FUTEK
ADVANCED SENSOR TECHNOLOGY, INC.

MODEL LTH350

Donut/Through Hole Load Cell

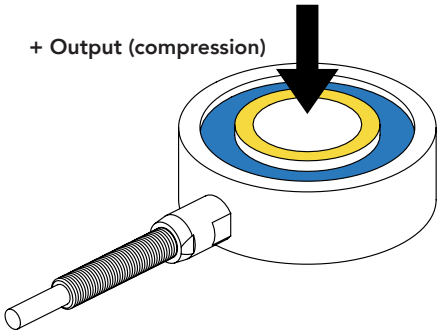
FEATURES

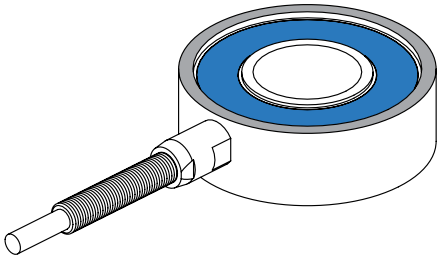
- Fast response time
- Robust strain relief
- Compatible in load washer applications
- Offered in a variety of capacities and inner diameters
- Low power consumption

Non-loading surface, do not contact

Active End

Fixed End

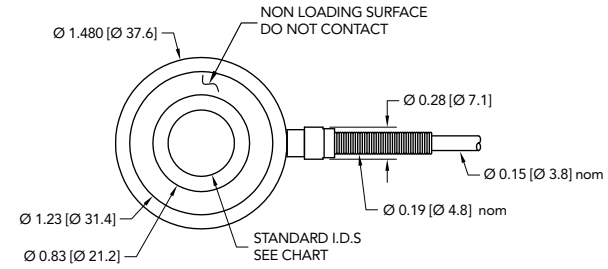


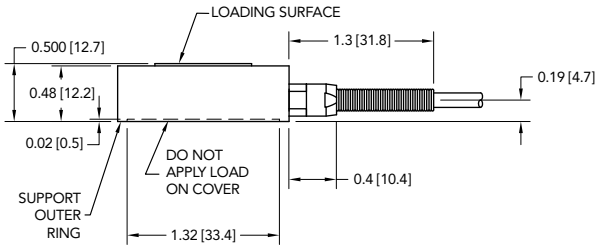


SPECIFICATIONS	
PERFORMANCE	
Nonlinearity	±0.5% of RO
Hysteresis	±0.5% of RO
Nonrepeatability	±0.5% of RO
ELECTRICAL	
Rated Output (RO)	1.5 mV/V (100 lb) 2 mV/V (250–5000 lb) nom
Excitation (VDC or VAC)	18 max
Bridge Resistance	700 Ohm nom
Insulation Resistance	≥500 MOhm @ 50 VDC
Connection	#24 AWG, 4 conductor, braided shielded Teflon cable, 10 ft [3 m] long
Wiring/Connector Code	WC1
MECHANICAL	
Capacities	100 lb [445 N], 250 lb [1112 N], 500 lb [2224 N], 1000 lb [4448 N], 2000 lb [8896 N], 3000 lb [13345 N], 5000 lb* [22240 N]*
Weight (approximate)	3.5 oz [99 g]
Safe Overload	150% of RO
Deflection	0.002 in [0.05 mm] nom
Material	17-4 PH stainless-steel
IP Rating	IP64
TEMPERATURE	
Operating Temperature	-60 to 200°F (-50 to 93°C)
Compensated Temperature	60 to 160°F (15 to 72°C)
Temperature Shift Zero	±0.005% of RO/°F (0.01% of RO/°C)
Temperature Shift Span	±0.005% of Load/°F (0.01% of Load/°C)
CALIBRATION	
Calibration Test Excitation	10 VDC
Calibration (standard)	5-pt Compression
Shunt Calibration Value	150 kOhm (100 lb) 100 kOhm (500–5000 lb)
CONFORMITY	
RoHS	EU 2015/863
CE	EN55011; EN61326-1

*Commonly stocked capacities

DIMENSIONS inches [mm]





INNER DIAMETER

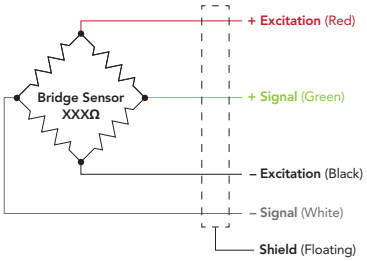
ID	Dimension $^{+0.01}_{-0.00}$ [$^{+0.25}_{-0.00}$]
1/4	0.259 [6.58]
5/16	0.322 [8.18]
3/8	0.384 [9.75]
7/16	0.447 [11.35]
1/2*	0.509 [12.93]
9/16	0.572 [14.53]
5/8*	0.634 [16.10]

*Commonly stocked inner diameters

Note: While torquing bolts, high tension forces will occur during installation, which could result in overloading the sensor. FUTEK recommends connecting the sensor to a system in order to monitor the applied forces. FUTEK is not liable or responsible for the mishandling of the sensor during installation.

WIRING CODE (WC1 WITH SHIELD)

RED	+ EXCITATION
BLACK	– EXCITATION
GREEN	+ SIGNAL
WHITE	– SIGNAL
SHIELD	FLOATING



CAPACITIES

ITEM #	lb	N	ID
FSH04309	500	2224	1/4 in [6.35 mm]
FSH04310	5000	22240	1/4 in [6.35 mm]
FSH04308	5000	22240	5/16 in [7.94 mm]
FSH04303	100	445	3/8 in [9.53 mm]
FSH04304	250	1112	3/8 in [9.53 mm]
FSH04305	500	2224	3/8 in [9.53 mm]
FSH04306	1000	4448	3/8 in [9.53 mm]
FSH04307	2000	8896	3/8 in [9.53 mm]
FSH04183	5000	22240	3/8 in [9.53 mm]
FSH04302	100	445	7/16 in [11.1 mm]
FSH04184	500	2224	1/2 in [12.7 mm]
FSH04185	1000	4448	1/2 in [12.7 mm]
FSH04186	2000	8896	1/2 in [12.7 mm]
FSH04187	3000	13345	1/2 in [12.7 mm]
FSH04188	5000	22240	1/2 in [12.7 mm]
FSH04189	1000	4448	9/16 in [14.29 mm]
FSH04190	2000	8896	9/16 in [14.29 mm]
FSH04191	3000	13345	9/16 in [14.29 mm]
FSH04192	5000	22240	9/16 in [14.29 mm]
FSH04193	100	445	5/8 in [15.88 mm]
FSH04194	250	1112	5/8 in [15.88 mm]
FSH04195	500	2224	5/8 in [15.88 mm]
FSH04196	1000	4448	5/8 in [15.88 mm]
FSH04197	2000	8896	5/8 in [15.88 mm]
FSH04198	3000	13345	5/8 in [15.88 mm]
FSH04199	5000	22240	5/8 in [15.88 mm]

Drawing Number: FI1443-B

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CE RøHS ANSI Z540-1 ISO 17025 ISO 9001 ISO 13485 U.S. Manufacturer