

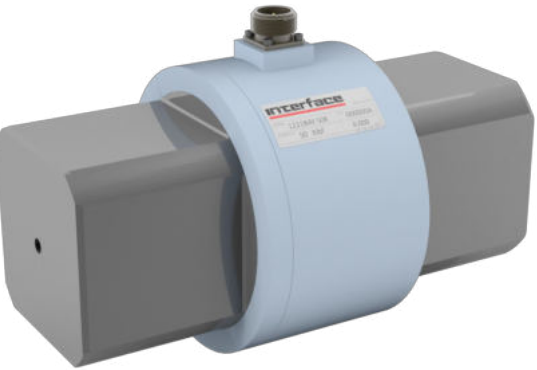
## TSQ HIGH CAPACITY SQUARE DRIVE TORQUE TRANSDUCER (U.S. & METRIC)

### FEATURES & BENEFITS

- 300K to 3,000K lbf-in capacities (34K to 340K Nm)
- Male square on each end
- High stiffness
- 2X safe overload
- Fully calibrated, CW & CCW

### SPECIFICATIONS

ACCURACY – (MAX ERROR)		
Nonlinearity – %FS		±0.25 (TSQ1-1200K ±0.50)
Hysteresis – %FS		±0.25 (TSQ1-1200K ±0.50)
Nonrepeatability – %RO		±0.05
TEMPERATURE		
Effect on Zero – %RO / deg	°F	±0.0002
Effect on Output – % / deg	°F	±0.0002
Compensated range	°F	+75 to +175
	°C	+24 to +175
Operating range	°F	-65 to +225
	°C	-54 to +107
ELECTRICAL		
Rated output – mV/V (Nominal)		3
Input resistance – Ohms		350
Output resistance – Ohms		350
Excitation, nominal – VDC		10
Excitation, MAX – VDC		15
MECHANICAL		
Safe overload – %RO		200
Connector		CF 3102E-14S-6P
Calibration		CW & CCW to rated capacity
Material		Alloy steel



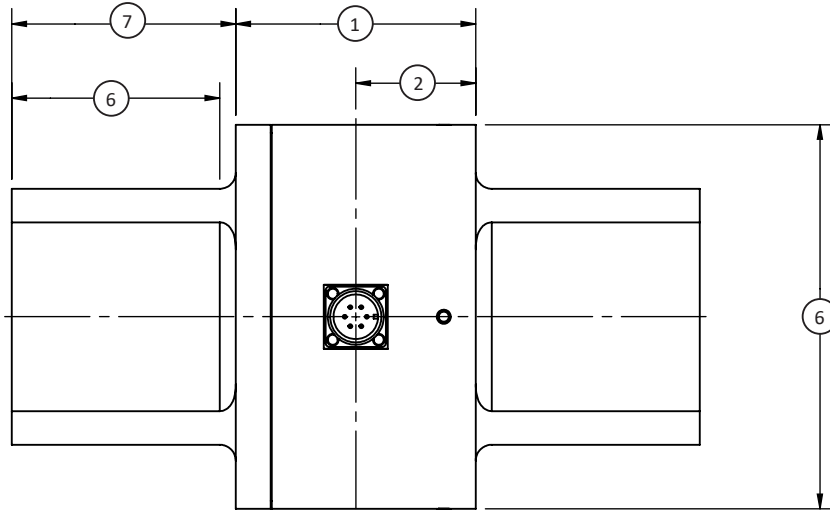
Model TSQ1-600K (Shown)

### PERFORMANCE PARAMETERS

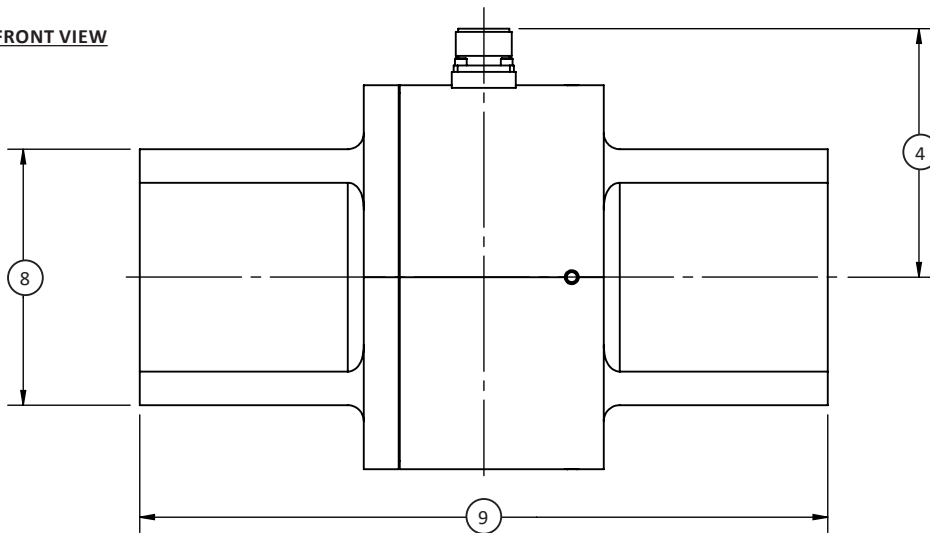
MODEL	CAPACITY		TORQUE OVERLOAD		TORSIONAL STIFFNESS		WEIGHT		MAX THRUST LOAD		MAX BENDING MOMENT	
	lbf-in	Nm	lbf-in	Nm	lbf-in/rad	Nm/rad	lbs	kg	lbf	N	lbf-in	Nm
TSQ1	300K	33.9K	600K	67.8K	52,200K	5,898K	57	25.9	400K	1779K	400K	45.2K
	600K	67.8K	1,200K	136K	56,600K	6,395K	57	25.9	400K	1779K	400K	45.2K
	1200K	136K	2,400K	271K	57,200K	6,460K	57	25.9	400K	1779K	400K	45.2K
TSQ2	750K	84.8K	1,500K	170K	171,000K	19,320K	166	75.3	1,500K	6672K	1,500K	169K
	1500K	170K	3,000K	339K	207,000K	23,390K	166	75.3	1,500K	6672K	1,500K	169K
	3000K	339K	6,000K	678K	220,000K	24,856K	166	75.3	1,500K	6672K	1,500K	169K

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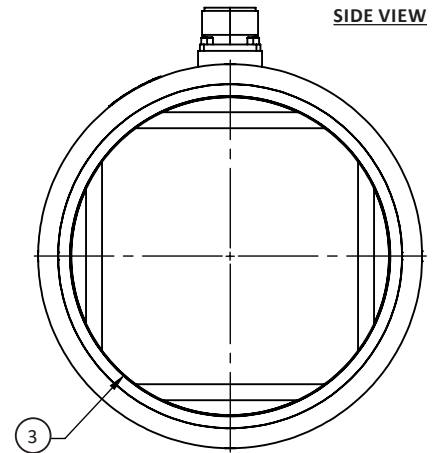
TOP VIEW



FRONT VIEW



SIDE VIEW



### DIMENSIONS

See Drawings	MODEL			
	TSQ1		TSQ2	
	U.S. (lbf-in)	Metric (Nm)	U.S. (lbf-in)	Metric (Nm)
	300K, 600K, 1200K	33.9K, 67.8K, 136K	750K, 1500K, 3000K	84.8K, 170K, 339K
	in	mm	in	mm
(1)	3.75	95.3	16	406
(2)	1.875	47.63	2.5	34
(3)	Ø4.970	Ø126.24	Ø7.5	Ø191
(4)	3.883	98.63	5.125	130.18
(5)	Ø6.0	Ø152.4	Ø8.5	Ø216
(6)	3.25	82.6	5	127
(7)	3.5	88.9	5.5	140
(8)	4.0	101.6	5.5 TYP ACROSS FLATS	140 TYP ACROSS FLATS
(9)	10.75	273.1	16	406

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