Vishay Sensortronics



Shear Beam Load Cell



FEATURES

- Rated capacities of 250 to 20,000 pounds, 125 to 10,000kg
- "Thru" or "threaded" load hole configurations
- · Low sensitivity to axial loads
- Low profile (ultra low available in 1000 to 2500 pound ranges)
- Sensorgage[™] sealed to IP67 standards
- Factory Mutual System Approved for Classes I, II, III; Divisions 1 and 2; Groups A through G. Also, non-incendive ratings (No barriers!).
- Trade certified for NTEP Class III:5000d, IIIL:10000d and OIML R-60 3000d available

OPTIONAL FEATURES

- · Stainless steel versions available
- 65059 TWA companion weighing assemblies available
- 65082 Tantamount companion weigh modules available

DESCRIPTION

Model 65023 is a low profile shear beam load cell designed for high accuracy platform scales, pallet scales and process weighing applications.

It has high immunity to shock or side loading and is available in 2 or 3mV/V sensitivity. Approved to OIML, NTEP standards. For hazardous environments this load cell is available with EEx ia IIC T6 level of European approval.

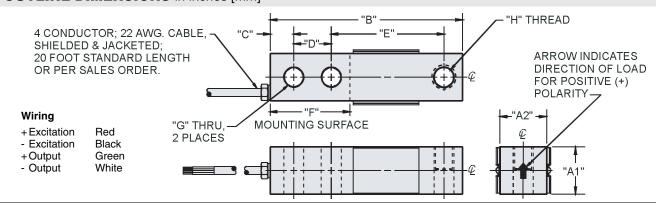
Nickel plating and full environmental sealing assures long term reliability. A stainless steel option is available for the lb versions for use in harsh or corrosive environments.

The two additional sense wires feed back the voltage reaching the load cell. Complete compensation of changes in lead resistance due to temperature change and/or cable extension is achieved by feeding this voltage into the appropriate electronics.

APPLICATIONS

- Floor scales
- · Tank weighing
- · Bin and hopper weighing

OUTLINE DIMENSIONS in inches [mm]



CAPACITY	A1	A2	В	С	D	E	F	G	Н	DEFLECTION	WEIGHT
250 - 500lbs	1.00	1.25	5.12	0.62	1.00	3.00	2.25	0.53	1/2-20 UNF-2B, Ø0.53 x 0.50 DP C'BORE	0.013	1.7
1K - 4K	1.25	1.25	5.12	0.62	1.00	3.00	2.25	0.53	1/2-20 UNF-2B, Ø0.53 x 0.62 DP C'BORE	0.017 - 0.025	4.0
5K - 10K	1.50	1.50	6.75	0.75	1.50	3.75	3.00	0.78	3/4-16 UNF-2B, Ø0.78 x 0.75 DP C'BORE	0.025 - 0.035	6.5
15K - 20K	2.00	2.00	8.88	1.00	2.00	4.88	4.00	1.03	1"-14 UNF-2B, Ø1.03 x 1.00 DP C'BORE	0.048 - 0.063	9.0
[125 - 250kg]	[25.0]	[31.0]	[130.0]	[16.0]	[25.0]	[76.0]	[57.0]	[13.0]	M12 x 1.75-6H, Ø13 x 15 DP C'BORE	[0.33]	[0.8]
[500 - 2t]	[32.0]	[32.0]	[130.0]	[16.0]	[25.0]	[76.0]	[57.0]	[13.0]	M12 x 1.75-6H, Ø13 x 15 DP C'BORE	[0.432 - 0.635]	[1.8]
[3t - 5t]	[38.0]	[38.0]	[171.0]	[19.0]	[38.0]	[95.0]	[76.0]	[20.7]	M20 x 2.5-6H, Ø20.5 x 19 DP C'BORE	[0.635 - 0.889]	[2.9]
[10t]	[51.0]	[51.0]	[226.0]	[25.0]	[51.0]	[124.0]	[102.0]	[25.0]	M24 x 2-6H, Ø25.4 x 25 DP C'BORE	[1.219 - 1.600]	[4.1]

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

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SPECIFICATIONS										
PARAMETER		UNIT								
Rated capacity-R.C. (E _{max})	250 125	lbs kg								
NTEP/OIML Accuracy class	NTEP III	NTEP IIIL	Standard	OIML R60						
Maximum no. of intervals (n)	3000 single	10000 multiple		3000*						
$Y = E_{max}/V_{min}$	NTEP Cert. N	Maximum available								
Rated output-R.O.		mV/V								
Rated output tolerance		±% mV/V								
Zero balance		±% FSO								
Combined error	0.02	0.02	0.03	0.02	±% FSO					
Non-repeatability		±% FSO								
Creep error (30 minutes)	0.025	0.03	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		°F (°C)								
Operating temperature range		°F (°C)								
Storage temperature range		°F (°C)								
Sideload rejection ratio										
Safe sideload		% of R.C.								
Maximum safe central overload		% of R.C.								
Ultimate central overload		% of R.C.								
Excitation, recommended		Vdc or Vac rms								
Excitation, maximum		Vdc or Vac rms								
Input impedance		Ω								
Output impedance		Ω								
Insulation resistance at 50VDC		MΩ								
Material										
Environmental protection										
Recommended torque		N*m								

Note: * OIML approval 1-10K & 500-5000kg only
** Stainless steel available

FSO - Full Scale Output

All specifications subject to change without notice.

Legal Disclaimer Notice



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