Brushless Rotary Keyed Shaft

TORQUE SENSOR

YDR Series

- **Torque Ranges 10Nm to 1000Nm**
- **0.3% Accuracy Class**
- **Suitable fro continuously rotating applications**
- **Brushless Design for High RPM capability**
- **3 YEAR WARRANTY**

Options Available

Mounting pedestal

Customer-specific measuring ranges

Supplied With Any Instrumentation and Calibrated as a Complete System with Traceable Certificate

DESCRIPTION

The TRQ/TRR series torque transducers provide “in-line” and cost effective torque measurement, utilising strain gauge technology.

The signal from the strain gauge bridge is transferred to a high quality bayonet lock MIL specification connector via high quality slip rings. The slip rings are constructed from silver, with silver graphite brushgear, which together, give high integrity, low noise transmission of the torque signal.

Options available, to further compliment this product include; torsionally stiff flexible couplings, parallel bored and keyed as necessary. Also available, as an option, are outputs of rotational speed and angle of rotation.

The TRQ/TRR series can be further complimented by any of our range of instrumentation to offer a complete system, supplied and calibrated from a single supplier.

Transducer Specialists...

APPLIED MEASUREMENTS LIMITED

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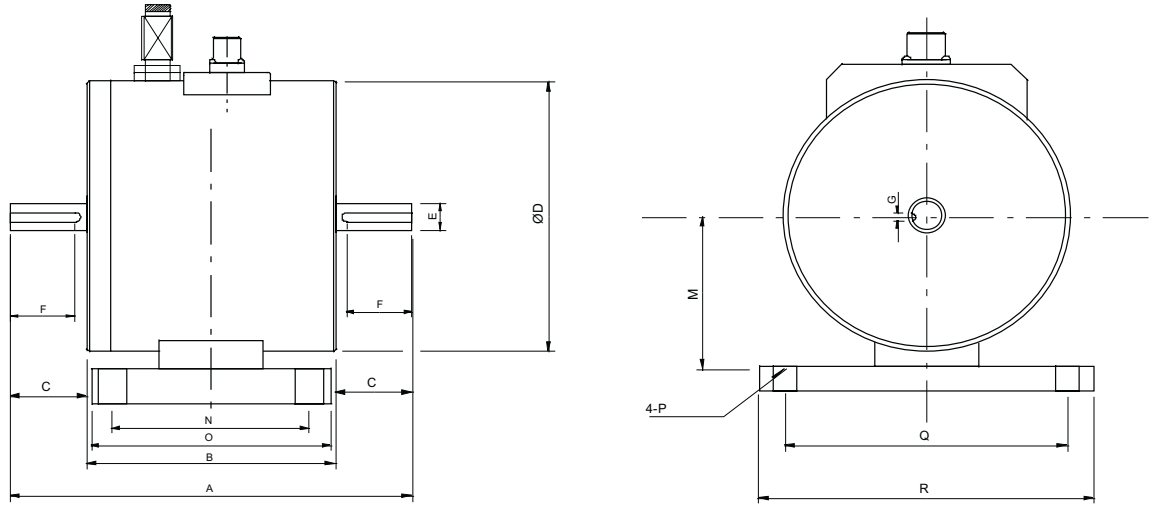
SPECIFICATION

CHARACTERISTICS	YDNR	UNITS
Torque Ranges:	9Nm, 20Nm, 50Nm	**Nm**
Rated Output (FSO):	2.0	**mV/V**
Excitation Voltage:	10	**VDC**
Safe Overload:	150	**% FSO**
Non-Linearity:	<0.2	**±% FSO**
Repeatibility:	<0.3	**±% FSO**
Hysteresis:	<0.3	**±% FSO**
Temperature Range Operating:	-10 to +70	**°C**
Compensated:	0 to +60	**°C**
Temperature Effect on Zero:	0.02	**±%FSO/°C**
Temperature Effect on Output:	0.01	**±%FSO/°C**
Terminal Resistance (Input/Output):	350±3.5 / 350±3.5	**ohms**
Insulation Resistance:	300	**megohms**
Environmental Protection:	IP40	
Cable:	3 metres, Ø5mm, shielded	
RPM Output:	60 pulses/revolution	



CAPACITY	A	B	C	ØD	ØE	F	G	M	N	O	ØP	Q	R	RPM
10-20Nm	219	120	49.5	101	20	35.0	5x5	72.0	78	98	7.0	97	117	6.000
50-100Nm	235	130	52.5	107	23	40.0	7x7	72.0	78	97	7.0	97	118	6.000
200-500Nm	287	150	68.5	114	38	50.0	10x8	72.0	78	99	7.0	97	118	4.000
1-2kNm	350	150	100	140	63	80.0	18x11	91.0	78	105	9.0	125	152	4.000
5-10kNm	500	220	140	172	90	115.0	25x14	114.0	118	148	11.0	162	192	2.000
20kNM	680	264	208	210	115	160.0	32x18	138.0	172	212	13.0	190	230	2.000
50kNm	680	264	208	210	115	160.0	31x18	138.0	172	212	13.0	190	230	2.000
80kNm	680	264	208	280	180	170.0	45x25	180.0	180	220	21.0	300	350	2.000