

Description

ADI ARTECH'S Torque transducer TTD is **CE Certified** general purpose dynamic rotary type torque sensor for accurate measurement of Torque in rotating shaft or 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 10NM to 0 to 50KNM 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 is provided with Male Square at one end and Female Square Drive on other end.** It is available for speed up to 2500 RPM max. TTD is available in wide variety of options: both ends shaft, both ends flange, Square Drive and combination of shaft, flange & Square Drive .Customized version can be provided as per user's dimensions and capacity.

Features

- ❖ **CE Rated** ❖ 0-10NM to 0-50KNM Capacities available.
- ❖ 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.

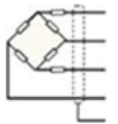
Applications

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, Engine Dynamometer, Automobile Testing
Alternators/pumps/gas & diesel turbine engines testing	Process Industries

Performance Specification

Standard Capacities in NM	See Table below
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	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

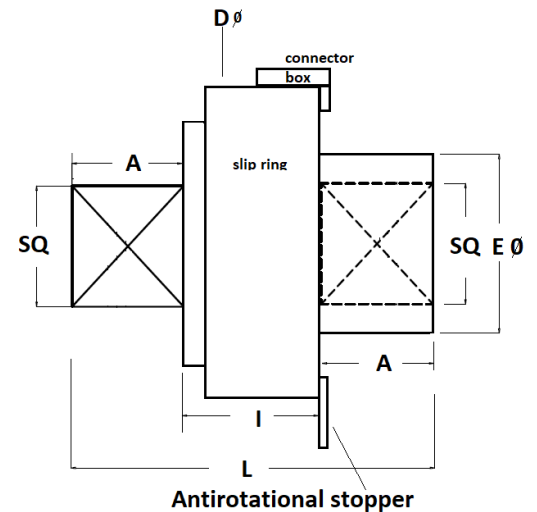
Electrical Termination



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

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	D - Appx.	I	E	L	SQ	Max. RPM & Rotational life
10, 20, 50, 100	15	86	85	32	115	12.7(1/2")	2500RPM, 20Millions
200, 300, 500	25	99	75	50	125	19.1(3/4")	2000RPM, 15Millions
1K, 1.5K	30	99	75	50	135	25.4(1")	1500RPM, 10.5Millions
2K, 3K, 5K	40	130	80	70	160	38.1(1 1/2")	1000RPM, 5Millions
10K	55	185	105	115	215	63.5(2 1/2")	500RPM, 2.5Millions
20K, 30K	70	215	130	140	270	76.2(3")	250RPM, 1Millions
50K	80	248	140	180	300	88.9(3 1/2")	100RPM, 0.5Millions

Specifications 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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