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 ±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)

IN LINE LOAD CELL (AILC2)

DIMENSIONS

MODEL	CAPACITY	DEFLECTION NOMINAL	THREAD
AILC2	200N	0.05mm [.002”]	M6x1-6g
AILC2	500N	0.05mm [.002”]	M6x1-6g
AILC2	1000N	0.05mm [.002”]	M6x1-6g
AILC2	2000N	0.05mm [.002”]	M6x1-6g
AILC2	5000N	0.10mm [.004”]	M6x1-6g

MODEL	CAPACITY	DEFLECTION NOMINAL	THREAD
AILC2	50lbf	0.05mm [.002”]	1/4”-28 UNF 2B
AILC2	100lbf	0.05mm [.002”]	1/4”-28 UNF 2B
AILC2	250lbf	0.05mm [.002”]	1/4”-28 UNF 2B
AILC2	500lbf	0.05mm [.002”]	1/4”-28 UNF 2B
AILC2	1000lbf	0.10mm [.004”]	1/4”-28 UNF 2B

Copyright © HITEC Sensors 2020. This flyer is indicative only. Contact HITEC directly for details.

HITECSENSORS
A HUMANETICS COMPANY

IN LINE LOAD CELL (AILC2)

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) (mV/V)	2 nominal	
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 Temperature Coefficient (%)	0.018 FS/°C	
Span Temperature Coefficient (%)	0.036 of load/°C	
Compensated Temperature (°C)	-15 to +70	Wider range available to order
Operating Temperature (°C)	-20 to +80	Wider range available to order
IP Rating	IP64	
Bridge Resistance (ohm)	700 nominal	
Excitation (V)	5, 10	

HITEC Sensor Developments, Inc. | 10 Elizabeth Drive
Chelmsford, MA 01824 I United States of America
T +1 978 742 9032 I **F** +1 978 742 9033

hitecsensors.com

Copyright © HITEC Sensors 2020. This flyer is indicative only. Contact HITEC directly for details.

HITECSENSORS
A HUMANETICS COMPANY