PCM 扭矩传感器 TQ-TRS

产品型号：

TQ-TRS

静态扭矩传感器系统
三：内存模型
的关键特征：

能力- 1000nm 0.5nm。

线性±0.2 %渗透。

IP40 密封。

应用：
试验机
过程控制

数据表：传感器的静态转矩 TQ—切

该系统提供了内存设备，测量小的扭转。三是从生产的不锈钢建设。负载细胞，这已被应用在设计的试验台的静态和动态测量是必需的。

值得注意的是：转矩换能器 calibrated 只提供单向的标准，无论是顺时针或逆时针。如果在两个方向的校

准是必需的，请指定这个在线 enquiring。

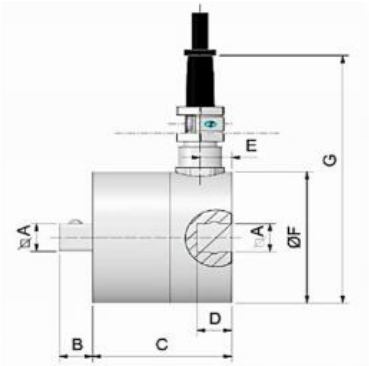
更多详细的产品规格和配件提供完整的清单，请下载产品数据表。

TYPICAL SPECIFICATION

PARAMETER	VALUE		UNITS
Capacities Range	0.5	2.5, 5, 10, 25, 50, 100, 250, 500, 1000	Nm
Rated Output	1 ≤ ±0.5%	2 ≤ ±0.5%	mV/V
Linearity & Hysteresis	0.2*		±% of Rated Output
Zero Balance	≤1		±% of Rated Output
Temperature Range: Operating	-10 to +70		°C
Temperature Range: Compensated	-20 to +80		°C
Temperature Effect: On Output	0.02		±% of Rated Output/°C
Temperature Effect: On Zero	0.02		±% of Rated Output/°C
Safe Overload	150		% of Rated Capacity
Break Overload	>300		% of Rated Capacity
Highly Dynamic Torque	70		% of Rated Capacity
Excitation: Recommended	1-15		Volts AC or DC
Excitation: Maximum	18		Volts AC or DC
Input Impedance	825 ± 50		Ω
Output Impedance	700 ± 2		Ω
Insulation Resistance	>2		GΩ at 50VDC
Sensor Execution Material	Stainless Steel (INOX 17-4PH)		-
Environmental Protection	IP40		-
Cable	5m *(PVC 105°C shielded, 4 core screened)*		-

***Option:** *Linearity and hysteresis ≤ ±0.10%.*

PROCESS COUPLING (Nm) - UNI ISO 1174-1	
0.5, 2.5, 5, 10	■ 1/4"
25, 50	■ 3/8"
100, 250	■ 1/2"
500, 1000	■ 3/4"

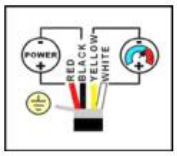


CODE	LOAD (Nm)	ØA	B	C	D	E	F	G
MTRS05NM	0.5	1/4"	7.5	44	8	10	45	85
MTRS2.5NM	2.5	1/4"	7.5	44	8	10	45	85
MTRS5NM	5	1/4"	7.5	44	8	10	45	85
MTRS10NM	10	1/4"	7.5	44	8	10	45	85
MTRS25NM	25	3/8"	10.5	44	11	10	45	85
MTRS50NM	50	3/8"	10.5	44	11	10	45	85
MTRS100NM	100	1/2"	15	44	16	10	45	85
MTRS250NM	250	1/2"	15	44	16	10	45	85
MTRS500NM	500	3/4"	22.5	53.5	24	17.5	51	91
MTRS1KNM	1000	3/4"	22.5	53.5	24	17.5	51	91

NOTE: *Torque transducers are supplied calibrated in one direction only as standard, either clockwise or counter-clockwise. If calibration in both directions is required, please specify this on enquiring. Thank you.*

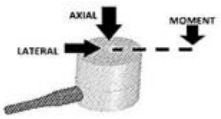
NOMINAL TORQUE	0.5Nm	2.5Nm	5Nm	10Nm	25Nm	50Nm	100Nm	250Nm	500Nm	1000Nm
Max. Axial Permissable Load (kN)	0.38	0.38	0.5	0.9	2.2	3.5	6	9.5	18	28
Max Lateral Permissable Load (N)	15	15	15	30	30	80	150	180	250	400
Bending Limit Moment (Nm)	1	1	1.5	3.5	4.5	15	20	42	65	170
Torsional Stiffness (kNm/rad)	0.0385	0.13	0.33	0.82	2.9	7	16.6	38.6	107	161
Torsion Angle (°)	0.74	1.1	0.87	0.7	0.49	0.41	0.34	0.37	0.27	0.36

WIRING DETAIL



Shield connected to the body of the torque meter.

LOADING MODE



For correct measurement both axial forces, transverse forces and bending moment should be absent.

In case of presence, they must not be greater than the values indicated above. To be reduced in silmultaneous presence of more solicitations.

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