

Wireless Telemetry Rotary Flange Mounting

TORQUE SENSOR

DTDR-F Series

DESCRIPTION

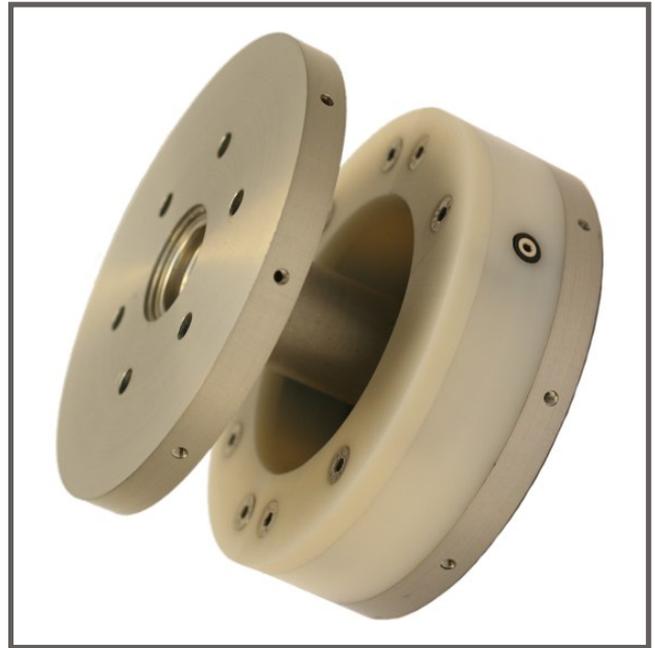
The DTDR-F series of wireless telemetry torque sensors are designed for the measurement of direct torque in rotating and static applications where a truly wireless device with on-board power supply and stator-free data transmission is required.

The DTDR-F utilises the latest T24 range of battery-powered wireless telemetry equipment that offers ease-of-use alongside robust data transmission and superb battery life.

The DTDR-F's data output can be fed into any T24 receiver module to provide an output or display to suit your requirement, options include; analogue voltage or current output, portable handheld display, USB to PC for display and data logging, large LED displays, alarm relays and printers. As the signal can be read by multiple modules any simultaneous combination of these is possible if required.

The complete assembly is rated to IP65 making it suitable for many common research, testing and industrial applications.

We can also customise the design to suit your application exactly if needed, simply contact our technical sales team to discuss your requirement.



DISPLAY & OUTPUT OPTIONS

The DTDR-F's output signal can be read by any receiving module from the T24 Wireless Telemetry range, the 3 most popular are shown below. The output can be read by multiple modules simultaneously so any combination of the options below is possible.

T24-HS Handheld Indicator



T24-AOI Analogue Output Module

**0-20mA / 4-20mA / 0-5Vdc
0-10Vdc / ± 5 Vdc / ± 10 Vdc**



T24-BSu USB Base Station + Viewing & Logging Software



Transducer Specialists...

APPLIED MEASUREMENTS LIMITED

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

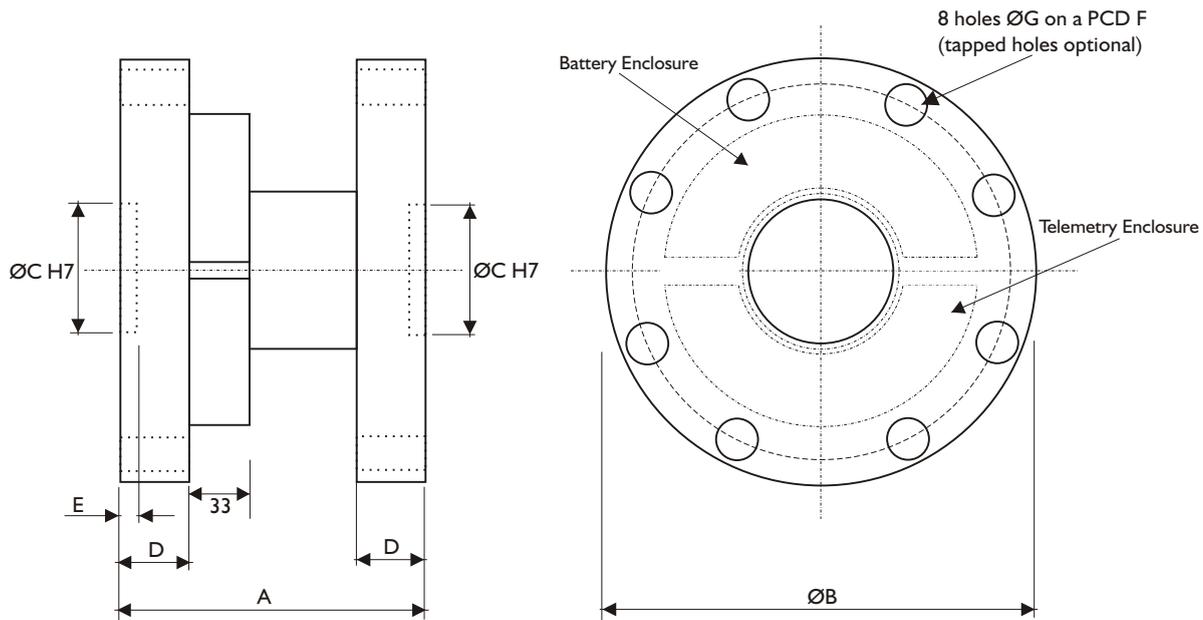
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SPECIFICATION

CHARACTERISTICS		DTDR-F	UNITS
Capacities:		0-50, 0-100, 0-200, 0-500, 0-1000, 0-2000, 0-3000 0-5000, 0-10k, 0-20k, 0-30k, 0-50k	Nm
Output:		2.4GHz Wireless Telemetry: Compatible with all T24 Modules*	
Output Bandwidth:		up to 200Hz (2kHz optional)	±%FSO
Overload Protection:		150	±%FSO
Non-Linearity:		<0.25	±%FSO
Repeatability:		<0.05	%FSO
Hysteresis:		<0.10	°C
Temperature Range	Operating:	0 to +80	°C
	Compensated:	+20 to +60	±%FSO/°C
Temperature Effects	On Zero:	<0.010	±Reading/°C
	On Output:	<0.020	Ohms
Fatigue Rating:		20 million fully reversed cycles	
Environmental Protection:		IP65	
Power Supply:		Integrated 3.6V Lithium-Ion Rechargeable Battery	
Range:		120 (in ideal conditions)	metres
Maximum Rotational Speed:		6500	rpm
Balancing:		Grade G6,3 (as per ISO 1940 standards)	
Construction Materials:		Aluminium Alloy (> 500Nm) / Stainless Steel (1000Nm>) & Nylon66	

*2kHz model is only compatible with T24-AOI, T24-AOIi, T24-BSi, T24-BSu Modules and the T24 Toolkit Software



All dimensions in mm

Capacity (Nm)	A	ØB	ØC H7	D	E	ØF	G
50	100	150	38	13	2	72	10.1
100	100	150	38	13	2	72	10.1
200	100	150	38	13	2	72	10.1
500	100	150	38	13	2	72	10.1
1000	110	150	38	19	2	72	10.1
2000	110	160	38	19	2	72	10.1
3000	130	203	50	30	3	177	16.2
5000	140	203	50	35	3	177	16.2
10000	150	203	50	38	3	177	16.2
20000	155	240	60	42	3	200	20.2
30000	180	280	60	50	4	235	24.2
50000	180	280	60	50	4	235	24.2

