

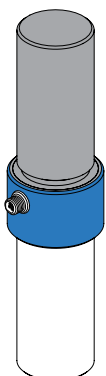
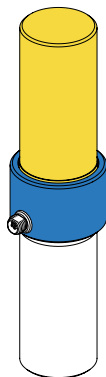


## FEATURES

- Fast response and low deflection
- Notable Nonlinearity
- For use in both tension and compression
- Environmental Protection
- Quick Disconnect Cable

- Non-loading surface, do not contact
- Active End
- Fixed End

- + Output (tension)
- Output (compression)



## SPECIFICATIONS

### PERFORMANCE

Nonlinearity	±0.2% of RO
Hysteresis	±0.2% of RO
Nonrepeatability	±0.1% of RO

### ELECTRICAL

Rated Output (RO)	2 mV/V nom
Excitation (VDC or VAC)	18 max
Bridge Resistance	350 Ohm nom
Insulation Resistance	≥500 MOhm @ 50 VDC
Connection	4 Position Micro Receptacle
Wiring Code	CC19

### MECHANICAL

Weight (approximate)	16oz [454 g]
Safe Overload	150% of RO
Deflection	0.004 in. [0.102 mm] nom
Material (flexure)	17-4 PH stainless-steel
IP Rating	IP64

### TEMPERATURE

Operating Temperature	-45 to 200°F (-42 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

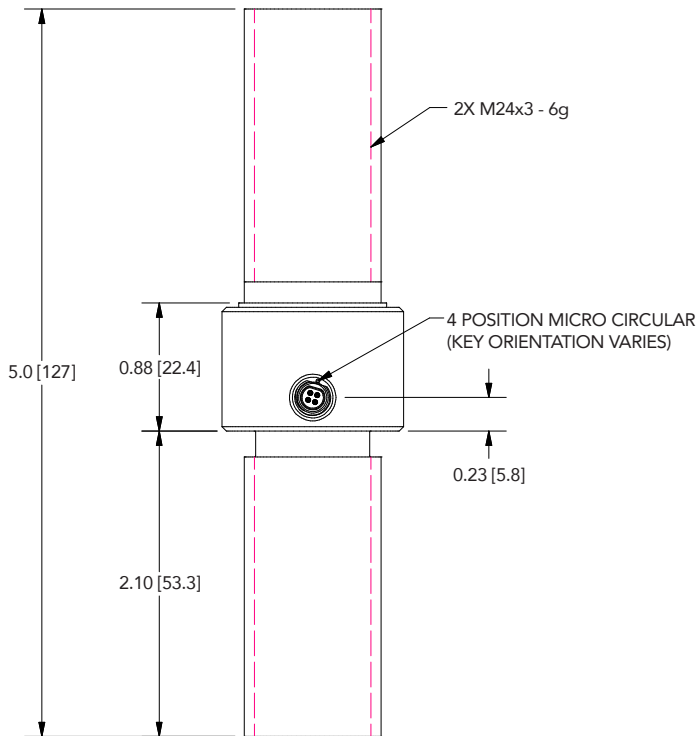
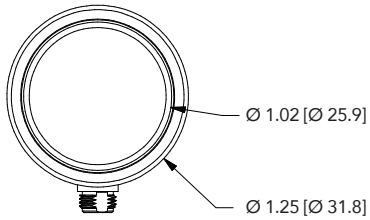
Calibration Test Excitation	10 VDC
Calibration (standard)	5-pt Tension
Calibration (available)	Compression
Shunt Calibration Value	60.4 kOhm

### CONFORMITY

RoHS	EU 2015/863
CE	EN55011; EN61326-1

## DIMENSIONS inches [mm]

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



## FUTEK 4 PIN MICRO CIRCULAR (CC19)

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



## CAPACITIES

ITEM #	klb	kN	Thread	Natural Frequency (kHz)
FSH04649	20	88.9	M24x3	9.9

Drawing Number: F11548

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

[www.futek.com](http://www.futek.com)



RoHS



U.S. Manufacturer



## FEATURES

- Fast response and low deflection
- Notable Nonlinearity
- Robust cable strain relief
- For use in both tension and compression
- Miniature size

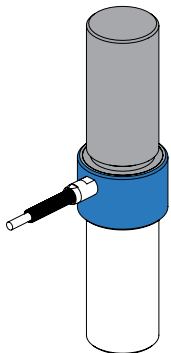
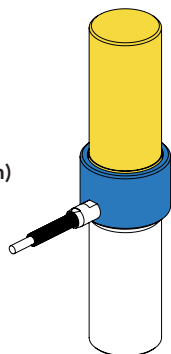
 Non-loading surface, do not contact

 Active End

 Fixed End

+ Output (tension)

- Output (compression)



## SPECIFICATIONS

### PERFORMANCE

Nonlinearity  $\pm 0.2\%$  of RO

Hysteresis  $\pm 0.2\%$  of RO

Nonrepeatability  $\pm 0.1\%$  of RO

### ELECTRICAL

Rated Output (RO) 2 mV/V nom

Excitation (VDC or VAC) 18 max

Bridge Resistance 350 Ohm nom

Insulation Resistance  $\geq 500$  MOhm @ 50 VDC

Connection #28 AWG, 4 conductor, braided shielded PVC cable, 10 ft [3 m] long

Wiring/Connector Code WC1

### MECHANICAL

Weight (approximate) 18 oz [510 g]

Safe Overload 150% of RO

Deflection 0.004 in. [0.102 mm] nom

Material (flexure) 17-4 PH stainless-steel

IP Rating IP64

### TEMPERATURE

Operating Temperature -45 to 200°F (-42 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 Tension

Calibration (available) Compression

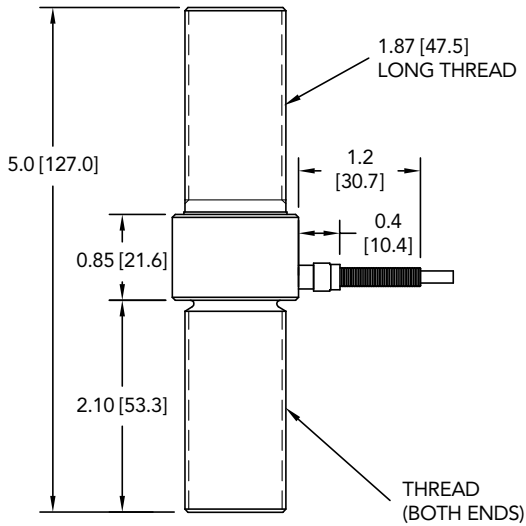
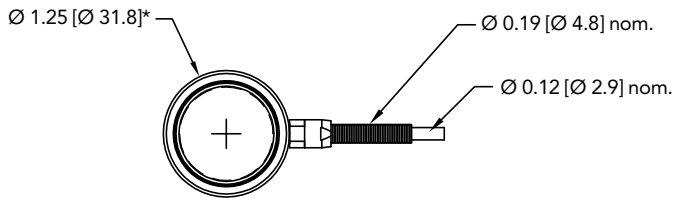
Shunt Calibration Value 60.4 kOhm

### CONFORMITY

RoHS EU 2015/863

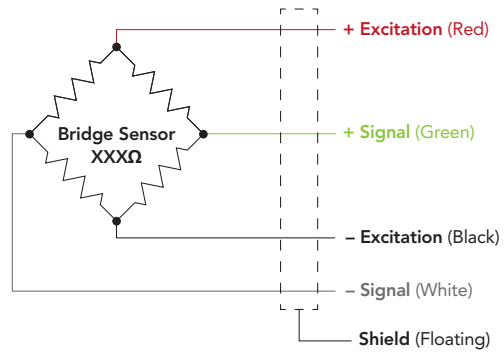
CE EN55011; EN61326-1

**DIMENSIONS** inches [mm]



**WIRING CODE** (WC1 WITH SHIELD)

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



**CAPACITIES**

ITEM #	klb	kN	Thread	Natural Frequency (kHz)
FSH04088	20	88.9	1-14	9.9
FSH04089	20	88.9	M24x3	9.9

Drawing Number: F11438-C

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