

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.	1. Wire Leads 26 AWG	BBA.	Flat Button, Black Anodized Aluminum
	B2.	2. Wire Leads 24 AWG	BCA.	Flat Button, Clear Anodized Aluminum
	B3.			
	B4.			
	B5.			
	G1.			
	G2.			
	G3.			
	G4.			
	G5.			

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:		
Insulation Resistance:	Min	Typ
	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
ENVIRONMENTAL:		
Operating Temperature (°C):	-40°	
Storage Temperature (°C):	+71°	
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 ²)	

