

LOW COST, SNAP-IN TOGGLE FOR WET & DUSTY ENVIRONMENTS, 1 & 2 POLES

The K4 series snap-in toggle switches are rugged, high performance sealed switches designed for use under severe conditions found in marine, appliance, heavy equipment and industrial control applications. They are totally sealed to IP68S and IP69K so the switch can withstand direct water spray and submersion. With the optional panel seal gasket, the K4 is also panel sealed.

The K4 series is offered in single and double pole configurations. Toggle action includes 2 and 3-position, momentary and maintained operation in a combination of 13 variations.

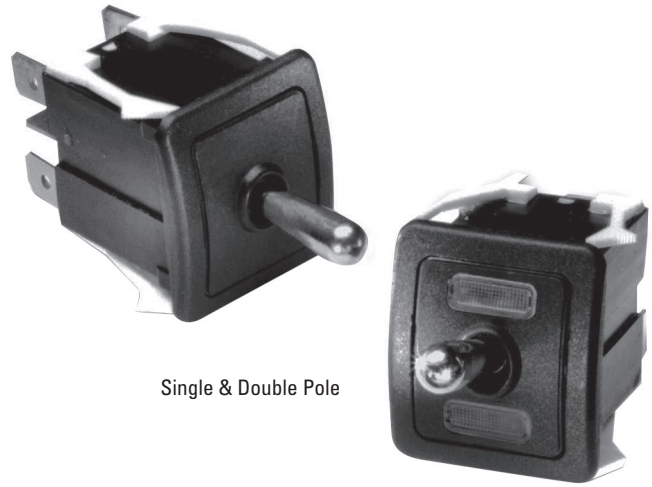
Mounting is simple and quick; snaps into panel from the front. The OTTO snap-in design supports a variety of panel thicknesses with just one cutout size specified.

Existing unsealed applications are easily upgraded to sealed functionality because the K series drops into existing panel cutouts.

A choice of models are offered to handle current from 16 amps to logic level electronic switching levels.

Features:

- Withstands direct water spray
- Sealed to IP68S and IP69K
- Fits industry standard panel openings for drop-in replacement of panel sealed & unsealed switches
- Snap-in feature accommodates a wide range of panel cutouts
- Switches up to 16 amps
- UV & solvent resistant
- Withstands extreme shock & vibration
- Legends & illuminated function indicators available
- 2 & 3-position, momentary, maintained action & center OFF
- RoHS compliant



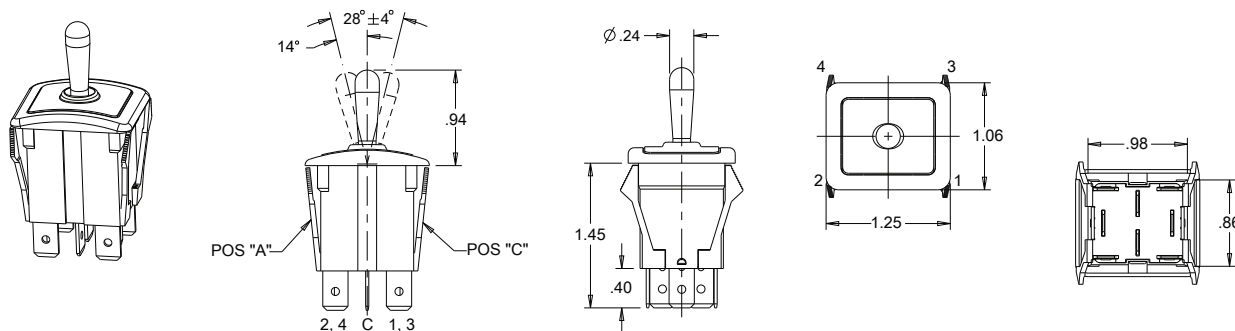
Single & Double Pole

LED, Neon or
Incandescent Illumination

Standard Characteristics/Ratings:			
ELECTRICAL RATINGS:			
Load	Sea Level @ 28VDC	Sea Level @125VAC, 60Hz	Cycles
Resistive	16A	5A	25,000
Resistive	10A	N/A	50,000
Inductive	7A	2A	25,000
DWV	1000Vrms except across light terminals		
Logic Level	10mA @ 5VDC, max D.C. logic level ratings 100,000 (void if logic level load(s) exceeded at any time)		
Electrical Life:	See Rating Chart		
LIGHTING:			
Light Source	Rating		
Incandescent	(VDC) 6V, 12V, 24V		
Neon	(VAC) 125V, 250V		
LED	(VDC) 2V, 6V, 12V, 24V		
Mechanical Life:	100,000 cycles		
Seal:	IP68S and IP69K		
Operating Temp Range:	-30°C to +85°C		
MATERIALS:			
Case:	Thermoplastic		
Toggle:	Stainless steel		
Terminals/Contact:	Brass, silver alloy with silver plate, gold plate for logic level		
Terminal Hardware:	Screws and lockwashers provided when applicable K4 series recommended Quick Connect terminals: AMP 60253-2 for 12-16 AWG AMP 42100-2 for 14-18 AWG		
Mounting Hardware:	None provided		

SEALED, ILLUMINATED SNAP-IN TOGGLE

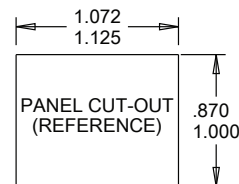
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PANEL THICKNESS AND MOUNTING OPENING GUIDELINES:

PANEL THICKNESS RANGE OF .025 - .105 (GASKET RECOMMENDED)
PANEL THICKNESS RANGE OF .105 - .187 (GASKET NOT REQUIRED)

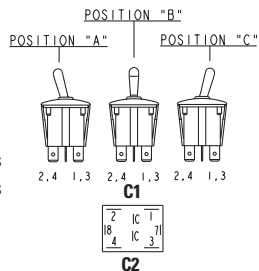
TERMINAL STYLES (.032 THICK)			
SCREW	QUICK CONNECT	SOLDER	P.C. PIN
#6-32 THD Terminal width: .25	Ø.08 Terminal width: .25	Ø.11 Terminal width: .25	.030 SQ. Terminal width: .10 Terminal height: .25



K4 SERIES PART NUMBER CODE

K4	X	X	X	X	X	X	X	X	
Terminal Style/ Switch Rating	Rocker Style	Switch Action/Circuit			Light Type*	Lens Color		Light/Circuit Location	Legend & Orientation
A. Quick Connect/ Standard	A. Bat Handle	A. 1-C1	B. NONE	C. OFF	A. No Light	Position	Position	A. No Light	A. No Legend
B. Screw/Standard		B. 1-C1	C. NONE	2-C1	B. 6V Incandescent	"A"	"B"	B. Dependent Light ON in position "A" Wired to terms 1 & 7	B. ?
C. Solder/Standard		C. (1-C1)	D. NONE	OFF	C. 12V Incandescent	B. Red	A. No Lens	C. Dependent Light ON in position "A" Wired to terms 1 & 7	C. ?
D. Quick Connect/ Logic Level		D. (1-C1)	E. NONE	2-C1	D. 24V Incandescent	C. Green	C. Green	D. Independent Light at position "C" Wired to terms 7 & 8	D. ON
E. Screw/Logic Level		E. (1-C1)	F. OFF	(2-C1)	E. 125VAC Neon	D. Amber	C. Green	E. Independent Light at position "C" Wired to terms 7 & 8	E. OFF
F. Solder/Logic Level		F. 1-C1	G. OFF	2-C1	F. 250VAC Neon	E. Clear	D. Amber	F. Independent Light at position "A" Wired to terms 7 & 8	F. ON
G. P.C. Pin/Standard		G. (1-C1)	H. OFF	2-C1	G. 2V Red LED		E. Clear	G. Independent Light at position "A" Wired to terms 7 & 8	G. ON
H. P.C. Pin/Logic Level		H. 1-C1/3-C2	I. NONE	OFF	H. 2V Green LED			H. Independent Light at position "A" Wired to terms 7 & 8	H. ON
		I. 1-C1/3-C2	J. NONE	2-C1/4-C2	J. 2V Amber LED			I. Independent Light at position "A" Wired to terms 7 & 8	I. ON
		J. 1-C1/3-C2	K. NONE	OFF	K. 6V Red LED			J. Independent Light at position "A" Wired to terms 3 & 7	J. ON
		K. (1-C1)/(3-C2)	L. NONE	OFF	L. 6V Green LED			K. Independent Light at position "C" Wired to terms 7 & 8	K. ON
		L. (1-C1)/(3-C2)	M. NONE	2-C1/4-C2	M. 6V Amber LED			L. Independent Light at position "A" Wired to terms 3 & 7	L. ON
		M. (1-C1)/(3-C2)	N. OFF	(2-C1)/(4-C2)	N. 12V Red LED			M. Independent Light at position "C" Wired to terms 4 & 8 Not available in DP	M. OFF
		N. 1-C1/3-C2	O. OFF	2-C1/4-C2	O. 24V Red LED			N. Independent Light at position "C" Wired to terms 2 & 8	N. OFF
		P. (1-C1)/(3-C2)	P. OFF	2-C1/4-C2	P. 12V Green LED			O. Independent Light at position "A" Wired to terms 2 & 8	O. ON
					Q. 12V Amber LED			P. Independent Light at position "C" Wired to terms 2 & 8	P. ON
					R. 24V Red LED			Q. Independent Light at position "A" Wired to terms 7 & 8	Q. ON
					S. 24V Green LED			R. Independent Light at position "C" Wired to terms 2 & 8	R. ON
					T. 24V Amber LED			S. Independent Light at position "A" Wired to terms 7 & 8	S. ON
								T. Independent Light at position "C" Wired to terms 2 & 8	T. ON

NOTE: () denotes momentary action.



NOTES:

- No momentary switches with dependent lights.
- Neon lamps only to be coded with clear or amber lenses.
- LED lenses must be clear or same color as LED.
- No legends on lamp side of switch.
- No dependents light in OFF positions.
- All legends printed on actuators without lens(es) will be white except actuator codes C, F, J, M & R.
- All legends printed on lenses will be white except on clear lens(es) will be black.

Optional Panel Gasket:

P/N C807038-25-1 0.062" thickness
P/N C807038-25-2 0.031" thickness

K4 connector P/N C801765
(See Connector page in Hardware & Accessories section)

• K4 panel plugs available as shown in Panel Plugs (PP) section.

ORDERING INFORMATION

Example: K4AAKEEABA specifies Q.C. terminals, standard rating; bat handle; DPST two position momentary ON, maintained OFF; 125VAC neon light; clear lens in positions "A", no lens in position "C"; dependent light ON in position "A", wired to terminals 1 & 7; no legend.

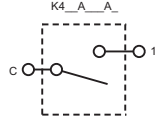
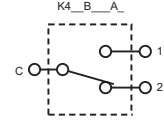
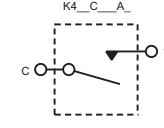
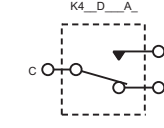
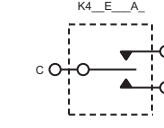
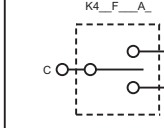
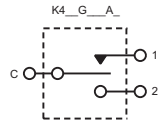
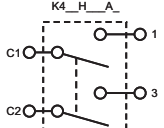
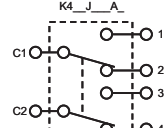
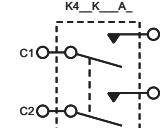
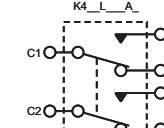
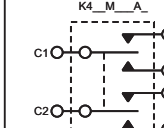
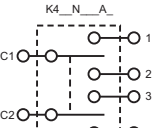
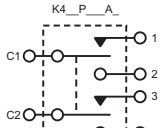
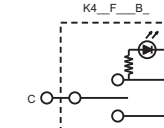
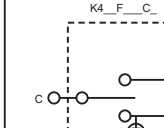
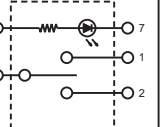
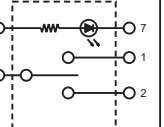
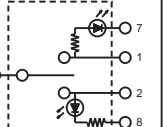
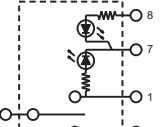
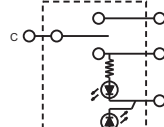
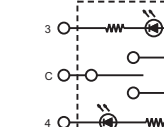
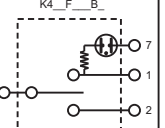
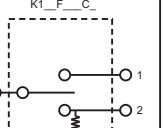
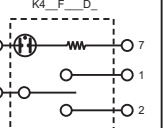
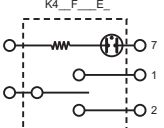
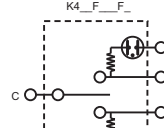
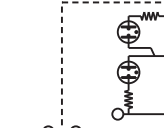
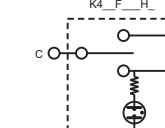
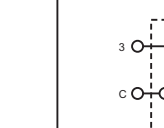
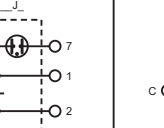
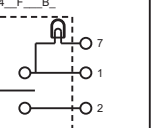
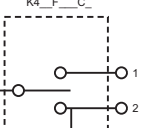
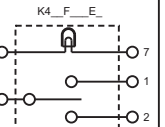
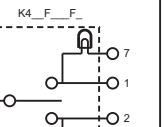
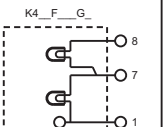
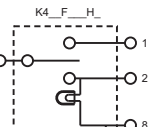
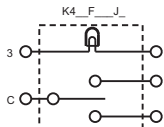
*See Appendix for complete voltage/current ratings table.

NOTE: LED anode (+) terminal number shown in **bold**.

D = Dependent Light
I = Independent Light

① All legends are white. Legend cannot be on the same side as the lens.

K4 SCHEMATICS

 <p>K4_A_A_A_ SPST - ON-NONE-OFF SCHEMATIC</p>	 <p>K4_B_A_A_ SPDT - ON-NONE-ON SCHEMATIC</p>	 <p>K4_C_A_A_ SPST - (ON)-NONE-OFF SCHEMATIC</p>	 <p>K4_D_A_A_ SPDT - (ON)-NONE-ON SCHEMATIC</p>	 <p>K4_E_A_A_ SPDT - (ON)-OFF-(ON) SCHEMATIC</p>	 <p>K4_F_A_A_ SPDT - ON-OFF-ON SCHEMATIC</p>
 <p>K4_G_A_A_ SPDT - (ON)-OFF-ON SCHEMATIC</p>	 <p>K4_H_A_A_ DPST - ON-NONE-OFF SCHEMATIC</p>	 <p>K4_J_A_A_ DPDT - ON-NONE-ON SCHEMATIC</p>	 <p>K4_K_A_A_ DPST - (ON)-NONE-OFF SCHEMATIC</p>	 <p>K4_L_A_A_ DPDT - (ON)-NONE-ON SCHEMATIC</p>	 <p>K4_M_A_A_ DPDT - (ON)-OFF-(ON) SCHEMATIC</p>
 <p>K4_N_A_A_ DPDT - ON-OFF-ON SCHEMATIC</p>	 <p>K4_P_A_A_ DPDT - (ON)-OFF-ON SCHEMATIC</p>	<p>GENERAL SCHEMATIC INFORMATION</p> <ul style="list-style-type: none"> ○ ○ INDICATES MAINTAIN ACTION (FIXED POSITION) ◀ ○ INDICATES MOMENTARY ACTION (AUTOMATIC RETURN POSITION) 		 <p>K4_F_B_ SPDT - ON-OFF-ON SCHEMATIC W/DEP LED IN "A"</p>	 <p>K4_F_C_ SPDT - ON-OFF-ON SCHEMATIC W/DEP LED IN "C"</p>
 <p>K4_F_D_ SPDT - ON-OFF-ON SCHEMATIC W/IND LED IN "A"</p>	 <p>K4_F_E_ SPDT - ON-OFF-ON SCHEMATIC W/IND LED IN "C"</p>	 <p>K4_F_F_ SPDT - ON-OFF-ON SCHEMATIC W/DEP LED IN "A" & "C"</p>	 <p>K4_F_G_ SPDT - ON-OFF-ON SCHEMATIC W/DEP LED IN "A" & IND LED IN "C"</p>	 <p>K4_F_H_ SPDT - ON-OFF-ON SCHEMATIC W/IND LED IN "A" & DEP LED IN "C"</p>	 <p>K4_F_J_ SPDT - ON-OFF-ON SCHEMATIC W/IND LED IN "A" & IND LED IN "C"</p>
 <p>K4_F_B_ SPDT - ON-OFF-ON SCHEMATIC W/DEP NEON BULB IN "A"</p>	 <p>K4_F_C_ SPDT - ON-OFF-ON SCHEMATIC W/DEP NEON BULB IN "C"</p>	 <p>K4_F_D_ SPDT - ON-OFF-ON SCHEMATIC W/IND NEON BULB IN "A"</p>	 <p>K4_F_E_ SPDT - ON-OFF-ON SCHEMATIC W/IND NEON BULB IN "C"</p>	 <p>K4_F_F_ SPDT - ON-OFF-ON SCHEMATIC W/DEP NEON BULB IN "A" & "C"</p>	 <p>K4_F_G_ SPDT - ON-OFF-ON SCHEMATIC W/DEP NEON IN "A" & IND NEON IN "C"</p>
 <p>K4_F_H_ SPDT - ON-OFF-ON SCHEMATIC W/IND NEON IN "A" & DEP NEON IN "C"</p>	 <p>K4_F_J_ SPDT - ON-OFF-ON SCHEMATIC W/IND NEON IN "A" & IND NEON IN "C"</p>	 <p>K4_F_B_ SPDT - ON-OFF-ON SCHEMATIC W/DEP BULB IN "A"</p>	 <p>K4_F_C_ SPDT - ON-OFF-ON SCHEMATIC W/DEP BULB IN "C"</p>	 <p>K4_F_D_ SPDT - ON-OFF-ON SCHEMATIC W/IND BULB IN "A"</p>	
 <p>K4_F_E_ SPDT - ON-OFF-ON SCHEMATIC W/IND BULB IN "C"</p>	 <p>K4_F_F_ SPDT - ON-OFF-ON SCHEMATIC W/DEP BULB IN "A" & "C"</p>	 <p>K4_F_G_ SPDT - ON-OFF-ON SCHEMATIC W/DEP BULB IN "A" & IND BULB IN "C"</p>	 <p>K4_F_H_ SPDT - ON-OFF-ON SCHEMATIC W/IND BULB IN "A" & DEP BULB IN "C"</p>	 <p>K4_F_J_ SPDT - ON-OFF-ON SCHEMATIC W/IND BULB IN "A" & IND BULB IN "C"</p>	<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE AS LISTED. MUST BE FREE FROM BURRS AND SHARP EDGES</p> <p>TOLERANCES .XX ±.03 .XXX ±.010 ANGLES ±2° DO NOT SCALE DRAWING</p>