

S-Beam Load Cell



FEATURES

- Rated capacities of 25 to 20,000 pounds
50 kilograms to 10 metric tons
- Designed for single or multiple load cell applications
- Constructed of high quality alloy tool steel
- Nickel plated for outstanding corrosion resistance
- *Sensorgage*TM sealed to IP67 standards
- Trade certified for NTEP Class III: 5000d, IIIIL: 10000d and OIML R-60 3000d available
- Factory Mutual System Approved for Classes I, II, III; Divisions 1 and 2; Groups A through G. Also, non-incendive ratings (No barriers!).

OPTIONAL FEATURE

- Stainless steel version is Model 60050

DESCRIPTION

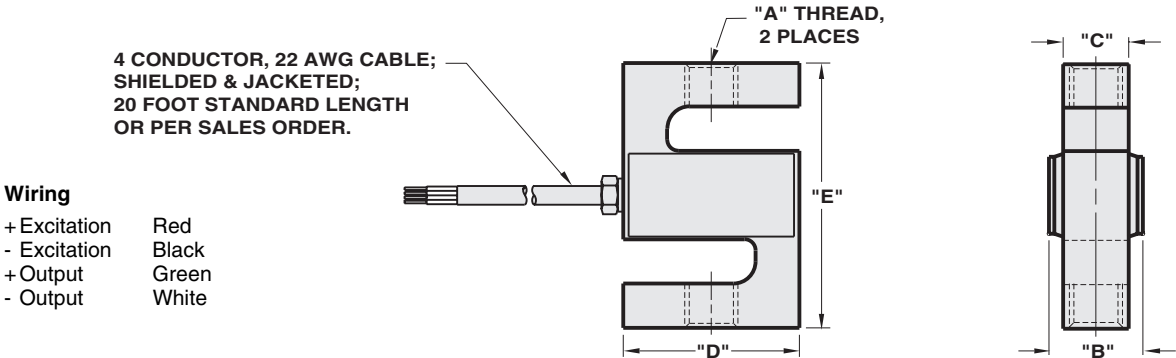
Model 60001 is a tension-compression load cell with a humidity-resistant coating and shielded cables, which enable use in harsh environments while maintaining operating specifications. Additional sense wires compensate for changes in lead resistance due to temperature change and/or cable extension.

Ideally suited for lever conversions, hanging scales, force measurement and a wide range of other industrial applications. Nickel-plated for outstanding corrosion resistance.

APPLICATIONS

- Tank, bin and hopper weighing
- Level and inventory monitoring
- Truck scale conversions
- Tension and compression measurements

OUTLINE DIMENSIONS in inches [mm]



| CAPACITY | A | B | C | D | E | DEFLECTION | WEIGHT |
|--------------|------------------|--------|--------|---------|---------|----------------|--------|
| 25 - 200 | 1/4-28 UNF-2B | 0.65 | 0.50 | 2.00 | 2.50 | 0.015 - 0.010 | 4.0 |
| 250 - 300 | 3/8-24 UNF-2B | 0.75 | 0.50 | 2.00 | 3.00 | 0.010 | 4.0 |
| 500 - 2K | 1/2-20 UNF-2B | 1.00 | 0.75 | 2.00 | 3.00 | 0.010 - 0.012 | 6.5 |
| 2.5K - 4K | 1/2-20 UNF-2B | 1.25 | 1.00 | 2.00 | 3.00 | 0.012 | 6.5 |
| 5K | 3/4-16 UNF-2B | 1.25 | 1.00 | 3.00 | 4.25 | 0.017 | 6.5 |
| 10K | 3/4-16 UNF-2B | 1.25 | 1.00 | 3.50 | 4.75 | 0.025 | 6.5 |
| 15K | 1-14 UNF-2-B | 1.50 | 1.25 | 4.00 | 5.50 | 0.025 | 9.0 |
| 20K | 1-1/4-12 UNF-2-B | 2.25 | 2.00 | 5.00 | 7.00 | 0.025 | 9.0 |
| [50 - 100kg] | M8.0 x 1.25-6H | [16.5] | [12.7] | [50.8] | [63.5] | [0.03 - 0.004] | [0.8] |
| [250kg - 1t] | M12 x 1.75-6H | [25.4] | [19.1] | [50.8] | [76.0] | [0.004] | [1.8] |
| [2.5t] | M20 x 1.5-6H | [31.8] | [25.4] | [76.2] | [108.0] | [0.008] | [2.9] |
| [5t] | M20 x 1.5-6H | [31.8] | [25.4] | [88.9] | [120.7] | [0.011] | [2.9] |
| [10t] | M30 x 2.0-6H | [57.2] | [50.8] | [127.0] | [177.8] | [0.011] | [4.0] |

Capacities are in pounds [kg/t]. Deflection is ±10%. Certified drawings are available.



SPECIFICATIONS

| PARAMETER | VALUE | | | | UNIT |
|-----------------------------------|--|--------------|----------|----------|-------------------|
| Rated capacity-R.C. (E_{max}) | 25, 50, 75, 100, 150, 200, 250, 300, 500, 750, 1K, 1.5K, 2K, 2.5K, 3K, 5K, 10K, 15K, 20K | | | | lbs |
| | 50kg, 100kg, 250kg, 500kg, 1t, 2.5t, 5t, 10t* | | | | kg/metric tons |
| NTEP/OIML Accuracy class | NTEP III | NTEP IIIIL | Standard | OIML R60 | |
| Maximum no. of intervals (n) | 5000 single | 10000 single | | 3000* | |
| $Y = E_{max}/V_{min}$ | NTEP Cert. No 86-043A1 | | | 6667 | Maximum available |
| Rated output-R.O. lbs | 3.0 | | | | mV/V |
| Rated output tolerance lbs | 25 - 3K: +25 / -10 5K - 20K: ±0.25 | | | | % |
| Rated output-R.O. kg | 3.0 | | | | mV/V |
| Rated output tolerance kg | 50kg -1t: +25 / -10 2.5t - 3t: ±0.25 | | | | % |
| Zero balance | 1.0 | | | | ±% FSO |
| Combined error | 0.02 | 0.02 | 0.03 | 0.02 | ±% FSO |
| Non-repeatability | 0.01 | | | | ±% FSO |
| Creep error (30 minutes) | 0.03 | 0.025 | 0.03 | 0.017 | ±% FSO |
| Temperature effect on zero | 0.0010 | 0.0010 | 0.0015 | 0.0010 | ±% FSO/°F |
| Temperature effect on output | 0.0008 | 0.0008 | 0.0008 | 0.0007 | ±% 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 | 30 | | | | % 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 | 343 - 450 | | | | Ω |
| Output impedance | 349 - 355 | | | | Ω |
| Insulation resistance at 50VDC | >1000 | | | | MΩ |
| Material | Nickel plated alloy tool steel** | | | | |
| Environmental protection | IP67 | | | | |

Note: * OIML approval 100-5Klbs & 50-2500kg only
 NTEP approval from 25-20Klbs only
 ** Stainless steel available - model number 60050
 FSO - Full Scale Output

All specifications subject to change without notice.

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