

Model Number 2305-01A		REACTION TORQUE SENSOR			Revision C ECN #: 38221										
Performance		ENGLISH		SI											
Measurement Range (Full Scale Capacity)		300000 lbf-in		33895 Nm											
Sensitivity (±15 %) (output at rated capacity)		2 mV/V		2 mV/V											
Non-Linearity		≤0.1 % FS		≤0.1 % FS											
Hysteresis		≤0.1 % FS		≤0.1 % FS											
Non-Repeatability		≤0.02 % FS		≤0.02 % FS											
Resonant Frequency		560 Hz		560 Hz											
Maximum Torque		450000 lbf-in		50842 Nm											
Environmental															
Overload Limit (Axial Thrust)		300000 lbf		1334.4 kN											
Overload Limit (Overhung Moment)		150000 lbf-in		16947 Nm											
Overload Limit (Shear)		30000 lbf		133.44 kN											
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											
Temperature Effect on Zero Balance (Maximum)		±0.002 %FS/°F		±0.0036 %FS/°C											
Electrical															
Bridge Resistance		350 Ohm		350 Ohm											
Excitation Voltage (Recommended)		10 VDC		10 VDC											
Insulation Resistance		5 GOhm		5 GOhm											
Zero Balance		≤1 %RO		≤1 %RO											
Physical															
Size (Diameter x Length)		14.00 in x 10.5 in		355.65 mm x 266.70 mm											
Weight		225 lb		102.06 Kg											
Mounting		Flange (1 in Bolts)		Flange (M24 Bolts)											
Torsional Stiffness		75800 klbf-in/radian		8564 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. ICP® is a registered trademark of PCB group, Inc.															
<table><tr><td>Entered: DMW</td><td>Engineer: PE</td><td>Sales: RR</td><td>Approved: JC</td><td>Spec Number:</td></tr><tr><td>Date: 01/24/2012</td><td>Date: 01/24/2012</td><td>Date: 01/24/2012</td><td>Date: 01/24/2012</td><td>25799</td></tr></table>						Entered: DMW	Engineer: PE	Sales: RR	Approved: JC	Spec Number:	Date: 01/24/2012	Date: 01/24/2012	Date: 01/24/2012	Date: 01/24/2012	25799
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 Company: PCB Load & Torque, Inc. Address: 24350 Indoplex Circle Farmington Hills, MI 48335 UNITED STATES Phone: 866-684-7107 Fax: 716-684-0987 E-mail: ltinfo@pcbloadtorque.com Web site: http://www.pcbloadtorque.com															

Model Number 2305-02A	REACTION TORQUE SENSOR			Revision C ECN #: 38221										
Performance	ENGLISH	SI		Optional Versions (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.)										
Measurement Range (Full Scale Capacity)	500000 lbf-in	56492 Nm	[1]	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 26443 for Complete Dimensions										
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	780 Hz	780 Hz												
Maximum Torque	750000 lbf-in	84738 Nm												
Environmental														
Overload Limit (Axial Thrust)	500000 lbf	2224 kN	[3]											
Overload Limit (Overhung Moment)	250000 lbf-in	28246 Nm	[3]											
Overload Limit (Shear)	50000 lbf	224.4 kN	[3]	Supplied Accessories 181-012A PT06A-10-6S(SR) (1)										
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	[5][4]											
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)	14.00 in x 10.50 in	355.65 mm x 266.70 mm	[6]											
Weight	225 lb	102.06 Kg												
Mounting	Flange (1 in Bolts)	Flange (M24 Bolts)												
Torsional Stiffness	150000 klbf-in/radian	16947 kN-m/radian												
Sensing Element	Strain Gage	Strain Gage												
Housing Material (Sensor)	Plated Steel	Plated Steel												
Electrical Connector	PT02E-10-6P	PT02E-10-6P												
														
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