

**Description**

ADI ARTECH'S Torque transducer TTD is 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 0-60°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 10 NM to 0 to 5000 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**

- 10, 20, 50, 100, 200, 500, 1000, 2000, 5000 NM 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.

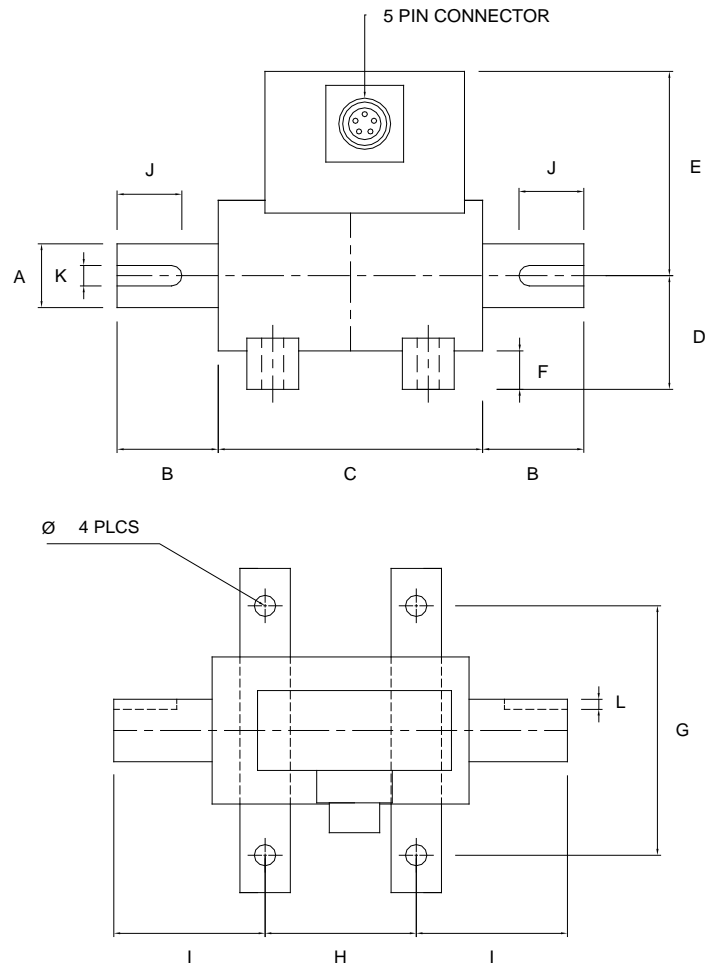
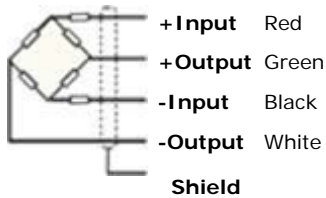
**Applications**

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	10,20,50,100,200,500,1000,2000,5000
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 Mtrs
Safe Overload	150% OF RC
Ultimate Overload	200% OF RC
Temp. Compensated Range	0-60 °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**



Capacity In NM	Max RPM	A	B	C	D	E(Max)	F	G	H	I	K	L	J	φ
10,20,50	5000	20	39	102	40	80	15	100	60	60	6.0	3.5	25	8.5
100, 200	4000	25	39	102	44	85	15	100	60	60	8.0	4.0	25	8.5
300,500,1000	3000	40	46	108	51	90	15	100	60	70	12.0	5.0	40	8.5
3000, 5000	2000	60	63	114	66	105	15	100	60	90	18.0	7.0	60	8.5

NOTE: ALL DIMENSIONS ARE IN MM



**ADI ARTECH TRANSDUCERS (P) LTD, VADODARA**

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