

Model Number <b>2302-02A</b>	<b>REACTION TORQUE SENSOR</b>	Revision: C ECN #: 38221
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	ENGLISH	SI	
<b>Performance</b>			
Measurement Range(Full Scale Capacity)	20,000 lbf-in	2259 N-m	[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	2.2 kHz	2.2 kHz	
Maximum Torque	30,000 lbf-in	3390 N-m	
<b>Environmental</b>			
Overload Limit(Axial Thrust)	20,000 lbf	88.96 kN	[3]
Overload Limit(Overhung Moment)	10,000 lbf-in	1130 N-m	[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]
<b>Electrical</b>			
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	
<b>Physical</b>			
Size (Diameter x Length)	5.00 in x 3.50 in	127 mm x 88.9 mm	[6]
Weight	10 lb	4.536 kg	
Mounting	Flange (3/8in Bolts)	Flange (M10 Bolts)	
Torsional Stiffness	7500 kbf-in/radian	847.4 kN-m/radian	
Sensing Element	Strain Gage	Strain Gage	
Housing Material(Sensor)	Plated Steel	Plated Steel	
Electrical Connector	PT02E-10-6P	PT02E-10-6P	

**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 26440 for Complete Dimensions


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

Entered: DMW	Engineer: PE	Sales: RR	Approved: JC	Spec Number:
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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.  
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**PCB Load & Torque, Inc.**  
 24350 Indoplex Circle  
 Farmington Hills, MI 48335  
 UNITED STATES  
 Phone: 866-684-7107  
 Fax: 716-684-0987  
 E-Mail: [Itinfo@pcbloadtorque.com](mailto:Itinfo@pcbloadtorque.com)  
 Web site: <http://www.pcbloadtorque.com>



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 Represented in India by  
**Structural Solutions Pvt Ltd. | Phone: 040 2322 2380 | Email: [sales@stsols.com](mailto:sales@stsols.com)**  
 #4th Floor, Sudheer Tapani Towers, Himayath Nagar, Hyderabad - 500 029