

Static/Reaction
Flange Mounting

TORQUE SENSOR

DTD-F
Series

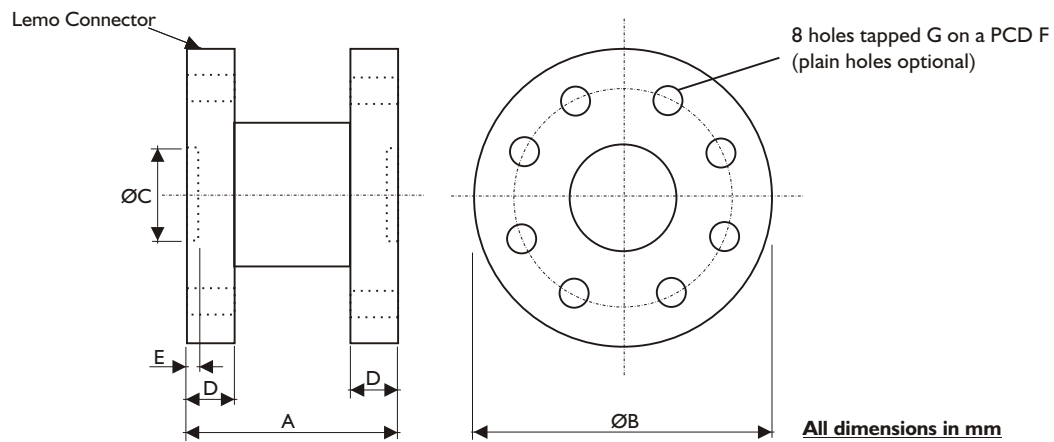
DESCRIPTION

The DTD-F series of Static/Reaction Torque Sensors have been designed specifically for the measurement of direct torque, and is particularly suited to Fatigue applications. Ranges from 10Nm to 10kNm are constructed from stainless steel while ranges from 20kNm and upwards are made from alloy steel. All models are environmentally protected to IP65 as standard and can optionally be sealed to IP68 (submersible).

The DTD-F torque sensor is provided with an integral, robust Lemo connector for quick and easy connection purposes.

Other styles and ranges are available and can be designed specifically to meet a particular applications requirement. Please consult our expert sales engineers to discuss your application in detail.

To further compliment the sensor a wide range of Instrumentation can be offered calibrated with the sensor:



| RANGE (Nm) | A | ØB | ØC | D | E | ØF | G |
|------------|-----|-----|------|----|---|------|-----|
| 10 | 76 | 100 | 38.1 | 13 | 2 | 82.5 | M8 |
| 20 | 76 | 100 | 38.1 | 13 | 2 | 82.5 | M8 |
| 50 | 76 | 100 | 38.1 | 13 | 2 | 82.5 | M8 |
| 100 | 76 | 100 | 38.1 | 13 | 2 | 82.5 | M8 |
| 200 | 76 | 100 | 38.1 | 13 | 3 | 82.5 | M8 |
| 500 | 76 | 100 | 38.1 | 13 | 3 | 82.5 | M8 |
| 1000 | 90 | 125 | 50.1 | 19 | 6 | 108 | M10 |
| 2000 | 90 | 125 | 50.1 | 19 | 6 | 108 | M10 |
| 3000 | 120 | 150 | 50.1 | 35 | 6 | 108 | M16 |
| 5000 | 120 | 205 | 80.1 | 38 | 8 | 165 | M16 |
| 10000 | 190 | 205 | 80.1 | 38 | 8 | 165 | M16 |
| 20000 | 216 | 250 | 102 | 32 | 8 | 203 | M20 |
| 30000 | 226 | 355 | 152 | 50 | 8 | 280 | M24 |
| 50000 | 226 | 355 | 152 | 50 | 8 | 280 | M24 |

| CHARACTERISTICS | DTD-F | UNITS |
|---------------------------|---|----------------|
| Range: | 10, 20, 50, 100, 200, 500, 1000, 2K, 3K, 5K, 10K, 20K, 30K, 50K | Nm |
| Excitation Voltage: | 10 (15 Max.) | VDC or VAC |
| Sensitivity: | 2.0 (up to 10K) or 1.5 (20K and above) | mV/V (Nominal) |
| Overload Protection: | 150 | ±%FSO |
| Non-Linearity: | <0.25 | ±%FSO |
| Repeatability: | <0.05 | ±%FSO |
| Hysteresis: | <0.10 | %FSO |
| Temperature Range | Operating: 0 to +80 | °C |
| | Compensated: +20 to +60 | °C |
| Temperature Effects | On Zero: <0.010 | ±%FSO/°C |
| | On Output: <0.020 | ±Reading/°C |
| Bridge Resistance: | 700 nominal | ohms |
| Fatigue Rating: | 20 million fully reversed cycles | |
| Environmental Protection: | IP65 | |

Transducer Specialists...

APPLIED MEASUREMENTS LIMITED

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3 MERCURY HOUSE - CALLEVA PARK - ALDERMASTON - BERKSHIRE - RG7 8PN - UK

Tel: (+44) 0118 981 7339 Fax: (+44) 0118 981 9121 email: info@appmeas.co.uk Internet: www.appmeas.co.uk