

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 10 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 0-50K NM 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.

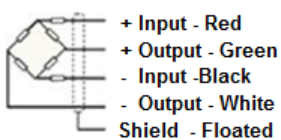
Applications

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

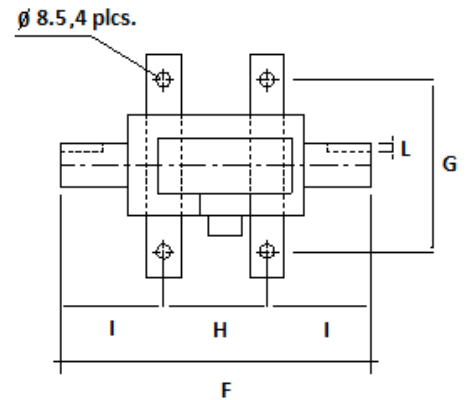
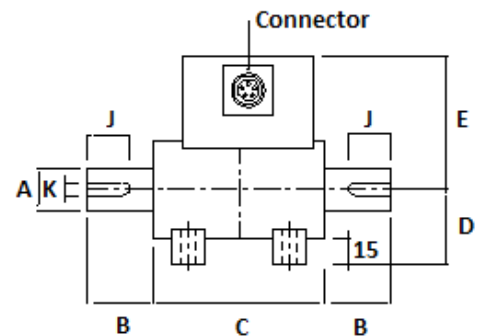
Standard Capacities in NM	50, 100, 200, 300, 500, 1K, 2K, 3K, 5K, 10K, 15K
Excitation Voltage	10 VDC- Maximum 15 VDC
Nominal Output	2.0 m V/ V
Non - Linearity	< ±0.1% FSO
Hysteresis	< ±0.1% FSO
Non-Repeatability	< ±0.1% FSO
Creep (30 minutes)	< ±0.3% FSO
Zero Balance	±1.0% FSO
Input Resistance	390 Ohms
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)	F	G	H	I	K	L	J
50	300/2million rotations	20	32	116	40	80	180	100	60	60	6.0	3.5	25
100, 200	200/1.5million rotations	25	39	102	42	85	180	100	60	60	8.0	4.0	25
300,500,1K	100/1million rotations	40	46	108	51	90	200	100	60	70	12.0	5.0	40
2K, 3K, 5K	50/0.75million rotations	60	62	116	65	105	240	100	60	90	18.0	7.0	60
10K	20/0.5million rotations	75	80	120	80	116	280	130	60	110	20.0	7.5	75
15K	10/0.2million rotations	90	95	130	90	140	320	160	90	115	25.0	9.0	90
20K, 30K, 40K	5/0.1million rotations	120	130	140	110	150	400	160	90	155	32.0	11.0	120
50K	5/0.1million rotations	140	150	150	125	165	450	160	90	180	36.0	12.0	140

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)	917/1, G.I.D.C. Estate, Makarpura, Vadodara - 390 010, Gujarat, INDIA Mobile : +91-9374068998, 9879444551, 9054467370 Email : sales@adiartech.com, adiartech@adiartech.com Website : www.adiartech.com
--	--	--