

**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 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 50 NM to 0 to 50K NM 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 5000 RPM max. Customized version can be provided as per user's dimensions and capacity.

**Features**

- ❖ **CE Rated** ❖ 0-50 to 0-50KNM Capacities are 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.

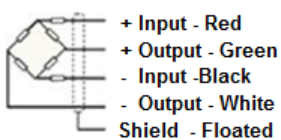
**Applications**

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

**Performance Specification**

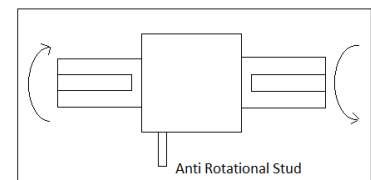
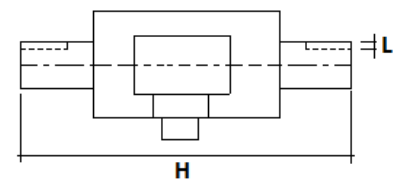
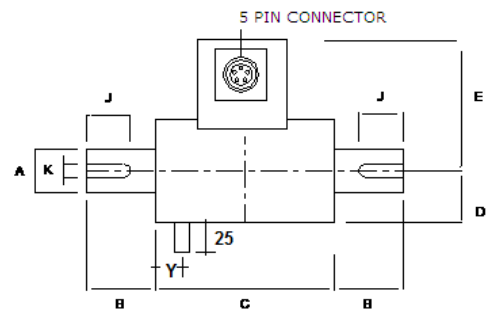
Standard Capacities in NM	50, 100, 200, 300, 500, 1K, 2K, 3K, 5K, 10K, 15K
Excitation Voltage	10 VDC- Maximum 15 VDC
Nominal Output	2.0 m V/ V
Non - Linearity	< ±0.1% FSO
Hysteresis	< ±0.1% FSO
Non-Repeatability	< ±0.1% FSO
Creep (30 minutes)	< ±0.3% FSO
Zero Balance	±1.0% FSO
Input Resistance	390 Ohms
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	< 0.0015% FSO/ °C
Temperature Effect on Zero	< 0.0020% 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



Capacity In NM	Max RPM/Rotational Life	A	B	C	D(appx.)	E(Max)	H	J	K	L	Y
50	300/2million rotations	20	32	116	25	80	180	25	6.0	3.5	20
100, 200	200/1.5million rotations	25	39	102	28	85	180	25	8.0	4.0	21
300,500,1K	100/1million rotations	40	46	108	36	90	200	40	12.0	5.0	25
2K, 3K, 5K	50/0.75million rotations	60	62	116	50	105	240	60	18.0	7.0	26
10K	20/0.5million rotations	75	80	120	65	116	280	75	20.0	7.5	30
15K	10/0.2million rotations	90	95	130	75	140	320	90	25.0	9.0	40
20K, 30K, 40K	5/0.1million rotations	120	130	140	95	150	400	120	32	11	77
50K	5/0.1million rotations	140	150	150	110	165	450	140	36	12	80

Specifications are subject to change.

All dimensions are in mm.



Manufactured in INDIA by:

**ADI ARTECH**  
**TRANSDUCERS PVT. LTD.**  
 (An ISO 9001:2015 Certified Company)

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