

Double-Ended Beam Load Cell

FEATURES

- Capacities: 5k to 250k lbs
- Low profile construction
- Nickel-plated alloy steel construction
- Certified to OIML R60 3000d, NTEP CoC-10000d
- Sealing: IP67 (DIN 40.050)

Optional

- FM approved for use in hazardous locations
- ATEX versions are available for use in potentially explosive atmospheres
- EDOC option available; product appearance will differ from the photograph due to coating



- Platform scales
- · On-board weighing
- Weighbridges
- Silo hopper weighing

DESCRIPTION

The Model 5103 transducers are double-ended, center-loaded shear beam load cells. The Model 5103 is constructed of nickel-plated alloy steel.









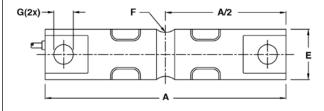


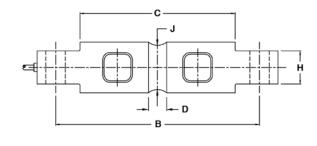
These products are suitable for tank weighing systems, low cost weighbridges, and axle weighers.

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

A specially designed mounting arrangement is available, providing the ideal solution for vessel / tank weighing.

OUTLINE DIMENSIONS in millimeters





Capacity (lbs)	5k, 10k	20k	30k- 60k	100k	150k	200k, 250k
Α	206.2	206.2	260.4	285.8	285.8	406.9
В	174.6	174.6	215.9	241.3	241.3	330.2
С	133.1	133.1	165.1	190.5	190.5	254.0
D	15.7	21.3	25.4	31.8	31.8	33.0
Е	43.2	49.5	76.2	88.9	99.1	136.5
F	12.7	12.7	25.4	38.1	38.1	50.8
G	16.7	16.7	26.9	26.9	26.9	39.6
Н	28.4	28.4	60.2	63.5	71.1	116.8
J	37.6	37.6	69.3	82.3	92.5	131.4

Cable specifications

Cable length 10 m (6 m for 5k-20k)

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

Above dimensions apply to non-EDOC-coated load cells.

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Double-Ended Beam Load Cell

SPECIFICATIONS									
PARAMETER		VALUE							
Standard capacities (E _{max})	2.3*, 4.5*, 9.1, 13	t							
Standard capacities (E _{max})	5k*, 10k*, 20k, 3	lbs							
Accuracy class according to OIML / NTEP	NTEP	Non-Approved	C3						
Max. number of verification intervals (n_{lc})	IIIL 10000	D3	3000						
Minimum verification interval (v _{min})			E _{max} /10,000						
Rated output (= S)		mV/V							
Rated output tolerance		±mV/V							
Zero balance		1.0	±% FSO						
Combined error	0.0200	0.0300	0.0200	±% FSO					
Non-repeatability	0.0100	0.0100	0.0100	±% FSO					
Minimum dead load output return	0.0250	0.0300	0.0167	±% applied load					
Creep error (30 minutes)		0.0300	0.0245	±% applied load					
Creep error (20 minutes)	0.030	0.0450	0.0053	±% applied load					
Temp. effect on min. dead load output	(0.001)	0.0140	0.0070	±% FSO/5°C (/°F)					
Temperature effect on sensitivity	(0.0008)	0.0070	0.0050	±% applied load/5°C (/°F)					
Minimum dead load		% E _{max}							
Maximum safe overload		% E _{max}							
Ultimate overload		% E _{max}							
Maximum safe side load		% E _{max}							
Deflection at E _{max}	0.5/0.6/1.	mm							
Excitation voltage		V							
Maximum excitation voltage		V							
Input resistance		Ω							
Output resistance		Ω							
Insulation resistance		ΜΩ							
Compensated temperature range		°C							
Operating temperature range		°C							
Storage temperature range		°C							
Element material (DIN)	١								
Sealing (DIN 40.050 / EN 60.529)									
Recommended torque on fixation bolts		N*m							

^{*} Only 20k-100k lbs (9.1-45.4 t) capacities are OIML approved.

FSO-Full Scale Output

All specifications subject to change without notice.



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