

## 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 version available
  - Stainless steel version available
  - FM approval available
  - EDOC option available; product appearance will differ from the photograph due to coating



### APPLICATIONS

- Silo/hopper/tank weighing

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

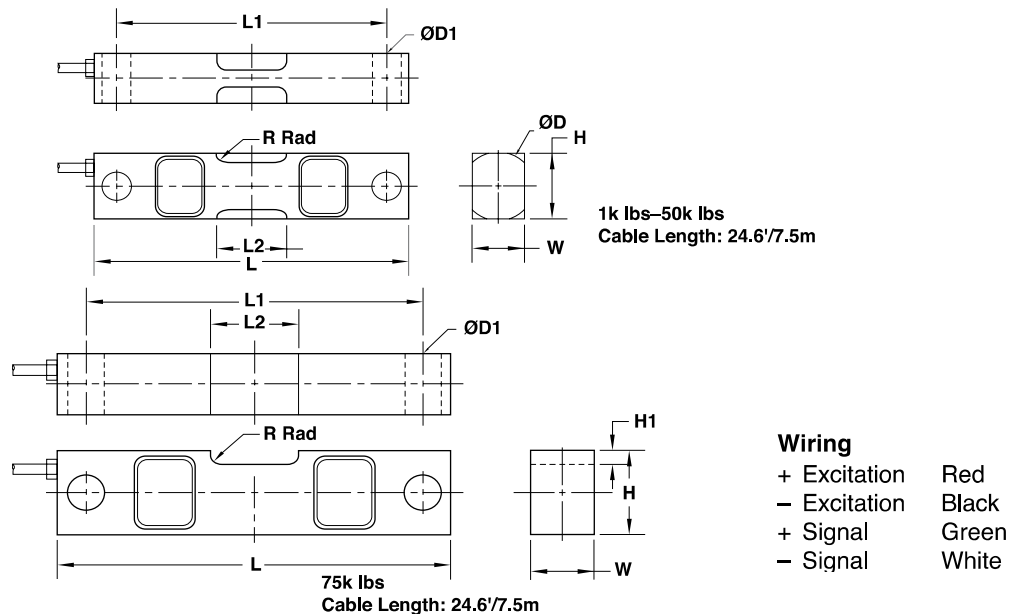
### DESCRIPTION

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

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

The output is rationalized to facilitate multiple-cell application.

### OUTLINE DIMENSIONS



| CAPACITY                            |        | L     | L <sub>1</sub> | L <sub>2</sub> | W    | H    | H <sub>1</sub> | D    | D <sub>1</sub> | 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 |

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

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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