

Double-Ended Shear Beam

FEATURES

- Capacities 1k–75k lbs
- Double-ended center-load shear beam design
- Rationalized outputs
- Free of horizontal movement
- Insensitive to side load
- Electroless nickel-plated alloy tool steel
- **Optional**
 - Hermetically sealed available
 - Stainless steel available
 - FM approval available



APPLICATIONS

- Silo/hopper/tank weighing

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

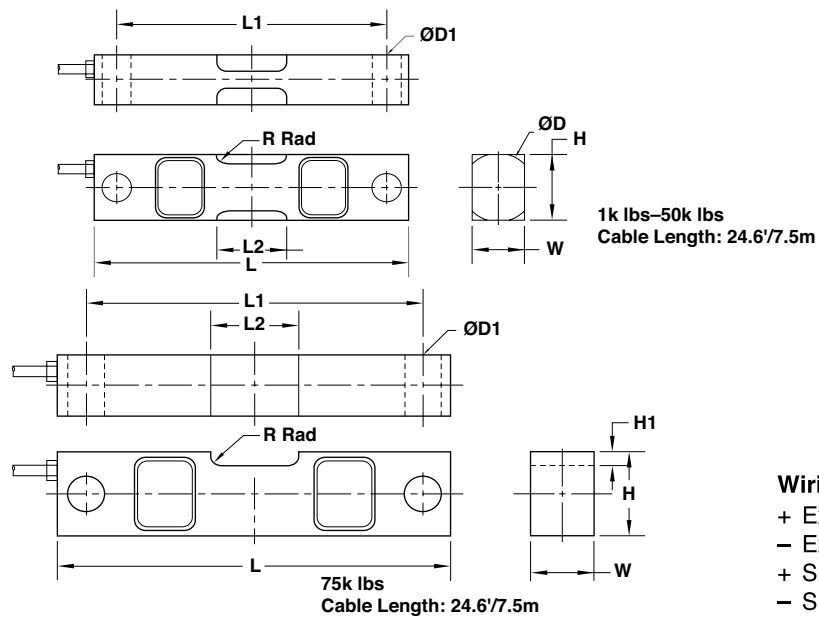
DESCRIPTION

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

The output is rationalized to facilitate multiple-cell application.

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

OUTLINE DIMENSIONS



| CAPACITY | | L | L ₁ | L ₂ | W | H | H ₁ | D | D ₁ | R |
|--|--------|-------|----------------|----------------|------|------|----------------|------|----------------|------|
| 1k / 1.5k / 2k / 2.5k / 3k / 5k lbs | mm | 190.5 | 158.8 | 35.4 | 31.7 | 31.7 | - | 31.7 | 12.7 | 5.0 |
| | (inch) | 7.50 | 6.25 | 1.39 | 1.25 | 1.25 | - | 1.25 | 0.50 | 0.20 |
| 10k / 15k / 20k / 25k lbs | mm | 222.3 | 190.5 | 50.0 | 36.6 | 49.3 | - | 50.8 | 20.6 | 5.0 |
| | (inch) | 8.75 | 7.50 | 1.97 | 1.44 | 1.94 | - | 2.00 | 0.81 | 0.20 |
| 50k / 75k lbs | mm | 342.9 | 292.1 | 82.6 | 62.0 | 74.7 | 4.6 | 76.2 | 33.3 | 5.0 |
| | (inch) | 13.50 | 11.50 | 3.25 | 2.44 | 2.94 | 0.18 | 3.00 | 1.31 | 0.20 |

Double-Ended Shear Beam

| SPECIFICATIONS | | |
|---|--|-----------------------|
| PARAMETER | VALUE | UNIT |
| NTEP/OIML accuracy class | Non-Approved | |
| $Y = E_{max}/V_{min}$ | 5000 | Maximum available |
| Standard capacities (E_{max}) | 1k, 1.5k, 2k, 3k, 5k, 10k, 15k, 20k, 25k, 50k, 75k | 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 | 0.030 (SS: 0.07%) | ±% of rated output |
| Hysteresis | 0.030 (SS: 0.07%) | ±% of rated output |
| Non-repeatability | 0.02 | ±% 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 | 0.0026 | ±% of rated output/°C |
| Temperature effect on sensitivity | 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 | Nicke-plated alloy steel | |
| Environmental protection | IP67 | |

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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