

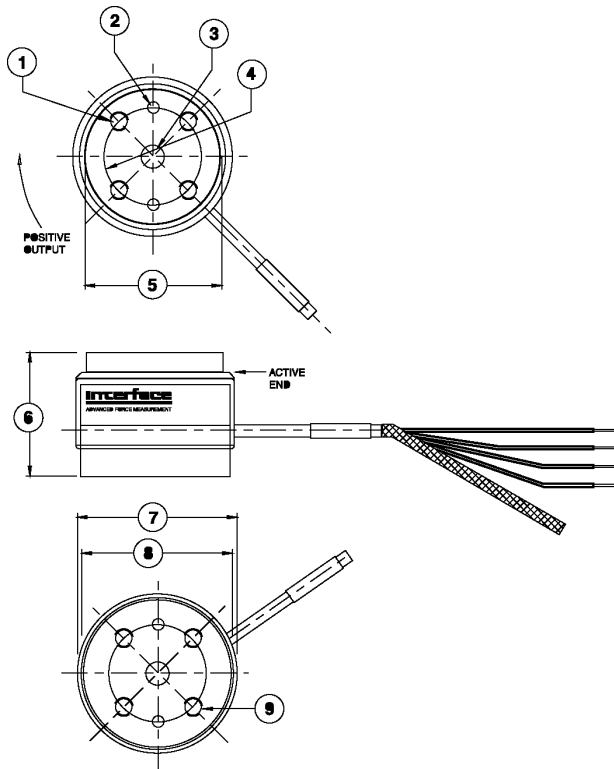
MRT Miniature Reaction Torque Transducer

- Low capacity – 0.2 to 20 Nm
- Proprietary Interface temperature compensated strain gages
- Small size – 41 x 33 mm (1.6 in OD x 1.25 in)
- Excellent linearity & repeatability
- Low deflection - high torsional stiffness



DIMENSIONS

See Drawing	CAPACITY (Nm)	
	0.2, 2, 5, 10, 20	
	inch (mm)	
(1)	M5 x 0.8 – 6H x 0.20 Deep	
(2)	.119 ±0.001 (3.02 ±0.03)	
(3)	.237 thru (6.02)	
(4)	.984 (24.99)	
(5)	1.375 (34.95)	
(6)	1.25 (31.8)	
(7)	1.60 (40.6)	
(8)	1.50 (38.1)	
(9)	M5 x 0.8 – 6H x 0.20 Deep	



SPECIFICATIONS

STANDARD CAPACITIES (Nm)	0.2, 2, 5, 10, 20
EQUIVALENT (in-lb)	1.77, 17.7, 44, 89, 177
ACCURACY – (MAX ERROR)	
Nonlinearity–% FS	±0.10
Hysteresis–% FS	±0.10
Nonrepeatability–% RO	±0.05
Creep, in 20 min–%	±0.10
TEMPERATURE	
Compensated Range–°F	15 to 115
Compensated Range–°C	-10 to 45
Operating Range–°F	-65 to 200
Operating Range–°C	-55 to 90
Effect on Zero–% RO/100F°	±0.20
Effect on Output–%/100F°	±0.10
ELECTRICAL	
Rated Output–mV/V (Nominal)	2.00 ±0.30
Zero Balance–% RO	±1.0
Input Resistance–Ohms	700 + 100/-7
Output Resistance–Ohms	700 ±7
Insulation Resistance–Megohm	>5000
Excitation, Nominal	10 VDC
Excitation, Maximum	20 VDC
MECHANICAL	
Overload:	
–safe torsion–% CAP	±150
–ultimate torsion–% CAP	±400
–safe side load–N	13, 110, 160, 280, 400
–lbf	3, 25, 36, 63, 90
–safe overhung moment–% CAP	100
– safe mounting torque–Nm	0.3, 3, 5, 6, 9
–in-lb	2.7, 27, 44, 55, 80
Deflection at capacity–radian	0.007, 0.003, 0.003, 0.003, 0.003
Cable length–feet	5