Description

ADI ARTECH'S Torque transducer TTD-SS-MF 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. 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 Model is provided with one end male shaft with key slot and other end with female hollow end with key way slot for locking.

- ❖ CE Rated ❖ 0-10NM to 0-50KNM Capacities available.
- ❖ SS 17-4ph Construction
- Can be designed to fit your dimensional needs.
- Other capacities are available on request.

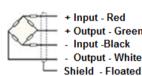
Applications

Electrical tool & Gear Box testing	Chemical Process industry				
Axle/shaft torsion test	Bearing friction measuring				
Testing of starters/s	lip Electric/hydraulic/pneumatic motors				
rings/brushes/clutches/brakes	testing				
Alternators/pumps/gas & dies	sel Engine Dynamometer, Automobile				
turbine engines testing	Testing				

Performance Specification

Standard Capacities in NM	See Table below						
Excitation Voltage	10 VDC- Maximum 15						
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	0-50 °C						
Temperature Effect on Output	< 0.0025% FSO/ ⁰ C						
Temperature Effect on Zero	< 0.0030% FSO/ ⁰ 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 **Options**

Compatible Instrument with 4-20 mA / 0-2 Volt Output

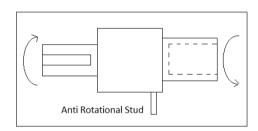
Digital Version with RS-485 interface / USB output

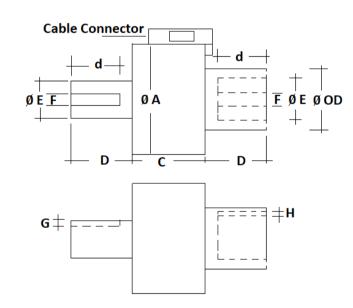
Blue Tooth Or Wireless Telemetry

Software for Graphic, Tabulation, Reporting

and Analysis







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CapNM	Α	В	С	D - Appx.	d	Ø OD	Е	F	G	Н	Max. RPM & Rotational life
10, 20, 50,100, 200	86	180	70	55	25	35	25	8	4	3.3	2500RPM, 20Millions
300, 500, 1000	100	200	55	72.5	40	55	40	12	5	3.5	2000RPM,15Millions
2K, 3K, 5K	130	200	60	70	60	85	60	18	7	4.9	1500RPM,10.5Millions
10K	160	240	72	84	75	105	75	20	7.5	5.0	1000RPM, 5Millions
15K	185	280	80	100	90	125	90	25	9	5.4	500RPM, 2.5Millions
20K, 30K, 40K	220	365	105	130	120	165	120	32	11	7.4	250RPM,1Millions
50K	250	410	114	148	140	190	140	36	12	8.4	100RPM,0.5Milloins

Specifications are subject to change.

All dimensions are in mm.



Made in INDIA by:

ADI ARTECH TRANSDUCERS PVT. LTD. n ISO 9001:2015 Certified Company)

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