

# Static Torque Dual Flange - STDF (SPL)

(1Nm ~ 5000Nm)

## FLANGED TYPE REACTION TORQUE TRANSDUCER

STDF - SPL reaction torque transducer is flange mount type designed for industrial and research applications. Both end flanges makes it very compact and easy to install into the applications. It is suitable for clock wise and anti clock wise directions

### FEATURES

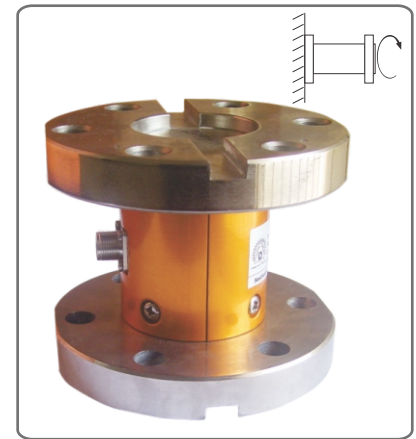
- Very compact and rugged for heavy duty applications.
- Compensated for axial and bending moments for good accuracy.
- Can be supplied as per customers required size and capacity.
- Both end shaft or one end shaft and other end flange type also can be supplied

### APPLICATION

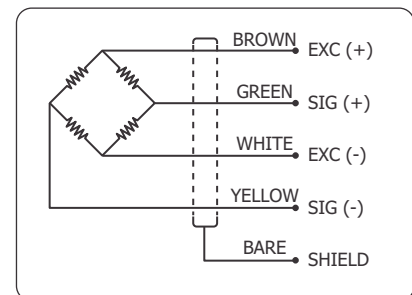
- Actuator/valve/electrical tool testing
- Axle/shaft torsion test
- Bearing friction measuring
- Testing of starters/slip rings/brushes/clutches/brakes
- Electric/hydraulic/pneumatic motors testing
- Alternators/pumps/gas, diesel, turbine engines testing
- Automobile testing of drive shaft and crank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

### TECHNICAL SPECIFICATION

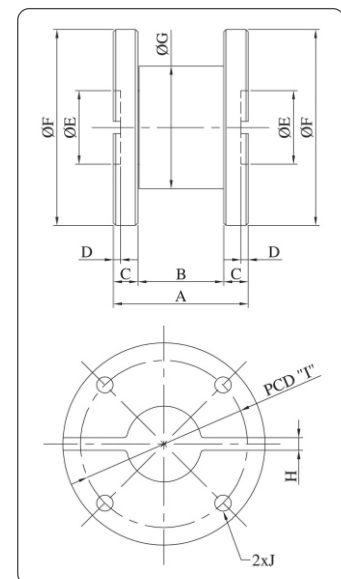
| Model                        | STDF - SPL                                          |
|------------------------------|-----------------------------------------------------|
| Rated capacity (R.C.)        | 1Nm ~ 5000Nm                                        |
| Rated output (R.O.)          | 1mV/V $\pm 1\%$                                     |
| Non-linearity                | 0.3% (0.1kgf-m under 0.5% R.O.)                     |
| Hysteresis                   | 0.3% (0.1kgf-m under 0.5% R.O.)                     |
| Repeatability                | 0.02% of R.O.                                       |
| Terminal resistance, input   | 350 $\Omega \pm 1\%$                                |
| Terminal resistance, output  | 350 $\Omega \pm 1\%$                                |
| Insulation resistance        | 2000M $\Omega$                                      |
| Temp. effect on zero balance | $\pm 0.1\%$ R.O./10°C                               |
| Temp. effect on rated output | $\pm 0.1\%$ Load/10°C                               |
| Excitation recommended       | 10V DC                                              |
| Safe overload                | 120% R.C.                                           |
| Cable length                 | $\varnothing 5.5$ mm, 4core shield cable, Length 2m |



### WIRING INFORMATION



### DIMENSION DETAILS



### DIMENSION TABLE

Unit : mm

| Rated Capacity | A   | B   | C  | D   | $\varnothing E$ | $\varnothing F$ | $\varnothing G$ | H  | I   | J                     |
|----------------|-----|-----|----|-----|-----------------|-----------------|-----------------|----|-----|-----------------------|
| 1, 2, 5 Nm     | 55  | 35  | 10 | 3   | 30              | 80              | 50              | 5  | 66  | 4- $\varnothing 6.5$  |
| 10, 20 Nm      | 55  | 35  | 10 | 3   | 30              | 80              | 50              | 5  | 66  | 4- $\varnothing 6.5$  |
| 50, 100 Nm     | 55  | 35  | 10 | 3   | 30              | 80              | 50              | 5  | 66  | 4- $\varnothing 6.5$  |
| 200 Nm         | 80  | 50  | 15 | 3   | 40              | 98              | 50              | 10 | 78  | 6- $\varnothing 10.5$ |
| 500 Nm         | 120 | 80  | 20 | 5   | 60              | 118             | 75              | 12 | 95  | 6- $\varnothing 10.5$ |
| 1000 Nm        | 130 | 90  | 20 | 6   | 60              | 146             | 75              | 16 | 115 | 6- $\varnothing 14$   |
| 2000 Nm        | 140 | 90  | 25 | 7.5 | 60              | 166             | 88              | 20 | 130 | 6- $\varnothing 18$   |
| 5000 Nm        | 170 | 100 | 35 | 10  | 80              | 197             | 98              | 28 | 155 | 6- $\varnothing 20$   |

Specifications are subject to change without Prior notice