

Description

ADI ARTECH'S Torque transducer TTD is general purpose dynamic rotary type torque sensor for accurate measurement of Torque and RPM 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 0-50°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 20NM to 0 to 10KNM ranges. **Higher range than 10KNM is supplied in Non-Contact Telemetry type only.** Torque sensing shaft is installed in ball journals and electrical signals are transferred through high quality, low noise slip ring and brush mechanism. This can be used at max. 2500RPM only. **This is provided with male shaft with key slot for locking at both ends.**

TTD is available in wide variety of options: both ends shaft, both ends flange and combination of shaft & flange versions for dynamic torque measurements. Customized version can be provided as per user's dimensions and capacity.

Features

- 0-20NM to 0-10KNM 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.

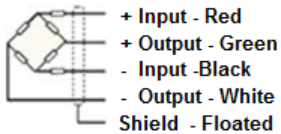
Applications

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	50,100,200,300,500,1K,2K,3K,5K,10K
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 Meters
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

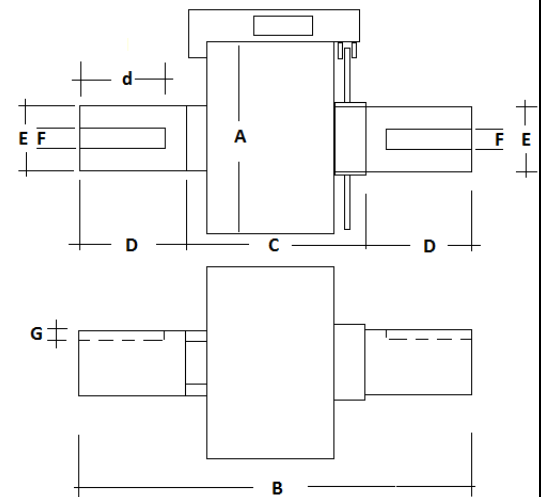
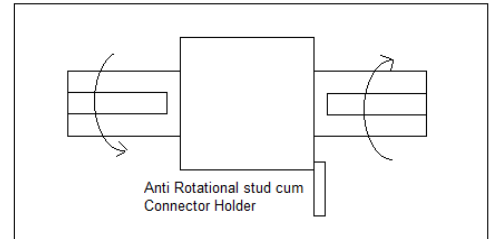
Electrical Termination



RPM-Yellow - +Ve
Blue - -Ve

Options

Compatible Instrument with 4-20 mA / 0-2 Volt Output
Digital Version with RS-485 interface / USB output
Blue Tooth Or Wireless Telemetry
Software for Graphic, Tabulation, Reporting And Analysis



Cap. NM	A	B	C	D	d	E	F	G	Max. RPM & Rotational life
20, 50,100, 200	86	150	90	30	25	25	8	4	2500RPM, 20Millions
300,500, 1000	100	150	70	40	40	40	12	5	2000RPM, 15Millions
2K,3K,5K	130	210	90	60	60	60	18	7	1500RPM, 12.5Millions
10K	160	240	90	75	75	75	20	7.5	1000RPM, 10Millions

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
	<p>ADI ARTECH TRANSDUCERS PVT. LTD.</p>	<p>Mobile : +91-9374068998, 9879444551, 9054467370 Email : sales@adiartech.com, adiartech@adiartech.com Website : www.adiartech.com</p>