### Description

This is static reaction torque transducer, flange mount with female Shaft loading end is designed for industrial and research applications. It is constructed from Electroless Ni plated tool steel for harsh industrial applications. TTS-F-SQ-F is strain gage based sensor with full temperature compensation over 10 to 50°C. It is compensated for axial and side loads for very good linearity and low hysteresis. It is very compact and easy to install into the applications. It is available from 0 - 100 NM to 0 - 5000 NM capacities to cover vide industrial applications. It is suitable for clock wise and anti-clock wise directions

### **Features**

- Very compact and rugged for heavy duty applications.  $\dot{\mathbf{v}}$
- ٠ Compensated for axial and bending moments for good accuracy.
- Gage area is sealed for IP 65 degree of environmental class. ٠
- Can be supplied as per customers required size and capacity. ÷

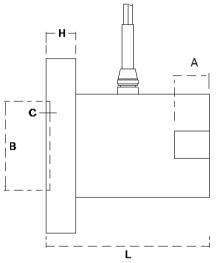
## **Applications**

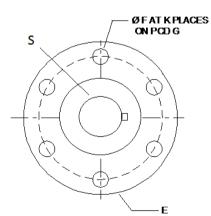
- Actuator/valve/electrical tool testing ٠
- Axle/shaft torsion test ٠
- ÷ Bearing friction measuring
- Testing of starters/slip rings/brushes/clutches/brakes ٠
- Electric/hydraulic/pneumatic motors testing ٠
- Alternators/Submersible pumps/gas, diesel, turbine engines testing Automobile testing of drive shaft and crank shaft torque ٠
- ٠
- Defence, Aerospace, R&D Establishments, Offshore test rigs, Automotive, machine ٠ tools, electrical and engineering industries.

## **Performance Specification**

| Electrical Termination              |                                      |
|-------------------------------------|--------------------------------------|
| Environmental Protection Class      | IP 65 for gage area                  |
| Finish & Construction               | Tool Steel / Stainless Steel 17-4 PH |
| Deflection                          | < 0.4 mm at FSO                      |
| Temperature Effect on Zero          | < 0.0020% FSO/ <sup>0</sup> C        |
| Temperature Effect on Output        | < 0.0015% FSO/ <sup>0</sup> C        |
| Temp. Compensated Range             | 10-50 °C                             |
| Allowable Side Load                 | 50%                                  |
| Ultimate Overload of Rated Capacity | 250%                                 |
| Safe Overload of Rated Capacity     | 150%                                 |
| Cable Length (4 Core Screened)      | 5 Mtrs                               |
| Insulation Resistance (50 VDC)      | > 1000 Mega Ohms                     |
| Output Resistance                   | 350 ± 3 Ohms                         |
| Input Resistance                    | 392 ± 15 Ohms                        |
| Zero Balance                        | ±1.0% FSO                            |
| Creep (30 minutes)                  | < ±0.3% FSO                          |
| Non-Repeatability                   | < ±0.1% FSO                          |
| Hysteresis                          | < ±0.2% FSO                          |
| Non - Linearity                     | < ±0.5% FSO                          |
| Nominal Output                      | 1.5 m V/ V                           |
| Excitation Voltage                  | 10 VDC- Maximum 15 VDC               |
| Standard Capacities                 | 100NM                                |
| •                                   |                                      |







# ALL DIMENSIONS WILL BE DEFINED BY THE USER TO FIT TO THE SUBMERSIBLE PUMP.

Specification are subject to change.

Red

Green

Black

White

Shield

+Input

+Output

-Input

-Output

All dimensions are in mm.



Manufactured in INDIA by: ADI ARTECH TRANSDUCERS PVT. LTD.

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