

T8 ECO ROTARY TORQUE TRANSDUCER (US & METRIC)

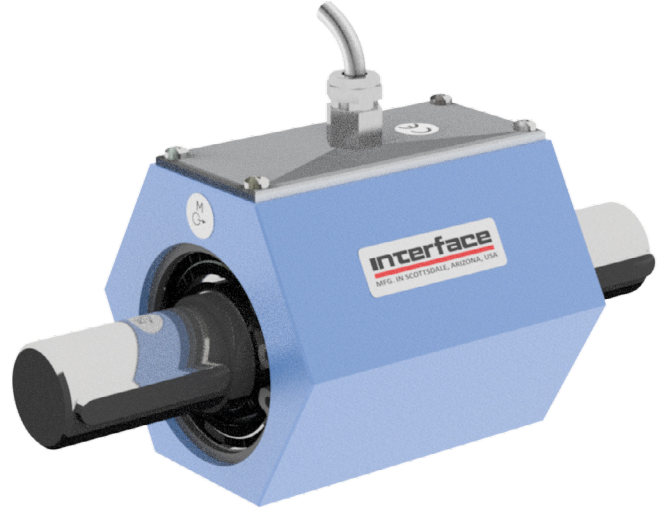
FEATURES & BENEFITS

- Capacities from 0.2 to 200 Nm (1.77 to 1.77K lbf-in)
- Stainless steel shaft
- ± 5 VDC output
- 12 to 28 VDC supply
- Contactless

SPECIFICATIONS

ACCURACY – (MAX ERROR)		
Combined Error – %FS		± 0.25
Non-repeatability – %FS		± 0.05
TEMPERATURE		
Effect on Zero – %RO / °C		± 0.04
Effect on Output – % / °C		± 0.02
Rated Range	°C	+5 to +45
	°F	+41 to +113
Operating Range	°C	0 to +60
	°F	+32 to +140
ELECTRICAL		
Output–VDC		± 5
Bandwidth – kHz – dB		1 – 3
Supply Voltage – VDC		+12 to +28
Supply Current – mA		90
Resolution		Analog
MECHANICAL		
Safe Overload – %RO		180
Max Speed – RPM		Varies with capacity (see table)
Shaft Material		Stainless steel
Housing Material		Aluminum

STANDARD CONFIGURATION



MODEL T8 (Shown)

OPTIONS

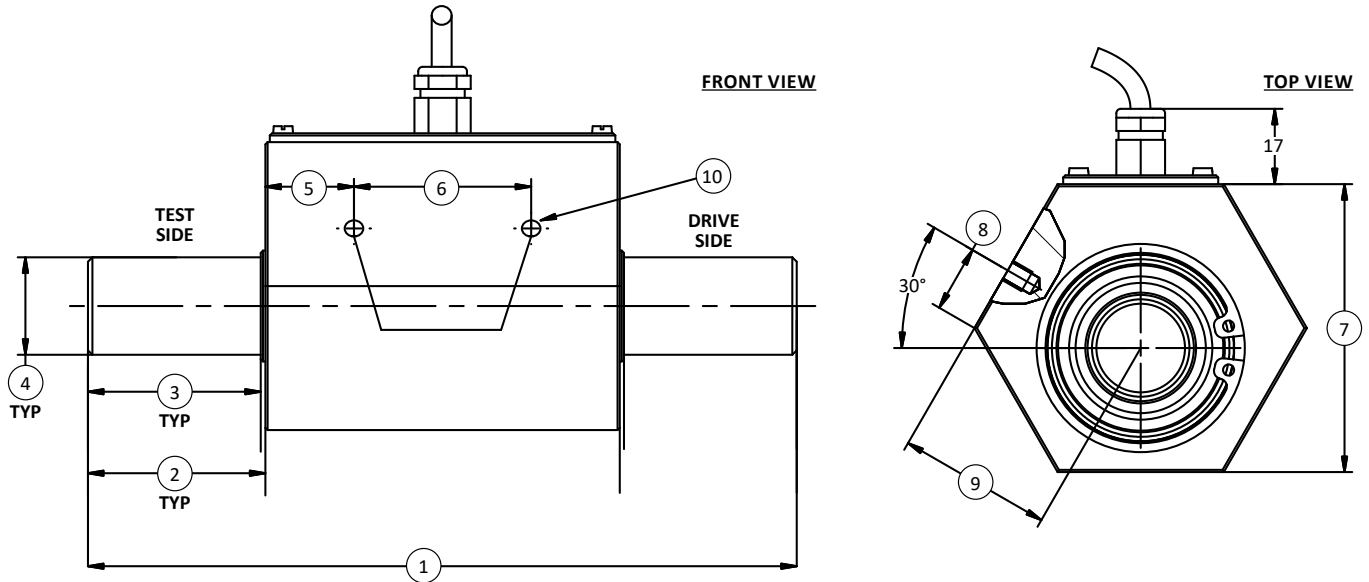
- Cable length – 0.1 m (3 ft)
- Keyed shafts – per Din 6885.1

T8 INTEGRAL CABLE WIRING CODE		
Function	Description	Color
Supply (+)	+12 to +28 VDC	Brown
Supply (GND)	0 VDC	Green
Signal (+)	± 5 VDC	Yellow
Signal (GND)	0 VDC	White
Shield	Shield	Shield

PERFORMANCE PARAMETERS

CAPACITY		MAX RPM	SPRING RATE (NM/rad)	MOMENT OF INERTIA (Kg•m ²)		MAX THRUST LOAD	
Nm	lbf-in			Drive Side	Test Side	N	lbf
0.2	1.77	8,000	1.8×10^1	1.6×10^{-6}	1.0×10^{-6}	20	4.5
0.5	4.43	8,000	1.1×10^2	1.6×10^{-6}	1.0×10^{-6}	30	6.74
1	8.85	8,000	3.6×10^2	1.6×10^{-6}	1.1×10^{-6}	40	8.99
2	17.7	8,000	8.9×10^2	1.6×10^{-6}	1.1×10^{-6}	40	8.99
5	44.3	8,000	8.9×10^2	1.7×10^{-6}	1.1×10^{-6}	50	11.2
10	88.5	8,000	8.9×10^2	1.7×10^{-6}	1.1×10^{-6}	50	11.2
15	133	8,000	8.4×10^3	1.7×10^{-6}	1.1×10^{-6}	50	11.2
20	177	6,000	8.4×10^3	4.2×10^{-5}	2.1×10^{-5}	1,600	360
50	443	6,000	8.4×10^3	4.2×10^{-5}	2.1×10^{-5}	1,600	360
100	885	6,000	2.0×10^4	4.7×10^{-5}	2.7×10^{-5}	3,000	674
200	1.77K	6,000	2.0×10^4	4.7×10^{-5}	2.7×10^{-5}	3,000	674

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DIMENSIONS

See Drawing	CAPACITIES							
	Metric (Nm)	U.S. (lbf-in)	Metric (Nm)	U.S. (lbf-in)	Metric (Nm)	U.S. (lbf-in)	Metric (Nm)	U.S. (lbf-in)
	0.2, 0.5, 1, 2	1.77, 4.43, 8.85, 17.7	5, 10, 15	44.3, 88.5, 133	20, 50	177, 443	100, 200	885, 1.77K
	mm	in	mm	in	mm	in	mm	in
(1)	100	3.94	100	3.94	140	5.51	160	6.30
(2)	18	0.71	18	0.71	30	1.18	40	1.57
(3)	17	0.67	17	0.67	29	1.14	39	1.53
(4)	8g6	0.3148/0.3144	10g6	0.3935/0.3931	18g6	0.7087/0.7082	22g6	0.8659/0.8654
(5)	14.5	0.57	14.5	0.57	20	0.79	20	0.79
(6)	35	1.38	35	1.38	40	1.57	40	1.57
(7)	46	1.81	46	1.81	65	2.56	65	2.56
(8)	8	0.31	8	0.31	15	0.59	15	0.59
(9)	26	1.02	26	1.02	34.8	1.37	34.8	1.37
(10)	M4		M4		M5		M5	