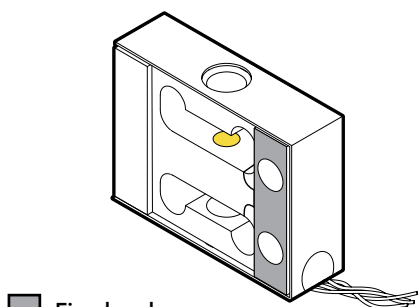
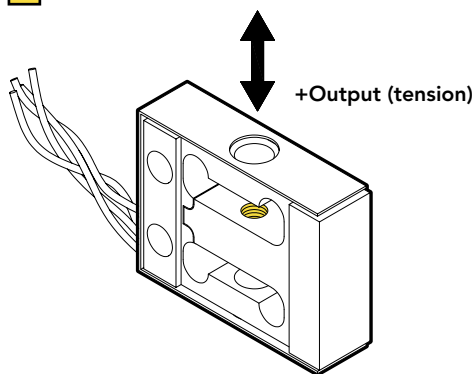




### FEATURES

- Intended for high volume applications
- Easily integrates into OEM applications
- Built-in overload protection
- Exceptional nonlinearity and nonrepeatability
- Can integrate with analog VDC, mA, digital SPI, I2C, RS-232, UART output, and more

#### Active end



#### Fixed end

### Sensor Solution Source

Load · Torque · Pressure · Multi-Axis · Calibration · Instruments · Software

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

### SPECIFICATIONS

#### PERFORMANCE

Nonlinearity  $\pm 0.02\%$  of RO (2.2–100 lb)  
 $\pm 0.06\%$  of RO (200 lb)

Hysteresis  $\pm 0.02\%$  of RO (2.2–100 lb)  
 $\pm 0.06\%$  of RO (200 lb)

Nonrepeatability  $\pm 0.02\%$  of RO

Creep  $\pm 0.025\%$  of Load

#### ELECTRICAL

Rated Output (RO) 2 mV/V nom

Excitation (VDC or VAC) 18 max

Bridge Resistance 1000 Ohm nom

Insulation Resistance  $\geq 500$  Mohm @ 50 VDC

Connection #29 AWG, 4 conductor, spiral teflon cable, 6 in [152.4 mm] long

Wiring/Connector Code WC2

#### MECHANICAL

Weight (approximate) 1 oz [28 g] (2.2–100 lb)  
3 oz [85 g] (200 lb)

Safe Overload See chart on next page

Material Aluminum (2.2–100 lb),  
17-4 PH stainless-steel (200 lb)

IP Rating IP30

#### 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  $\pm 0.005\%$  of RO/ $^{\circ}\text{F}$  [ $0.01\%$  of RO/ $^{\circ}\text{C}$ ]

Temperature Shift Span  $\pm 0.005\%$  of Load/ $^{\circ}\text{F}$  [ $0.01\%$  of Load/ $^{\circ}\text{C}$ ]

#### CALIBRATION

Calibration Test Excitation 10 VDC

Calibration (standard) Certificate of Conformance

Calibration (available) 5-pt Tension and Compression

Shunt Calibration Value 150 kOhm

#### CONFORMITY

RoHS 2011/65/EU

CE EN61326-1:2006

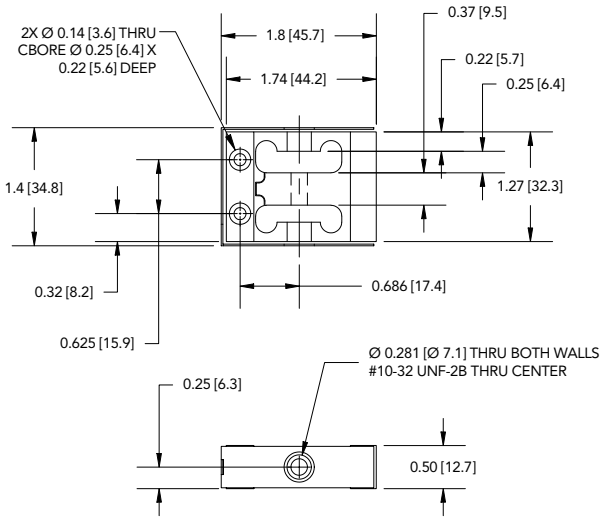


RoHS



U.S. Manufacturer

**DIMENSIONS inches [mm]**



**CAPACITIES**

ITEM #	lb	N	Deflection (in.)	Natural Frequency (Hz)	Safe Overload (lb)
FSH03974	2.2	9.8	0.0080	280	250
FSH03975	5	22.2	0.0065	468	250
FSH03976	10	44.5	0.0060	687	250
FSH03977	25	111	0.0055	1134	250
FSH03978	50	222	0.0055	1593	250
FSH03979	100	445	0.0060	2157	250
FSH03980	200	890	0.0055	1773	400*

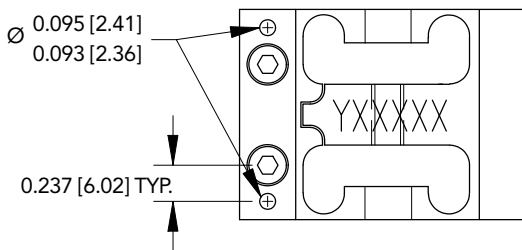
\*If additional pins are used

**WIRING CODE (WC2)**

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

\*Color code for this sensor is not FUTEK standard

**ADDITIONAL HOLE LOCATIONS (200 LB ONLY)**



Drawing Number: FI1400

FUTEK reserves the right to modify its design and specifications without notice. Please visit [www.futek.com/salesterms](http://www.futek.com/salesterms) for complete terms and conditions.

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