



ISO 9001/AS9100 Certified

DTH920

THRU-HOLE LOAD CELL

YOUR ENGINEERED SOLUTION SOURCE SM



DESCRIPTION

The Series DTH920 thru-hole load cells are 0.50% accuracy force transducers designed with a clear center hole for applications requiring a load structure to pass thru the load cell.

Depending on the force loading arrangement, these “donut-style” force transducers can be used to measure either tension or compression. The compact construction is welded stainless steel. These bonded foil strain gaged force sensors provide reliable performance for a wide range of demanding applications. Features include shock and vibration protection. DTH920 load cells are ideal for applications involving clamping forces, bolt and fastener force, and structural analysis.

Each unit is shipped with a 5 point calibration record traceable to NIST as standard.

STANDARD FEATURES

- Low Profile
- 0.50% Accuracy
- Tension or Compression
- 2 mV/V
- Welded Stainless Steel
- -65°F to 250°F Standard Temperature
- Shock and Vibration Resistant
- 5 Point Calibration Record Traceable to NIST

OPTIONAL FEATURES

- Metric Thru-Holes
- Custom Capacities
- Special Calibration
- Customer Specified Cable Lengths
- -65°F to +400°F Operating Temperature
- Submersible Configurations

PERFORMANCE

STANDARD RANGES

250 lbs through 30,000 lbs.

OUTPUT

2mV/V nominal.

ACCURACY

0.50% FSO BFSL.

TEMPERATURE EFFECT ON ZERO

0.005% FSO/°F.

TEMPERATURE EFFECT ON SPAN

0.005% Reading/°F.

ZERO BALANCE

3% FSO.

ENVIRONMENTAL CHARACTERISTICS

OPERATING TEMPERATURE RANGE

-65°F to 250°F.

(-65°F to 400°F optional.)

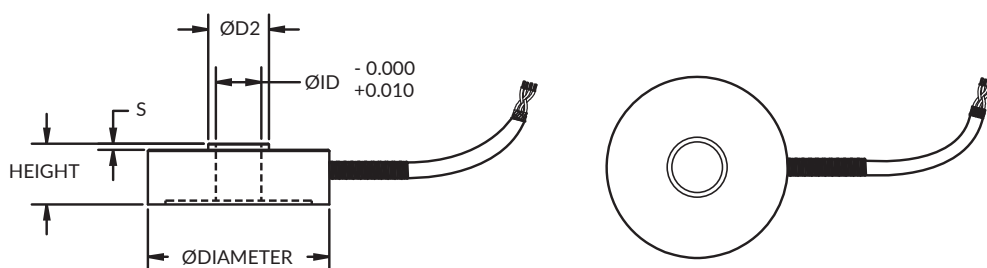
COMPENSATED TEMPERATURE RANGE

70°F to 170°F.

(-65°F to 400°F optional.)



A US Manufacturer of: Pressure, Temperature, Load/
Force/Torque, and Displacement Sensors.



FRAME	DIAMETER	HEIGHT	ØD2	S	MIN RANGE (LB)	MAX RANGE (LB)	ID*
A	1.50	0.50	0.50	0.05	250	2k	from 0.19 to 0.38
B	2.00	0.63	0.88	0.05	250	10k	from 0.19 to 0.66
C	3.00	0.75	1.70	0.08	2k	30k	from 0.19 to 1.28

*Customer specified ID

MECHANICAL CHARACTERISTICS

STATIC OVERLOAD WITHOUT DAMAGE

150% Range.

CALIBRATION

Standard calibration is 5 pts (0, 50%, 100%, 50%, 0 Range) compression.

MATERIAL

Welded stainless steel.

THRU HOLE

See table.

ELECTRICAL CHARACTERISTICS

BRIDGE RESISTANCE

700 Ohms nominal.

EXCITATION

10 Vdc or 10 Vac.

INSULATION RESISTANCE

Greater than 5000 megaohms at 50 Vdc.

ELECTRICAL TERMINATION

10', 4 Conductor Shielded Teflon Cable.

ELECTRICAL CHARACTERISTICS

STANDARD WIRING CODE

(Connector pin-outs)

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.



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

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