



## FEATURES

- Miniature size
- Fast response and low deflection
- Quick Disconnect Cable
- For use in both tension and compression

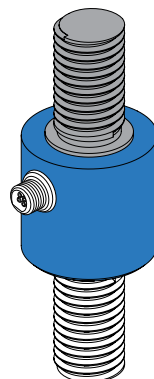
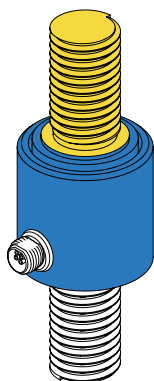
 Non-loading surface, do not contact

 Active End

 Fixed End

+ Output (tension)

- Output (compression)



## SPECIFICATIONS

### PERFORMANCE

Nonlinearity	±0.25% of RO
Hysteresis	±0.25% of RO
Nonrepeatability	±0.1% of RO

### ELECTRICAL

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

### MECHANICAL

Weight (approximate)	5.5 oz [156 g]
Safe Overload	150% of RO
Deflection	0.002 in [0.05 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	±0.01% of Load/°F (0.018% of Load/°C)

### CALIBRATION

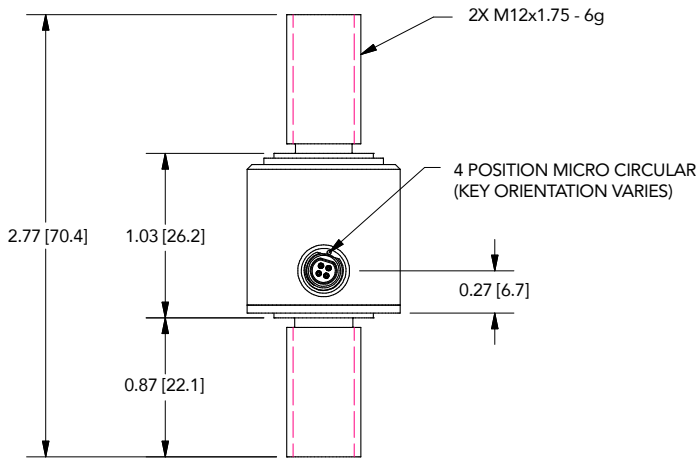
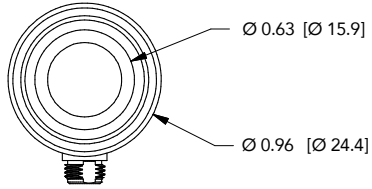
Calibration Test Excitation	10 VDC
Calibration (standard)	5-pt Tension
Calibration (available)	Compression
Shunt Calibration Value	60.4 kOhm

### 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)
FSH04644	5	22.2	M12x1.75	14.5

Drawing Number: F11545

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

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RoHS



U.S. Manufacturer



## FEATURES

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

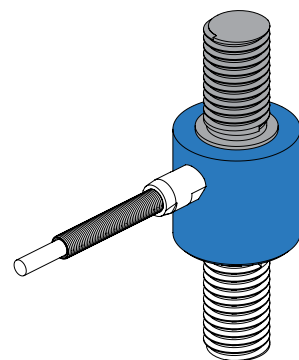
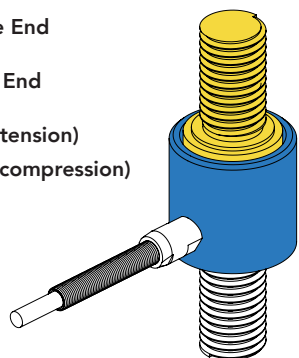
 Non-loading surface, do not contact

 Active End

 Fixed End

+ Output (tension)

- Output (compression)



## SPECIFICATIONS

### PERFORMANCE

Nonlinearity	±0.5% of RO
Hysteresis	±0.5% of RO
Nonrepeatability	±0.1% of RO

### ELECTRICAL

Rated Output (RO)	1.6 mV/V (4 klb) 2 mV/V (5 klb)
Excitation (VDC or VAC)	18 max
Bridge Resistance	350 Ohm nom
Insulation Resistance	≥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)	5.5 oz [156 g]
Weight (minus cable)	3.5 oz [99 g]
Safe Overload	150% of RO
Deflection	0.002 in [0.05 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	±0.02% of Load/°F (0.036% of Load/°C)

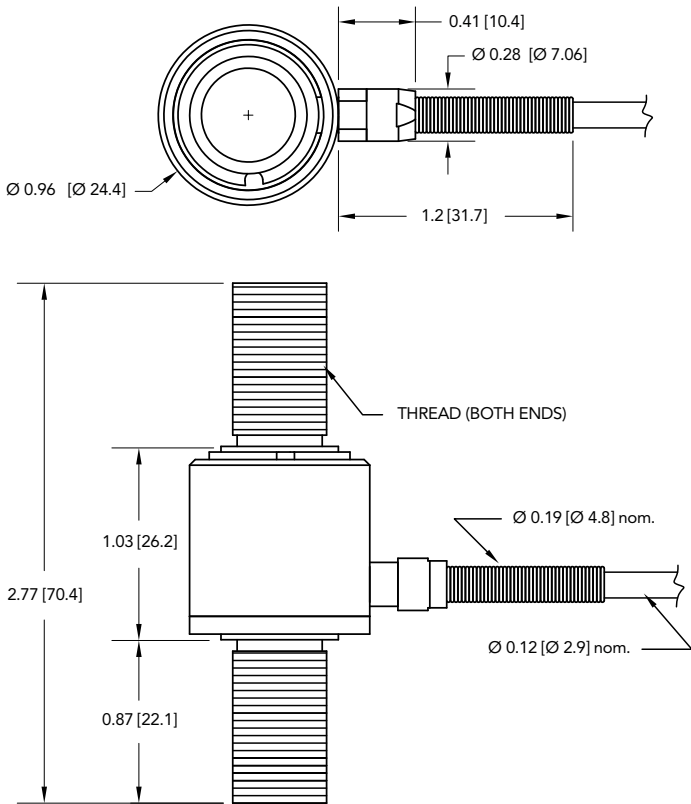
### CALIBRATION

Calibration Test Excitation	10 VDC
Calibration (standard)	5-pt Tension
Calibration (available)	Compression
Shunt Calibration Value	100 kOhm (4 klb), 60.4 kOhm (5 klb)

### CONFORMITY

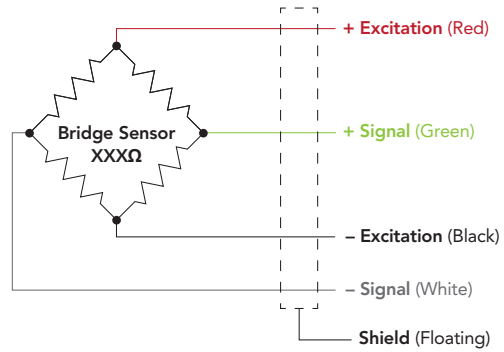
RoHS	EU 2015/863
CE	EN55011; EN61326-1

**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)
FSH04077	4	17.8	1/2-20	14.5
FSH04079	4	17.8	M12x1.75	14.5
FSH04078	5	22.2	1/2-20	14.5
FSH04080	5	22.2	M12x1.75	14.5

Drawing Number: F11437-B

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