

J2-S5 Transducer

Strain Gauge, Flange Mount, Short Travel with Pushbutton



The J2-S5 Series of strain gauge based force transducers provide an analog output proportional to the force applied to the button. The J2-S5 also offers a built-in pushbutton short travel, full bridge circuit and an up to 1 million cycle life.

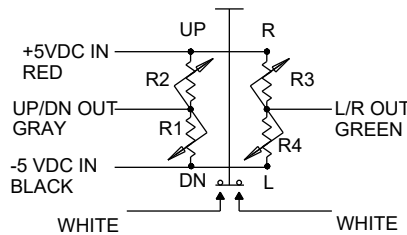
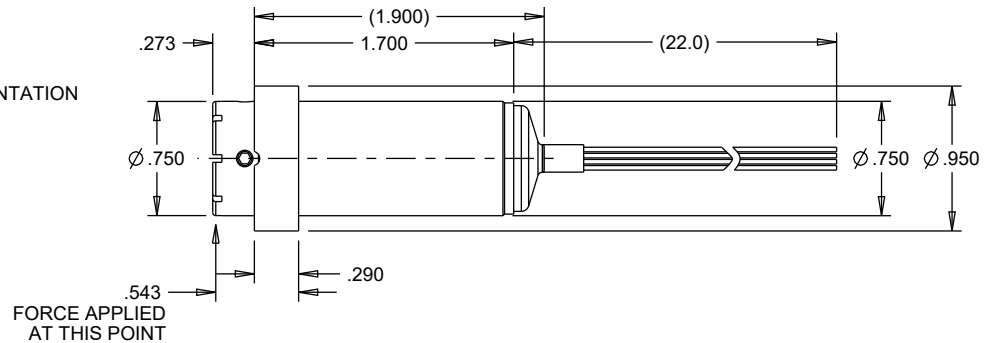
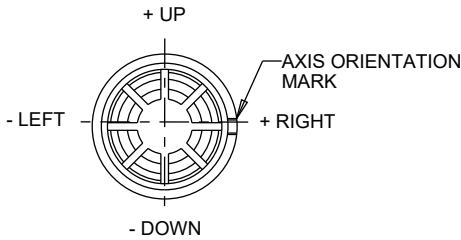
This transducer compensates for outside influences, such as temperature, to maintaining accuracy even in the most demanding environments.

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

Product Features

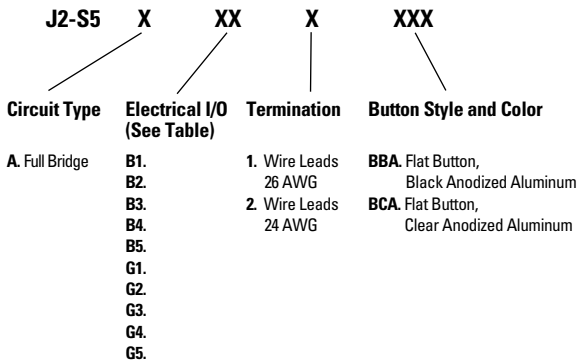
- Flat button types with built in pushbutton
- Full bridge circuit type
- Up to 1 million cycle life
- Short travel in each direction
- 24 or 26 AWG wire leads
- Watertight to IP68S
- Infinite Resolution

J2-S5



FULL BRIDGE

J2-S5 PART NUMBER CODE



EXCITATION VOLTAGE TABLE FOR J2-S5

Circuit Configuration	Excitation Voltage (Units VDC)	Sensitivity Until Stop (Units VDC/lb. +/- 20%)	Null Output at 25°C Bipolar (Units VDC)	Null Output at 25°C Supply to Ground (Units VDC)	Full Scale Travel Cycles (Units x 10 ⁶)
B1	+/- 7.5	+/- 0.45	+/- 0.10		0.3
G1	+ 15.0	+/- 0.45		7.5 +/- 0.10	0.3
B2	+/- 6.0	+/- 0.45	+/- 0.10		0.2
G2	+ 12.0	+/- 0.45		6.0 +/- 0.10	0.2
B3	+/- 6.0	+/- 0.33	+/- 0.06		1.0
G3	+ 12.0	+/- 0.33		6.0 +/- 0.06	1.0
B4	+/- 5.0	+/- 0.33	+/- 0.05		1.0
G4	+ 10.0	+/- 0.33		5.0 +/- 0.05	1.0
B5	+/- 5.0	+/- 0.25	+/- 0.05		1.0
G5	+ 10.0	+/- 0.25		5.0 +/- 0.05	1.0

Standard Characteristics/Ratings:

ELECTRICAL:	Min	Typ	Max
	Insulation Resistance:	100MΩ min @ 50VDC	
Null Temp Coefficient:	+/- .5% of full scale within 1 second after release		
Null Hysteresis:	+/- .006 VDC within 1 second after release		
Sensitivity Temp Coefficient:	+/- .2% full scale per degree C		
Resolution:	Infinite		
MECHANICAL:			
Travel (in.):		.05 MAX	
Operating Force (lbs.):		3.0	3.1
Pushbutton Operating Point (in.):		.08 MAX	
Pushbutton Actuation Force (lbs.):	2.75	3.5	4.25
ENVIRONMENTAL:			
Operating Temperature (°C):	-40°		+71°
Storage Temperature (°C):	-55°		+85°
Enclosure Dust Tight:	IAW MIL-PRF-8805, Symbol 2		
Test:	MIL-S-81619 and MIL-STD-810		
MATERIAL:			
Switch Case:	Black anodized aluminum		
Wires:	NEMA HP3, Type E (22")		