



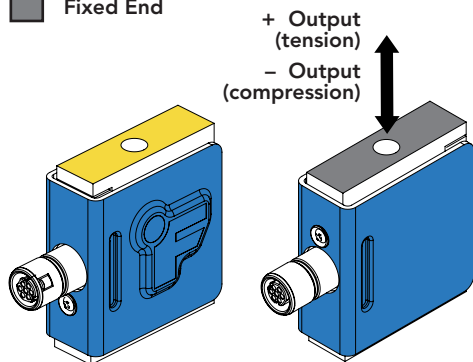
FEATURES

- Detachable 7 Pin FUTEK Receptacle
- Integrated IEEE1451.4 TEDs chip and PT-1000 temperature sensor
- Heat treated stainless-steel flexure design for optimal fatigue life and off center loading capabilities
- High performance tension and compression load cell
- Light weight, miniature size
- Integrated overload protection
- Notable nonrepeatability
- Shock and vibration resistant

 Non-loading surface, do not contact

 Active End

 Fixed End



SPECIFICATIONS

PERFORMANCE

Nonlinearity	±0.1% of RO
Hysteresis	±0.1% of RO
Nonrepeatability	±0.05% of RO

ELECTRICAL

Rated Output (RO)	1 mV/V nom (250 g) 2 mV/V nom (1 - 100 lb)
Excitation (VDC or VAC)	10 max
Bridge Resistance	350 Ohm nom
Insulation Resistance	≥500 MOhm @ 50 VDC
Connection	FUTEK 7-Pin Receptacle
Connector Code	CC18

MECHANICAL

Weight (approximate)	0.3 oz [9 g]
Safe Overload	1000% of RO (1-25 lb) 200% tension only (50-100 lb)
Material	17-4 PH stainless-steel body, anodized cover
IP Rating	IP40
Vibration Resistance	20-2000 Hz, 0.01g ² /Hz per MIL-STD-810E
Shock Resistance	500 g per IEC60068-2-27

TEMPERATURE

Operating Temperature	-60 to 200°F [-50 to 93°C]
Compensated Temperature	60 to 160°F [15 to 72°C]
Temperature Shift Zero	±0.005% of RO/°F [0.009% of RO/°C]
Temperature Shift Span	±0.005% of Load/°F [0.009% of Load/°C]

CALIBRATION

Calibration Test Excitation	5 VDC
Calibration (standard)	5-pt Tension
Calibration (available)	5-pt Tension and Compression
Shunt Calibration Value	100 kOhm (250 g) 60.4 kOhm (1-100 lb)

Sensor Solution Source

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

www.futek.com

DSPM Industria[®]
sensori & trasduttori

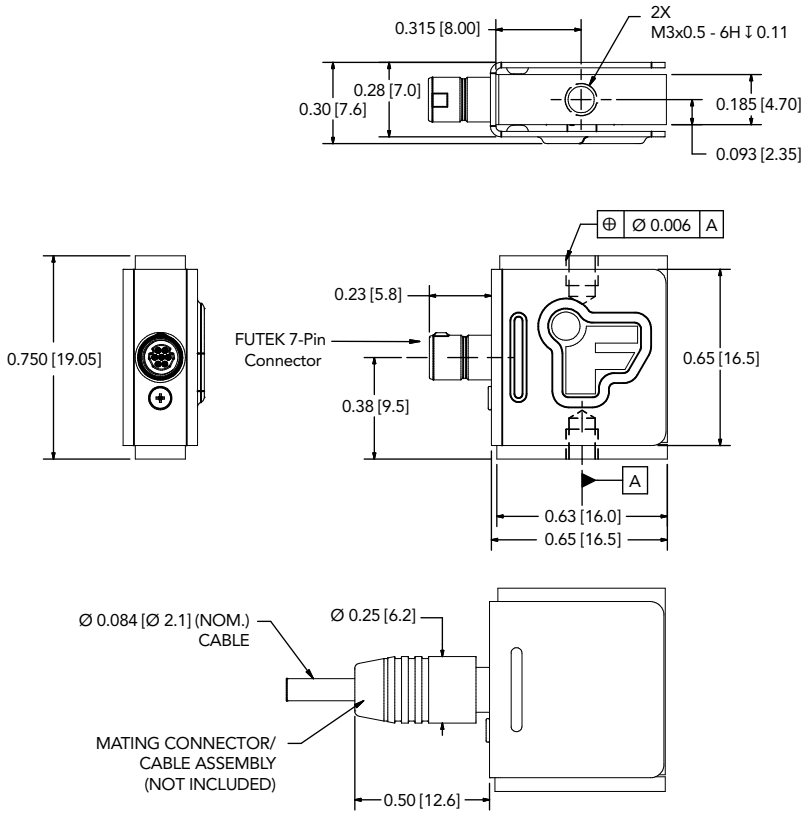
Via Paolo Uccello 4 - 20148 Milano
Tel +39 02 48 009 757 Fax +39 02 48 002 070 info@dspmindustria.it www.dspmindustria.it

RoHS



U.S. Manufacturer

DIMENSIONS inches [mm]

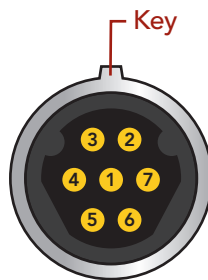


CAPACITIES

ITEM #	lb	N	Deflection (in)	Natural Frequency (Hz)
FSH04401	250 g	2.5	0.003	690
FSH04085	1	4.5	0.005	690
FSH04101	2	8.9	0.004	1180
FSH04100	5	22.2	0.003	2180
FSH04099	10	44.5	0.003	3010
FSH04097	25	111	0.003	5380
FSH04422	50	222	0.003	6620
FSH04416	100	445	0.004	8250

WIRING CODE FUTEK 7-PIN CONNECTOR

PIN	DESCRIPTION	COLOR
1	- Excitation	Black
2	+ Signal	Green
3	+ Excitation	Red
4	- Signal	White
5	Temperature + TEDS Ground	Blue
6	Temperature Data	Brown
7	TEDS Data	Orange



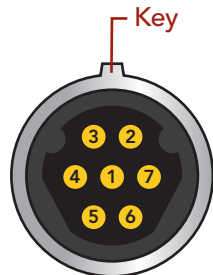
Drawing Number: FI1452-C

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



VARIATIONS

ITEM #	LENGTH [FT]	CABLE	SPECIFICATIONS
FSH03971	5	7 Position Nano Mating, Anodized Aluminum Shell, 30 AWG 7 Teflon, Polyester Conductor Cable	Temperature: -67 TO 248°F -55 TO 120°C IP Rating: IP61



FEATURES

- Flex rated cable
- Easily inserts and detaches from sensor

LOAD CELL CONNECTIONS

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

TEMPERATURE CONNECTIONS

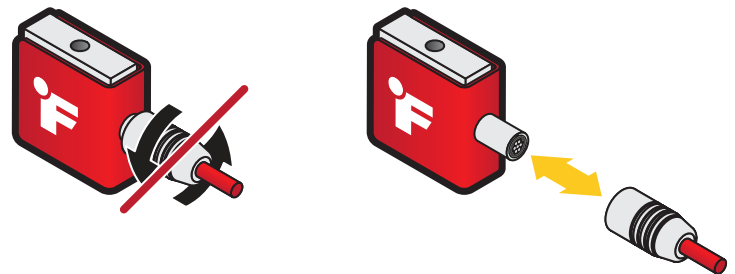
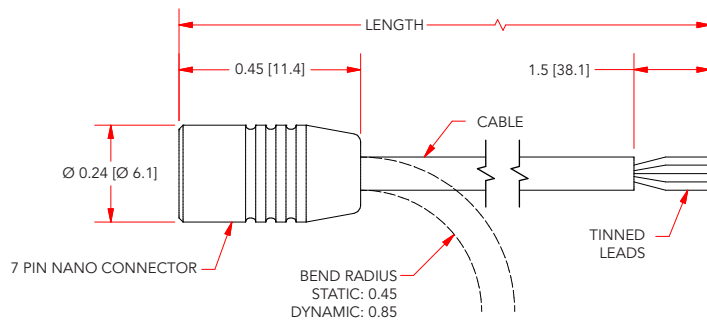
PIN	COLOR	DESCRIPTION
5	Blue	Temperature + TEDS Ground
6	Brown	Temperature Data

TEDS

PIN	COLOR	DESCRIPTION
5	Blue	Temperature + TEDS Ground
7	Orange	TEDS Data

Note: Mating connector is floating from shield

DIMENSIONS inches [mm]



Note: Do not twist connector cable once attached to sensor

Drawing Number: FI1497

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