

RoHS



Product Description

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.

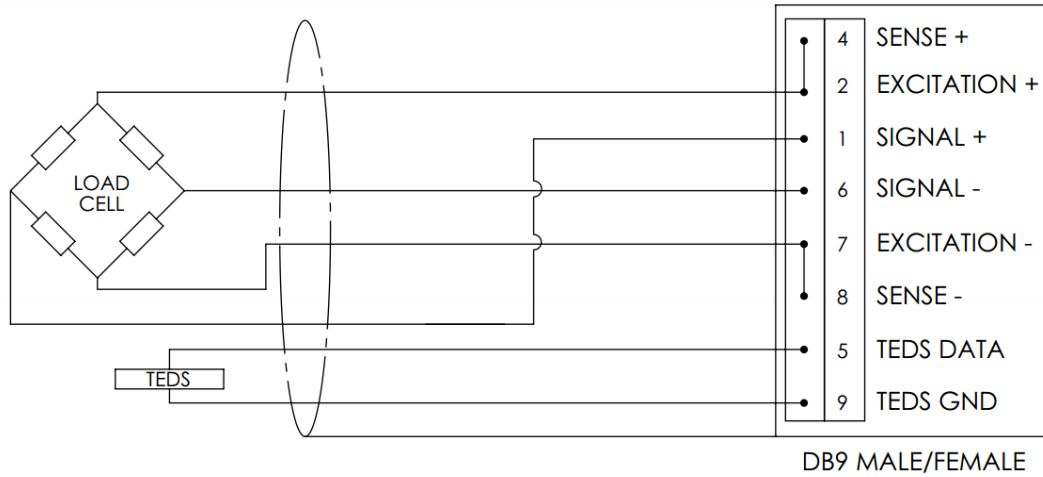
Performance Specifications

▪ RATED CAPACITY	1kg, 2kg, 5kg, 10kg
▪ RATED OUTPUT (RO)	1mV/V nominal (0.5 – 4.5VDC from amplifier version)
▪ SAFE OVERLOAD	150 % of R.O.
▪ NO LOAD OFFSET (ZERO BALANCE)	$\pm 2\%$ of R.O.
▪ EXCITATION (VDC OR VAC)	10 MAX, 5V recommended (5VDC for amplifier version)
▪ INPUT IMPEDANCE	350 Ω nom.
▪ OUTPUT IMPEDANCE	350 Ω nom.
▪ NON-LINEARITY	$\pm 0.1\%$ of R.O.
▪ HYSTERESIS	$\pm 0.1\%$ of R.O.
▪ NONREPEATABILITY	$\pm 0.05\%$ of R.O.
▪ CREEP (30 min)	$\leq 0.1\%$ of R.O.
▪ TEMP. SHIFT ZERO	$\pm 0.01\%$ of R.O./ $^{\circ}\text{F}$ (± 0.018 of R.O./ $^{\circ}\text{C}$)
▪ TEMP. SHIFT SPAN	$\pm 0.01\%$ of LOAD/ $^{\circ}\text{F}$ (± 0.018 of LOAD/ $^{\circ}\text{C}$)
▪ COMPENSATED TEMP.	5 to 160 $^{\circ}\text{F}$ (-15 to 71 $^{\circ}\text{C}$)
▪ OPERATING TEMP	-40 to 200 $^{\circ}\text{F}$ (-40 to 93 $^{\circ}\text{C}$)
▪ WEIGHT (approx)	0.09 lb [40g]
▪ MATERIAL	Aluminium (stainless steel optional for 2kg and above)
▪ DEFLECTION	0.0004" [0.1mm] nominal.
▪ IP RATING	IP40
▪ CALIBRATION TEST EXCITATION	5 VDC
▪ 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.
▪ NATURAL FREQUENCY	1kg – 1500Hz 2kg – 2400Hz 5kg – 4000Hz 10kg – 6500Hz

Low Capacity High Accuracy Load Cell

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 factory for pinout details



Dimensions (mm)

