

SOCKET EXTENSION REACTION TORQUE SENSORS

WITH 1/4, 3/8, 1/2, AND 3/4" 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:

-54 to 121°C (-65 to 250°F)

Compensated Temperature Range:

21 to 76°C (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

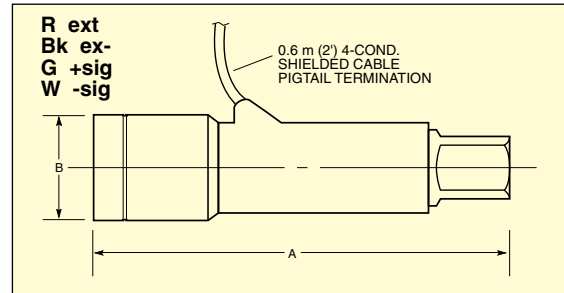
TQ103-125 torque sensor, shown close to actual size.



Socket not included.

Dimensions: inches

MODEL NO.	A	B
TQ103-25	3.0	1/2 Dia.
TQ103-50	3.0	1/2 Dia.
TQ103-125	3.0	1/2 Dia.
TQ103-200	3.0	11/16 Dia.
TQ103-600	3.0	11/16 Dia.
TQ103-1.5K	3.5	7/8 Dia.
TQ103-2.4K	3.5	7/8 Dia.
TQ103-6K	5.0	1 1/2 Dia.



To Order

MODEL NO.	RANGE (inch-lb)	DRIVE	RANGE OUTPUT (mV/V)	COMPATIBLE METERS*
TQ103-25	0 to 25	1/4"	1.0	HHP-SG, DP25B-S, DP41-S
TQ103-50	0 to 50	1/4"	2.0	HHP-SG, DP25B-S, DP41-S
TQ103-125	0 to 125	1/4"	2.0	HHP-SG, DP25B-S, DP41-S
TQ103-200	0 to 200	3/8"	1.5	HHP-SG, DP25B-S, DP41-S
TQ103-600	0 to 600	3/8"	3.0	HHP-SG, DP25B-S, DP41-S
TQ103-1.5K	0 to 1500	1/2"	3.0	HHP-SG, DP25B-S, DP41-S
TQ103-2.4K	0 to 2400	1/2"	3.0	HHP-SG, DP25B-S, DP41-S
TQ103-6K	0 to 6000	3/4"	3.0	HHP-SG, DP25B-S, DP41-S

* 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 1/4" drive ratchet, with 0 to 125 in-lb range, HHP-SG, handheld strain gage indicator.

TORQUE **F**