

FLANGE-MOUNTED REACTION TORQUE SENSORS

10 in-lb to 100K inch-lb

TQ101 Series



Standard

- ✓ Ideal for Monitoring Torque in Motor Pump and Machine Mounts
- ✓ Flange Mounted for Easy Installation
- ✓ Measures Torque in Clockwise and Counterclockwise Directions

TQ101 Series reaction torque sensors are ideal for measuring reaction or restraining torques found in motor mounts, pump mounts, and machine mounts. They can also be used in limited rotation applications, such as measuring the torque required to turn a nut or an actuator shaft. The TQ101 is designed with flanges, enabling easy installation or adaptation. It is rugged enough for factory use, yet accurate enough for the laboratory.

SPECIFICATIONS

Rated Output: 2 mV/V nominal

Excitation: 10 Vdc, 20 Vdc max

Accuracy: ±0.18% FS

Linearity: ±0.10% FS

Hysteresis: ±0.10% FS

Repeatability: ±0.10% FS

Zero Balance: ±1.0% FS

Operating Temp Range:

-53 to 120°C (-65 to 250°F)

Compensated Temp Range:

0 to 76°C (32 to 170°F)

Thermal Effects:

Zero: ±0.002% FS/°F

Span: ±0.002% rdg/°F

Max Load:

Safe: 150% FS

Ultimate: 300% FS

Bridge Resistance: 350 Ω nominal

Full Scale Angular Deflection: 1.2°

Construction: Nickel-plated steel



TQ101-1K, shown smaller than actual size.

Sensing Element:

Aluminum (up to 500 inch-lb), nickel-plated steel (above 500 inch-lb)

Cover: Aluminum (100, 200 and 500 inch-lb) and nickel-plated steel (all other ranges)

Electrical: Mating connector supplied

To Order Visit omega.com/tq101 for Pricing and Details

RANGE	MODEL NO.	WT (lb)	COMPATIBLE METERS
0 to 10 in-lb	TQ101-10	3	DP41-S, DP302-S, DP2000-S4
0 to 20 in-lb	TQ101-20	3	DP41-S, DP302-S, DP2000-S5
0 to 50 in-lb	TQ101-50	3	DP41-S, DP3002-S, DP87
0 to 100 in-lb	TQ101-100	5	DP41-S, DP302-S, DP2000-S4
0 to 200 in-lb	TQ101-200	5	DP41-S, DP302-S, DP2000-S5
0 to 500 in-lb	TQ101-500	5	DP41-S, DP3002-S, DP87
0 to 1000 in-lb	TQ101-1K	8	DP41-S, DP302-S, DP2000-S4
0 to 2000 in-lb	TQ101-2K	8	DP41-S, DP302-S, DP2000-S5
0 to 5000 in-lb	TQ101-5K	10	DP41-S, DP3002-S, DP87
0 to 10,000 in-lb	TQ101-10K	10	DP41-S, DP3002-S, DP87
0 to 15,000 in-lb	TQ101-15K	20	DP41-S, DP3002-S, DP87
0 to 20,000 in-lb	TQ101-20K	20	DP41-S, DP3002-S, DP87
0 to 50,000 in-lb	TQ101-50K	20	DP41-S, DP87, DP-760
0 to 100,000 in-lb	TQ101-100K	30	DP41-S, DP87, DP-760

Comes complete with operator's manual and 5-point calibration.

Ordering Example: TQ101-100, flange-mounted reaction torque sensor with 0 to 100 in-lb range.