MODEL LRF400

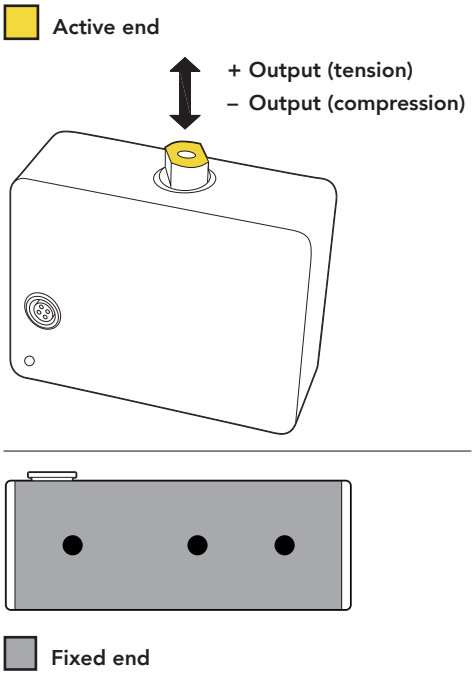
Load Cell Tension and Compression



FEATURES

- Peak accuracy in standard solutions
- Exceptional overload tolerance, up to 20,000%
- High Temperature & Long Term Load Stability
- Operates in both tension and compression
- Detachable Connector

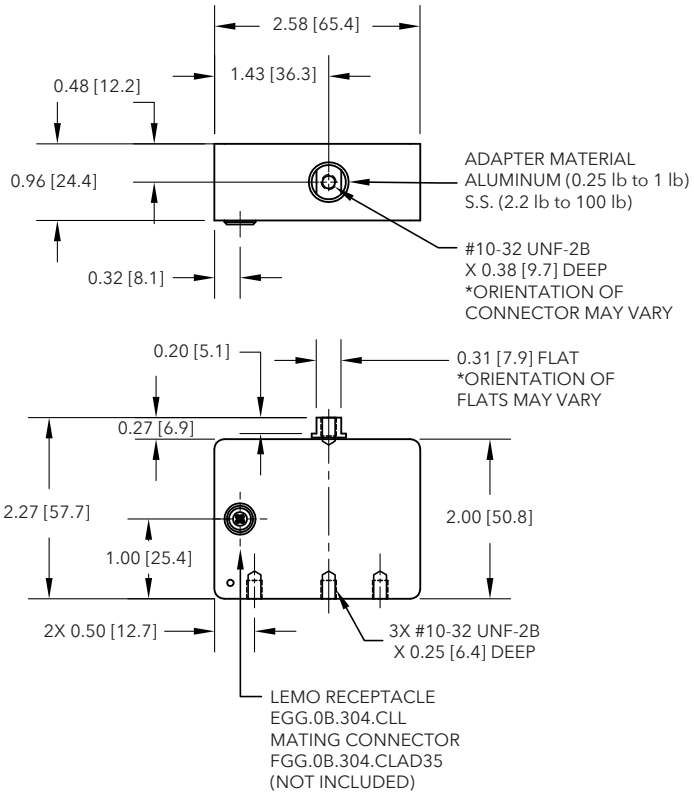
IMPORTANT NOTE: DO NOT ROTATE THE LOADING ROD AS IT WILL CAUSE DAMAGE TO THE SENSOR



SPECIFICATIONS	
PERFORMANCE	
Nonlinearity	±0.05% of RO
Hysteresis	±0.05% of RO
Nonrepeatability	±0.05% of RO
Creep	±0.05% of Load
ELECTRICAL	
Rated Output (RO)	1.5 mV/V (0.25 lb) 2 mV/V (0.5 – 100 lb)
Excitation (VDC or VAC)	18 max
Bridge Resistance	1000 Ohm nom
Insulation Resistance	≥500 Mohm @ 50 VDC
Connection	4 Pin LEMO® Receptacle
Connector Code	CC4
MECHANICAL	
Weight (approximate)	5 oz [140 g]
Safe Overload	See table
Material	Aluminum, Red Anodized (Housing)
IP Rating	IP40
TEMPERATURE	
Operating Temperature	-60 to 200°F [-50 to 93°C]
Compensated Temperature	60 to 160°F [15 to 71°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 compression
Calibration (available)	Tension and Compression
Shunt Calibration Value	150 kOhm (0.5 – 100 lb) 200 kOhm (0.25 lb)
CONFORMITY	
RoHS	EU 2015/863
CE	EN55011; EN61326-1

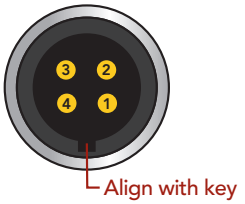
DIMENSIONS inches [mm]

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



CONNECTOR CODE (CC4)

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



CAPACITIES

ITEM #	lb	N	Safe Overload (lb)	Deflection (in)	Natural Frequency (Hz)
FSH04036	0.25	1.1	50	0.0078	120
FSH04037	0.50	2.2	50	0.0075	170
FSH04038	1	4.5	50	0.0067	260
FSH04039	2.2	9.8	250	0.0084	210
FSH04040	5	22.2	250	0.0065	350
FSH04041	10	44.5	250	0.0059	520
FSH04042	25	111	250	0.0052	860
FSH04043	50	222	250	0.0050	1250
FSH04044	100	445	250	0.0050	1760

Drawing Number: FI1435-D

FUTEK reserves the right to modify its design and specifications without notice.
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CE RoHS ANSI Z540-1 ISO 17025 ISO 9001 ISO 13485 U.S. Manufacturer