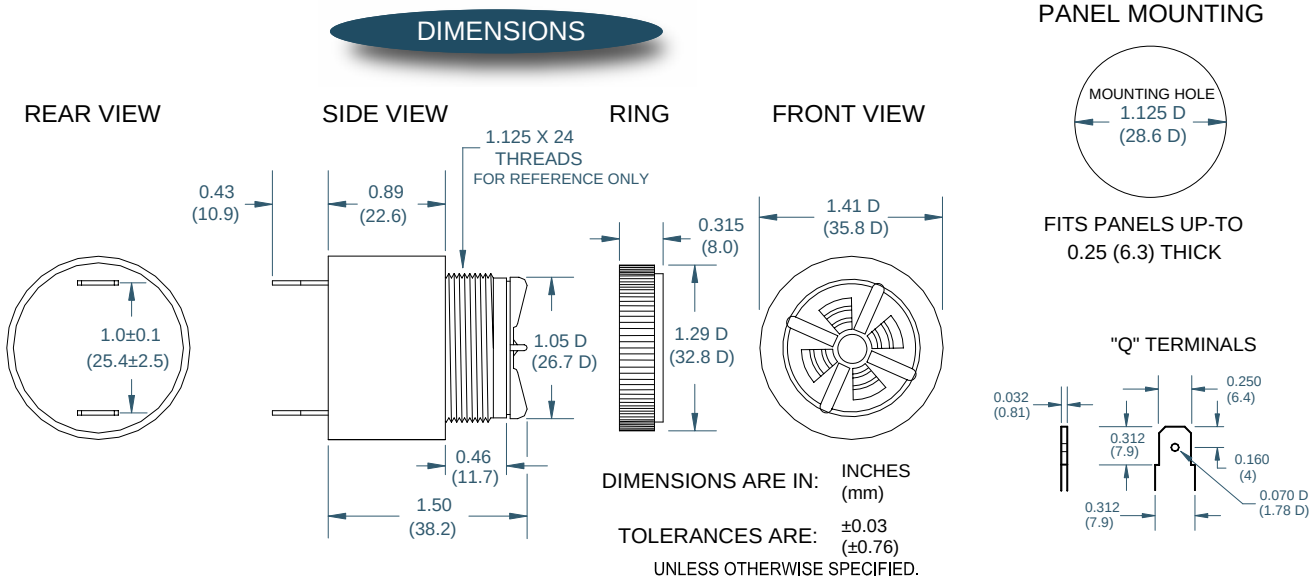


The XC-V09-301-Q is a panel mounted alarm for operating voltages of 130-220VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades for push-on or direct solder attachment.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	30 mA at 130 Vac 50 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 95±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

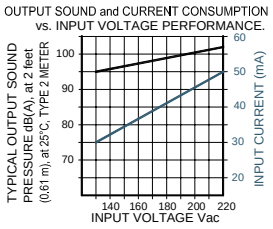
All specifications subject to change without notice.

XC-V09-301-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

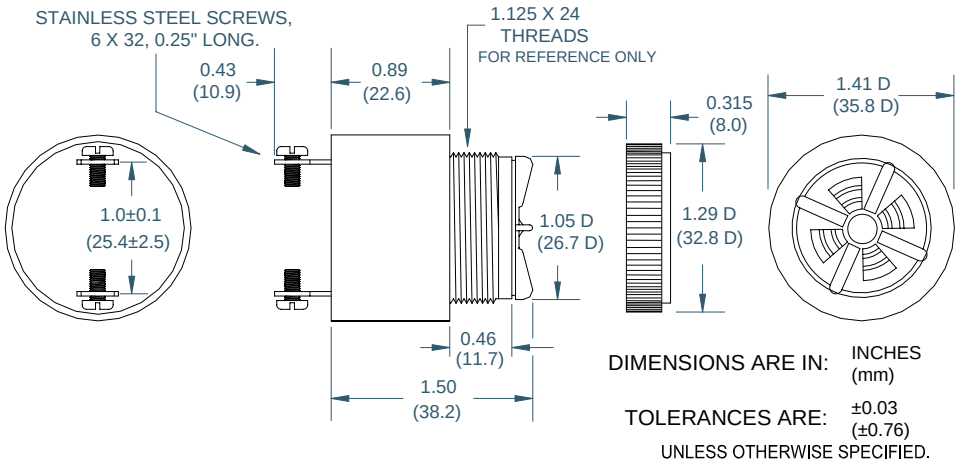


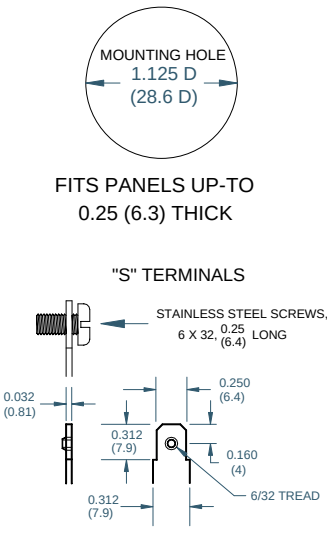
The XC-V09-301-S is a panel mounted alarm for operating voltages of 130-220VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. The terminals are standard 0.25" quick-connect blades with screws added for connection to wires with lugs.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	30 mA at 130 Vac 50 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 95±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





DIMENSIONS ARE IN: INCHES (mm)

TOLERANCES ARE: ±0.03 (±0.76)

UNLESS OTHERWISE SPECIFIED.

Floyd Bell Inc

An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

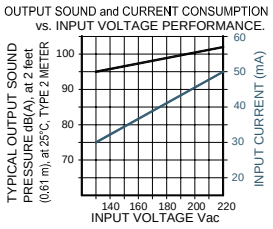
All specifications subject to change without notice.

XC-V09-301-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



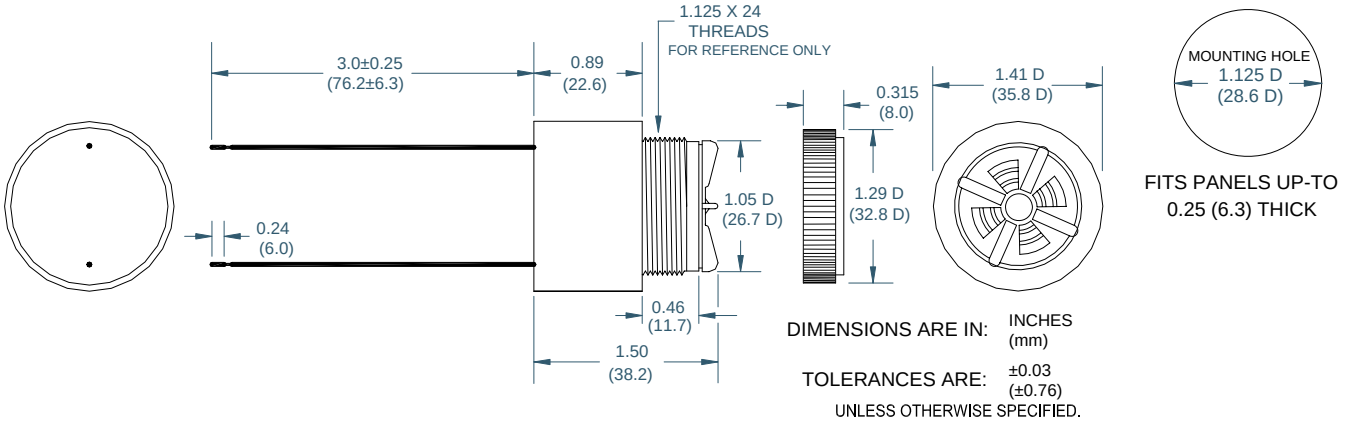
The XC-V09-301-W is a panel mounted alarm for operating voltages of 130-220VAC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25". The case is designed for panel mounting in a 1.125" hole with a knurled ring nut.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	130-220 Vac
Nominal Operating Voltage:	220 Vac
Operating Frequency:	2900±250 Hz.
Typical Operating Current:	30 mA at 130 Vac 50 mA at 220 Vac
Typical Sound Pressure:	With volume control fully open: 95±5 dB(A), at 130 Vac, at 24 inches (61 cm), at 25°C 103±5 dB(A), at 220 Vac, at 24 inches (61 cm), at 25°C.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20°C to +65°C.
Storage Temperature:	-40°C to +85°C.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40°C continuously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 2.07

Copyright © 2007 Floyd Bell Inc.

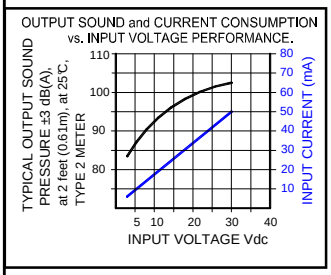
All specifications subject to change without notice.

XC-V09-330-Q

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

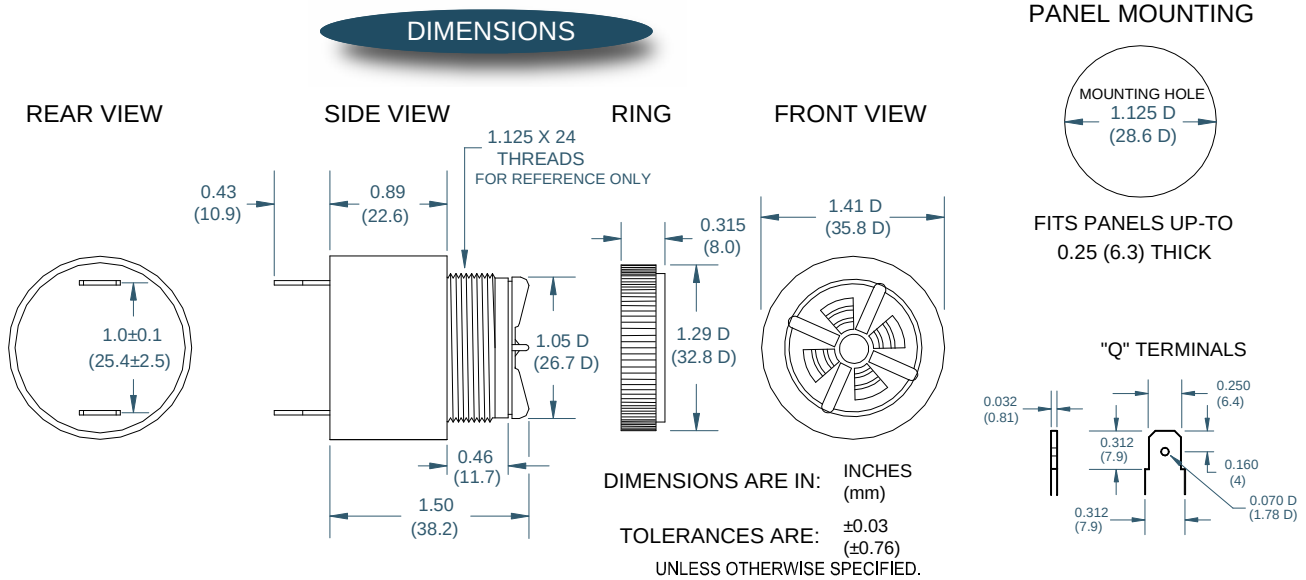


The XC-V09-330-Q is an extra loud output, panel mounted alarm for operating voltages of 3-30VDC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	3-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±500 Hz.
Typical Operating Current:	6 mA at 3 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 82±5 dB(A), at 3 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) Thickness
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS



Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 03.12

Copyright © 2012 Floyd Bell Inc.

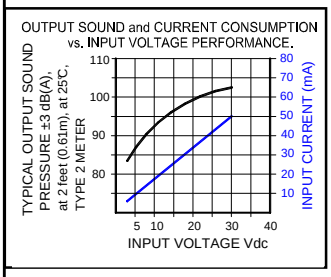
All specifications subject to change without notice.

XC-V09-330-S

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology

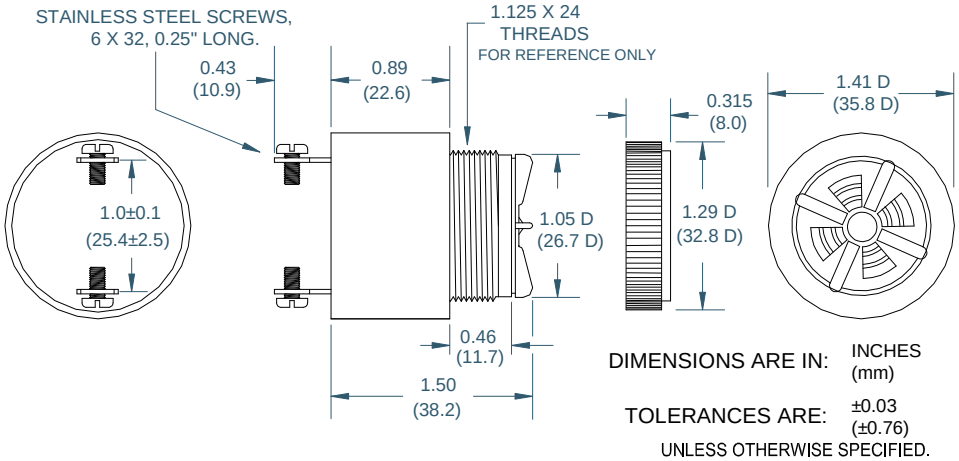


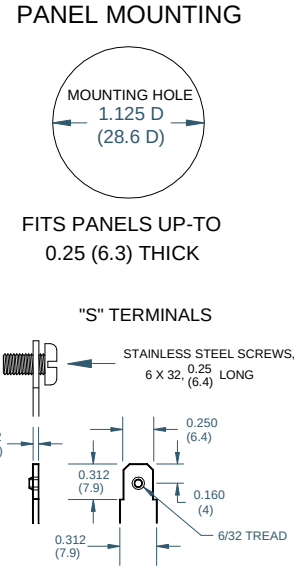
The XC-V09-330-S is an extra loud output, panel mounted alarm for operating voltages of 3-30VDC. The continuous tone has a typical sound pressure level of 103 dB(A) at maximum voltage. The built-in volume control provides variable attenuation up to 20 dB(A) typically.

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	3-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±500 Hz.
Typical Operating Current:	6 mA at 3 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 82±5 dB(A), at 3 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	0.25 (6.3) Wide Quick Connect Blades with 0.25 (6.3) Long 6x32 Stainless Steel Screws
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS





Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 03.12

Copyright © 2012 Floyd Bell Inc.

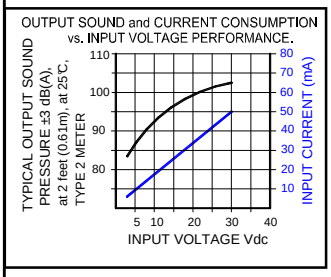
All specifications subject to change without notice.

XC-V09-330-W

Made in USA



- Durable Stainless Steel 304 Diaphragm
- Epoxy Encapsulated Electronics
- UL Approved
- NEMA 4X Certified with Optional Gasket
- Reliable Piezoelectric Technology



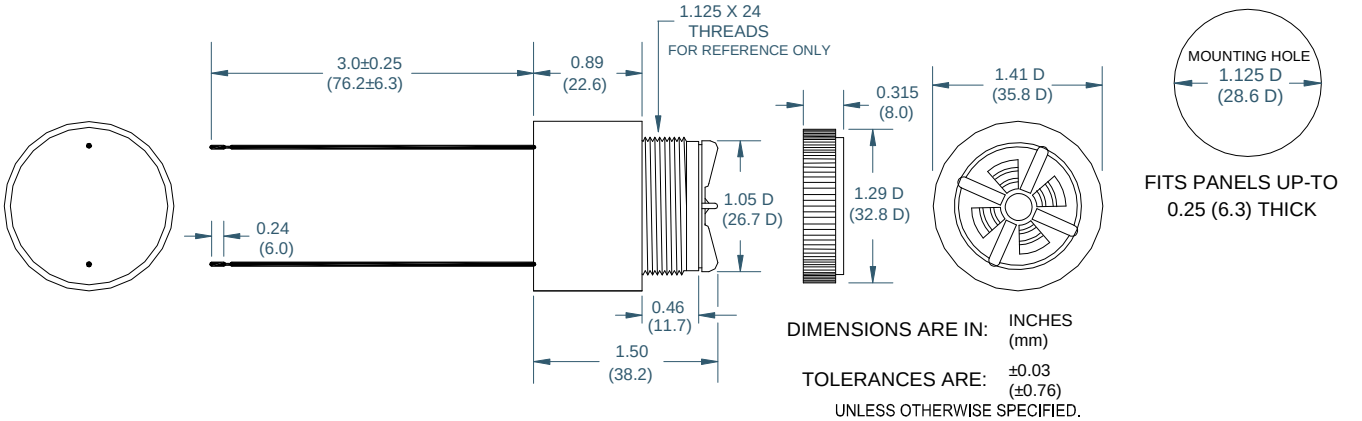
The XC-V09-330-W is an extra loud output, continuous tone, panel mounted alarm for operating voltages of 3-30VDC. The built-in volume control provides variable attenuation up to 20 dB(A) typically. It is terminated with two 24AWG wires, 3" long, stripped 0.25".

SPECIFICATIONS

Operating Mode:	Extra Loud Continuous Tone
Operating Voltage:	3-30 Vdc
Nominal Operating Voltage:	30 Vdc
Operating Frequency:	2900±500 Hz.
Typical Operating Current:	6 mA at 3 Vdc 50 mA at 30 Vdc
Typical Sound Pressure:	With volume control fully open: 82±5 dB(A), at 3 Vdc, at 24 inches (61 cm), at 25℃ 103±5 dB(A), at 30 Vdc, at 24 inches (61 cm), at 25℃.
Termination:	24AWG Wire, Tinned Copper, Vinyl Insulated, Red and Black
Termination Strength:	Pull test with a maximum of 22 pounds (10 kg) load
Operating Temperature:	-20℃ to +65℃.
Storage Temperature:	-40℃ to +85℃.
Surge Voltage:	20% over maximum rated voltage for less than 5 minutes.
Reverse Voltage Protection:	To the maximum operating voltage.
Part Recognized By:	Underwriters Laboratory
Construction Materials:	Case- Plastic "NORYL® N-190", Flame Retardant UL 94-VO, Black Internal Circuit- Audio-oscillator and piezoelectric driver Potting- 2 parts epoxy resin or silicone, black Diaphragm- Stainless Steel 304 Gasket (Sold Separately)– 0.062" Thick, 60 Durometer Neoprene
Environmental Durability:	Salt Spray- Withstand exposure to salt spray per ASTM B117 for a period of 300 hours with no decrease in sound output Humidity- 95% relative humidity at +40℃ continu ously for 100 hours. Vibration- Withstands vibration between 0 and 55 Hz. on all axes.
Life Expectancy:	10 years under normal operating conditions.
Warranty:	For a period of two years from the date of manufacture under normal operating conditions.

DIMENSIONS

REAR VIEW SIDE VIEW RING FRONT VIEW PANEL MOUNTING



FITS PANELS UP-TO 0.25 (6.3) THICK

Floyd Bell Inc
An ISO 9001:2000 Registered Company

720 Dearborn Park Lane • Columbus, OH 43085
Tel: 888-FLOYD-BELL • Fax: 614/291-0823
www.floydbell.com

Revision: 03.12

Copyright © 2012 Floyd Bell Inc.

All specifications subject to change without notice.