# **Donut Shaped Load Cell**

**Model TH** 

THRU-HOLE DESIGN

15,000-200,000 LBS.

**LINEARITY TO 0.25%** 



Model TH (Compression Only)

Model TH Donut Shaped Load Cell features a smooth thru-hole design for use in applications which require the load structure to pass through the cell. Such applications include bolt force measurement, post or leg mount, and rolling mill systems. Load ranges as low as 15,000 pounds and as great as 200,000 pounds can be measured within a maximum full scale non-linearity of ±0.25% F.S. This model is used in compression applications. For optimum performance, this load cell must be mounted between load surfaces which are flat and parallel. The Model TH Donut Shaped Load Cell is designed to provide the customer with an internal hole diameter which is large relative to the outside diameter. The Model TH is a small size, high capacity load cell.

#### Model TH (Compression Only) Order Code BL911

PERFORMANCE

| Load Ranges             | 15,000 to 200,000 lbs |
|-------------------------|-----------------------|
| Non-linearity (max)     | ±0.25% F.S.           |
| Hysteresis (max)        | ±0.25% F.S.           |
| Non-repeatability (max) | ±0.1% F.S.            |
| Output                  | 2mV/V                 |
| Resolution              | Infinite              |
|                         |                       |

**ENVIRONMENTAL** 

| Temperature, Operating Temperature, Compensated | -65° F to 250° F<br>60° F to 160° F |
|---|-------------------------------------|
| Temperature Effect                              |                                     |
| - Zero (max)                                    | .005% F.S./° F                      |
| - Span (max)                                    | .005% Rdg./° F                      |

**ELECTRICAL** 

| Strain Gage Type             | Bonded Foil         |
|------------------------------|---------------------|
| Excitation (calibration)     | 10VDC NOM           |
| Bridge Resistance            | 350 ohms            |
| Wiring Code (std)            | #1 (See Pg. AP-8)   |
| Electrical Termination (std) | Teflon cable (5ft.) |
| ` '                          | . ,                 |

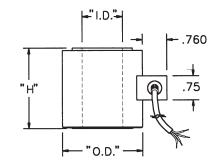
**MECHANICAL** 

| Static Overload Capacity<br>Casing Material<br>Deflection—Full Scale | 50% over capacity<br>Stainless steel<br>.0025" |
|--|--|
| Schoolor Tali Scale  | .0023  |
|  |  |

## **Dimensions**

### Model TH (Order Code BL911)

| (0 0)                |      |      |       |  |
|----------------------|------|------|-------|--|
| Available Ranges     | 0.D" | H"   | I.D." |  |
| 15,000; 20,000 lbs.  | 1.50 | 1.50 | .76   |  |
| 30,000; 50,000 lbs.  | 2.00 | 2.00 | 1.01  |  |
| 75,000; 100,000 lbs. | 2.50 | 2.50 | 1.26  |  |
| 150,000 lbs.         | 3.00 | 3.00 | 1.51  |  |
| 200,000 lbs.         | 3.50 | 3.50 | 1.76  |  |
|                      |      |      |       |  |



# **Options (See Appendix)**

Temperature compensated 1b, 1c, 1f; Electrical termination 6j; Special calibration 9a, 9b

Premium Options: 1g, 1h; 12b