

## 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<sup>™</sup> sealed to IP68 standards
- Cell Guard<sup>™</sup> 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.

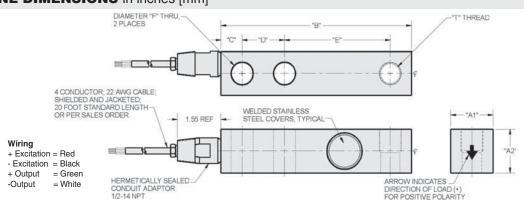
Hermetically sealed against moisture, the construction of the model 65083H in combination with a polyurethane dual shielded cable, enables continuous operation in harsh environments while maintaining a high operating specification.

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  $\pm 10\%$ . Certified drawings are available. \*SE denotes "Small Envelope". A 5K capacity is available in the 1K/4K dimensional envelope.



### Regional Distributor

Vishay Sensortronics

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#### **SPECIFICATIONS**

PARAMETER		UNIT			
Rated capacity-R.C. (E <sub>max</sub> )		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 <sub>max</sub> /V <sub>min</sub>	NTEP Cert.	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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