

PRODUCT DATA SHEET

ET1100 Low Speed Torquemeter

Model Rating

Maximum Continuous Torque: 100Nm

Maximum Continuous Speed: 16000rpm

Shaft Rating Range 10Nm to 100Nm

Accuracy at Full Scale Torque 0.12% Application Dependant

Specification

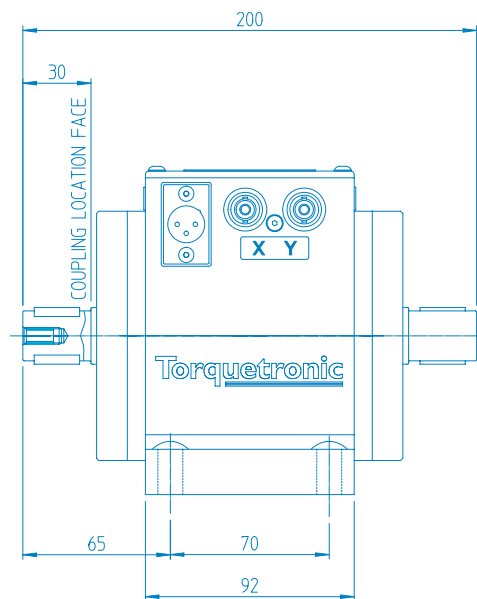
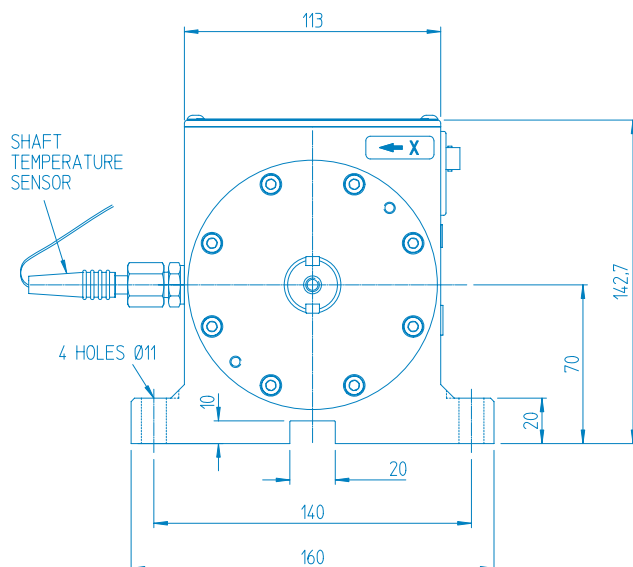
Number of Bearings	2
Bearing Temp. Monitoring	None
Bearing Lubrication Type	Grease
Accelerometer Mounting	None
Rotastat Voltage	See GDS01

Environment

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



Outline Drawing



Overall Weight 10kg

For more detail see drawings

INST02-1100-00	For installation drawing
02-1100-00	For itemized assembly drawing
E850001	For typical electrical connection drawing
03-1100-00	For drawing of optional calibration 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	2off Opposite Shallow Keys
Nominal Size	Ø22mm

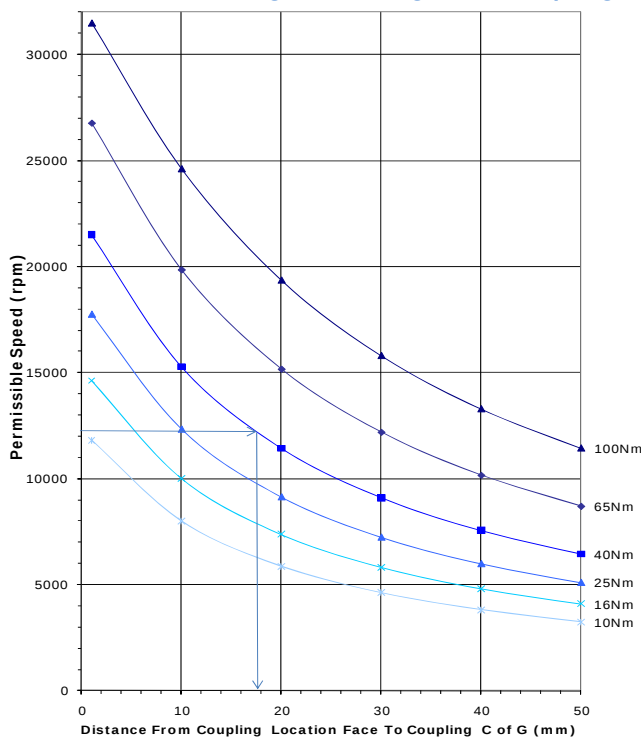
Bearing Lubrication Requirements

Lubrication type	Semi Synthetic Grease
Grease type	Shell Nerita HV Grease
Grease quantity	0.7 ml

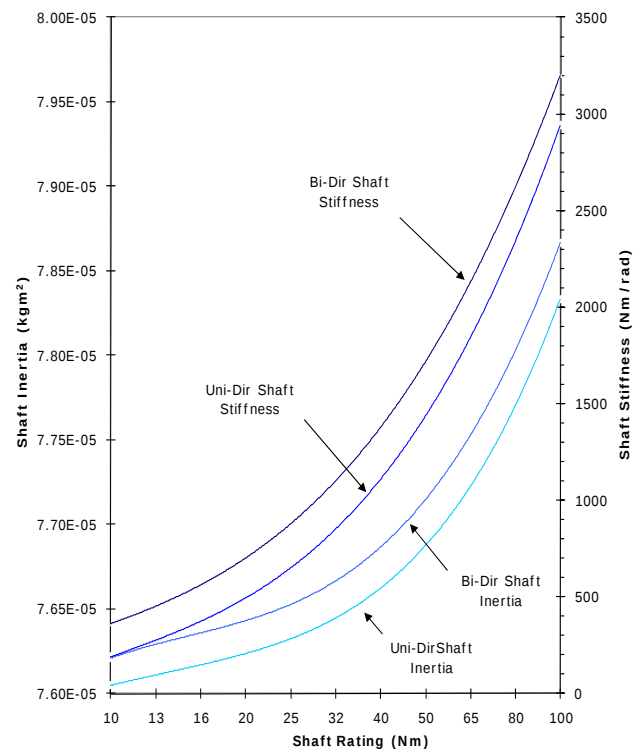
Cartridge Style

ET1100 supplied as a non cartridge style torquemeter, refer to GDS01 Sheet Section 3

Permissible Speed vs CofG Overhang
10–100Nm rating with 0.5kg Mass Coupling



Inertia and Torsional Stiffness vs Shaft Rating



For a different coupling mass (m_c) the permissible speed (N_{c_c}) is factored as follows:

$$N_{c_{0.5kg}} = N_{c_c} \sqrt{\frac{m_c}{0.5}}$$

Example:

Application max speed 10000rpm

Torsion shaft rating 40Nm

Estimated coupling mass 0.75kg

$$N_{c_{0.5kg}} = 10000 \sqrt{\frac{0.75}{0.5}} = 12247 \text{ rpm}$$

The max allowable coupling C of G from location face read off chart is 18mm.

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.