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FUTEK
ADVANCED SENSOR TECHNOLOGY, INC.

MODEL MTA600
Triaxial Load Cell

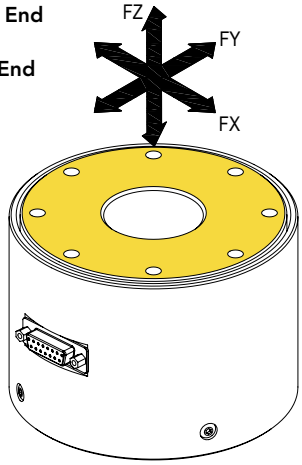


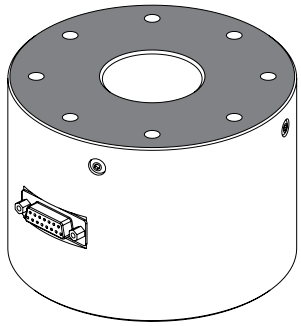
FEATURES

- Can support simultaneous force measurements on the X, Y, Z axes
- Used for wind tunnel model applications
- Used for triaxial dynamometer applications for motion studies

Active End

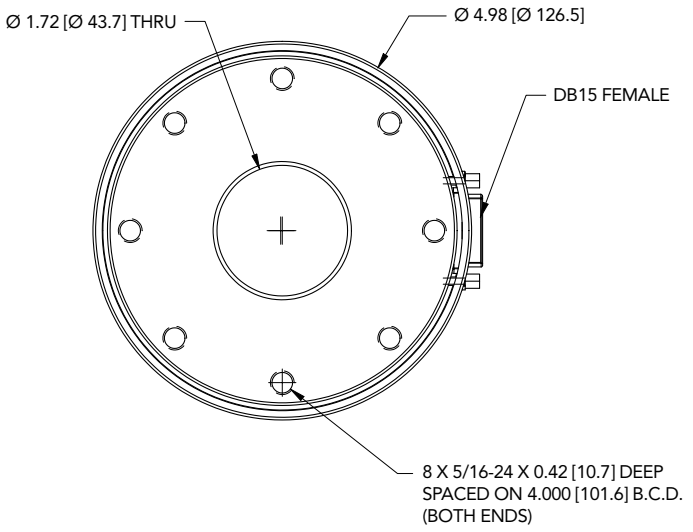
Fixed End

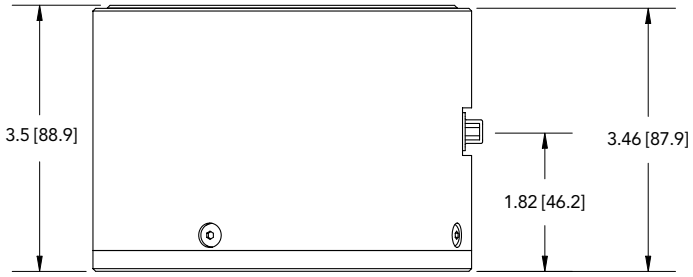




SPECIFICATIONS	
PERFORMANCE	
Capacity	Ch Fx 2500 lb; Ch Fy 2500 lb; Ch Fz 5000 lb
Nonlinearity	±0.5% of RO
Hysteresis	±0.5% of RO
Nonrepeatability	±0.2% of RO
ELECTRICAL	
Rated Output (RO)	1.50 mV/V nom (Fx, Fy) 0.75 mV/V nom (Fz)
Excitation (VDC or VAC)	18 max
Bridge Resistance	350 Ohm (Fx, Fy) 700 Ohm (Fz)
Insulation Resistance	≥500 MOhm @ 50 VDC
Connection	DB15 Female
Connector Code	CC9
MECHANICAL	
Weight (approximate)	8 lb [3.6 kg]
Safe Overload	150% of RO
Material	17-4 PH stainless-steel
IP Rating	IP40
TEMPERATURE	
Operating Temperature	0 to 160°F (-17 to 71°C)
Compensated Temperature	60 to 160°F (15 to 72°C)
Temperature Shift Zero	±0.02% of RO/°F (0.036% of RO/°C)
Temperature Shift Span	±0.02% of Load/°F (0.036% of Load/°C)
CALIBRATION	
Calibration Test Excitation	10 VDC
Calibration (standard)	5-pt Compression
Calibration (available)	Tension and Compression
Shunt Calibration Value	75 kOhm (Fx, Fy) 200 kOhm (Fz)

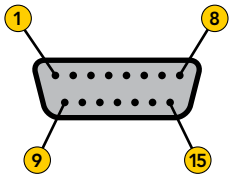
DIMENSIONS inches [mm]





DB15 FEMALE (CC9)

PIN	DESCRIPTION	CH
1	+ Excitation	FX
2	– Excitation	
3	– Signal	
4	+ Signal	
5	+ Excitation	FY
6	– Excitation	
7	– Signal	
8	+ Signal	
9	+ Excitation	FZ
10	– Excitation	
11	– Signal	
12	+ Signal	



CAPACITY

lb	Deflection (in)	Natural Frequency (Hz)
Fx - 2500	0.003	1600
Fy - 2500	0.003	1600
Fz - 5000	0.001	4000

Drawing Number: FI1469

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