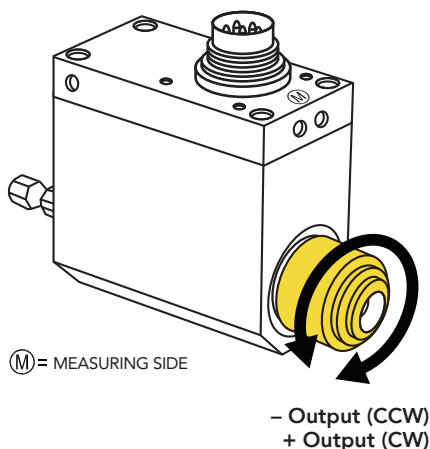




## FEATURES

- Utilizes strain gauge technology
- Compact size
- Can operate up to 3000 RPM
- Slip ring assembly

### ■ Active end



## SPECIFICATIONS

### PERFORMANCE

|                  |              |
|------------------|--------------|
| Nonlinearity     | ±0.2% of RO  |
| Hysteresis       | ±0.1% of RO  |
| Nonrepeatability | ±0.2% of RO  |
| Rotational Speed | 3000 RPM Max |

### ELECTRICAL

|                         |  |
|-------------------------|--|
| Rated Output (RO)       | 1 mV/V nom (2 Nm); 2 mV/V nom (6–20 Nm)  |
| Excitation (VDC or VAC) | 5 to 11                                  |
| Connection              | 6 pin Binder Series #581 (09-0323-99-06) |

### MECHANICAL

|                      |   |
|----------------------|---|
| Weight (approximate) | 0.7 lb [0.30 kg]                          |
| Safe Overload        | 150% of RO                                |
| Material             | Aluminum (Housing)<br>Steel Alloy (Shaft) |
| 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 (±0.02% of RO/°C)     |
| Temperature Shift Span  | ±0.01% of Load/°F (±0.02% of Load/°C) |

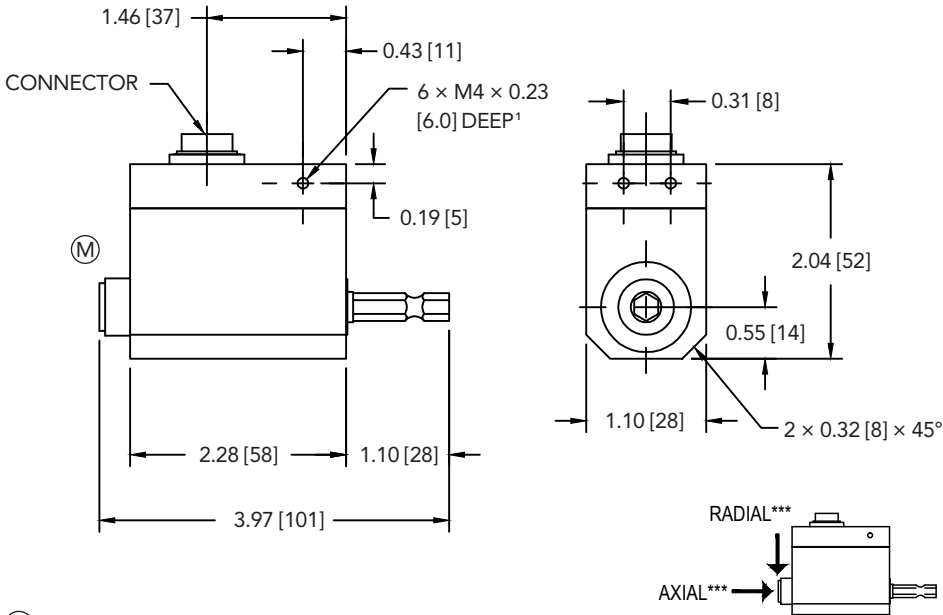
### CALIBRATION

|                                    |  |
|------------------------------------|--|
| Calibration Test Excitation        | 10 VDC   |
| Calibration (standard)             | Certificate of Conformance   |
| Calibration (available)            | 5-pt CW & CCW  |
| Shunt Calibration Value (Internal) | 87 kOhm (2 Nm), 43 kOhm (6–20 Nm)  |
| Shunt Calibration                  | With sensor fully connected jump Pins 1 & 6 to generate full mV/V output |

### CONFORMITY

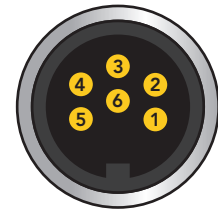
|      |   |
|------|---|
| RoHS | 2014/30/EU                                |
| CE   | <a href="#">Declaration of Conformity</a> |

**DIMENSIONS** inches [mm]



**CONNECTOR CODES**

| PIN | COLOR    | DESCRIPTION  |
|-----|----------|--------------|
| 1   | Black    | - Excitation |
| 2   | Red      | + Excitation |
| 3   | Floating | Shield       |
| 4   | Green    | + Signal     |
| 5   | White    | - Signal     |
| 6   | Orange   | Shunt Cal    |



TORQUE SENSOR WITH STANDARD 1/4" HEX PER DIN 3126 E & F  
 \* ANTI-ROTATION HOLES, NOT TO BE USED TO SUPPORT LOAD  
 \*\* MAXIMUM LOAD ALLOWED, NOT FOR MEASUREMENT

**CAPACITIES**

| ITEM #   | Nm [in-lb] | *** Max Axial Force lb [N] | *** Max Radial Force lb [N] | Torsional Stiffness Nm/rad |
|----------|------------|----------------------------|-----------------------------|----------------------------|
| FSH01979 | 2 [18]     | 4.5 [20]                   | 4.5 [20]                    | 260                        |
| FSH01980 | 6 [53]     | 11.3 [50]                  | 9 [40]                      | 545                        |
| FSH01981 | 12 [106]   | 11.3 [50]                  | 9 [40]                      | 570                        |
| FSH01982 | 20 [177]   | 33.7 [150]                 | 9 [40]                      | 690                        |

Drawing Number: FI1403-B

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10 Thomas, Irvine, CA 92618 USA

Tel: (949) 465-0900  
 Fax: (949) 465-0905

[www.futek.com](http://www.futek.com)



RoHS



U.S. Manufacturer