

Cylindrical Double-Ended Shear Beam

FEATURES

- Capacities 5k–150k lbs
- Center-loaded double-ended shear beam design
- Free of horizontal movement
- Insensitive to side load
- Electroless nickel-plated alloy tool steel
- NTEP Class III L 10000 approval from 20k lbs to 150k lbs
- **Optional**
 - FM approval available
 - EDOC option available; product appearance will differ from the photograph due to coating



APPLICATIONS

- Truck/rail scales
- Silo/hopper/tank weighing
- Fork-lift scales

DESCRIPTION

The Model CSB is constructed of alloy steel and is fully potted with special chemical compounds to IP67,

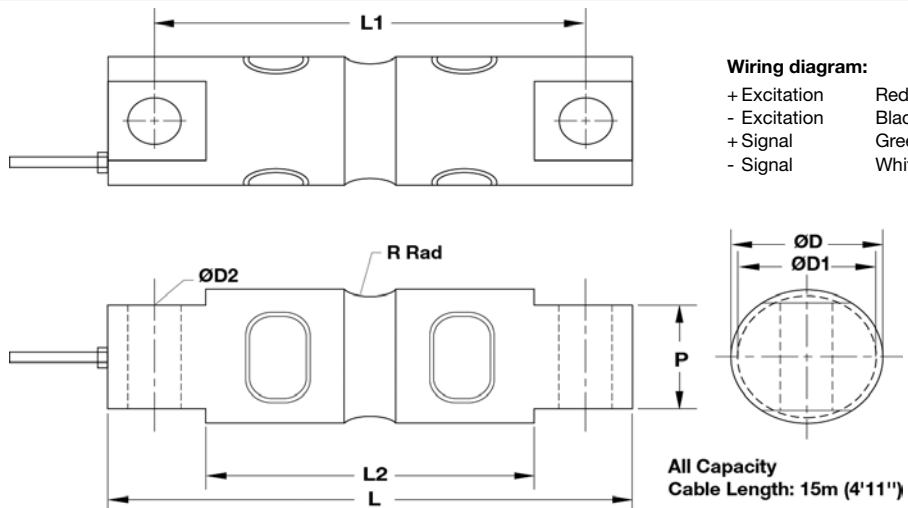
providing excellent protection against moisture and humidity.

The double-ended mounting provides good restraint for possible movement of tanks and, in many cases, eliminates the need for check rods.

The shear beam design gives excellent performance for high capacity loading.

The cylindrical construction provides easy installation with simple loading features.

OUTLINE DIMENSIONS



| CAPACITY | | L | L1 | L2 | D | D1 | D2 | P | R |
|---------------------|--------|-------|-------|-------|------|------|------|------|------|
| 5k/10k lbs | mm | 206.3 | 174.8 | 133.1 | 43.2 | 37.7 | 16.8 | 28.5 | 12.7 |
| | (inch) | 8.12 | 6.88 | 5.24 | 1.70 | 1.48 | 0.66 | 1.12 | 0.50 |
| 20k lbs | mm | 206.3 | 174.8 | 133.1 | 49.5 | 37.9 | 16.8 | 28.5 | 12.7 |
| | (inch) | 8.12 | 6.88 | 5.24 | 1.95 | 1.49 | 0.66 | 1.12 | 0.50 |
| 30k/40k/50k/60k lbs | mm | 260.4 | 215.9 | 164.8 | 76.2 | 69.4 | 26.9 | 60.2 | 25.4 |
| | (inch) | 10.25 | 8.50 | 6.49 | 3.20 | 2.73 | 1.06 | 2.37 | 1.00 |
| 100k lbs | mm | 285.8 | 241.3 | 190.2 | 88.9 | 82.3 | 26.9 | 63.5 | 25.4 |
| | (inch) | 11.25 | 9.50 | 7.49 | 3.5 | 3.24 | 1.06 | 2.50 | 1.00 |
| 150k lbs | mm | 285.8 | 241.3 | 190.2 | 99.1 | 92.5 | 26.9 | 71.1 | 38.1 |
| | (inch) | 11.25 | 9.50 | 7.49 | 3.90 | 3.64 | 1.06 | 2.80 | 1.50 |

Above dimensions apply to non-EDOC-coated load cells.

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| SPECIFICATIONS | | | |
|---|--|--------------|-----------------------|
| PARAMETER | VALUE | | UNIT |
| NTEP/OIML accuracy class | NTEP III L | Non-Approved | |
| Maximum no. of intervals (n) | 10000 multiple* | | |
| Y = E _{max} /V _{min} | 14000 | 5000 | Maximum available |
| Standard capacities (E _{max}) | 5k, 10k, 20k, 30k, 40k, 50k, 60k, 100k, 150k | | lbs |
| Rated output—R.O. | 3.0 | | mV/V |
| Rated output tolerance | 0.25 | | ±% of rated output |
| Zero balance | 1 | | ±% of rated output |
| Non-linearity | 0.025 | | ±% of rated output |
| Hysteresis | 0.025 | | ±% of rated output |
| Non-repeatability | .02 | | ±% of rated output |
| Creep error (20 minutes) | 0.030 | | ±% of rated output |
| Zero return (20 minutes) | 0.030 | | ±% of rated output |
| Temperature effect on min. dead load output | 0.0010 | 0.0026 | ±% of rated output/°C |
| Temperature effect on sensitivity | 0.0010 | 0.0015 | ±% of applied load/°C |
| Compensated temperature range | -10 to +40 | | °C |
| Operating temperature range | -20 to +60 | | °C |
| Safe overload | 150 | | % of R.C. |
| Ultimate overload | 300 | | % of R.C. |
| Excitation, recommended | 10 | | VDC or VAC RMS |
| Excitation, maximum | 15 | | VDC or VAC RMS |
| Input impedance | 770±10 | | Ω |
| Output impedance | 700±5 | | Ω |
| Insulation resistance | >5000 | | MΩ |
| Construction | Nickel-plated alloy steel | | |
| Environmental protection | IP67 | | |

*Capacities 20k–150k lbs only

All specifications subject to change without notice.

FM Approval

Intrinsically Safe: Class I, II, III; Div. 1 Groups A-G

Non-Incendive: Class I; Div. 2 Groups A-D

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