

STRAIN GAUGE BASED FORCE TRANSDUCER

FULL BRIDGE CIRCUIT TYPE, SHORT TRAVEL

The J3 series of strain gauge based force transducers provides analog output proportional to the force applied to the button. The J3-100002 bottom mount transducer offers short travel, full bridge circuit, a concave button style, and 1 million cycle life.

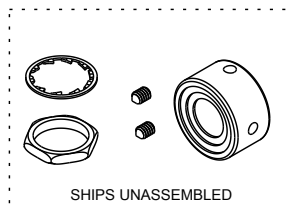
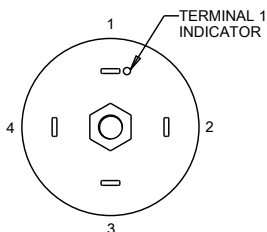
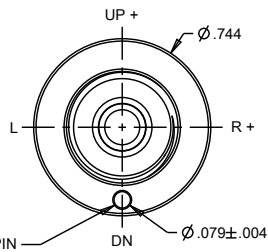
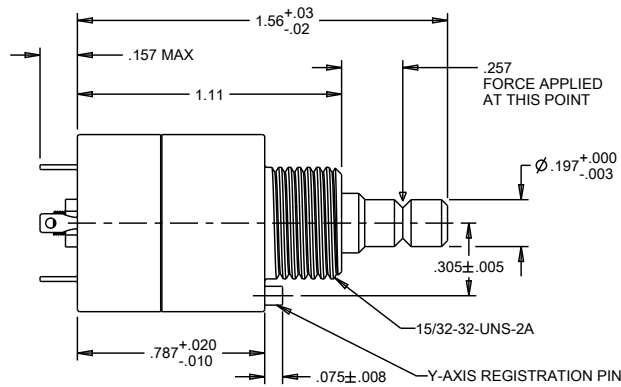
The strain gauge transducer compensates for outside influences, like temperature, allowing the transducer to maintain accuracy even in the most demanding environments.

The J3'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 IP67 and dusttight to MIL-PRF-8805 Design 2
- Shorter behind panel
- Multiple button types available



J3-100002
Transducer

Standard Characteristics/Ratings:

ELECTRICAL RATINGS (+/- 6 VDC):

| | |
|--------------------------------------|--|
| Sensitivity | .50 Volts per lb. typical |
| Insulation Resistance: | 100MΩ min @ 50VDC |
| Null Temp Coefficient: | +/- .02% 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 typical |
| Resolution: | Infinite |
| Element Resistance: | 410Ω +/- 10% |
| Seal: | IP67 and MIL-PRF-8805 Design 2 |
| 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 |

MATERIALS:

| | |
|------------------|---|
| Button: | Black anodized aluminum |
| Case: | Brass and black anodized aluminum |
| Hardware: | Lockwasher, hex nut and button set screws |

