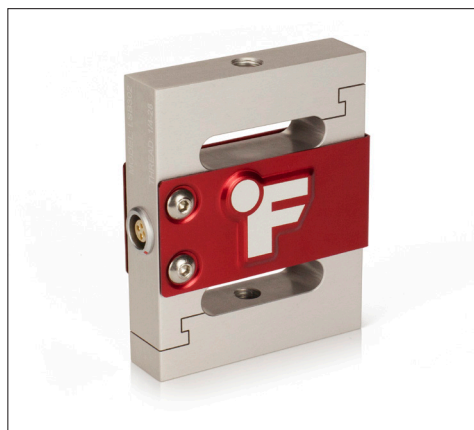


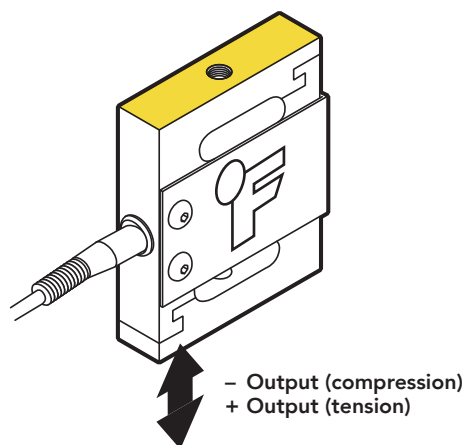
# S-Beam Tension and Compression Load Cell w/ Overload Protection



## FEATURES

- Up to 10 times the overload protection
- For in line use in both tension and compression
- Notable nonlinearity
- Connector strain relief

### ■ Mounting end



## SPECIFICATIONS

### PERFORMANCE

Nonlinearity  $\pm 0.05\%$  of RO  
 $\pm 0.1\%$  of RO (300 lb)

Hysteresis  $\pm 0.05\%$  of RO  
 $\pm 0.1\%$  of RO (300 lb)

Nonrepeatability  $\pm 0.05\%$  of RO

### ELECTRICAL

Rated Output (RO) 2 mV/V nom  
3 mV/V (300 lb)

Excitation (VDC or VAC) 20 max

Bridge Resistance 1000 Ohm nom

Insulation Resistance  $\geq 500$  MOhm @ 50 VDC

Connection 4-Pin LEMO® connector receptacle standard.

Connector Code CC4 (LEMO)  
WC4 (Cable version)

### MECHANICAL

Weight (approximate) 5 oz [142 g]

Safe Overload 1000% (25–100 lb)  
500% (300 lb)

Material Anodized aluminum

IP Rating IP64 (Cable version), IP50 (LEMO)

### TEMPERATURE

Operating Temperature -60 to 200°F [-50 to 93°C] (Lemo Version)

Compensated Temperature 60 to 160°F [15 to 72°C]

Temperature Shift Zero  $\pm 0.001\%$  of RO/°F [0.0018% of RO/°C]

Temperature Shift Span  $\pm 0.0008\%$  of Load/°F [0.0014% of Load/°C]

### CALIBRATION

Calibration Test Excitation 10 VDC

Calibration (standard) 5-pt Tension

Calibration (available) Tension and Compression

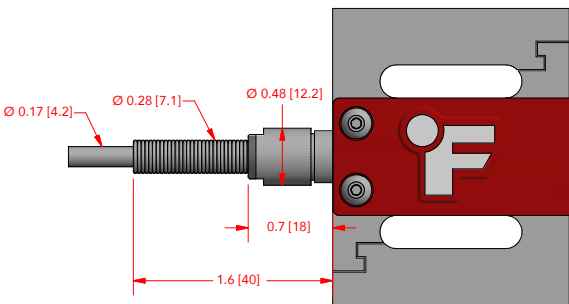
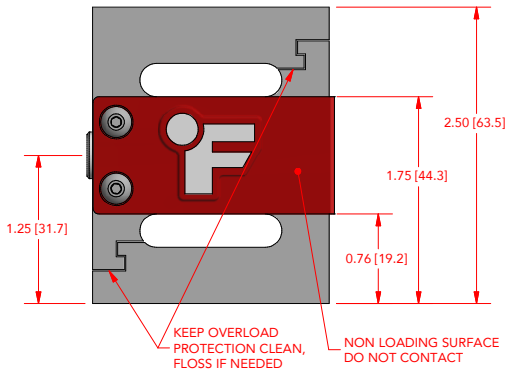
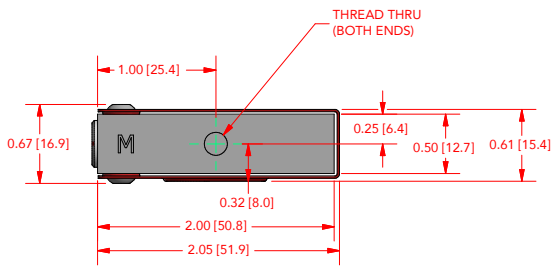
Shunt Calibration Value 150 kOhm  
100 kOhm (300 lb)

### CONFORMITY

RoHS EU 2015/863

CE EN55011; EN61326-1

**DIMENSIONS** inches [mm]

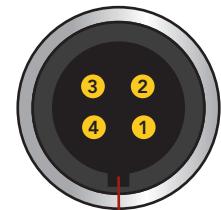


**CAPACITIES**

| ITEM #   | lb  | N    | Thread | Natural Frequency (Hz) | Deflection (in.) | LEMO® Connector |
|----------|-----|------|--------|------------------------|------------------|-----------------|
| FSH04200 | 25  | 111  | 1/4-28 | 1150                   | 0.006            | X               |
| FSH04205 |     |      | M6 x 1 |                        |                  | X               |
| FSH04201 | 50  | 222  | 1/4-28 | 1600                   | 0.006            | X               |
| FSH04206 |     |      | M6 x 1 |                        |                  | X               |
| FSH04202 | 100 | 445  | 1/4-28 | 2200                   | 0.007            | X               |
| FSH04207 |     |      | M6 x 1 |                        |                  | X               |
| FSH04470 | 300 | 1334 | 1/4-28 | 2600                   | 0.015            | X               |
| FSH04469 |     |      | M6 x 1 |                        |                  | X               |

**LEMO 4-PIN (CC4)**

| PIN | COLOR | DESCRIPTION  |
|-----|-------|--------------|
| 1   | Red   | + Excitation |
| 2   | Green | + Signal     |
| 3   | White | - Signal     |
| 4   | Black | - Excitation |



Align with key

Sensor Receptacle View

**WIRING CODE (WC4)**

|        |              |
|--------|--------------|
| RED    | + EXCITATION |
| BLACK  | - EXCITATION |
| GREEN  | + SIGNAL     |
| WHITE  | - SIGNAL     |
| ORANGE | + SENSE      |
| BLUE   | - SENSE      |
| SHIELD | GROUNDED     |

Drawing Number: F11446-B

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