

LOW CAPACITY HIGH ACCURACY (CIRCULAR TYPE LOAD CELL)

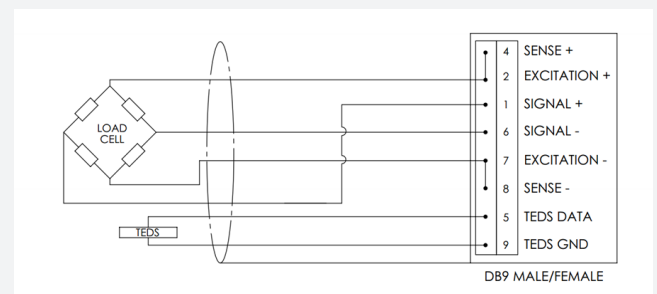
The Low Capacity High Accuracy load cell is an aluminium strain gauge based transducer designed for high accuracy, with temperature compensation and enhanced stiffness.

This design provides better than $\pm 0.1\%$ (full scale) non-linearity. The load cell is provided with a threaded central hub for loading (a load button is optional), and 3 threaded holes on the bottom surface, for ease of mounting. Options include stainless steel welded or potted construction, internal amplifier, extended temperature range and IEEE1451.4 TEDS capability.

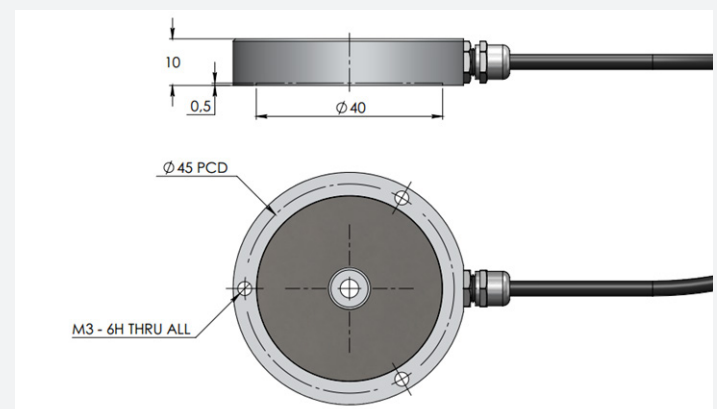
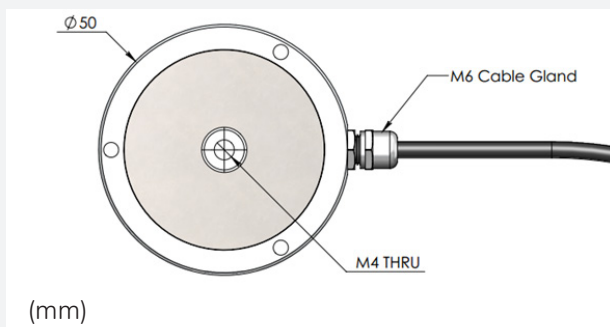


WIRING

- The load button is provided with a #28 AWG 4-conductor braided shielded cable with outer jacket, 0.12" [3 mm] diameter, 2 ft [0.6m] long, with no connection between the shield and the sensor body.
- Optional DB9 cable mounted connector pin configuration as shown below.
- M8 load cell mounted connector also available. Contact us for pinout details.



DIMENSIONS



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SPECIFICATION

PARAMETER	RANGE
Rated Capacity (kg)	1, 2, 5, 10
Rated Output (RO) (mV/V)	1 nominal (0.5 – 4.5VDC from amplifier version)
Safe Overload (%)	150 of RO
No Load Offset (Zero Balance) (%)	±2 of RO
Excitation (VDC or VAC) (V)	5, 10
Input Impedance	350 Ω nominal
Output Impedance	350 Ω nominal
Non-Linearity (%)	±0.1 of RO
Hysteresis (%)	±0.1 of RO
Non-Repeatability (%)	±0.05 of RO
Creep (30 min.) (%)	≤0.1 of RO
Temperature Shift Zero (%)	±0.01 of RO/°F (±0.018 of RO/°C)
Temperature Shift Span (%)	±0.01 of load/°F (±0.018 of load/°C)
Compensated Temperature (°F)	5 to 160 (-15 to 71°C)
Operating Temperature (°F)	-40 to 200°F (-40 to 93°C)
Weight (lb)	0.09 (40g) approx.
Material	Aluminium (stainless steel optional for 2kg and above)
Deflection (in)	0.0004 (0.1mm) nominal
Natural Frequency	1kg – 1500Hz 2kg – 2400Hz 5kg – 4000Hz 10kg – 6500Hz
IP Rating	IP40
Calibration Test Excitation (VDC)	5
Calibration (std.)	5 pt. compression (tension calibration optional)
Connector	None (default) M8 Male connector mounted on the load cell (optional) DB9 cable mounted connector, male or female (optional)
Compliance	RoHS Amplified version: ESD safe, EMC compliant with EN61326-2-3:2006, CE marked.



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