

Miniature Reaction Torque Transducers

Models QWFK-8M and QWLC-8M



Model QWFK-8M

COMPACT SIZE

HIGH FREQUENCY

0.1% LINEARITY

Models QWFK-8M and QWLC-8M Miniature Reaction Torque Transducers are engineered for minimum size and to achieve an impressive 0.1% maximum non-linearity. Four bonded strain gages are positioned on a special machined portion of the transducer to effectively measure even slight torque motion. These models operate and are calibrated in both directions. A modular, stainless steel construction and no moving parts provide excellent durability under harsh industrial conditions. Typical miniature reaction torque transducer applications include motor dynamometer, tire braking, twist measurement, torque tables, and friction-skid test measurements.

PERFORMANCE

	Model QWFK-8M	Model QWLC-8M
Torque Ranges.....	25 in.-oz. to 300 in.-lb.	25 in.-oz to 300 in.-lb.
Non-Linearity (max).....	±0.1% F.S.	±0.1% F.S.
Hysteresis (max).....	±0.1% F.S.	±0.1% F.S.
Non-Repeatability (max).....	±0.03% F.S.	±0.03% F.S.
Output (nominal).....	2mV/V	2mV/V
Resolution.....	Infinite	Infinite

ENVIRONMENTAL

Temperature, Operating.....	-65° F to 225° F	-65° F to 225° F
Temperature, Compensated.....	60° F to 160° F	60° F to 160° F
Temperature Effect		
- Zero (max).....	.005% F.S./° F	.005% F.S./° F
- Span (max).....	.005% Rdg./° F	.005% Rdg./° F

ELECTRICAL

Strain Gage Type.....	Bonded foil	Bonded foil
Excitation.....	10VDC*	10VDC*
Bridge Resistance.....	350 ohms	350 ohms
Wiring Code (std).....	#1 (See Pg. AP-8)	#1 (See Pg. AP-8)
Electrical Termination (std).....	Teflon cable (5 ft.)	Teflon cable (5 ft.)

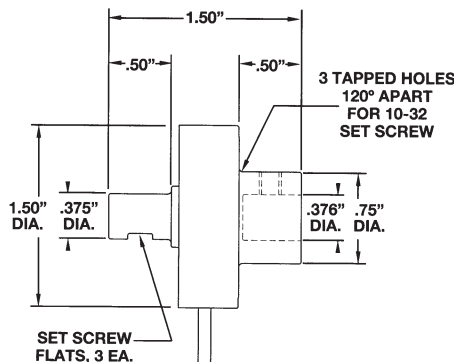
MECHANICAL

Overload Safe.....	50% over capacity	50% over capacity
Case Material.....	Stainless steel	Stainless steel
Deflection—Torsional		
25 in.-oz-50 in.-lb.0027 radians	.0027 radians
100, 300 in.-lb.00255 radians	.00255 radians

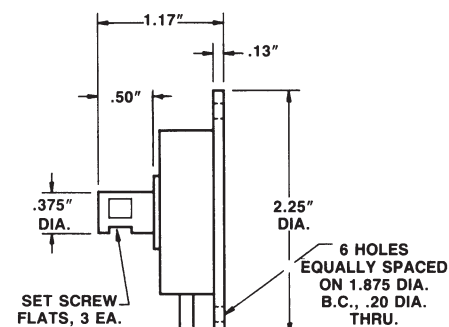
Dimensions

Model QWFK-8M (Order Code BT311)

Model QWLC-8M (Order Code BT312)



Model QWFK-8M



Model QWLC-8M

*≤ 100 in.-oz.
5 VDC excitation

Options (See Appendix)

Temperature compensated 1b, 1c, 1f

Premium Options: 1d, 1e

TORQUE

MINIATURE REACTION TRANSDUCERS