Model 5103

Vishay Revere

Double Ended Beam Load Cell

FEATURES

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

OPTIONAL FEATURE

- FM approved for use in hazardous locations
- Atex versions are available for use in potentially explosive atmospheres

DESCRIPTION

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

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

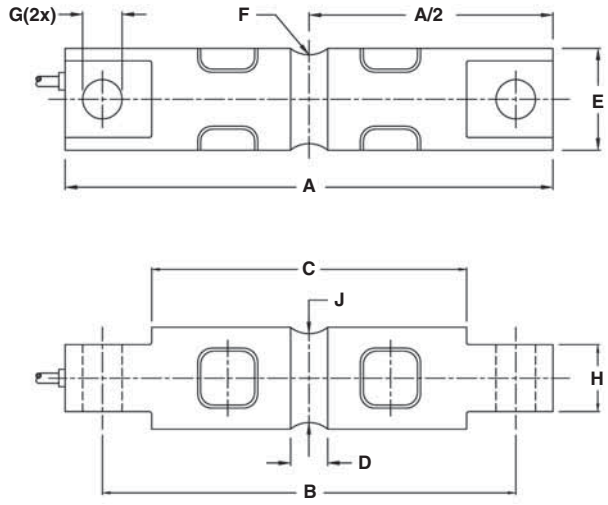
A reliable sealing is ensured by the proprietary TRANSEAL potting compound and additional mechanical protection of the strain gage area.

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

APPLICATIONS

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

OUTLINE DIMENSIONS in millimeters



Capacity (lbs)	5K, 10K	20K	30 - 60K	100K	150K	200K, 250K
A	206.2	206.2	260.4	285.8	285.8	408.9
B	174.6	174.6	215.9	241.3	241.3	330.2
C	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
E	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
H	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

Note: Dimensions in millimeters

Cable specifications:

Cable length: 10 meters (6 meters for 5 - 20K

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

Rabbit Control Systems

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SPECIFICATIONS

PARAMETER	VALUE			UNIT
Standard capacities (E_{max})	2.3, 4.5, 9.1, 13.6, 18.2, 22.7, 27.2, 45.4, 68, 91, 113			ton
Standard capacities (E_{max})	5, 10, 20, 30, 40, 50, 60, 100, 150, 200, 250			Klbs
Accuracy class according to OIML / NTEP	NTEP	Non-Approved	C3	
Maximum no. of verfication intervals (n_{lc})	IIIL 10000	D3	3000	
Minimum verification interval (V_{min})			E_{max}/10,000	
Rated output (=S)	3.0			mV/V
Rated output tolerance	0.003			±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
Temperature effect on minimum 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	0			%E_{max}
Maximum safe over load	150			%E_{max}
Ultimate over load	300			%E_{max}
Maximum safe side load	100			%E_{max}
Deflection at E_{max}	0.5/ 0.6/ 1.1/ 0.5/ 0.5/ 0.5/ 0.6/ 0.5/ 0.5/ 0.9/ 0.9			mm
Excitation voltage	5 to 12			V
Maximum excitation voltage	15			V
Input resistance	700±7			Ω
Output resistance	700±7			Ω
Insulation resistance	≥5000			MΩ
Compensated temperature range	-10 to +40			°C
Operating temperature range	-40 to +80			°C
Storage temperature range	-40 to +90			°C
Element material (DIN)	Nickel plated alloy steel			
Sealing (DIN 40.050 / EN60.529)	IP67			
Recommended torque on fixation bolts	12 to 14			N*m

FSO-Full Scale Output

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