

Description

ADI ARTECH'S Torque transducer TTD is general purpose dynamic rotary type torque sensor for accurate measurement of Torque in rotating shaft or equipment. It is constructed from hardenable, SS 17-4 PH material. This is strain gage based sensor with full temperature compensation over 10-50°C. It is very accurate, reliable and sturdy for industrial applications. It is compensated for axial and bending forces for accurate torque measurements. It is available from 0 to 10NM to 0 to 40KNM ranges Torque sensing shaft is installed in ball journals and electrical signals are transferred through high quality, low noise slip ring and brush mechanism. TTD is available in wide variety of options: both ends shaft, both ends flange and combination of shaft & flange versions for dynamic torque measurements. It is available for speed up to 2500 RPM max. Customized version can be provided as per user's dimensions and capacity.

This is provided with male shaft with key slot for locking at both ends.

Features

- 0-20NM to 0-50KNM Capacities available.
- Hardenable Stainless Steel 17-4 PH construction for resistance against shock and overload.
- Can be designed to fit your dimensional needs.
- Other capacities are available on request.

Applications

Electrical tool testing	Gear Box Testing
Axle/shaft torsion test	Bearing friction measuring
Testing of starters/slip rings/brushes/clutches/brakes	Electric/hydraulic/pneumatic motors testing
Alternators/pumps/gas & diesel turbine engines testing	Engine Dynamometer, Automobile Testing

Performance Specification

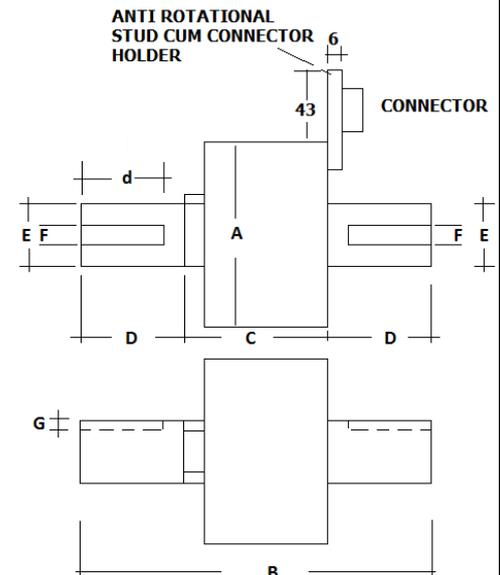
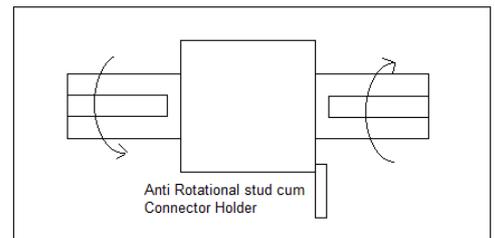
Standard Capacities in NM	20,50,100,200,300,500,1K,2K,3K,5K,10K,15K,20K,30K,40K,50K
Excitation Voltage	10 VDC
Nominal Output	2m V / V
Non - Linearity	< ±0.2% FSO
Hysteresis	< ±0.1% FSO
Non-Repeatability	< ±0.1% FSO
Creep (30 minutes)	< ±0.3% FSO
Zero Balance	±1.0% FSO
Input Resistance	390 Ohms
Output Resistance	350 Ohms
Insulation Resistance (50 VDC)	> 1000 Mega Ohms
Cable Length (4 Core Screened)	5 Mtrs
Safe Overload	150% OF RC
Ultimate Overload	200% OF RC
Temp. Compensated Range	0-50 °C
Temperature Effect on Output	< 0.005% FSO/ °C
Temperature Effect on Zero	< 0.0050% FSO/ °C
Rotational Angular Deflection	< 0.2 ° at FSO
Finish & Construction	Stainless Steel 17 - 4 PH
Environmental Protection Class	IP65 - Gage area

Electrical Termination

	+Input	Red		
	+Output	Green		
	-Input	Black		
	-Output	White		
	Shield			

Cap. NM	A	B	C	D	d	E	F	G	Max.RPM & Rotational life
20, 50,100, 200	86	140	90	25	20	25	8	4	2500RPM, 20Millions
300,500, 1000	100	150	60	45	35	40	12	5	2000RPM, 15Millions
2K,3K,5K	130	210	80	65	55	60	18	7	1500RPM, 12.5Millions
10K	160	300	100	100	90	75	20	7.5	1000RPM, 10Millions
15K,20K	185	300	100	100	90	90	25	9.0	500RPM, 7.5Millions
30K,40K,50K	215	360	120	120	110	120	32*	11*	250RPM, 5Millions

*Dual Key Ways at 180°



Specification are subject to change.

All dimensions are in mm.

	Manufactured by:	917/1, G.I.D.C. Estate, Makarpura, Vadodara - 390 010, Gujarat, INDIA
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