



## FEATURES

- 5 times smaller than conventional torque sensors
- 10 times more accurate than current loop torque measurement
- Sized to mount to precision servo motors

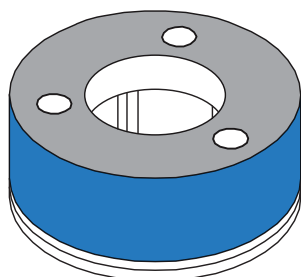
 Non-loading surface, do not contact

 Active End

 Fixed End

+ Output (CW)

- Output (CCW)



## SPECIFICATIONS

### PERFORMANCE

Nonlinearity  $\pm 0.5\%$  of RO

Nonrepeatability  $\pm 0.2\%$  of RO

### ELECTRICAL

Rated Output (RO) 1.6 mV/V nom [1 Nm]  
1.4 mV/V nom [2 Nm]

Excitation (VDC or VAC) 7 max

Bridge Resistance 350 Ohm nom [1 Nm]  
1000 Ohm nom [2 Nm]

Connection #34 AWG, 4 conductor, braided shielded cable  
0.5 ft [0.15 m] long

Wiring Code WC1

### MECHANICAL

Weight 0.02 lb [9.1 g]

Safe Overload 150% of RO [1 Nm]  
150% of RO [2 Nm]

Material Aluminum

IP Rating IP20

### TEMPERATURE

Operating Temperature -60 to 200°F [-51 to +93°C]

Compensated Temperature 60 to 160°F [16 to 71°C]

Temperature Shift Zero  $\pm 0.02\%$  of RO/°F [ $\pm 0.036\%$  of RO/°C]

Temperature Shift Span  $\pm 0.04\%$  of LOAD/°F [ $\pm 0.072\%$  of LOAD/°C]

### CALIBRATION

Calibration Test Excitation 5 VDC

Calibration (standard) Certificate of Conformity

Calibration (available) 5-pt CW & CCW

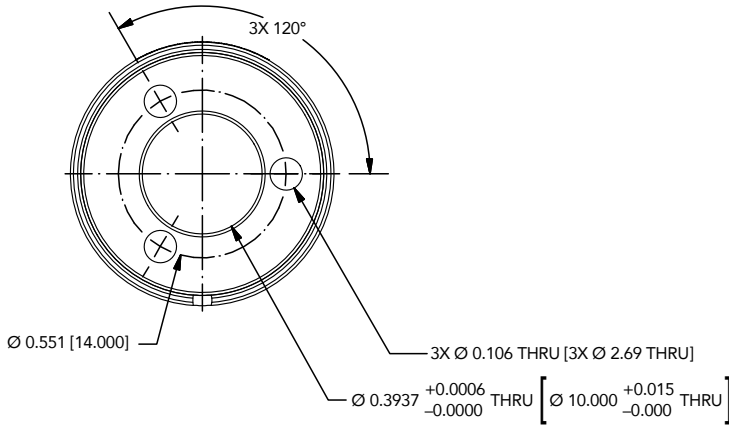
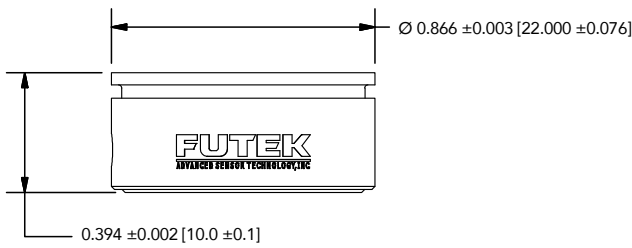
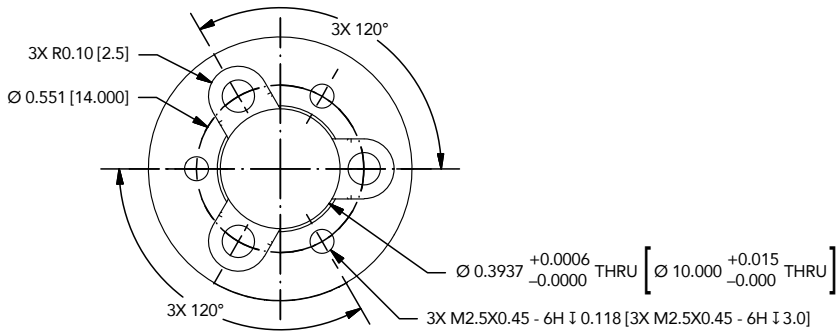
Shunt Calibration Value 60.4 kOhm [1 Nm]  
200 kOhm [2 Nm]

### CONFORMITY

RoHS EU 2015/863

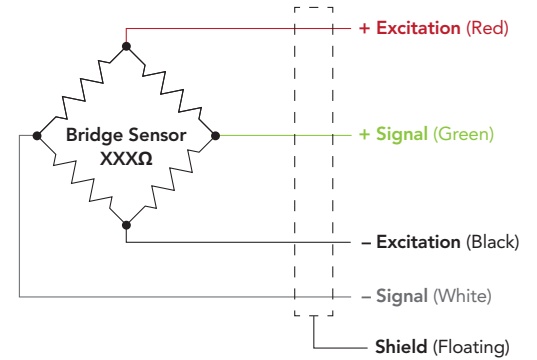
CE EN55011; EN61326-1

**DIMENSIONS** inches [mm]



**WIRING CODE** WC1

RED	+ EXCITATION
BLACK	- EXCITATION
GREEN	+ SIGNAL
WHITE	- SIGNAL
SHIELD	FLOATING



**CAPACITIES**

ITEM #	in-lb	Nm	Torsional Stiffness (in-lb/rad)	Natural Frequency (Hz)
QSH02113	8.9	1	3600	7700
QSH02116	17.7	2	10600	13550

Drawing Number: F11423-C

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RoHS



U.S. Manufacturer