



MODEL TRS150

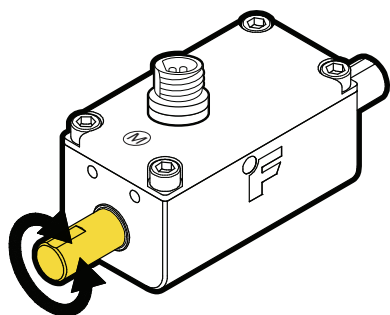
Miniature Slip Ring Rotary Torque Sensor



FEATURES

- 17mm x 17mm Compact Design face for side by side assembly
- Light Weight Design
- Low Power Consumption
- Exceptional Repeatability

 Active End



SPECIFICATIONS

PERFORMANCE

Nonlinearity	±0.1% of RO
Hysteresis	±0.2% of RO
Nonrepeatability	±0.05% of RO
Rotational Speed	300 RPM max

ELECTRICAL

Rated Output (RO)	2 mV/V nom
Excitation	10 VDC max
Bridge Resistance	1000 Ohm nom (0.5, 1 N-m capacity) 2000 Ohm nom (2 N-m capacity)
Connection	4 Position Micro Receptacle (CC19)

MECHANICAL

Weight	1 oz [28.3 g]
Safe Overload	150% of RO
Maximum Axial Force ¹	36 lbf [160 N]
Maximum Radial Force ¹	5.6 lbf [24.9 N]
Material	Shaft - Stainless Steel Housing - Anodized Aluminum
IP Rating	IP40

TEMPERATURE

Operating Temperature	14 to 194°F [-10 to 90°C]
Compensated Temperature	41 to 122°F [5 to 50°C]
Temperature Shift Zero	±0.01% of RO/°F [±0.018% of RO/°C]
Temperature Shift Span	±0.04% of RO/°F [±0.072% of RO/°C]

CALIBRATION

Calibration Test Excitation	5 VDC
Calibration (standard)	Certificate of Conformance
Calibration (available)	5-pt CW & CCW
Shunt Calibration Value	150 kOhm (0.5, 1 N-m capacity) 301 kOhm (2 N-m capacity)

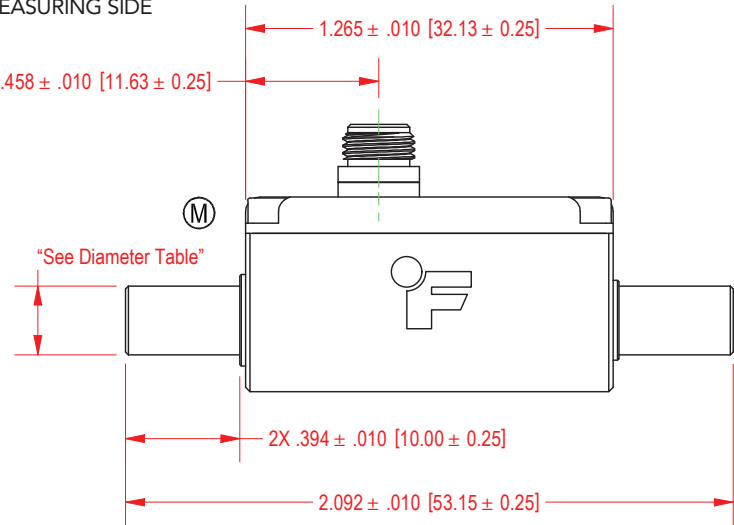
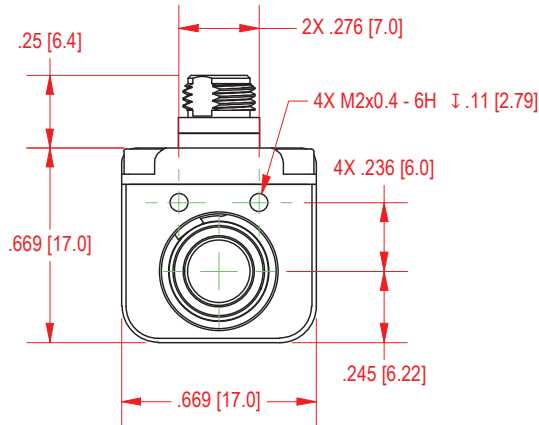
CONFORMITY

RoHS	EU 2015/863
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DIMENSIONS inches [mm]

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

(M) = MEASURING SIDE



FUTEK 4 POSITION MICRO RECEPTACLE (CC19)

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



CAPACITIES

ITEM #	Capacity N-m [in-lb]
FSH04793	0.5 [4.4]
FSH04794	1.0 [8.9]
FSH04795	2.0 [17.7]

SHAFT DIAMETER in [mm]

ITEM #	Set Screw Flat
FSH04793	X
FSH04794	X
FSH04795	

Note:

¹ The max static axial & radial forces are calculated at 25°C [77°F]. Higher temperature conditions can potentially decrease calculated values.

Drawing Number: FI1580

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