Hermetically Sealed Stainless Steel Shear Beam Load Cell

FEATURES

- Rated capacities of 1000 to 10,000 pounds
  500 kg to 5 metric tonnes
- 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**
  - ❍ Companion weigh module is Model 65080 Stainless Steel *TantaMount*

65080-TWA

APPLICATIONS

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

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.

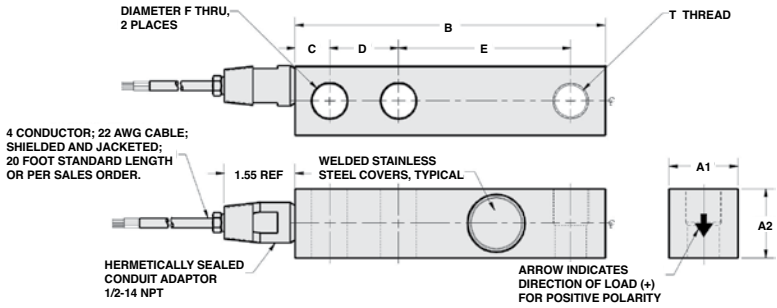
Its low profile and all welded sealing combined with high accuracy makes this load cell ideally suited for low profile platforms, pallet truck weighers, tanks and silos. The guide slots incorporated into the upper and lower mounting faces enable manufacturers to easily position the load cell.

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.

OUTLINE DIMENSIONS in inches [millimeters]

Wiring
+ Excitation = Red
– Excitation = Black
+ Output = Green
– Output = White



CAPACITY	A1	A2	B	C	D	E	F	G-THREAD	DEFLECTION	WEIGHT
1k–4k	1.22	1.25	5.12	0.62	1.00	3.00	0.53	1/2-20 UNF-2B, Ø 0.53 × 0.61 DP C'BORE	0.012	2.4
5k–SE*	1.22	1.50	5.12	0.62	1.00	3.00	0.53	1/2-20 UNF-2B, Ø 0.53 × 0.61 DP C'BORE	0.012	2.4
5k–10k	1.50	2.00	6.75	0.75	1.50	3.75	0.78	3/4-16 UNF-2B, Ø 0.78 × 0.75 DP C'BORE	0.030	3.9
[500 kg–2 t]	[31.0]	[31.0]	[130.0]	[16.0]	[25.0]	[76.0]	[13.0]	M12 × 1.75-6H	[0.305]	[1.1]
[500 kg–2 t]	[31.0]	[32.0]	[130.0]	[16.0]	[25.0]	[76.0]	[13.0]	M12 × 1.75-6H	[0.305]	[1.1]
[3 t–5 t]	[38.0]	[38.0]	[171.0]	[19.0]	[38.0]	[95.0]	[20.0]	M20 × 2.5-6H	[0.762]	[1.8]

Capacities are in pounds. 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	**VALUE**				**UNIT**
Rated capacity—R.C. (E_{max})	1k, 1.5k, 2.5k, 4k, 5k, 10k 500 kg, 750 kg, 1 t, 2 t, 5 t				lbs kg/t
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			8333	Maximum available
Rated output—R.O.	2.0	2.0	3.0	2.0	mV/V
Rated output tolerance	0.25				±% mV/V
Zero balance	1.0				±% FSO
Combined error	0.02	0.02	0.03	0.02	±% FSO
Non-repeatability	0.01				±% 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	14 to 104 (–10 to 40)				°F (°C)
Operating temperature range	0 to 150 (–18 to 65)				°F (°C)
Storage temperature range	–60 to 185 (–50 to 85)				°F (°C)
Sideload rejection ratio	500:1				
Safe sideload	100				% of R.C.
Maximum safe central overload	150				% of R.C.
Ultimate central overload	300				% of R.C.
Excitation, recommended	10				VDC or VAC RMS
Excitation, maximum	15				VDC or VAC RMS
Input impedance	343–357				Ω
Output impedance	349–355				Ω
Insulation resistance at 50 VDC	>1000				MΩ
Material	Stainless steel				
Environmental protection	IP68 welded seals, glass to metal cable!!				Special
Recommended torque	All capacities up to 5000 kg–136.0 5000 kg–205.0				N*m

FSO—Full Scale Output

All specifications subject to change without notice.

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