

Model Number 2305-02A	REACTION TORQUE SENSOR				Revision: D ECN #: 47636
Performance			ENGLISH	SI	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.
Measurement Range(Full Scale Capacity)	500,000 lbf-in	56,492 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	780 Hz	780 Hz			
Maximum Torque	750,000 lbf-in	84,738 Nm			
Environmental					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
Overload Limit(Axial Thrust)	500,000 lbf	2224 kN	[3]		
Overload Limit(Overhung Moment)	250,000 lbf-in	28,246 Nm	[3]		
Overload Limit(Shear)	50,000 lbf	224.4 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					SUPPLIED ACCESSORIES: 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			
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	150,000 klbf-in/radian	16,947 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.					



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