

Series MIN835

Miniature High Capacity Tension and Compression Load Cell



Description

The Series MIN835 load cells are compact-sized for higher capacity tension and compression load applications. Constructed of all welded stainless steel, these bonded foil strain gaged force sensors provide reliable performance for demanding applications. The MIN835 comes in a variety of mounting configurations. Standard features include shock and vibration protection. MIN835 load cells are ideal for high capacity applications where size constraints limit many load cell configurations. Typical applications are actuator testing, filament testing, and structures testing. Each unit is shipped with a 5 point calibration record traceable to NIST as standard.

Standard Features

- 0.20% Accuracy
- Compact Size
- High Capacity (2000 lbs. to 10,000 lbs.)
- Tension and Compression
- 2 mV/V nominal
- All Welded Stainless Steel
- -65°F to 250°F Standard Temperature
- Shock and Vibration Resistant
- 5 Point Calibration Record Traceable to NIST

Optional Features

- Multiple Mounting Configurations
- Metric Versions
- Special Calibration
- Customer Mounting Threads and Cable Lengths
- -65°F to +400°F Operating Temperature

Performance

Standard Ranges

2000, 3000, 5000, 7500, 10,000 lbs.

Output

2mV/V nominal.

Accuracy

0.20% BFSL.

Temperature Effect on Zero

0.005% FSO/°F.

Temperature Effect on Span

0.005% Reading/°F.

Zero Balance

1% FSO.

Environmental Characteristics

Operating Temperature Range

-65°F to 250°F.
(-65°F to 400°F optional.)

Compensated Temperature Range

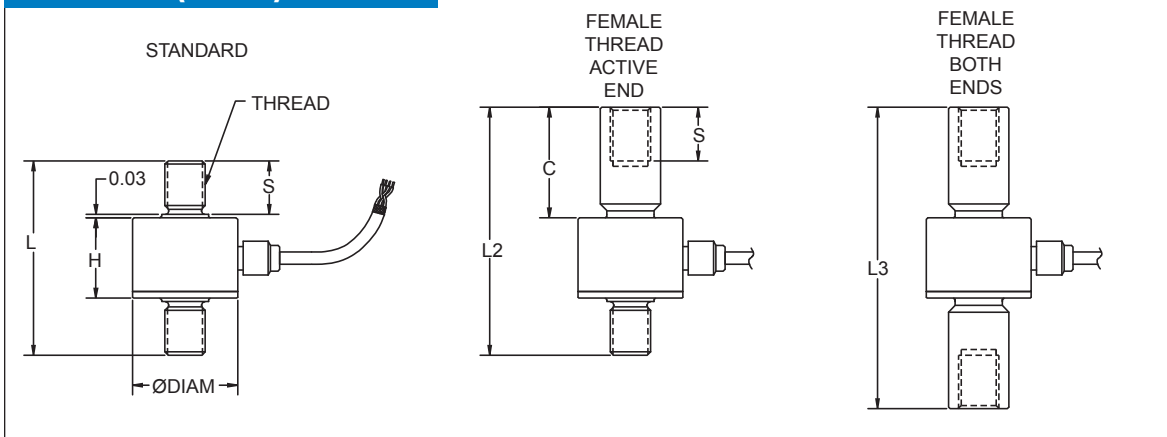
70°F to 170°F.
(-65°F to 400°F optional.)

MIN835

Series MIN835 Specifications

Baseline Configuration Specs Represented.
Modifications Encouraged - See Below
Custom Designs Available

Dimensions (inches)



Capacities (LB)

Capacities (LB)	Diameter	L	H	Thread	S	L2	C	L3
2000, 3000	Ø1.00	1.81	0.75	3/8-24 UNF	0.50	2.31	1.03	2.81
5000	Ø1.25	2.25	0.88	1/2-20 UNF	0.63	2.88	1.29	3.51
7500, 10,000	Ø1.36	3.06	1.00	3/4-16 UNF	1.00	4.06	2.03	5.06

Mechanical Characteristics

Threads

See table.

Static Overload Without Damage

150% FSO.

Standard Calibration

Tension only:

5 points (0, 50%, 100%, 50%, 0 of FSO).

Optional Calibrations

• Compression only:

5 points (No charge option)

• Tension and Compression:

5 points in each direction

• Special multipoint calibration (customer specified):

in tension or compression or both tension and compression.

Material

Welded stainless steel.

Electrical Characteristics

Bridge Resistance

350 Ohms nominal.

Excitation

10 Vdc or Vac.

Insulation Resistance

Greater than 5000 megohms at 50 Vdc.

Electrical Termination

10', 4 Conductor Shielded Teflon Cable.

Electrical Characteristics

Connector Pins (Standard)

RED +EXE GREEN - SIG
BLACK - EXE WHITE +SIG

Customer specified wiring codes are available.

Modifications and Warranty

MODIFICATIONS: We realize transducer applications vary greatly and as such our designs are flexible. Choice of pressure port, electrical termination, material compatibility and performance characteristics are a few of the many options available. Specifications on this datasheet represent the standard configuration only. Product and company names listed are trademarks of their respective companies. Specifications subject to change without notice.

WARRANTY: Stellar Technology warrants that its product shall be free from defective workmanship and/or material for a twelve month period from the date of shipment, provided that Stellar Technology's obligation hereunder shall be limited to correcting any defective material FOB our factory. No allowance will be made for any expenses incurred for correcting any defective workmanship and/or material without written consent by Stellar Technology. This warranty is in lieu of all other warranties expressed or implied.

LORD SENSING
Stellar Technology

ISO 9001/AS9100

Due to the nature of technology, changes are inevitable. For latest technical specifications, see our website.

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