Single-Ended Beam Load Cell

FEATURES

- Capacities: 500–5000 kg, 1k–20k lbs.
- Low profile construction
- Certified to OIML R-60, 4000d and NTEP III, 5000 divisions
- Sealing: IP67 (DIN 40.050)
- Stainless steel construction
- Threaded load hole
- **Optional**
  - FM certified for use in potentially explosive atmospheres

APPLICATIONS

- Low profile platforms
- Pallet truck weighing
- Tank and silo weighing

DESCRIPTION

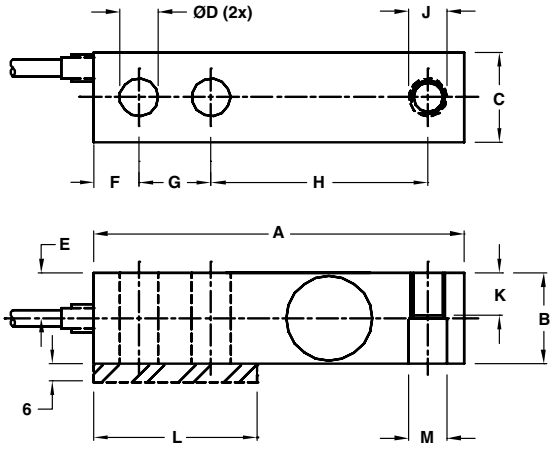
The 9123 is a low profile single-ended shear beam type load cell. The 9123 is stainless steel.

These products are suitable for small and medium platform scales, overhead track scales, hopper scales, and process weighing applications.

Reliable sealing is ensured by the proprietary TRANSEAL potting compound and additional mechanical protection of the strain gage area.

Ease of installation is made possible through the use of a partially threaded hole to accept levelling feet, load buttons, or loading cables.

OUTLINE DIMENSIONS in millimeters



Capacity	Dimensions in mm		Dimensions in inches		
	0.5T–2T	5T	1k–4k	5k–15k	20k
A	130.0	171.5	5.12	6.75	8.75
B	31.5	37.8	1.23	1.45	1.95
C	31.8	38.1	1.23	1.45	1.95
ØD	13.5	20.7	0.53	0.78	1.06
E	15.7	19.1	0.62	0.72	0.98
F	15.7	19.1	0.62	0.75	1.00
G	25.4	38.1	1.00	1.50	2.00
H	76.2	95.3	3.00	3.75	4.75
J	M12x1.75-6H	M20x2.5-6H	½-20UNF-2B	¾-16UNF-2B	1-12UNF-2B
K	15.7	19.1	0.62	0.75	0.98
L	57.2	76.2	2.25	3.12	4.00
ØM	13.5	20.7	0.53	0.78	1.030

Cable specifications:

Cable length: 6m

+ Excitation	Red
– Excitation	Black
+ Output	Green
– Output	White
Shield	Transparent

Cable screen is not connected to load cell body. Performance may be affected if load cell cables are shortened.

Single-Ended Beam Load Cell

SPECIFICATIONS					
PARAMETER	**VALUE**				**UNIT**
Standard capacities (E_{max})	500, 1000, 2000, 5000 (1)				kg
Standard capacities (E_{max})	1k, 2.5k, 4k, 5k, 10k, 15k, 20k (1)				lbs
Accuracy class according to OIML R-60 /NTEP	NTEP III	Non-Approved	C3	C4	
Max. no. of verfication intervals	5000		3000	4000	
Min. verification interval ($V_{min}=E_{max}/Y$)			E_{max}/6000	E_{max}/8000	
Min. verification interval, type MR			E_{max}/10000	E_{max}/18000	
Rated output (=S)	3				mV/V
Rated output tolerance	0.003				±mV/V
Zero balance	1.0				±% FSO
Combined error	0.0200	0.050	0.023	0.018	±% FSO
Minimum dead load output return	0.0250	0.050	0.017	0.013	±% applied load
Non-repeatability	0.0100	0.070	0.035	0.026	±% FSO
Creep error (30 minutes)		0.060	0.025	0.018	±% applied load
Temp. effect on min. dead load output	(0.0008)	0.0250	0.0120	0.0088	±% FSO/5°C (/°F)
Temp. effect on min. dead load output, type MR			0.0070	0.0039	±% FSO/5°C
Temperature effect on sensitivity	(0.0010)	0.0250	0.0088	0.0065	% applied load/5°
Minimum dead load	0				% E_{max}
Maximum safe overload	150				% E_{max}
Ultimate overload	300				% E_{max}
Maximum safe side load	100				% E_{max}
Deflection at E_{max}	0.4 / 0.8 / 1.0 / 1.1—kg 0.4 / 0.8 / 1.0 / 0.9 / 1.1—lbs				mm
Excitation voltage	5 to 12				V
Maximum excitation voltage	15				V
Input resistance	350±3.5				Ω
Output resistance	350±3.5				Ω
Insulation resistance	≥5000				MΩ
Compensated temperature range	–10 to +40				°C
Operating temperature range	–40 to +80				°C
Storage temperature range	–50 to +90				°C
Element material	Stainless steel				
Sealing (DIN 40.050 / EN60.529)	IP67				
Recommended torque on fixation bolts	0.5–2T and 1k–4k lbs.: 149 5k lbs. and 5T and over: 271				N*m

(1) 5T and 10k lbs. are not approved by OIML

FSO—Full Scale Output

Correct mounting of the load cell is essential to ensure optimum performance.
Further information is available on request.

All specifications subject to change without notice.

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