



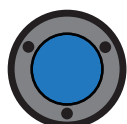
**FEATURES**

- Fast Response time ( $\mu$ s)
- Environmental Protection, IP67 Rated
- Water Resistant and Outdoor Rated
- 17-4 PH stainless-steel construction
- Utilizes metal foil strain gauge technology
- Quick Disconnect Cable

 Non-loading surface, do not contact

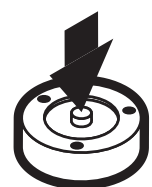
 Active End

 Fixed End



Top view

Bottom view



+ Output (compression)

**SPECIFICATIONS**

**PERFORMANCE**

Nonlinearity	See chart on next page
Hysteresis	See chart on next page
Nonrepeatability	$\pm 0.05\%$ of RO

**ELECTRICAL**

Rated Output (RO)	2 mV/V nom (100 to 2000 lb), 2.5 mV/V nom (2500 lb)
Excitation (VDC or VAC)	18 max
Bridge Resistance	740 Ohm nom
Insulation Resistance	$\geq 500$ MOhm @ 50 VDC
Connection	4 Position Micro Receptacle
Wiring/Connector Code	CC19

**MECHANICAL**

Weight (approximate)	3.7 oz [102 g]
Safe Overload	150% of RO
Deflection	See chart on next page
Material	17-4PH stainless-steel
IP Rating	IP67

**TEMPERATURE**

Operating Temperature	$-60$ to $200^{\circ}\text{F}$ [ $-50$ to $93^{\circ}\text{C}$ ]
Compensated Temperature	$60$ to $160^{\circ}\text{F}$ [ $15$ to $72^{\circ}\text{C}$ ]
Temperature Shift Zero	$\pm 0.01\%$ of RO/ $^{\circ}\text{F}$ [ $0.018\%$ of RO/ $^{\circ}\text{C}$ ]
Temperature Shift Span	$\pm 0.02\%$ of LOAD/ $^{\circ}\text{F}$ [ $0.036\%$ of LOAD/ $^{\circ}\text{C}$ ]

**CALIBRATION**

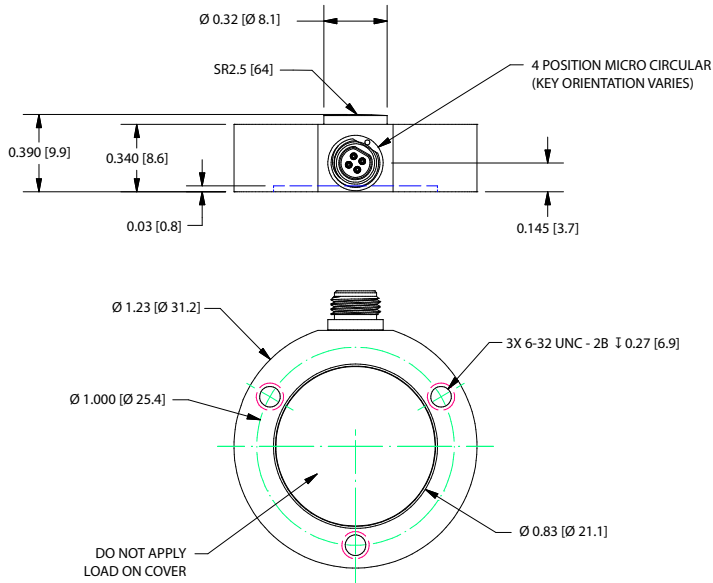
Calibration Test Excitation	10 VDC
Calibration (standard)	5-pt Compression
Shunt Calibration Value	100 kOhm, 87.325 kOhm (2500 lb)

**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]



## FUTEK 4 PIN MICRO CIRCULAR (CC19)

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



## CAPACITIES

ITEM #	lb.	N	Nonlinearity (% of RO)	Hysteresis (% of RO)	Deflection (in)	Natural Frequency (kHz)
FSH04603	100	445	±0.15	±0.15	0.001	14
FSH04604	250	1112	±0.15	±0.15	0.001	23
FSH04605	500	2224	±0.25	±0.25	0.001	32
FSH04606	1000	4448	±0.25	±0.25	0.0015	40
FSH04607	2000	8896	±0.35	±0.35	0.002	45
FSH04608	2500	11120	±0.50	±0.50	0.0024	45

Drawing Number: FI1536

FUTEK reserves the right to modify its design and specifications without notice.

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RoHS



U.S. Manufacturer



## FEATURES

- Ultra low deflection
- Robust strain relief
- 17-4 PH stainless-steel construction
- For use in compression
- Utilizes metal foil strain gauge technology
- Adheres to RoHS Directive 2015/863/EU

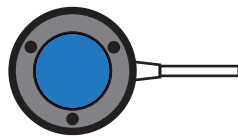
 Non-loading surface, do not contact

 Active End

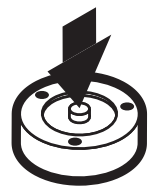
 Fixed End



Top view



Bottom view



+ Output (compression)

## SPECIFICATIONS

### PERFORMANCE

Nonlinearity See chart on next page

Hysteresis See chart on next page

Nonrepeatability  $\pm 0.05\%$  of RO

### ELECTRICAL

Rated Output (RO) 2 mV/V nom (100 to 2000 lb),  
2.5 mV/V nom (2500 lb)

Excitation (VDC or VAC) 18 max

Bridge Resistance 740 Ohm nom

Insulation Resistance  $\geq 500$  MOhm @ 50 VDC

Connection #26 AWG, 4 conductor, braided shielded Teflon  
cable 10 ft [3 m] long

Wiring/Connector Code WC1

### MECHANICAL

Weight (approximate) 3.7 oz [102 g]

Safe Overload 150% of RO

Deflection 0.001 in [0.025 mm] nom

Material 17-4PH stainless-steel

IP Rating IP64

### TEMPERATURE

Operating Temperature  $-60$  to  $200^{\circ}\text{F}$  [ $-50$  to  $93^{\circ}\text{C}$ ]

Compensated Temperature  $60$  to  $160^{\circ}\text{F}$  [ $15$  to  $72^{\circ}\text{C}$ ]

Temperature Shift Zero  $\pm 0.01\%$  of RO/ $^{\circ}\text{F}$  [0.018% of RO/ $^{\circ}\text{C}$ ]

Temperature Shift Span  $\pm 0.02\%$  of LOAD/ $^{\circ}\text{F}$  [0.036% of LOAD/ $^{\circ}\text{C}$ ]

### CALIBRATION

Calibration Test Excitation 10 VDC

Calibration (standard) 5-pt Compression

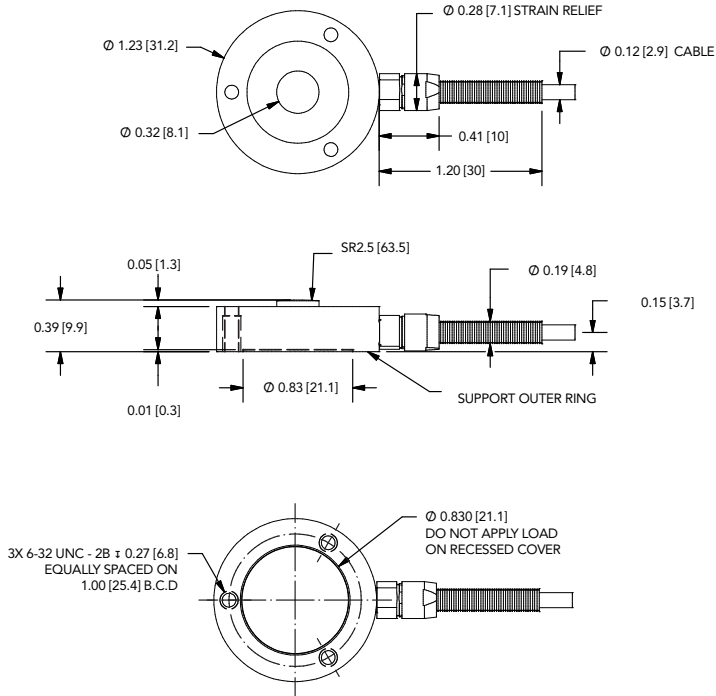
Shunt Calibration Value 100 kOhm, 87.325 kOhm (2500 lb)

### CONFORMITY

RoHS EU 2015/863

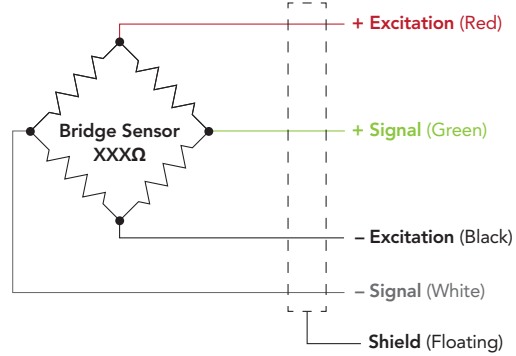
CE EN55011; EN61326-1

**DIMENSIONS inches [mm]**



**WIRING CODE (WC1 WITH SHIELD)**

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



**CAPACITIES**

ITEM #	lb.	N	Nonlinearity % of RO	Hysteresis % of RO	Natural Frequency (kHz)
FSH03889	100	445	±0.15	±0.15	12.3
FSH03890	250	1112	±0.15	±0.15	18
FSH03891	500	2224	±0.25	±0.25	24
FSH03892	1000	4448	±0.25	±0.25	29.9
FSH03893	2000	8896	±0.35	±0.35	30.7
FSH03894	2500	11120	±0.50	±0.50	31.8



Drawing Number: F11055-I

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