

TRANSDUCER

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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 •

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- 24 or 26 AWG wire leads •
- Watertight to IP68S •
- Infinite resolution •

J2-S5 PART NUMBER CODE .I2-S5 ххх XX

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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.	 Wire Leads 26 AWG Wire Leads 24 AWG 	BBA. Flat Button, Black Anodized Aluminum BCA. Flat Button, Clear Anodized Aluminum

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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		



DERS

Indicate. Control. Connect.

Standard Characteristics/Ratings:

ELECTRICAL:					
	Min	Тур	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 (Ibs.):	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 HP	3, Type E (22")			

