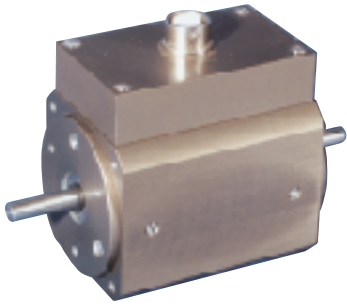


ORTT Optical Rotary Torque Transducers



Size 1-7



Size 15-16

The TSC series of **Rotary Torque Transducers** are non-contact optical devices which function using the displacement principle causing a variation of volume of light. This volume of light is varied by optical components attached to the transducer torsion shaft.

Solid state light sources are used creating a very robust technology with low power demand.

Low inertia parts and non-contact measurement enables the **TSC Rotary Torque Transducer** to operate to high speeds and sensitivity. This technology allows for a wide range of torque capacities.

Signal processing carried out within the transducer allows for connecting cable in excess of 30 metres if required and the transducer can be fixed either by base, flange, or in-line, between suitable couplings.

The advanced technology of the TSC Rotary Torque Transducer reduces maintenance requirements. Bearings can be changed by the user without requiring recalibration of the transducer. This feature is especially useful in long operational and arduous conditions. Automatic ranging and decimal point selection is achieved when used in conjunction with the TSC range of display equipment.

Encoders for speed or angle measurement are fitted as standard.

Applications

Research and Development; Process Control; Engineering and Technological Development for motors, motor drive systems, compressors, transmission systems and generators.

Features

- * Solid State Optics
- * Non Contact
- * Low Inertia
- * High Speed
- * High Sensitivity and Frequency Response
- * Rapid Serviceability

Specifications

Accuracy:	±1 of FSD
Resolution:	±0.1% of FSD
Linearity:	±>0.6% of FSD
Hysteresis:	±0.1% of FSD
Repeatability:	±0.2% of FSD
Cyclic Optical Error:	±>1% of FSD
Frequency Response:	Better than 100uS
Temperature Coefficient:	0.1% per degree C
Overload Capacity:	In excess of 200% of rated capacity
Operating Temp. Range:	-10°C to 60°C
Input Power Requirements:	±5V DC 50mA and ±12V DC 200mA
Signal Output Bipolar:	±1V DC for rated Capacity

Torque Ranges 10mNm to 2,000 Nm: 10zf.in to 1,000 lb.ft
100 gcm to 200 Kgm
Note: larger sizes can be supplied on request.

We reserve the right to change specifications as deemed necessary with continuous improvement

NAMAS Calibration Traceability on all Products and Services

Timesync Controls Ltd



Torque Systems

Calibration Services

Electronic Manufacture

Web Tension Control

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