

# PRODUCT DATA SHEET

## ET2070 Low Speed Torquemeter

### Model Rating

Maximum Continuous Torque: 700Nm

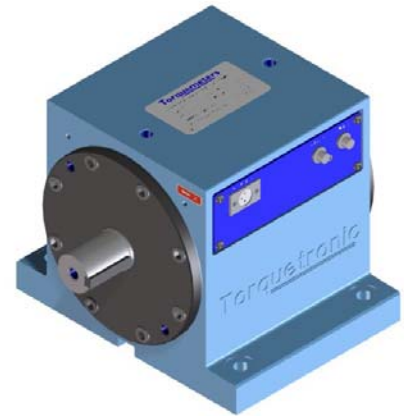
Maximum Continuous Speed: 12000rpm

Shaft Rating Range 58Nm to 700Nm

Accuracy at Full Scale Torque 0.12% Application Dependant

### Specification

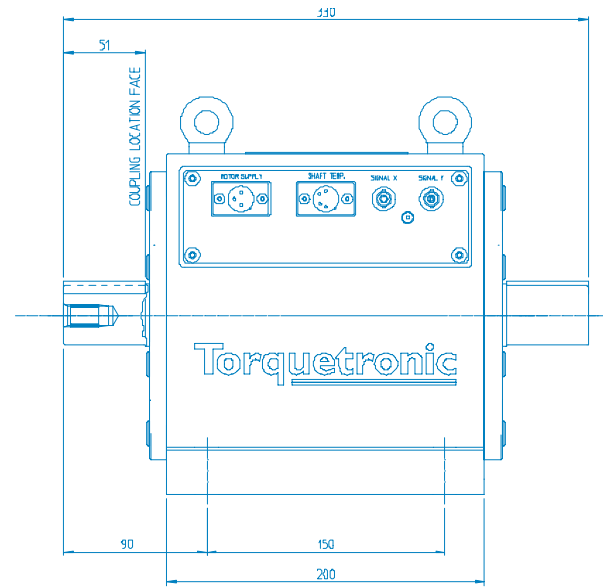
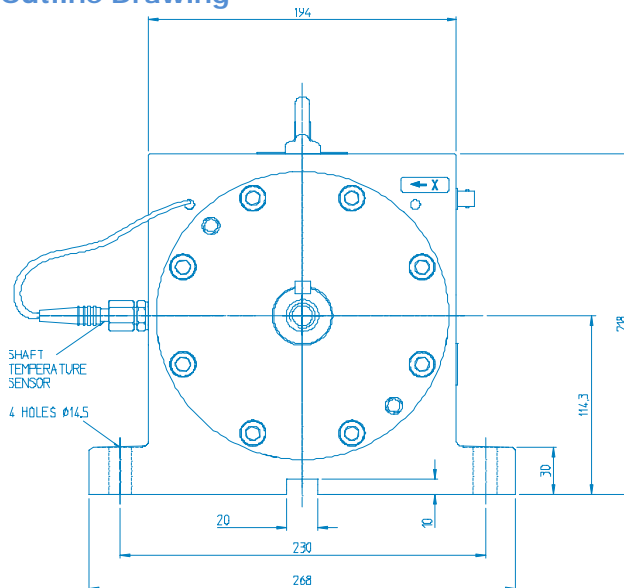
Number of Bearings	2
Bearing Temp. Monitoring	None
Bearing Lubrication Type	Grease
Accelerometer Mounting	None
Rotastat Voltage	See GDS01



### Environment

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

### Outline Drawing



Overall Weight 29kg

### For more detail see drawings

INST02-2070-00	For installation drawing
02-2070-00	For itemized assembly drawing
E850001	For typical electrical connection drawing
03-2070-00	For drawing of optional calibration tooling



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### Coupling Specification

Shaft End Type	1 off Deep Key
Nominal Size	Ø38mm

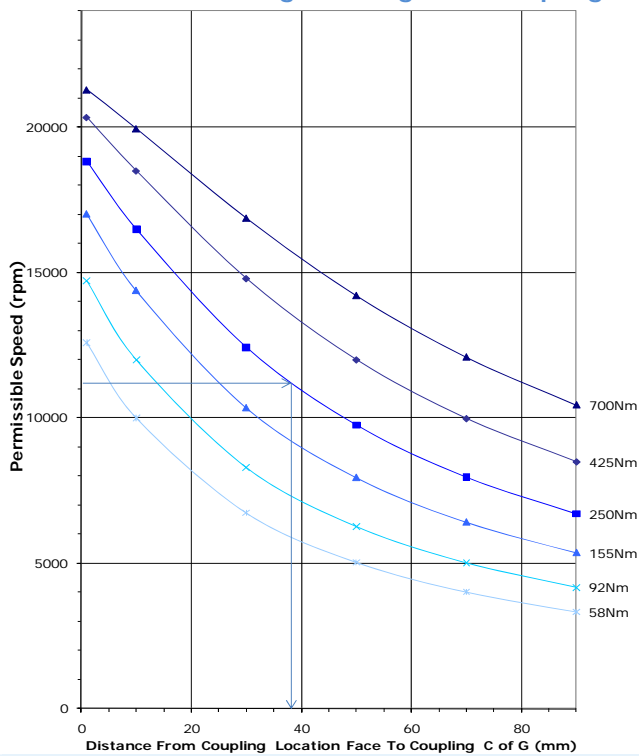
### Bearing Lubrication Requirements

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

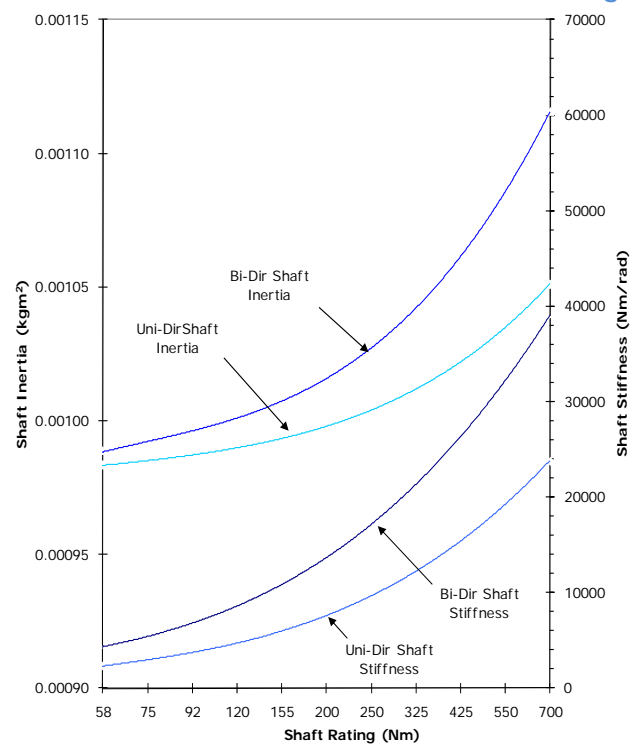
### Cartridge Style

Interchangeable torsion shafts for ET2070 supplied as bearings and shaft only.

Permissible Speed vs CofG Overhang  
58–700Nm rating with 2kg 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:

$$Nc_{0.5kg} = Nc_c \sqrt{\frac{m_c}{2.0}}$$

Example:  
Application max speed 10000rpm  
Torsion shaft rating 250Nm  
Estimated coupling mass 2.5kg

$$Nc_{0.5kg} = 10000 \sqrt{\frac{2.5}{2.0}} = 11180rpm$$

The max allowable coupling C of G from location face read off chart is 38mm.

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.