

SUBMINIATURE S-BEAM LOAD CELL

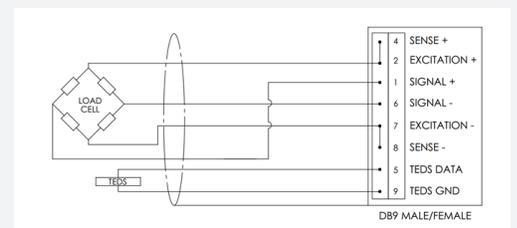
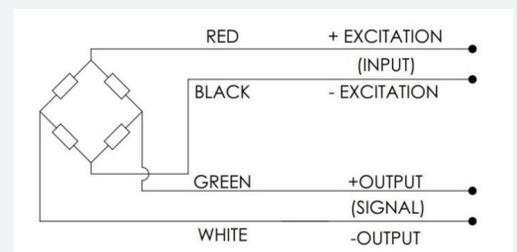
The Subminiature S-Beam Load Cell is a bi-directional strain gauge-based transducer with high performance and built-in temperature compensation.

This design provides better than $\pm 0.1\%$ (full scale) non-linearity and includes overload protection in both tension and compression directions. Options include IEEE1451.4 TEDS capability.

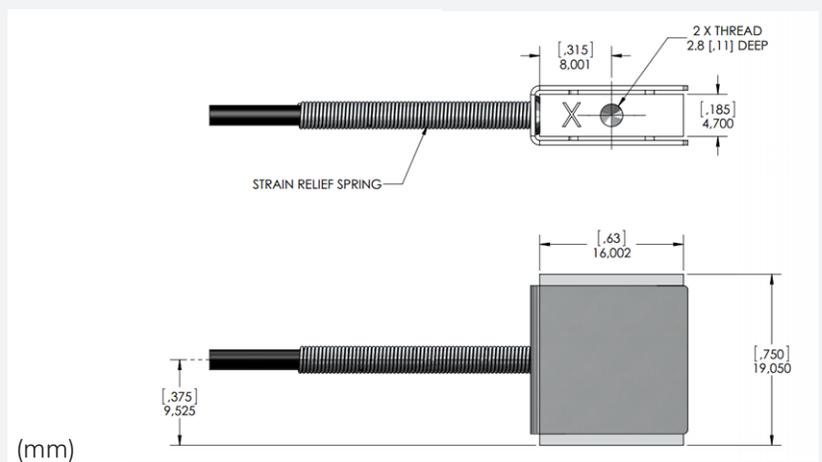


WIRING

- The sensor is provided with a #32 AWG 4-conductor braided shielded cable with an outer jacket of 0.087" [2.2 mm] diameter, 5 ft [1.5m] long, with no connection between the shield and the sensor body. For additional protection, the cable is contained within a stainless steel spring for strain relief purposes for the first 1" [25 mm].
- Connector pin configuration as shown below (for the with-connector version)



DIMENSIONS



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SPECIFICATION

PARAMETER	RANGE
Rated Capacity (lbf)	1, 2, 5, 10, 25, 50, 100
Rated Output (RO) (mV/V)	2 nominal
Safe Overload (%)	1000 of R.O., 200 tension only for 50 & 100lbf
No Load Offset (Zero Balance) (%)	±3 of RO
Excitation (VDC or VAC) (V)	5, 10
Input Impedance	1000 Ω nom.
Output Impedance	1000 Ω nom.
Non-Linearity (%)	±0.1 of RO
Hysteresis (%)	±0.1 of RO
Non-Repeatability (%)	±0.1 of RO
Temperature Shift Zero (%)	±0.01 of RO/°F (±0.018 of RO/°C)
Temperature Shift Span (%)	±0.02 of load/°F (±0.036 of load/°C)
Compensated Temperature (°F)	+5 to +160 (-15 to +71°C)
Operating Temperature (°F)	-60 to +200 (-51 to +93°C)
Weight (lb)	0.02 (9g) approx.
Material	Aluminum (1lbf – 10lbf), SS (25lbf – 100lbf)
Deflection (in)	0.004 [0.1mm] nominal
IP Rating	IP40
Calibration Test Excitation (VDC)	5
Calibration (std.)	5 pt. tension & compression
Connector	Default none, optional DB9 male or female (specify at time of order)
Thread	M3x0.5 or #4-40 (specify at time of order)

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