

ROTATING TORQUE SENSORS SHAFT-TO-SHAFT CONFIGURATION



**0-3 in-lb to 0-2000 in-lb
0-0.35 to 0-226 N-M
5000 RPM Max**

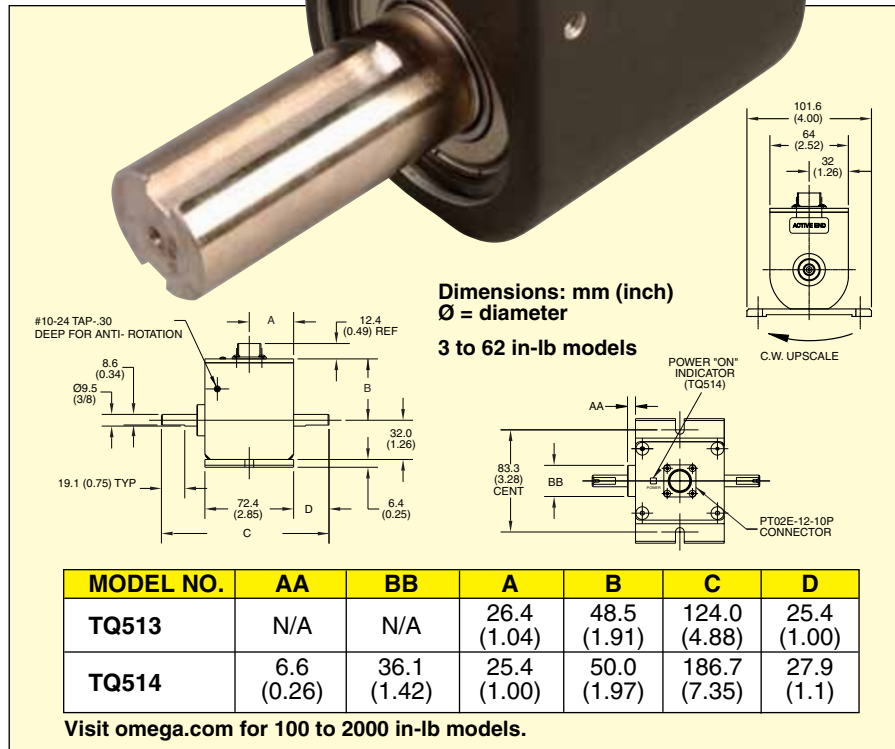
TQ513-100
shown smaller
than actual size.

TQ513 Series

- ✓ Silver Slip Rings for Secure Connections
- ✓ Operating Speed Up to 5000 RPM
- ✓ Optional Optical Encoder for Angle or Speed Measurement

The TQ513 Series are designed to measure the rotating torque using shaft-to-shaft in-line placement.

Heavy-duty silver slip rings provide secure transmission of power and signal from the rotating shaft to your instrumentation. An optional 1024 ppr optical encoder is available to measure angle or speed.



SPECIFICATIONS:

Excitation Voltage: 20 Vdc maximum

Bridge Resistance: 1000 Ω

Output at Full Scale: 2.0 mV/V nominal

Linearity: 0.10% FS

Hysteresis: 0.10% FS

Zero Balance: 1.0% FS

Operating Temperature: -40 to 85°C

(-40 to 185°F)

Compensated Temperature: 21 to 76°C

(70 to 170°F)

Thermal Effects

Zero: 0.0036% FS/°C

Span: 0.0036% FS/°C

Overload Capacity: 150% FS

Material:

<100 in-lb: SS shafts, aluminum sensor

≥100 in-lb: Steel shaft and sensor

Maximum Shaft Speed: 5000 RPM

Electrical Connection: 4-pin twist lock connector (mating connector supplied); 10-pin twist lock connector with optional optical encoder (mating connector supplied)

To Order

MODEL NO.	CAPACITY			SHAFT	KEY
	in-oz	in-lb	N-M		
TQ513-003	50	3.125	0.35	3/8"	1/32" flat
TQ513-006	100	6.25	0.71		
TQ513-012	200	12.5	1.41		
TQ513-030	500	31.25	3.53		
TQ513-062	1000	62.5	7.06		
TQ513-100	—	100	12	0.749	3/16"
TQ513-200	—	200	23		
TQ513-500	—	500	56		
TQ513-1K	—	1000	113	0.999	1/4"
TQ513-2K	—	2000	226		

OPTIONS (Additional Cost)

ORDER SUFFIX	DESCRIPTION
-EN1024	Integral 1024 ppr optical encoder
-MB	Foot mounting bracket

Comes complete with operator's manual.

Ordering Examples: TQ513-012, 12 in-lb range rotating torque sensor.

TQ513-500-EN1024, 500 in-lb rotation torque sensor with 1024 ppr optical encoder.