

Vishay Sensortronics

Hermetically Sealed Stainless Steel Shear Beam Load Cell



FEATURES

- Rated capacities of 1000 to 10,000 pounds 500kg to 5 metric tons
- Stainless steel, welded seal construction
- Interchangeable with Sensortronics model 65023 shear beam
- Trade certified for NTEP Class III: 5000 Divisions and Class IIIL: 10000 Divisions; OIML R60: 3000 Divisions
- Hermetically Sensorgage[™] sealed to IP68 standards
- Cell Guard[™] two year warranty
- Factory Mutual System approved for Classes I, II, III; Divisions 1 and 2; Groups A through G. Also, non-incendive ratings (No barriers!).

OPTIONAL FEATURES

 Companion weigh module is Model 65080 Stainless Steel TantaMount

DESCRIPTION

Model 65083H provides the weighing industry with the **ultimate** protection necessary for today's hostile environments in an economical low profile range suitable for platform scale manufacture.

Its low profile and all welded sealing combined with high accuracy makes this load cell ideally suited for low profile platforms, pallet truck weighers, tanks and silos. The guide slots incorporated into the upper and lower mounting faces enable manufacturers to easily position the load cell.

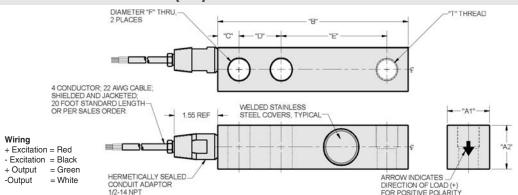
Hermetically sealed against moisture, the construction of the model 65083H in combination with a polyurethane dual shielded cable, enables continuous operation in harsh environments while maintaining a high operating specification.

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

- Hostile environments: Food & beverage processing Chemical and plastics processing Pharmaceutical and biomedical processing
- Washdown and Clean-In-Place environments
- High performance weighing modules and assemblies

OUTLINE DIMENSIONS in inches [mm]



CAPACITY	A1	A2	В	С	D	E	F	G-THREAD	DEFLECTION	WEIGHT
1K - 4K	1.22	1.22	5.12	0.62	1.00	3.00	0.53	1/2-20 UNF-2B, Ø0.53 x 0.61 DP C'BORE	0.012	2.4
5K - SE*	1.22	1.22	5.12	0.62	1.00	3.00	0.53	1/2-20 UNF-2B, Ø0.53 x 0.61 DP C'BORE	0.012	2.4
5K - 10K	1.50	1.50	6.75	0.75	1.50	3.75	0.78	3/4-16 UNF-2B, Ø0.78 x 0.75 DP C'BORE	0.030	3.9
[500kg - 2t]	[31.0]	[31.0]	[130.0]	[16.0]	[25.0]	[76.0]	[13.0]	M12 x 1.75-6H	[0.305]	[1.1]
[500kg - 2t]	[31.0]	[31.0]	[130.0]	[16.0]	[25.0]	[76.0]	[13.0]	M12 x 1.75-6H	[0.305]	[1.1]
[3t - 5t]	[38.0]	[38.0]	[171.0]	[19.0]	[38.0]	[95.0]	[20.0]	M20 x 2.5-6H	[0.762]	[1.8]

Capacities are in pounds [kg/t]. Deflection is ±10%. Certified drawings are available. *SE denotes "Small Envelope". A 5K capacity is available in the 1K/4K dimensional envelope.

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SPECIFICATIONS

PARAMETER		UNIT				
Rated capacity-R.C. (E _{max})		lbs kg/metric tons				
NTEP/OIML Accuracy class	NTEP III NTEP IIIL		Standard	OIML R60		
Maximum no. of intervals (n)	5000 multiple	10000 multiple		3000		
Y = E _{max} /V _{min}	NTEP Cert.	No. 98-175	98-175		Maximum available	
Rated output-R.O.	2.0	2.0	3.0	2.0	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)	0.03	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	II	Special				
Recommended torque		N*m				

FSO - Full Scale Output

All specifications subject to change without notice.

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