

STRAIN GAUGE, FLANGE MOUNT, SHORT TRAVEL WITH PUSHBUTTON

The J2-S5 Series of strain gauge based force transducers provides 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 maintain accuracy even in the most demanding environments.

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



Features:

- Flat button 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
- Infinite resolution

J2-S5 PART NUMBER CODE

J2-S5	X	XX	X	XXX
Circuit Type	Electrical I/O (See Table)	Termination	Button Style and Color	
A. Full Bridge	B1. B2. B3. B4. B5. G1. G2. G3. G4. G5.	1. Wire Leads 26 AWG 2. Wire Leads 24 AWG	BBA. Flat Button, Black Anodized Aluminum BCA. Flat Button, Clear Anodized Aluminum	

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		
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")		

