

TS17 HEX DRIVE REACTION TORQUE TRANSDUCER (U.S. & METRIC)

FEATURES & BENEFITS

- Capacities from 0.1 to 20 Nm (0.07 to 177 lbf-in)
- Simple operation - no moving parts
- Useful for auditing fastener torques
- Quick-connect chuck

SPECIFICATIONS

ACCURACY – (MAX ERROR)		
Combined Error – %FS		± 0.1
Nonrepeatability – %		± 0.05
TEMPERATURE		
Effect on Zero – %RO / deg	°C	±0.02
Effect on Output – % / deg	°C	±0.01
Rated Range	°C	+5 to +50
	°F	+41 to +122
Operating Range	°C	-10 to +60
	°F	+14 to +140
ELECTRICAL		
Output – mV/V	0.2 - 5 Nm	1
	1.77 - 44.3 lbf-in	
	10 - 20 Nm	2
	88.5 - 177 lbf-in	
Excitation Voltage – VDC MAX		12
Bridge Resistance – Ohm		350
Cable Length – m		3
MECHANICAL		
Safe Overload – %RO		130
Material		Alloy steel



MODEL TS17 (Shown)

OPTIONS

- 100% Control Signal (RCAL)

ELECTRICAL CONNECTION

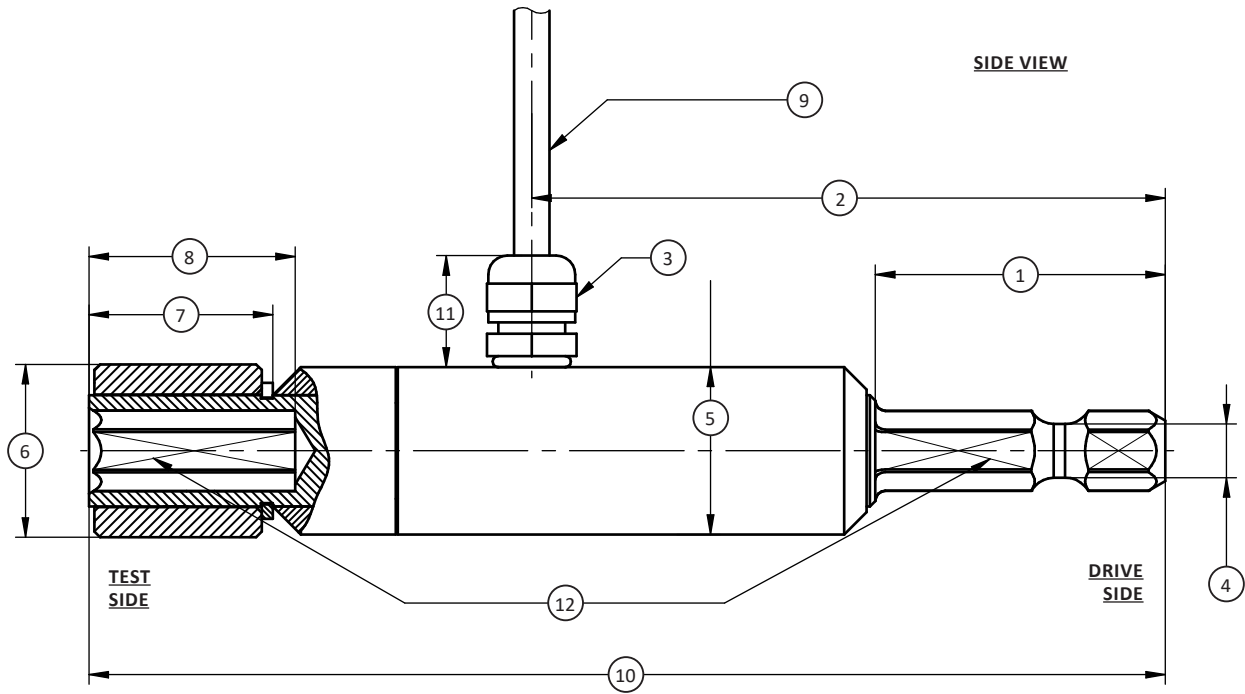
Wire	6-PIN ELECTRICAL CONNECTION	
	Function	
Green	Excitation (-)	
Brown	Excitation (+)	
Yellow	Shield	
White	Signal (+)	
Grey	Signal (-)	
Shield	Control signal (option)	

PERFORMANCE PARAMETERS

CAPACITY		SPRING RATE	MOMENT OF INERTIA – J (Kg•m ²)		MAX THRUST LOAD		MAX SHEAR FORCE	
Nm	lbf-in	NM/rad	Drive Side	Test Side	N	lbf	N	lbf
0.1	0.89	1.8x10 ¹	6.7x10 ⁻⁷	5.7x10 ⁻⁷	43	9.7	0.6	0.13
0.2	1.78	1.8x10 ¹	6.7x10 ⁻⁷	5.7x10 ⁻⁷	43	9.7	0.6	0.13
0.5	4.43	1.1x10 ²	6.7x10 ⁻⁷	5.7x10 ⁻⁷	95	21.4	1.2	0.27
1	8.85	1.1x10 ²	6.7x10 ⁻⁷	5.7x10 ⁻⁷	380	85.4	3.7	0.83
2	17.7	1.9x10 ²	6.8x10 ⁻⁷	5.7x10 ⁻⁷	380	85.4	3.7	0.83
5	44.3	3.7x10 ²	6.9x10 ⁻⁷	5.8x10 ⁻⁷	700	157	9.5	2.14
10	88.5	3.7x10 ²	6.9x10 ⁻⁷	5.8x10 ⁻⁷	1.15K	259	19	4.3
20	177	4.8x10 ²	7.1x10 ⁻⁷	6.0x10 ⁻⁷	1.15K	259	19	4.3

U.S. dimensions and capacities are provided for conversion only. Standard products have International System of Units (SI) capacities and dimensions.

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DIMENSIONS

See Drawing	CAPACITY	
	Metric (Nm)	U.S. (lbf-in)
	0.1, 0.2, 0.5, 1, 2, 5, 10, 20	0.07, 0.15, 0.37, 0.7, 1.5, 3.7, 88.5, 177
	mm	in
(1)	26 ^{+0.2}	1.0 ^{+0.008}
(2)	57	2.2
(3)	SW 8	
(4)	∅4.8 ^{-0.1}	∅0.19 ^{-0.004}
(5)	∅15	∅0.6
(6)	∅15.5	∅0.61
(7)	16.5	0.65
(8)	18.5	0.73
(9)	∅3.2	∅0.13
(10)	96.5	3.80
(11)	10	0.4
(12)	∅1/4"	