

# IN LINE LOAD CELL (AILC2)

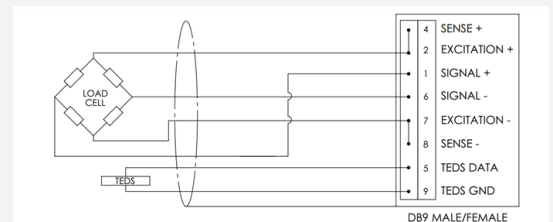
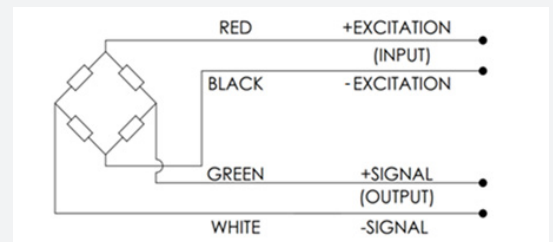
Miniature threaded In Line Load Cells are strain gauge based transducers with temperature compensation and excellent overall performance.

This type measures tensile and compressive loads up to 5000N/1000lbf with better than  $\pm 0.25\%$  non-linearity.



## 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)



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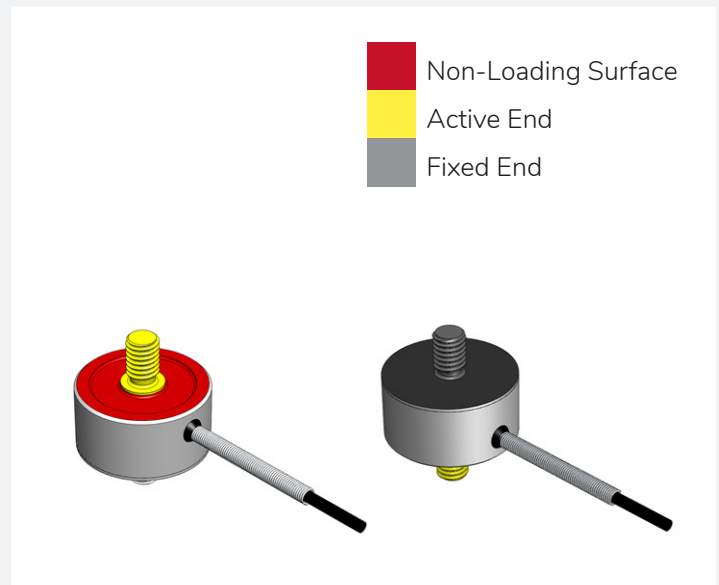
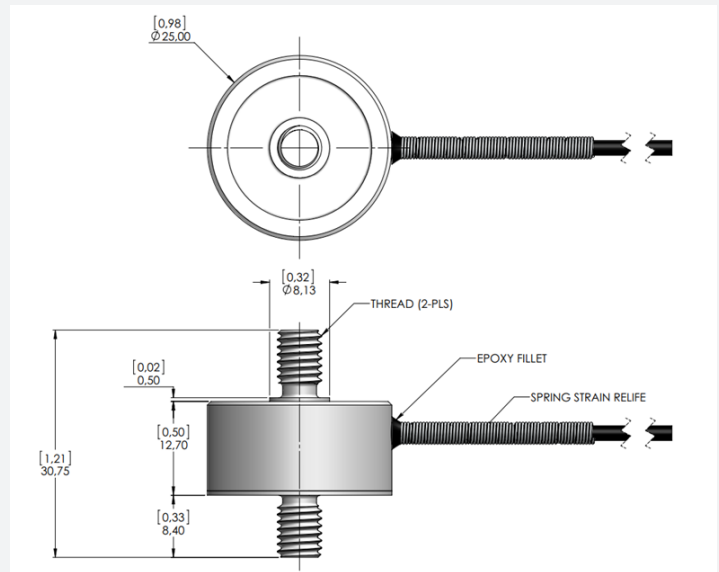
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## DIMENSIONS

MODEL	CAPACITY	DEFLECTION NOM.	THREAD
101-10	200N	0.05mm [.002"]	M6x1-6g
102-10	500N	0.05mm [.002"]	M6x1-6g
103-10	1000N	0.05mm [.002"]	M6x1-6g
104-10	2000N	0.05mm [.002"]	M6x1-6g
105-10	5000N	0.10mm [.004"]	M6x1-6g

MODEL	CAPACITY	DEFLECTION NOM.	THREAD
111-10	50lbf	0.05mm [.002"]	1/4"-28 UNF 2B
112-10	100lbf	0.05mm [.002"]	1/4"-28 UNF 2B
113-10	250lbf	0.05mm [.002"]	1/4"-28 UNF 2B
114-10	500lbf	0.05mm [.002"]	1/4"-28 UNF 2B
115-10	1000lbf	0.10mm [.004"]	1/4"-28 UNF 2B



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## SPECIFICATION

PARAMETER	RANGE	NOTES
Capacity	200N, 500N, 1000N, 2000N & 5000N	With metric threads as standard
	50lbf, 100lbf, 250lbf, 500lbf, 1000lbf	With unified threads as standard
Rated Output (RO)	2mV/V nom.	
Allowable Maximum Load	150% full scale	No effect on performance
Non-Linearity	± 0.25% of RO max.	
Hysteresis	± 0.25% of RO max.	
Repeatability	± 0.1% of RO max.	
Zero Balance	5% of RO max.	
Zero Temp. Coefficient	0.018% FS/°C	
Span Temp. Coefficient	0.036% of load/°C	
Compensated Temp. Range	-15°C to 70°C	Wider range available to order
Operating Temp. Range	-20°C to 80°C	Wider range available to order
IP Rating	IP64	
Bridge Resistance	700 ohm nom.	
Excitation	5V, 10V	

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