

# BASIC AND RPM ROTARY TORQUE SENSOR

## YDR/YDRA SERIES



- Torque Ranges 10Nm to 80kNm
- 0.09% Accuracy Class
- Suitable for continuously rotating applications
- Slip ring technology
- YDR model with RPM sensor
- 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 YDR/YDRA is designed specifically where high accuracy (0.09%) is required. Both the YDA and YDRA torque transducers use slip rings for the data transfer. Robust construction and minimal size make them ideal for applications in demanding applications and where there are space restrictions.

The YDR includes an RPM sensor to measure rotational speed simultaneously with torque.

The YDR/YDRA 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

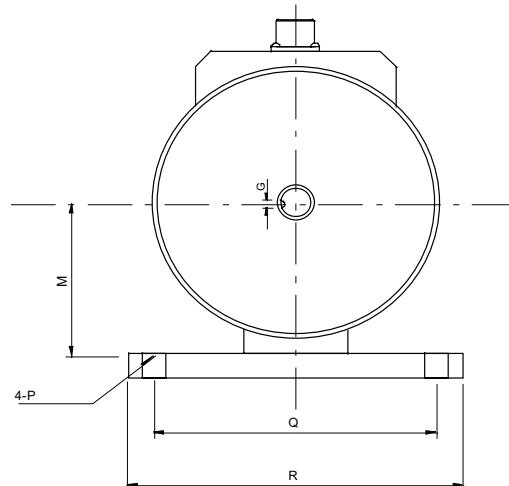
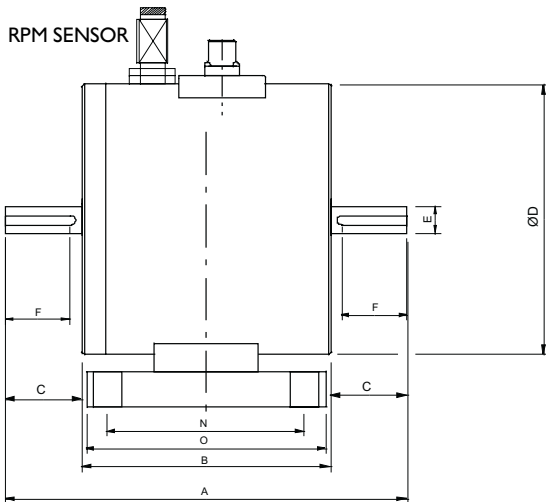
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# SPECIFICATION

CHARACTERISTICS	YDR	YDRA	UNITS
Torque Ranges:	10Nm - 80kNm	10Nm - 20kNm	Nm
Rated Output (FSO):	1.5 ± 1%		mV/V
Excitation Voltage:	10		VDC
Safe Overload:	150		% FSO
Non-Linearity:	0.09		±% FSO
Repeatability:	0.09		±% FSO
Hysteresis:	0.08		% FSO
Temperature Range Operating:	-20 to -70		°C
Compensated:	-10 to -60		°C
Temperature Effect on Zero:	0.005		±%FSO/°C
Temperature Effect on Output:	0.005		±%FSO/°C
Terminal Resistance (Input/Output):	350		ohms
Insulation Resistance:	300		Megaohms at 500VDC
Environmental Protection:	IP 50		
Cable:	3m screend Ø7 mm		
RPM Output:	60 pulses/revolution	N/A	



CAPACITY	A	B	C	ØD	ØE	F	G	M	N	O	ØP	Q	R	RPM
10-20Nm	191	101	45	101	20	40	5x5	63.5	78	96	7	108	128	6.000
50-100Nm	195	105	45	107	23	40	8x7	66	78	97	7	114	135	6.000
200-500Nm	247	107	70	114	38	60	10x8	72	78	102	9	121	141	4.000
1-2kNm	313	113	100	140	63	80	18x11	91	78	102	9	147	173	4.000
5-10kNm	390	130	130	172	90	100	25x14	101	100	126	11	154	180	2.000
20kNm	440	140	150	210	115	120	32x18	130	110	148	13	190	228	2.000

## YDRA

CAPACITY	A	B	C	ØD	ØE	F	G	M	N	O	ØP	Q	R	RPM
10-20Nm	219	120	49.5	101	20	35	5x5	72.0	78	98	7	97	117	6.000
50-100Nm	235	130	52.5	107	23	40	7x7	72.0	78	97	7	97	118	6.000
200-500Nm	287	150	68.5	114	38	50	10x8	72.0	78	99	7	97	118	4.000
1-2kNm	350	150	100	140	63	80	18x11	91.0	78	105	9	125	152	4.000
5-10kNm	500	220	140	172	90	115	25x14	114.0	118	148	11	162	192	2.000
20kNm	680	264	208	210	115	160	32x18	138.0	172	212	13	190	230	2.000
50kNm	680	264	208	210	115	160	32x18	138.0	172	212	13	190	230	2.000
80kNm	680	264	208	280	180	170	45x25	180.0	180	220	21	300	350	2.000

