

# PRODUCT DATA SHEET

## ET2077 Suspended Torquemeter

### Model Rating

Maximum Continuous Torque: 700Nm

Maximum Continuous Speed: 6000rpm

Shaft Rating Range 58Nm to 700Nm

Accuracy at Full Scale Torque 0.12% Application Dependant

### Specification

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

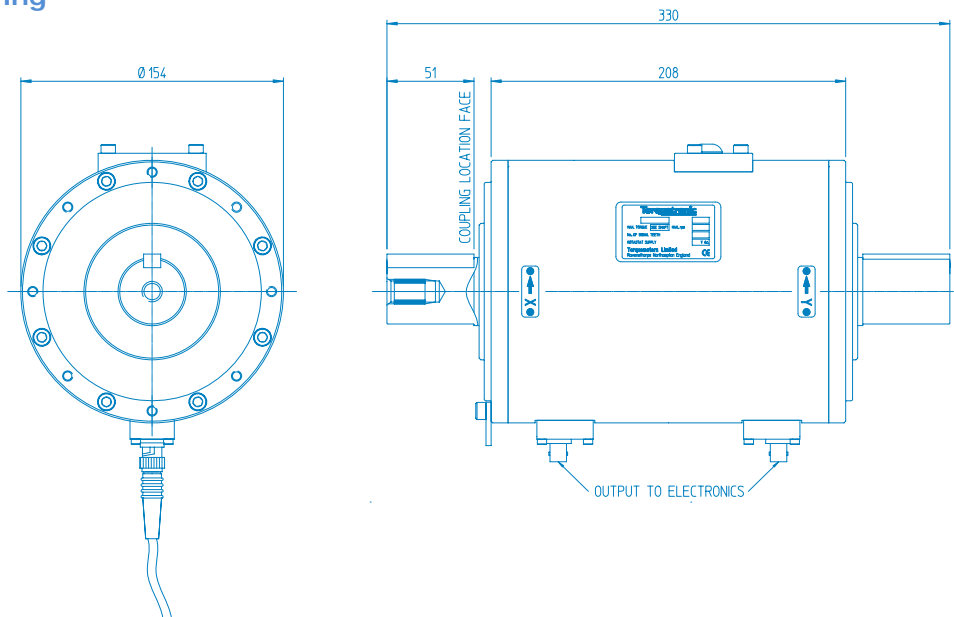


### Environment

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

Model view orientation to be updated

### Outline Drawing



Overall Weight 13kg

For more detail see drawings

INST02-2077-00	For installation drawing
02-2077-00	For itemized assembly drawing
E850001	For typical electrical connection drawing
03-2077-00	For drawing of optional calibration tooling



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

### Coupling Specification

Shaft End Type	1 off Deep Key
Nominal Size	Ø38mm

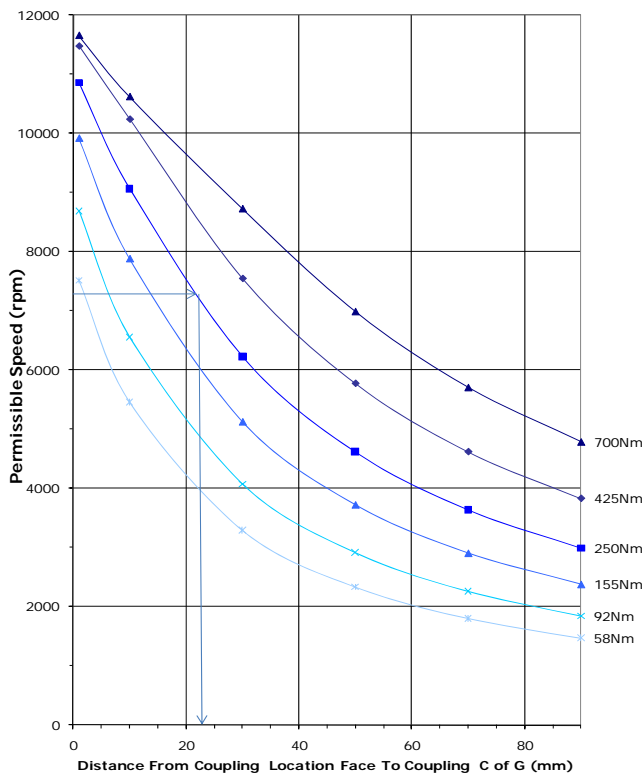
### Bearing Lubrication Requirements

Lubrication type	Semi Synthetic Grease
Grease type	Shell Nerita HV Grease
Grease quantity	1.5 ml

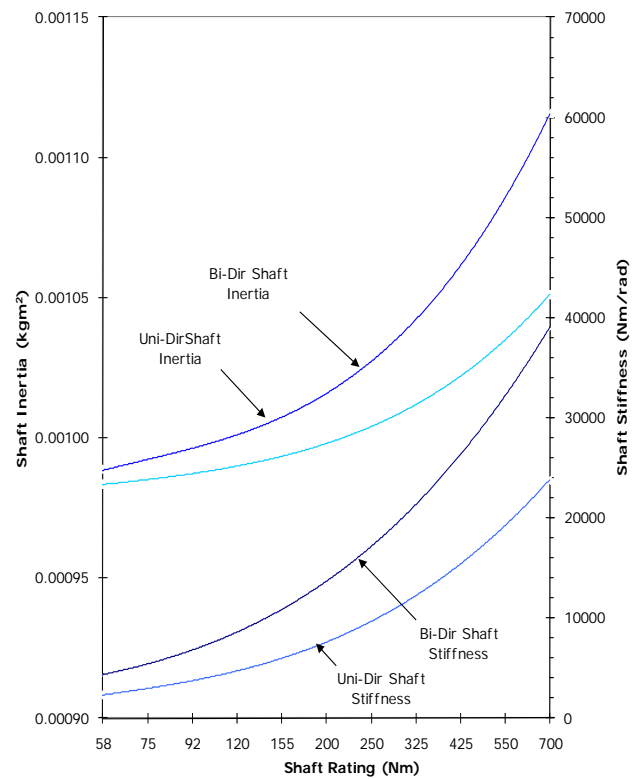
### Cartridge Style

Interchangeable torsion shafts for ET2077 supplied as bearings and shaft only.

**Permissible Speed vs CofG Overhang**  
58–700Nm rating with 10kg 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:

$$Nc_{0.5kg} = Nc_c \sqrt{\frac{m_c}{10.0}}$$

Example:

Application max speed 6000rpm  
Torsion shaft rating 250Nm  
Estimated coupling mass 15.0kg

$$Nc_{0.5kg} = 6000 \sqrt{\frac{15.0}{10.0}} = 7348rpm$$

The max allowable coupling C of G from location face read off chart is 23mm.

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

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