TRANSDUCER

FULL BRIDGE CIRCUIT TYPE, SHORT TRAVEL

The J2-S4 Series of strain gauge based force transducers provides analog output proportional to the force applied to the button. The J2-S4 bottom mount transducer offers short travel, full bridge circuit, a flat button style, and 1 million cycle life.

The strain gauge transducer compensates for outside influences, like temperature, allowing the transducer to maintain accuracy even in the most demanding environments.

The J2-S4's threaded bushing case offers a secure switch retention method for a wide range of panel thicknesses.

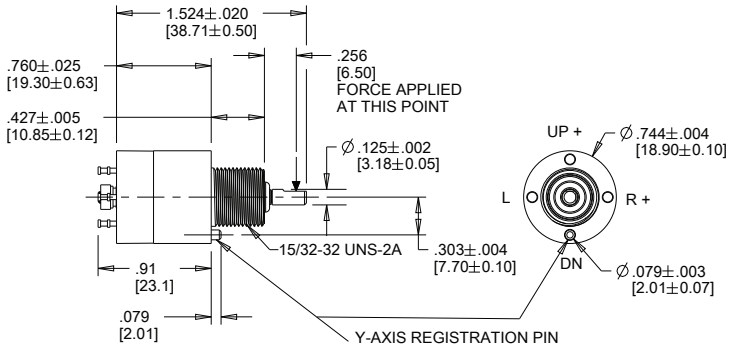
Applications include flight control, operating ground vehicles, and cursor control or target acquisition.

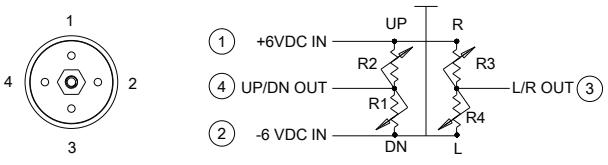
Features:

- **Full bridge circuit type**
- **1 million cycle life**
- **Short travel in each direction**
- **Watertight to IP68S**
- **Shorter behind panel**
- **Multiple button types available**

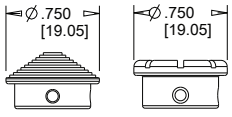
J2-S4 Transducer

Standard Characteristics/Ratings:	
ELECTRICAL RATINGS (+/- 6 VDC):	
Sensitivity	.50 Volts per lb. typical
Insulation Resistance:	100MΩ min @ 50VDC
Null Temp Coefficient:	+/- .08% full scale per degree C max
Null Hysteresis:	+/- .006 VDC within 1 second after release
Sensitivity Temp Coefficient:	+/- .2% full scale per degree C
Null Output:	0VDC +/- .100VDC
Resolution:	Infinite
Element Resistance:	1000Ω +/- 15%
Seal:	IP68S Watertight
Operating Force:	3.0 lbs. typical
Operating Temp Range:	-54°C to +71°C
Storage Temp Range:	-57°C to +85°C
Travel:	.05" max travel each direction
Cycle Life:	1,000,000 cycles; 1 cycle = max travel & return
MATERIALS:	
Button:	Anodized aluminum or plastic
Case:	Black anodized aluminum
Hardware:	Lockwasher, hex nut and button set screws

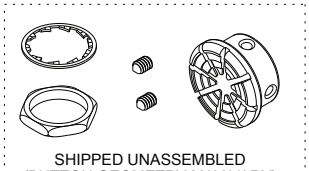




A. FULL BRIDGE



A. CONICAL HAT B. FLAT BUTTON



SHIPPED UNASSEMBLED
(BUTTON GEOMETRY MAY VARY)

J2-S4 PART NUMBER CODE

J2-S4 X XX X XXX

Circuit Type	Electrical I/O (See Table)	Termination	Button Style and Color
A. Full Bridge	**B6.**	**2.** Terminals	**AP2.** Conical Hat, Black Thermoplastic **BBA.** Flat Button, Black Anodized Aluminum **BCA.** Flat Button, Clear Anodized Aluminum

EXCITATION VOLTAGE					
CIRCUIT CONFIGURATION	EXCITATION VOLTAGE (UNITS VDC)	SENSITIVITY UNTIL STOP (UNITS VDC/LB. ±20%)	MAX OUTPUT AT STOP (UNITS VDC)	NULL OUTPUT AT 25°C BIPOLAR (UNITS VDC)	FULL SCALE TRAVEL CYCLES EACH DIRECTION (UNITS x10^6)
B6	±6.0	±0.50	±1.80	±0.10	1.0