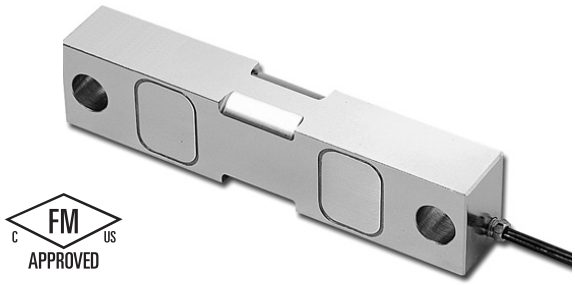
Double-Ended Shear Beam

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



APPLICATIONS

- Silo/hopper/tank weighing

DESCRIPTION

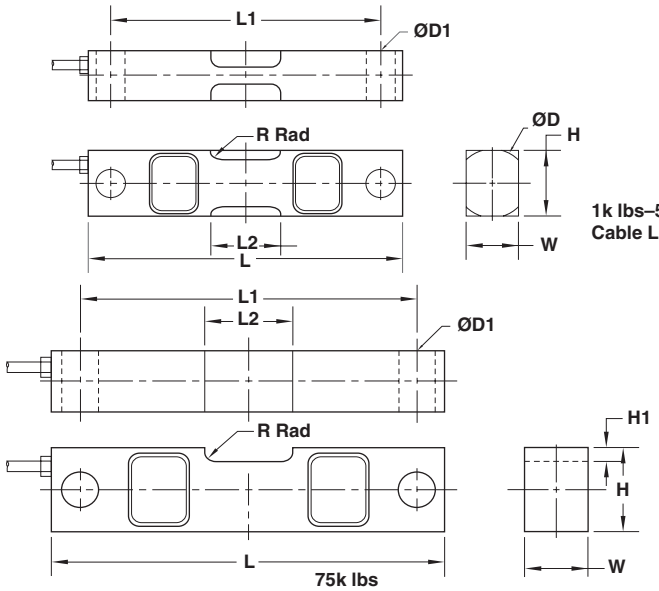
Model DSR is constructed of alloy tool steel and is potted to IP67 providing excellent protection against moisture and humidity.

The double-ended mounting provides a good restraint to possible tank movements and, in many cases, eliminates the need for check rods.

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

The output is rationalized to facilitate multiple-cell applications.

OUTLINE DIMENSIONS



Wiring

+ Excitation	Red
– Excitation	Black
+ Signal	Green
– Signal	White

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

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

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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.

CERTIFICATION MARKINGS

FM Approval markings (USA and Canada)

IS Class I, II, III, Division 1, Groups A, B, C, D, E, F and G;
NI Class I, Division 2, Groups A, B, C, and D;
Dust-ignitionproof Class II, III, Division 2, Groups F and G;
T5;
Ta = -20°C to +60°C;