

Model Number 2303-01A	REACTION TORQUE SENSOR	Revision: E ECN #: 47636
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	<u>ENGLISH</u>	<u>SI</u>	
Performance			
Measurement Range(Full Scale Capacity)	50,000 lbf-in	5649 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	750 Hz	750 Hz	
Maximum Torque	75,000 lbf-in	8474 Nm	
Environmental			
Overload Limit(Axial Thrust)	50,000 lbf	222.4 kN	[3]
Overload Limit(Overhung Moment)	25,000 lbf-in	2825 Nm	[3]
Overload Limit(Shear)	10,000 lbf	44.48 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)	8.00 in x 7.38 in	203.2 mm x 187.45 mm	[6]
Weight	50 lb	22.67 kg	
Mounting	Flange (5/8in Bolts)	Flange (M16 Bolts)	
Torsional Stiffness	10,200 klbf-in/radian	1152 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 26441 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	18727



PCB LOAD & TORQUE
A PCB PIEZOTRONICS DIV.

PCB Load & Torque
 A Division of PCB Piezotronics
 24350 Indoplex Circle
 Farmington Hills, MI 48335
 UNITED STATES
 Phone: 866-684-7107
 E-Mail: LTSales@pcb.com
 Web site: www.pcb.com/LoadAndTorque