

Subminiature Load Cells

Model 11

150 g to 1,000 lb.

STAINLESS STEEL



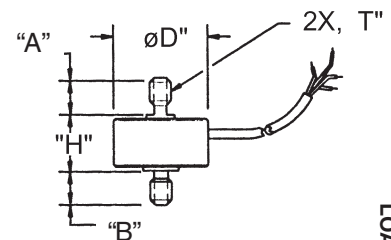
Model 11 Tension/Compression

Model 11 (tension/compression) Subminiature Load Cell is designed to measure load ranges from 150 g to 1000 lb. With subminiature dimensions, including diameters from .50" to 0.75" and height of 0.38", these units are easily incorporated into systems having limited space. The model achieves a combined non-linearity and hysteresis of 0.5% full scale and a frequency response of up to 58 kHz. A small circuit board is included in the load cell's lead wire cable for zero balance, and should not be removed.

Model 11 (Order Code BL321)

Available Ranges	øD"	T	H"	A"	B"	Q *
150; 250; 500; 1000 g	0.50	#4-40UNC	0.29	0.19	0.18	4
5; 10; 25; 50; 100 lb.	0.50	#4-40UNC	0.29	0.19	0.18	4
250; 500; 1,000 lb.	0.75	1/4-28UNF	0.38	0.31	0.31	20

* "Q" = maximum tightening torque allowed inch-lb.



PERFORMANCE

Load Ranges	150 g to 1000 lb.
Non-Linearity (max)	±0.5% F.S.
Hysteresis (max)	±0.5% F.S.
Non-Repeatability (max)	±0.1% F.S.
Output (standard)	
150 g to 500 g	10mV/V nom.
1,000 g to 1,000 lb.	2mV/V nom.
Resolution	Infinite
Zero Balance (nom.)	± 3% F.S.

ENVIRONMENTAL

Temperature, Operating	-65° F to 250° F
Temperature, Compensated	60° F to 160° F
Temperature Effect	
-Zero (max)	0.01% F.S./° F
-Span (max)	0.02% Rdg./° F

ELECTRICAL

Strain Gage Type	Semiconductor
150 g to 500 g	Foil
1,000 g to 10,000 lb.	5VDC
Excitation (calibration)	5000 megohm @ 50VDC
Insulation Resistance	
Bridge Resistance	
150 g to 500 g	500 ohms (semi)
1,000 g to 1,000 lb.	350 ohms (foil)
Wiring Code (std)	#1 (See Appendix)
Electrical Termination (std)	5' integral cable with balance board*

MECHANICAL

	150g	250g	500g	1000g	5lb	10lb	25lb	50lb	100lb	250lb	500lb	1000lb
Deflection @ F.S. (x10 ⁻³ in)	0.05	0.04	0.03	0.7	0.6	0.6	0.5	0.5	0.5	0.6	0.7	1.0
Static Overload Capacity (% F.S.)	500	500	500	150	150	150	150	150	150	150	150	150
Ringing Frequency (kHz)	10	14	22	8	11	17	24	34	48	25	33	40
Weight (g)	5	5	5	5	5	5	5	5	5	19	19	19

NOTE: Standard calibration for tension/compression load cells is in tension only.

* A small 2" long circuit board is included in the cable, 2 ft. from the load cell. Do not remove this board.

Options (See Appendix)

Temperature compensated 1b, 1c

Premium Options: 1e (≥1,000 g only), 1f (≥1,000 g only)