

# PRODUCT DATA SHEET

## ET2707 Suspended Torquemeter

### Model Rating

Maximum Continuous Torque: 7000Nm

Maximum Continuous Speed: 5500rpm

Shaft Rating Range 700Nm to 7000Nm

Accuracy at Full Scale Torque 0.12% Application Dependant  
At 95% Confidence Level

### Specification

Number of Bearings	2
Bearing Temp. Monitoring	None
Bearing Lubrication Type	Grease
Accelerometer Mounting	None
Rotastat Voltage	See GDS01

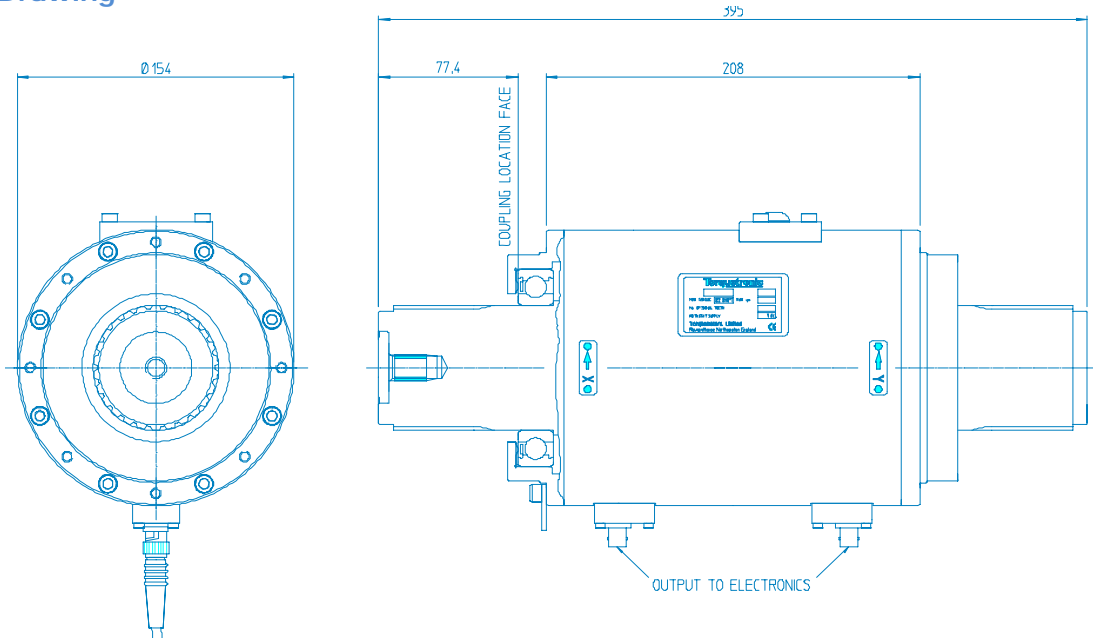


### Environment

Storage Temperature	-50 to 85°C
Operating Temperature	-20 to 80°C

Model view orientation to be updated

### Outline Drawing



Overall Weight 21kg

For more detail see drawings

INST02-2707-00	For installation drawing
02-2707-00	For itemized assembly drawing
E850001	For typical electrical connection drawing
03-2707-00	For drawing of optional calibration tooling
06-2707-00 & 06-2707-01	For optional bearing removal and refitting tooling



**Torquemeters Limited**

Ravensthorpe, Northampton, NN6 8ET, United Kingdom.  
Telephone: +44 (0)1604 770232 Fax: +44 (0)1604 770778  
email: info@torquemeters.com www.torquemeters.com

**Torquemeters** LIMITED  
high performance test & measurement systems

### Coupling Specification

Shaft End Type	Splined DIN 5480 – 70 x 2.5 x 26 x 7H 8f
Nominal Size	70mm

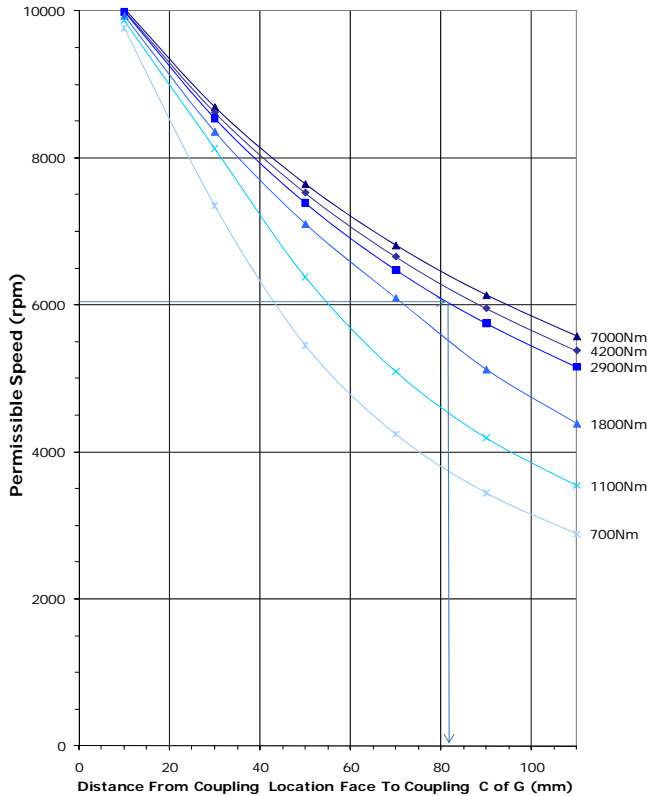
### Bearing Lubrication Requirements

Lubrication type	Semi Synthetic Grease
Grease type	Shell Nerita HV Grease
Grease quantity	5ml

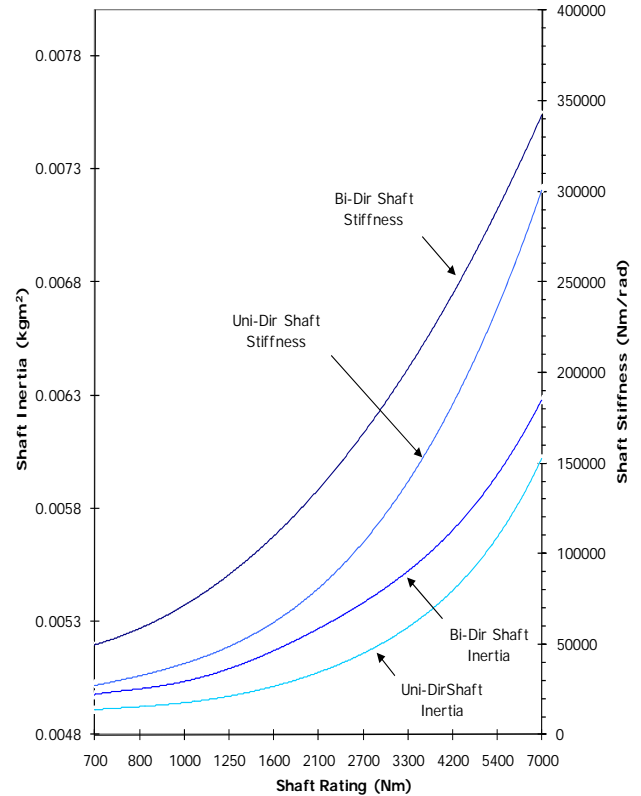
### Cartridge Style

ET2707 supplied as a non cartridge style torquemeter, refer to GDS01 Sheet Section 3

**Permissible Speed vs. CofG Overhang**  
700–7000Nm rating with 25kg Mass Coupling



**Inertia and Torsional Stiffness vs Shaft Rating**



For a different coupling mass ( $m_c$ ) the permissible speed ( $Nc_c$ ) is factored as follows:

$$Nc_{0.5kg} = Nc_c \sqrt{\frac{m_c}{25.0}}$$

Example:

Application max speed 5500rpm  
Torsion shaft rating 2900Nm  
Estimated coupling mass 30.0kg

$$Nc_{0.5kg} = 5500 \sqrt{\frac{30.0}{25.0}} = 6025rpm$$

The max allowable coupling C of G from location face read off chart is 82mm.

Note: Bi-directional ET's can run heavier couplings, contact Torquemeters for further details.

Please refer to Technical Data Sheet (TDS01) for details of Torquetric Torquemeter phase shift system.  
Please refer to Generic Data Sheet (GDS01) for details of Torquemeter options.