

Model Number 2304-02A	REACTION TORQUE SENSOR	Revision: D ECN #: 47636
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	ENGLISH	SI	
Performance			
Measurement Range(Full Scale Capacity)	200,000 lbf-in	22,596 Nm	[1]
Sensitivity(± 15 %)(output at rated capacity)	2 mV/V	2 mV/V	[1][5]
Non-Linearity	≤ 0.1 % FS	≤ 0.1 % FS	[5]
Hysteresis	≤ 0.1 % FS	≤ 0.1 % FS	[5]
Non-Repeatability	≤ 0.02 % FS	≤ 0.02 % FS	[5]
Resonant Frequency	1.1 kHz	1.1 kHz	
Maximum Torque	300,000 lbf-in	33,895 Nm	
Environmental			
Overload Limit(Axial Thrust)	200,000 lbf	889.6 kN	[3]
Overload Limit(Overhung Moment)	100,000 lbf-in	11,298 Nm	[3]
Overload Limit(Shear)	30,000 lbf	133.44 kN	[3]
Temperature Range(Operating)	-65 to +200 °F	-54 to +93 °C	
Temperature Range(Compensated)	+70 to +170 °F	+21 to +77 °C	
Temperature Effect on Output(Maximum)	± 0.002 %Reading/°F	± 0.0036 %Reading/°C	[4]
Temperature Effect on Zero Balance(Maximum)	± 0.002 %FS/°F	± 0.0036 %FS/°C	[4][5]
Electrical			
Bridge Resistance	350 Ohm	350 Ohm	[1]
Excitation Voltage(Recommended)	10 VDC	10 VDC	[2]
Insulation Resistance	5 GOhm	5 GOhm	
Zero Balance	≤ 1 %RO	≤ 1 %RO	
Physical			
Size (Diameter x Length)	9.75 in x 8.50 in	247.65 mm x 215.90 mm	[6]
Weight	80 lb	36.29 kg	
Mounting	Flange (3/4in Bolts)	Flange (M20 Bolts)	
Torsional Stiffness	53,900 klbf-in/radian	6090 kN-m/radian	
Sensing Element	Strain Gage	Strain Gage	
Housing Material(Sensor)	Plated Steel	Plated Steel	
Electrical Connector	PT02E-10-6P	PT02E-10-6P	

All specifications are at room temperature unless otherwise specified.
 In the interest of constant product improvement, we reserve the right to change specifications without notice.

OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

NOTES:
 [1] Nominal.
 [2] Calibrated at 10 VDC, usable 5 to 20 VDC or VAC RMS.
 [3] Singularly applied, i.e. no other extraneous loads.
 [4] Over compensated operating temperature range.
 [5] FS - Full Scale.
 [6] See Drawing 26442 for Complete Dimensions

SUPPLIED ACCESSORIES:
 Model 181-012A PT06A-10-6S(SR) (1)

Entered: LK	Engineer: PE	Sales: KH	Approved: JSD	Spec Number:
Date: 2/22/2018	Date: 2/22/2018	Date: 2/22/2018	Date: 2/22/2018	22017



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