

Low Cost Load Cell

Model 53

±0.25% NON-LINEARITY

5 TO 50,000 lb.

STAINLESS STEEL



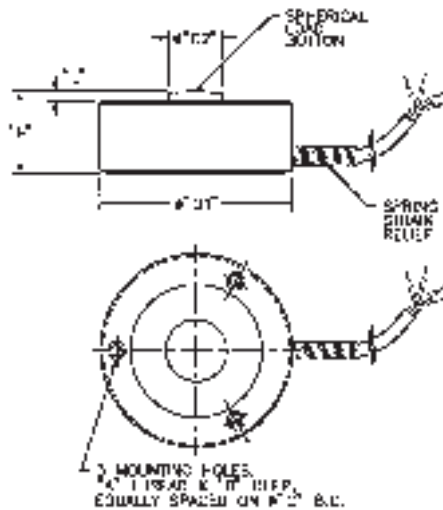
Model 53 load cells are bonded foil strain gage transducers designed for low cost production and testing applications (i.e. press calibration). Engineered compression force measurements up to 50,000 lb., this model achieves a maximum non-linearity of 0.25% full scale. Precision gaging techniques and a stainless steel construction provides excellent long-term stability and reliability under severe operating conditions. The Model 53 compression-only load cell has an integral load button machined as part of the load cell. The Model 53 must be mounted on a smooth flat surface for proper operation. Three tapped holes are provided for mounting.

Dimensions

(Order Code) AL131

Ranges

	D1"	D2"	H"	L"	A"	B"	C"
5, 10, 25, 50, 100 lb.	1.00	0.21	0.62	0.05	#4-40 UNC	.22	0.75
250, 500, 1000, 2000 lb.	1.25	0.32	0.39	0.07	#6-32-UNC	.25	1.00
3000, 4000, 5000, 7500, 10,000 lb.	1.50	0.40	0.63	0.08	#6-32 UNC	.25	1.25
15,000, 20,000, 30,000 lb.	2.00	0.60	1.00	0.12	#6-32 UNC	.25	1.625
50,000 lb.	3.00	0.78	1.50	0.18	#6-32 UNC	.25	2.375



Options (See Appendix)

Temperature compensated 1b; 1c; 1e

Premium Options: 1g; 1h; 1i; 6d; 6i (H" dimension will increase); 12b

Model 53
(Compression Only)
Order Code AL131)

PERFORMANCE	Load Ranges	5 to 50,000 lb.
	Non-Linearity (max)	±0.25% F.S.
	Hysteresis (max)	±0.3% F.S.
	Non-Repeatability (max)	±0.1% F.S.
	Output (standard)	2mV/V
	Resolution	Infinite
ENVIRONMENTAL	Temperature, Operating	-65° F to 250° F
	Temperature, Compensated	60° F to 160° F
	Temperature Effect	
	–Zero (max)	0.005% F.S./° F
	–Span (max)	0.01% Rdg./° F
ELECTRICAL	Strain Gage Type	Bonded foil
	Excitation (calibration)	10VDC
	Excitation (acceptable)	Up to 10VDC or AC
	Insulation Resistance	5000 megohm @ 50VDC
	Bridge Resistance	350 ohms
	Shunt Calibration Data	Included
	Wiring Code (std.)	#1 (See Pg. AP-8)
	Electrical Termination (std)	Teflon cable (5 ft.)
MECHANICAL	Overload, Safe	50% over capacity
	Deflection –Full Scale	0.001" –0.003"
	Casing Material	17-4 PH Stainless
IN-LINE AMPLIFIERS (Optional)	Outputs Available	0-5VDC, 4-20mA

General Information

How to order (See Pg. AP-19)
 Load cell selection flow chart (See Pg. LO-1)