



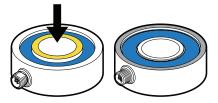
## **FEATURES**

- Miniature through-hole design
- Low power consumption, suitable for batteryoperated and confined spaces.
- Instrumented for optimized performance and minimized effects of extraneous loads.
- Suitable for limited space applications with high accuracy and reliability.
- Integrated 4-pin micro connector for convenient cable connection/disconnection.
- Welded isolation diaphragms for protection in harsh environments.
- ID of 1/4" to 5/8" available
- OEM options available.
- Featured in NASA's Orion deployment mechanism.
- Fast response (µs) and low deflection

Non-loading surface, do not contact Active End

**Fixed End** 

+ Output (compression)



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	4 Position Micro Receptacle	
Wiring Code	CC19	
MECHANICAL		
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	See Capacity Charts	
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	2011/65/EU with 2015/863	
CE	EN55011; EN61326-1	



 $\mathsf{Load} \cdot \mathsf{Torque} \cdot \mathsf{Pressure} \cdot \mathsf{Multi-Axis} \cdot \mathsf{Calibration} \cdot \mathsf{Instruments} \cdot \mathsf{Software}$ 









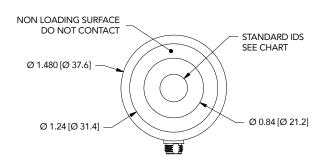


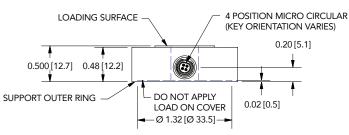


Model LTH350 2

## **DIMENSIONS** inches [mm]

TOLERANCE:  $.X \pm 0.1"$  [2.5]  $.XX \pm 0.01"$  [0.25]  $.XXX \pm 0.005"$  [0.127]





INNER DIAMETER (Actual)				
ID	<b>Dimension</b> inches [mm] $^{+0.01}_{-0.00} \begin{bmatrix} +0.25 \\ -0.00 \end{bmatrix}$			
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]			
5/8"	0.634 [16.10]			

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.

CAPACITIES					
ITEM #	lb	N	IP	Nominal ID	
FSH04588	100	445	IP64	7/16 in [11.1 mm]	
FSH04595	100	445	IP64	5/8 in [15.88 mm]	
FSH04584	250	1112	IP64	3/8 in [9.53 mm]	
FSH04596	250	1112	IP64	5/8 in [15.88 mm]	
FSH04589	500	2224	IP64	1/2 in [12.7 mm]	
FSH04597	500	2224	IP64	5/8 in [15.88 mm]	
FSH04861	1000	4448	IP67	3/8 in [9.53 mm]	
FSH04865	1000	4448	IP67	1/2 in [12.7 mm]	
FSH04869	1000	4448	IP67	5/8 in [15.88 mm]	
FSH04862	2000	8896	IP67	3/8 in [9.53 mm]	
FSH04866	2000	8896	IP67	1/2 in [12.7 mm]	
FSH04870	2000	8896	IP67	5/8 in [15.88 mm]	
FSH04863	3000	13345	IP67	3/8 in [9.53 mm]	
FSH04867	3000	13345	IP67	1/2 in [12.7 mm]	
FSH04871	3000	13345	IP67	5/8 in [15.88 mm]	
FSH04860	5000	22240	IP67	1/4 in [6.35 mm]	
FSH04912	5000	22240	IP67	5/16 in [8.18 mm]	
FSH04864	5000	22240	IP67	3/8 in [9.53 mm]	
FSH04868	5000	22240	IP67	1/2 in [12.7 mm]	
FSH04872	5000	22240	IP67	5/8 in [15.88 mm]	

## **FUTEK 4 PIN MICRO CIRCULAR** (CC19)

1	+ EXCITATION	Red
2	– EXCITATION	Black
3	– SIGNAL	White
4	+ SIGNAL	Green



Drawing Number: FI1542-B

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