



Model Number 2508-05A		<b>REACTION TORQUE SENSOR</b>			Revision: E ECN #: 44533
<b>Performance</b>		<b>ENGLISH</b>	<b>SI</b>		<b>OPTIONAL VERSIONS</b> Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.
Measurement Range(Full Scale Capacity)	1000 lbf-in	113 Nm	[1]		
Sensitivity(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	2700 Hz	2700 Hz			
Maximum Torque	1500 lbf-in	170 Nm			
<b>Environmental</b>					<b>NOTES:</b> [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 32786 for Complete Dimensions
Overload Limit(Axial Thrust)	660 lbf	2936 N	[3]		
Overload Limit(Overhung Moment)	500 lbf-in	56.5 Nm	[3]		
Overload Limit(Shear)	800 lbf	3559 N	[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>					<b>SUPPLIED ACCESSORIES:</b> Model 181-012A PT06A-10-6S(SR) (1)
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			
Output Polarity	cw+	cw+			
<b>Physical</b>					
Size (Diameter x Length)	2.00 in x 3.00 in	50.8 mm x 76.2 mm	[6]		
Weight	2 lb	908 g			
Mounting	Flange (#10-24 Bolts)	Flange (No Metric Equivalent)			
Torsional Stiffness	127 klbf-in/radian	14.35 kN-m/radian			
Sensing Element	Strain Gage	Strain Gage			
Electrical Connector	PT02E-10-6P	PT02E-10-6P			
Housing Material	Anodized Aluminum	Anodized Aluminum			
					
<p>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.          ICP® is a registered trademark of PCB Group, Inc.</p>					
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