socket extension reaction
torque sensors
with ¼, 3⁄8, ½, and ¾" square drives

TQ103 Series

✓ Ideal for use with drive/socket systems to monitor or verify bolt torque
✓ Measures torque in clockwise and counterclockwise directions
✓ Compact, low cost, and accurate
✓ Easily inserted between socket and drive
✓ Rugged construction for industrial applications

The OMEGA® TQ103 Series socket extension torque sensors are installed between a socket and drive to measure or verify bolt torque. These sensors can measure torque in both clockwise and counterclockwise directions. Their accuracy, cost, and size make them ideal for a variety of industrial and laboratory applications.

Specifications
Rated output: 1 to 3 mV/V (see chart)
Excitation: 10 Vdc, 20 Vdc maximum
Accuracy: ±0.37% FS
Linearity: ±0.25% FS
Hysteresis: ±0.25% FS
Repeatability: ±0.1% FS
Zero balance: ±0.1% FS
Operating temperature range: -94 to 121°F (-65 to 250°F)
Compensated temperature range: 21 to 76°F (70 to 170°F)
Thermal effects:
  Zero: 0.002% FS/F
  Span: 0.002% rdg/F
Maximum load: 150% FS, safe; 300% FS, ultimate
Bridge resistance: 1000 Ω
Angular deflection at FS: 3°
Construction: Alloy steel
Electrical: 0.6 m (2') of 4-conductor, shielded, color-coded cable with pigtail termination

To Order

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Range (inch-lb)</th>
<th>Drive</th>
<th>Range Output (mV)</th>
<th>Compatible Meters*</th>
</tr>
</thead>
<tbody>
<tr>
<td>TQ103-25</td>
<td>0 to 25</td>
<td>¼&quot;</td>
<td>1.0</td>
<td>HHP-SG, DP25B-S, DP41-S</td>
</tr>
<tr>
<td>TQ103-50</td>
<td>0 to 50</td>
<td>¼&quot;</td>
<td>2.0</td>
<td>HHP-SG, DP25B-S, DP41-S</td>
</tr>
<tr>
<td>TQ103-125</td>
<td>0 to 125</td>
<td>¼&quot;</td>
<td>2.0</td>
<td>HHP-SG, DP25B-S, DP41-S</td>
</tr>
<tr>
<td>TQ103-200</td>
<td>0 to 200</td>
<td>¾&quot;</td>
<td>1.5</td>
<td>HHP-SG, DP25B-S, DP41-S</td>
</tr>
<tr>
<td>TQ103-600</td>
<td>0 to 600</td>
<td>¾&quot;</td>
<td>3.0</td>
<td>HHP-SG, DP25B-S, DP41-S</td>
</tr>
<tr>
<td>TQ103-1.5K</td>
<td>0 to 1500</td>
<td>¾&quot;</td>
<td>3.0</td>
<td>HHP-SG, DP25B-S, DP41-S</td>
</tr>
<tr>
<td>TQ103-2.4K</td>
<td>0 to 2400</td>
<td>¾&quot;</td>
<td>3.0</td>
<td>HHP-SG, DP25B-S, DP41-S</td>
</tr>
<tr>
<td>TQ103-6K</td>
<td>0 to 6000</td>
<td>¾&quot;</td>
<td>3.0</td>
<td>HHP-SG, DP25B-S, DP41-S</td>
</tr>
</tbody>
</table>

* The HHP-SG is a standard handheld meter; DP25B-S and DP41-S are panel meters.

Ordering example: TQ103-125, socket extension torque sensor for ¼" drive ratchet, with 0 to 125 in-lb range, HHP-SG, handheld strain gauge indicator.