

Description

ADI ARTECH'S Torque transducer TTD is **CE Certified** general purpose dynamic rotary type torque sensor for accurate measurement of **Torque and RPM OR Angle of rotation** in rotating equipment. It is constructed from 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 20NM to 0 to 10KNM ranges. 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. Digital instrument with Torque, RPM and Power OR Angle of Rotation display can be offered.**

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

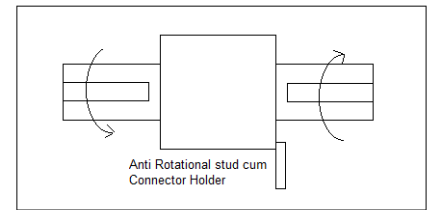
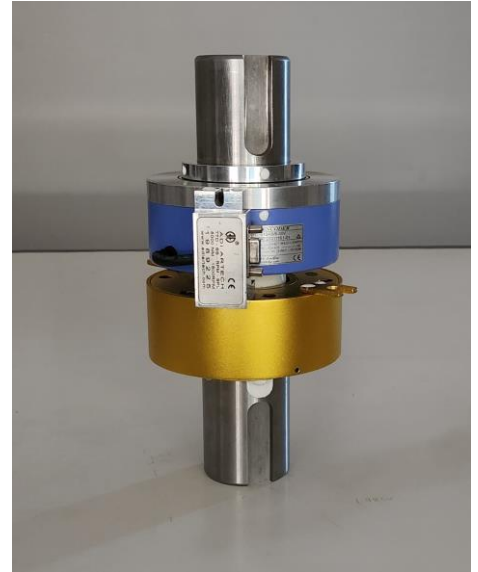
- ❖ **CE Rated** ❖ 0-20NM to 0-10KNM Capacities available.
- ❖ Stainless Steel 17-4 PH construction for resistance against shock and overload.
- ❖ Can be designed to fit your dimensional needs and capacity.
- ❖ **Instrument with Torque, RPM and Power OR Angle of Rotation can be offered for motor efficiency test and other research applications.**

Applications

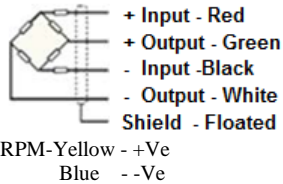
Electrical tool testing	Gear Box Testing
Axle/shaft torsion test	Bearing friction measuring
Testing of starters/slip rings/brushes/clutches/brakes	Electric/hydraulic/pneumatic motors testing
Alternators/pumps/gas & diesel turbine engines testing	Engine Dynamometer, Automobile Testing

Performance Specification

Standard Capacities in NM	See Table below
Excitation Voltage	10 VDC
Nominal Output	2m V / V + / - 0.5
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	10-50 °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



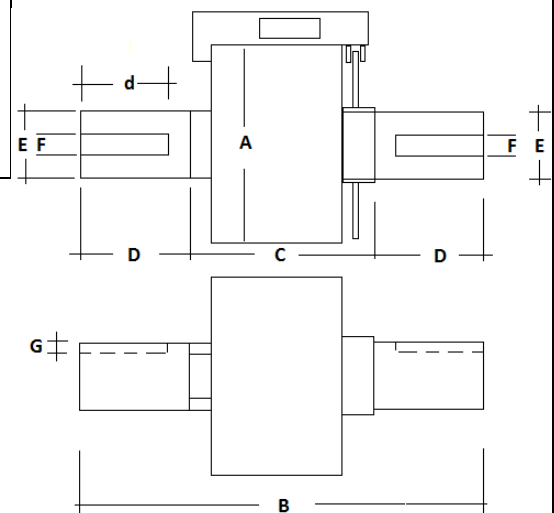
Electrical Termination



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	180	110	35	25	25	8	4	2000RPM, 20Millions
300,500, 1000	100	220	110	55	40	40	12	5	2000RPM, 15Millions
2K,3K,5K	130	280	140	70	60	60	18	7	1500RPM, 10Millions
10K	160	320	150	85	75	75	20	7.5	1000RPM, 5Millions



Specification are subject to change.

All dimensions are in mm.



Made in INDIA by:
ADI ARTECH
TRANSDUCERS PVT. LTD.
 (An ISO 9001:2015 Certified Company)

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