



## FEATURES

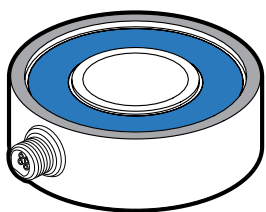
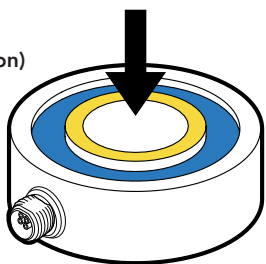
- Compatible in load washer applications
- Offered in a variety of capacities and inner diameters
- Low power consumption
- Fast response ( $\mu$ s) and low deflection
- Environmental Protection, IP67 Rated
- Water Resistant and Outdoor Rated
- Quick Disconnect Cable

 Non-loading surface, do not contact

 Active End

 Fixed End

+ Output  
(compression)



## SPECIFICATIONS

### PERFORMANCE

Nonlinearity	$\pm 0.5\%$ of RO
Hysteresis	$\pm 0.5\%$ of RO
Nonrepeatability	$\pm 0.5\%$ 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	$\geq 500$ MOhm @ 50 VDC
Connection	4 Position Micro Receptacle
Wiring Code	CC19

### 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	IP67

### TEMPERATURE

Operating Temperature	-60 to 200°F (-50 to 93°C)
Compensated Temperature	60 to 160°F (15 to 72°C)
Temperature Shift Zero	$\pm 0.005\%$ of RO/°F (0.01% of RO/°C)
Temperature Shift Span	$\pm 0.005\%$ of Load/°F (0.01% of Load/°C)

### CALIBRATION

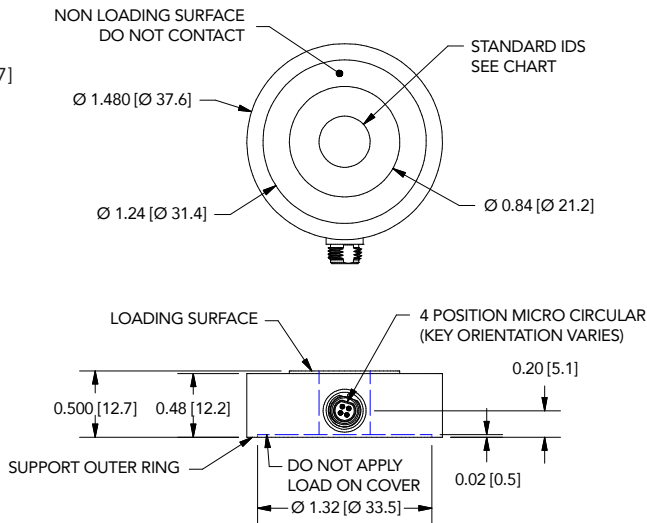
Calibration Test Excitation	10 VDC
Calibration (standard)	5-pt Compression
Shunt Calibration Value	150 kOhm (100 lb) 100 kOhm (500–5000 lb)

### CONFORMITY

RoHS	EU 2015/863
CE	EN55011; EN61326-1

## DIMENSIONS inches [mm]

TOLERANCE:  
 .X ± 0.1" [2.5]  
 .XX ± 0.01" [0.25]  
 .XXX ± 0.005" [0.127]



## CAPACITIES

ITEM #	lb	N	ID
FSH04581	5000	22240	1/4 in [6.35 mm]
FSH04582	5000	22240	5/16 in [7.94 mm]
FSH04583	100	445	3/8 in [9.53 mm]
FSH04584	250	1112	3/8 in [9.53 mm]
FSH04585	1000	4448	3/8 in [9.53 mm]
FSH04586	2000	8896	3/8 in [9.53 mm]
FSH04587	5000	22240	3/8 in [9.53 mm]
FSH04588	100	445	7/16 in [11.1 mm]
FSH04589	500	2224	1/2 in [12.7 mm]
FSH04590	1000	4448	1/2 in [12.7 mm]
FSH04591	2000	8896	1/2 in [12.7 mm]
FSH04592	3000	13345	1/2 in [12.7 mm]
FSH04593	5000	22240	1/2 in [12.7 mm]
FSH04594	3000	13345	9/16 in [14.29 mm]
FSH04595	100	445	5/8 in [15.88 mm]
FSH04596	250	1112	5/8 in [15.88 mm]
FSH04597	500	2224	5/8 in [15.88 mm]
FSH04598	1000	4448	5/8 in [15.88 mm]
FSH04599	2000	8896	5/8 in [15.88 mm]
FSH04600	3000	13345	5/8 in [15.88 mm]
FSH04601	5000	22240	5/8 in [15.88 mm]
FSH04602	3000	13345	3/8 in [9.53 mm]

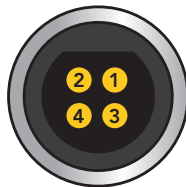
## INNER DIAMETER

ID	Dimension <sup>+0.01</sup> <sub>-0.00</sub> [ <sup>+0.25</sup> <sub>-0.00</sub> ]
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]

**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.

## FUTEK 4 PIN MICRO CIRCULAR (CC19)

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



Drawing Number: FI1542

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RoHS



U.S. Manufacturer