# MINIATURE S-BEAM OVERLOAD PROTECTION LOAD CELL

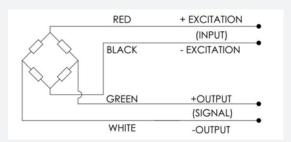
The Miniature S-Beam Load Cell is a bi-directional Aluminium strain gauge based transducer with high performance and built-in temperature compensation.

This design provides better than  $\pm 0.05\%$  (full scale) non-linearity and includes overload protection in both tension and compression directions.

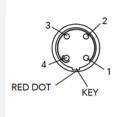


### **WIRING**

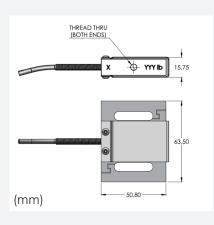
- Cable Version
   The S-beam load cell is provided with 4x28 AWG wiring within a braided shielded cable (overall cable length 2m)
- Lemo Version
   Connector pin configuration as shown below (for the with-connector version)



PIN	WIRING CODE
1	+ EXCITATION
4	- EXCITATION
2	+ SIGNAL
3	- SIGNAL



## **DIMENSIONS**



MODEL	CAPACITY	THREAD
MSBLC-2M-P	25	M6 x 1
MSBLC-2U-P	25	1/4 - 28
MSBLC-2M-P	50	M6 × 1
MSBLC-2U-P	50	1/4 - 28
MSBLC-2M-P	100	M6 × 1
MSBLC-2U-P	100	1/4 - 28
MSBLC-2M-P	250	M10 × 1.5
MSBLC-2U-P	250	1/4 - 28

## **SPECIFICATION**

PARAMETER	RANGE
Rated Capacity	25, 50, 100 & 250 lbf
Rated Output (RO)	2mV/V nom.
Overload	1000% of RO
No Load Offset	±1% of RO
Excitation (VDC or VAC)	5V, 10V
Input Impedance	1000 Ω nom.
Output Impedance	1000 Ω nom.
Non-Linearity	±0.05% of RO
Hysteresis	±0.05% of RO
Non-Repeatability	±0.05% of RO
Temp. Shift Zero	±0.005% of RO/°F (±0.009 of RO/°C)
Temp. Shift Span	±0.01% of load/°F (±0.018 of load/°C)
Compensated Temp.	5 to 160°F (-15 to 71°C)
Operating Temp.	-60 to 200°F (-51 to 93°C) – Lemo Version 5 to 176°F (-15 to 80°C) – Cable Version
Weight (approx.)	0.3lb [140g]
Material	Aluminum
Deflection	.004" to .010" [0.1mm to 0.25mm] nom.
IP Rating	IP40
Calibration Test Excitation	5V (recommended), 10V max.
Calibration (std.)	5 pt. tension

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