

Double-Ended Shear Beam Load Cell

FEATURES

- Rated capacities of 5,000 to 100,000 pounds, 2.3 to 45 metric tons
- High quality alloy tool steel construction
- Nickel plated for outstanding corrosion resistance
- Replacement for RTI model 5103 (EZM1)
- 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!)



This product is designed for use in industrial and outdoor environments. Nickel plated steel construction limits corrosion from outdoor use. The IP67 sealing makes it suitable for applications that are subject to high-pressure wash down. Tank weighing is made simple when this load cell is combined with the EZ mount mounting hardware it was designed for. Its high accuracy and availability in high capacities make it ideal for certified truck and rail scales.

APPLICATIONS

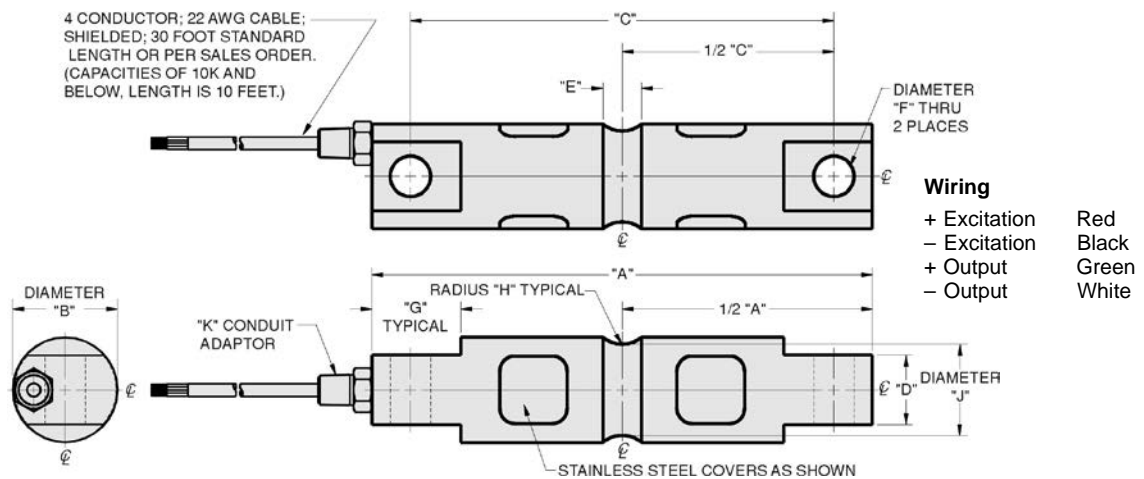
- Tank, bin, and silo weighing
- Railroad track scales
- Truck scales

DESCRIPTION

The 60058 is a mid to high capacity nickel-plated alloy steel, double-ended shear beam load cell.

This load cell is rated intrinsically safe by the Factory Mutual System (FM); making it suitable for use in potentially explosive environments. This load cell is certified for Legal For Trade applications by the American NTEP standards.

OUTLINE DIMENSIONS in inches [millimeters]



| CAPACITY | A | B | C | D | E | F | G | H | J | K-THREAD |
|------------|---------|--------|---------|--------|--------|--------|--------|--------|--------|------------|
| 5k-20k | 8.12 | 1.70 | 6.88 | 1.13 | 0.63 | 0.65 | 1.44 | 0.50 | 1.48 | 1/4-18 NPT |
| 30k-60k | 10.25 | 2.97 | 8.50 | 2.38 | 0.95 | 1.06 | 1.94 | 1.00 | 2.73 | 1/2-14 NPT |
| 100k | 11.25 | 3.50 | 9.50 | 2.50 | 1.25 | 1.06 | 1.88 | 1.50 | 3.24 | 1/2-14 NPT |
| [2.3-9T] | [206.2] | [43.2] | [174.8] | [28.7] | [16.0] | [16.5] | [36.6] | [12.7] | [37.6] | 1/4-18 NPT |
| [13.6-27T] | [260.4] | [75.4] | [215.9] | [60.5] | [24.1] | [26.9] | [49.3] | [25.4] | [69.3] | 1/2-14 NPT |
| [45T] | [285.8] | [88.9] | [241.3] | [63.5] | [31.8] | [26.9] | [47.8] | [38.1] | [82.3] | 1/2-14 NPT |

Capacities are in pounds [kg/T].

Double-Ended Shear Beam Load Cell

| SPECIFICATIONS | | | | |
|-----------------------------------|---|----------------|----------|-------------------|
| PARAMETER | VALUE | | | UNIT |
| Rated capacity—R.C. (E_{max}) | 5k, 10k, 20k, 30k, 40k, 50k, 60k, 100k 2.3, 4.5, 9.0, 13.6, 18.0, 23.0, 27.0, 45.0 | | | lbs tons |
| NTEP/OIML accuracy class | NTEP III | NTEP III L | Standard | |
| Maximum no. of intervals (n) | 5000 multiple | 10000 multiple | | |
| $Y = E_{max}/V_{min}$ | See NTEP cert. 97-042A1 | | | Maximum available |
| Rated output—R.O. | 3.0 | | | mV/V |
| Rated output tolerance | 0.25 | | | ±% mV/V |
| Zero balance | 1.0 | | | ±% FSO |
| Combined error | 0.02 | 0.02 | 0.03 | ±% FSO |
| Non-repeatability | 0.01 | 0.01 | 0.01 | ±% FSO |
| Creep error (20 minutes) | 0.030 | 0.030 | 0.03 | ±% FSO |
| Temperature effect on zero | 0.0015 | 0.0010 | 0.0015 | ±% FSO/°F |
| Temperature effect on output | 0.0008 | 0.0008 | 0.0008 | ±% of load/°F |
| Compensated temperature range | 14 to 104 (–10 to 40) | | | °F (°C) |
| Operating temperature range | 0 to 150 (–18 to 65) | | | °F (°C) |
| Storage temperature range | –60 to 185 (–50 to 85) | | | °F (°C) |
| Safe sideload | 100 | | | % of R.C. |
| Maximum safe central overload | 150 | | | % of R.C. |
| Ultimate central overload | 300 | | | % of R.C. |
| Excitation, recommended | 10 | | | VDC or VAC RMS |
| Excitation, maximum | 15 | | | VDC or VAC RMS |
| Input impedance | 686–714 | | | Ω |
| Output impedance | 699–707 | | | Ω |
| Insulation resistance at 50 VDC | >1000 | | | MΩ |
| Material | Nickel-plated alloy tool steel | | | |
| Environmental protection | IP67 | | | |

FSO—Full Scale Output

R.C.—Rated Capacity

All specifications subject to change without notice.

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