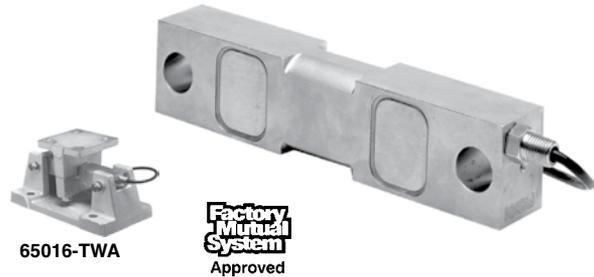


## Double-Ended Shear Beam Load Cell

### FEATURES

- Rated capacities of 1000 to 100,000 pounds
- Insensitive to side loads and bending moments
- High output—well suited to high deadload/low liveload applications
- Load cells have matched outputs for multi-cell systems
- Excellent combined error and repeatability
- Integral conduit adaptor
- *Sensorgage™* sealed to IP67 standards
- Factory Mutual System Approved for Classes I, II, III; Divisions 1 and 2; Groups A through G. Also, non-incendive ratings (No barriers!);
- **Optional**
  - Weighing assemblies available—65016 TWA



### DESCRIPTION

The double-ended mounting provides good restraint to possible movement of the tanks and, in many cases, eliminates the need for check rods. The double Shear Beam design gives excellent performance for high capacity loading.

The output is rationalized to facilitate multiple-cell application.

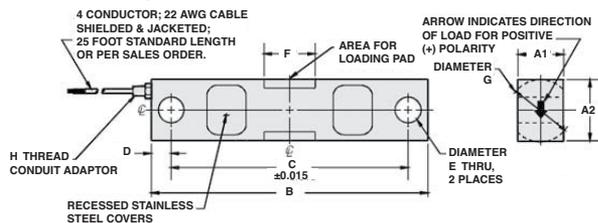
This load cell is constructed of alloy tool steel and is potted to IP67 providing excellent protection against moisture and humidity.

### APPLICATIONS

- Tank, bin, and silo weighing
- Batching, blending and mixing systems
- Level and inventory monitoring

### OUTLINE DIMENSIONS in millimeters

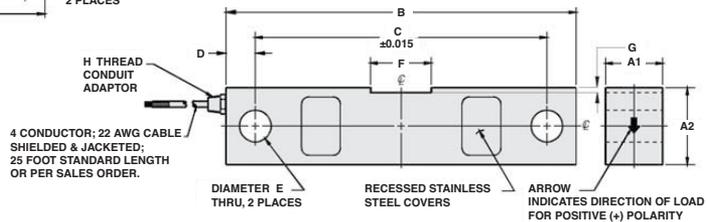
#### 1000 to 50,000 lb capacities



#### Wiring

|              |       |
|--------------|-------|
| + Excitation | Red   |
| - Excitation | Black |
| + Output     | Green |
| - Output     | White |

#### 75,000 to 100,000 lb capacities



| CAPACITY | A1   | A2   | B     | C     | D    | E    | F    | G    | H         |
|----------|------|------|-------|-------|------|------|------|------|-----------|
| 1k-5k    | 1.25 | 1.25 | 7.50  | 6.25  | 0.62 | 0.50 | 1.22 | 1.25 | 1/4-18NPT |
| 10k-25k  | 1.44 | 1.94 | 8.75  | 7.50  | 0.62 | 0.81 | 1.62 | 1.99 | 1/4-18NPT |
| 35k      | 1.50 | 2.50 | 8.75  | 7.50  | 0.62 | 0.81 | 1.62 | 2.50 | 1/4-18NPT |
| 50k      | 2.44 | 2.94 | 13.50 | 11.50 | 1.00 | 1.31 | 3.25 | 2.99 | 1/2-14NPT |
| 75k      | 2.44 | 2.94 | 13.50 | 11.50 | 1.00 | 1.31 | 3.12 | 0.18 | 1/2-14NPT |
| 100k     | 2.94 | 3.94 | 18.50 | 15.00 | 1.75 | 1.63 | 3.25 | 0.25 | 1/2-14NPT |

### Double-Ended Shear Beam Load Cell

| <b>SPECIFICATIONS</b>                        |  |                |
|--|--|----------------|
| <b>PARAMETER</b>                             | <b>VALUE</b>   | <b>UNIT</b>    |
| <b>Rated capacity—R.C. (E<sub>max</sub>)</b> | 1k, 1.5k, 2.5k, 5k, 10k, 15k, 25k, 35k, 50k, 75k, 100k | lbs            |
| <b>NTEP/OIML accuracy class</b>              | Standard   |                |
| <b>Maximum no. of intervals (n)</b>          | —  |                |
| <b>Rated output—R.O.</b>                     | 3.0  | mV/V           |
| <b>Rated output tolerance</b>                | 0.25   | ±% mV/V        |
| <b>Zero balance</b>                          | 1.0  | ±% FSO         |
| <b>Combined error</b>                        | 0.03   | ±% FSO         |
| <b>Non-repeatability</b>                     | 0.01   | ±% FSO         |
| <b>Creep error (20 minutes)</b>              | 0.03   | ±% FSO         |
| <b>Temperature effect on zero</b>            | 0.0015   | ±% FSO/°F      |
| <b>Temperature effect on output</b>          | 0.0008   | ±% of load/°F  |
| <b>Compensated temperature range</b>         | 14 to 104 (–10 to 40)                                  | °F (°C)        |
| <b>Operating temperature range</b>           | 0 to 150 (–18 to 65)                                   | °F (°C)        |
| <b>Storage temperature range</b>             | –60 to 185 (–50 to 85)                                 | °F (°C)        |
| <b>Sideload rejection ratio</b>              | 500:1  |                |
| <b>Safe sideload</b>                         | 100  | % of R.C.      |
| <b>Maximum safe central overload</b>         | 150  | % of R.C.      |
| <b>Ultimate central overload</b>             | 300  | % of R.C.      |
| <b>Excitation, recommended</b>               | 15   | VDC or VAC RMS |
| <b>Excitation, maximum</b>                   | 25   | VDC or VAC RMS |
| <b>Input impedance</b>                       | 700±14   | Ω              |
| <b>Output impedance</b>                      | 703±4  | Ω              |
| <b>Insulation resistance at 50 VDC</b>       | >1000  | MΩ             |
| <b>Material</b>                              | Nickel-plated alloy tool steel                         |                |
| <b>Environmental protection</b>              | IP67   |                |

#### Notes

FSO—Full Scale Output

All Specifications subject to change without notice.

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