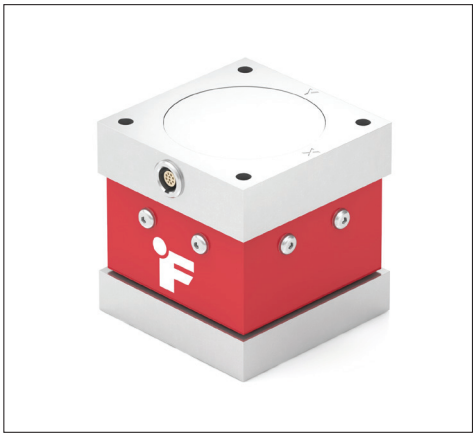
MODEL MTA400

Triaxial Load Cell



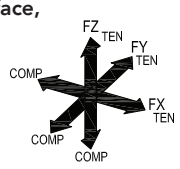
FEATURES

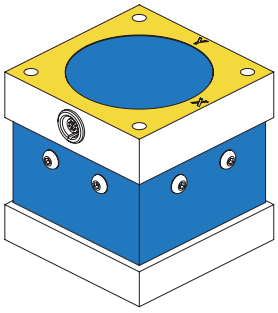
- Ideal for wind tunnel lift, drag, and side force measurement
- Low mechanical crosstalk
- Ideal for flight control force auditing and measurement of Robotic Actuator and Reaction Forces

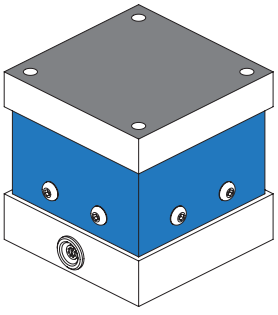
Non-loading surface, do not contact

Active End

Fixed End



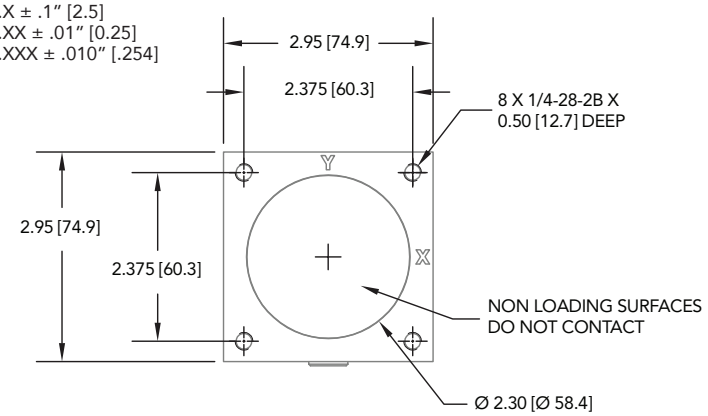


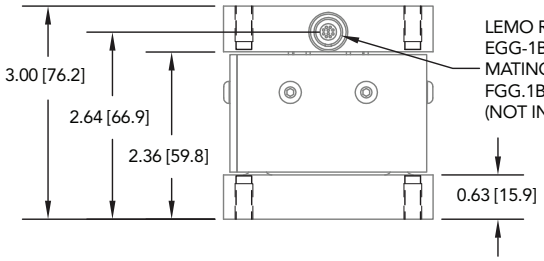


SPECIFICATIONS	
PERFORMANCE	
Capacity	Ch Fx: 250 lb; Ch Fy: 250 lb; Ch Fz: 500 lb
Nonlinearity	±0.25% of RO
Hysteresis	±0.25% of RO
Cross Talk	±3% of RO or less
ELECTRICAL	
Rated Output (Fx, Fy)	2 mV/V nom
Rated Output (Fz)	1 mV/V nom
Excitation (VDC or VAC)	18 max
Input Bridge Resistance	253 Ohm nom
Output Bridge Resistance	700 Ohm nom
Insulation Resistance	≥500 MOhm @ 50 VDC
Connection	10 pin LEMO® receptacle EGG.1B.310.CLL
Connector Code	CC8
MECHANICAL	
Weight (approximate)	2 lb [907 g]
Safe Overload	150% of RO
Material (flexure)	Aluminum, Red Anodized Covers
IP Rating	IP40
TEMPERATURE	
Operating Temperature	-60 to 200°F (-51 to 93°C)
Compensated Temperature	60 to 160°F (15 to 72°C)
Temperature Shift Zero	±0.01% of RO/°F (0.018% 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 Compression
Calibration (available)	5-pt Tension
Shunt Calibration Value	200 kOhm (Fz) 100 kOhm (Fx, Fy)
CONFORMITY	
RoHS	2011/65/EU with 2015/863
CE	EN55011; EN61326-1

DIMENSIONS inches [mm]

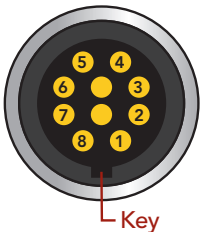
TOLERANCE:
.X ± .1" [2.5]
.XX ± .01" [0.25]
.XXX ± .010" [.254]





LEMO 10-PIN (CC8)

PIN	CHANNEL	DESCRIPTION
1	Fx, Fy, Fz	+ Excitation
2	Fx, Fy, Fz	– Excitation
3	Fx	+ Signal
4		– Signal
5	Fy	+ Signal
6		– Signal
7	Fz	+ Signal
8		– Signal



CAPACITIES

lb	Deflection (in)	Natural Frequency (Hz)
Fx & Fy - 250	0.002	1000
Fz - 500	0.001	4000

Drawing Number: FI1468-A

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