

Amp type rotary

TORQUE SENSOR

TMA/TMRA
Series



- Torque Ranges 5Nm to 2kNm
- 0.3% Accuracy Class
- Brushless Design for High RPM capability
- 0-10Vdc or 4-20mA output
- TMA model with RPM output
- Upto 10,000rpm
- 3 YEAR WARRANTY

Options Available

Customer-specific measuring ranges

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

DESCRIPTION

The TMA/TMRA is designed for continuously rotating applications. Both the TMA and TMRA models use slip rings for data transfer. Both models have integral amplifiers to increase the output signal for torque to 0-10Vdc with the option to order with a 4-20mA output if preferred.

The TMA/TMRA 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

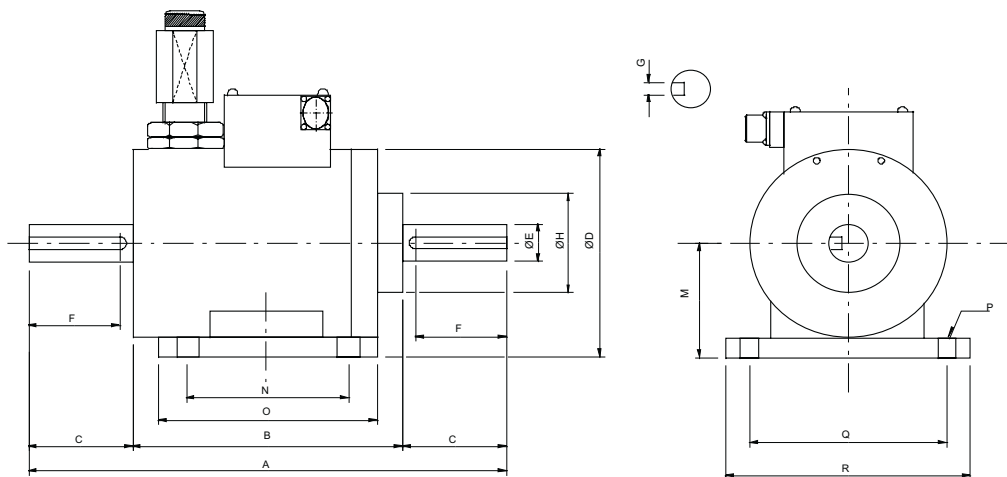
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SPECIFICATION

CHARACTERISTICS	TMA	TMRA	UNITS
Torque Ranges:	5Nm to 2kNm		Nm
Rated Output (FSO):	0-10Vdc	(4-20mA option)	mV/V
Excitation Voltage:	15		VDC
Safe Overload:	150		% FSO
Non-Linearity:	0.3		±% FSO
Repeatability:	0.3		±% FSO
Hysteresis:	0.3		% 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 screened Ø5mm		
RPM Output:	60 pulses/revolution		



TMA

CAPACITY	A	B	C	ØD	ØE	F	G	ØH	I	K	M	N	O	P	Q	R	RPM
5-20Nm	180	100	40	76	15	35	5X5	40.0	8	8	47.0	66	84	4 -Ø7 THRU	76	94	10.000
30-50Nm	194	104	45	76	17	37	6X6	40.0	8	8	47.0	70	88	4 -Ø7 THRU	78	96	10.000
100Nm	212	112	50	83	22	42	6X6	54.0	8	8	50.5	78	96	4 -Ø7 THRU	84	102	8.500
200Nm	224	114	55	91	32	47	10X8	68.0	8	8	54.5	78	96	4 -Ø7 THRU	91	111	6.000
500Nm	248	112	68	99	40	60	10X8	72.0	8	8	58.5	78	96	4 -Ø7 THRU	99	119	5.000
1kNm	292	112	90	105	42	80	12X8	78.0	8	10	63.5	72	96	4 -Ø7 THRU	116	140	4.000
2kNm	314	114	100	120	55	80.0	16X10	90.0	8	10	71.0	74	98	4 -Ø7 THRU	129	153	4.000

TMRA

CAPACITY	A	B	C	ØD	ØE	F	G	ØH	I	K	M	N	O	P	Q	R	RPM
5-20Nm	164	84	40	76	15	35	5x5	40.0	8	8	47.0	50	68	4-Ø7 THRU	76	94	10.000
30-50Nm	178	88	45	76	17	37	6x6	40.0	8	8	47.0	54	72	4-Ø7 THRU	78	96	10.000
100Nm	196	96	50	83	22	42	6X6	54.0	8	8	50.5	62	80	4-Ø7 THRU	84	102	8.500
200Nm	208	98	55	91	32	47	10x8	68.0	8	8	54.5	64	82	4-Ø7 THRU	91	111	6.000
500Nm	232	96	68	99	40	60	10X8	72.0	8	8	58.5	62	80	4-Ø7 THRU	99	119	5.000
1kNm	276	96	90	105	42	80	12X8	78.0	8	10	63.5	56	80	4-Ø7 THRU	116	140	4.000
2kNm	298	98	100	120	55	80.0	16X10	90.0	8	10	71.0	58	82	4-Ø7 THRU	129	153	4.000

