

## Double-Ended Beam Load Cell

### FEATURES

- Capacities: 10k to 125k lbs
- Environmental protection: IP67 (DIN 40.050)
- Material: Stainless steel
- Certified by NTEP class III, 10000 divisions
- **Optional**
  - FM approved for use in potentially explosive atmospheres



### APPLICATIONS

- Silos, tanks and hoppers
- Weighbridges

### DESCRIPTION

The Model 9303 is a link-loaded stainless steel double-ended shear beam type load cell, specifically designed for truck scales, track scales and high capacity weighing applications.

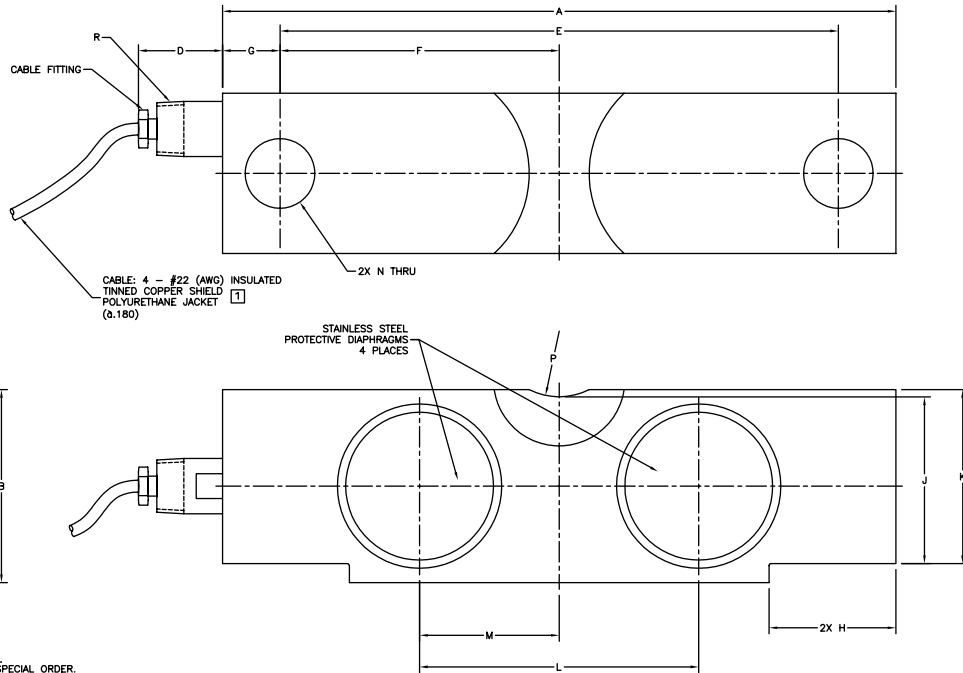
A reliable sealing and mechanical protection of the strain gage area is ensured by the use of a potting compound with a metal cover.

This load cell is rated intrinsically safe by FM approvals, making it suitable for use in potentially explosive atmospheres.

### OUTLINE DIMENSIONS in inches

#### Wiring

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



| CAPACITY      | A     | B    | C    | D    | E     | F    | G    | H    | J    | K    | L    | M    | N     | P     | Q     | R           |
|---------------|-------|------|------|------|-------|------|------|------|------|------|------|------|-------|-------|-------|-------------|
| 10k, 15k, 20k | 7.75  | 1.94 | 1.69 | 1.28 | 6.50  | 3.25 | 0.63 | 1.38 | 1.63 | 1.70 | 3.00 | 1.50 | ∅0.68 | R0.75 | R0.90 | 1/4"-18 NPT |
| 30k, 40k      | 10.25 | 2.44 | 1.94 |      | 8.50  | 4.25 | 0.88 | 1.93 | 2.00 | 2.10 | 4.25 | 2.13 | ∅0.81 | R1.00 | R1.12 | 1/4"-18 NPT |
| 50k, 60k, 75k | 10.25 | 2.94 | 2.44 |      | 8.50  | 4.25 | 0.88 | 1.93 | 2.54 | 2.65 | 4.25 | 2.13 | ∅1.06 | R1.00 | R1.37 | 1/2"-14 NPT |
| 100k, 125k    | 15.25 | 3.86 | 2.90 |      | 12.75 | 6.38 | 1.25 | 3.13 | 3.30 | 3.43 | 6.38 | 3.19 | ∅1.62 | R1.50 | R1.80 | 1/2"-14 NPT |

Capacities are in pounds.

## Double-Ended Beam Load Cell

| SPECIFICATIONS                                     |   |              |                  |
|--|---|--------------|------------------|
| PARAMETER  | VALUE   |              | UNIT             |
| Standard capacities ( $E_{max}$ )                  | 10k, 15k, 20k, 30k, 40k, 50k, 60k, 75k, 100k, 125k <sup>(1)</sup> |              | lbs              |
| Accuracy class according to NTEP                   | NTEP III L  | Non-Approved |                  |
| Maximum no. of verification intervals ( $n_{IC}$ ) | 10000 Multiple  |              |                  |
| Rated output (=S)                                  | 3   |              | mV/V             |
| Rated output tolerance                             | 0.003   |              | ±mV/V            |
| Zero balance                                       | 1.0   |              | ±% FSO           |
| Combined error                                     | 0.0200  | 0.0300       | ±% FSO           |
| Temperature effect on zero                         | 0.0090  | 0.0135       | ±% FSO/5°C (°F)  |
| Temperature effect on output                       | 0.0072  | 0.0072       | ±% load/5°C (°F) |
| Compensated temperature range                      | -10 to +40 (+14 to 104)   |              | °C (°F)          |
| Operating temperature range                        | -53° to +93° (-65° to +200°)                                      |              | °C (°F)          |
| Safe load limit                                    | 150   |              | % $E_{max}$      |
| Ultimate load                                      | 300   |              | % $E_{max}$      |
| Safe side load limit                               | 100   |              | % $E_{max}$      |
| Excitation voltage recommended                     | 10  |              | VDC              |
| Excitation voltage maximum                         | 15  |              | VDC              |
| Input resistance                                   | 700±7   |              | Ω                |
| Output resistance                                  | 700±7   |              | Ω                |
| Insulation resistance                              | ≥1000   |              | MΩ               |
| Environmental protection                           | IP67  |              |                  |
| Element material                                   | Stainless steel   |              |                  |

<sup>(1)</sup> 10k is not approved by NTEP

FSO—Full Scale Output

**Mounting:**

Correct mounting of the load cells is essential to ensure optimum accuracy and performance. Further information is available upon request. No mounts available for 9303.

All specifications subject to change without notice.



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