

Model Number 4115K-04A		ROTARY TRANSFORMER TORQUE SENSOR			Revision: F ECN #: 44335		
Performance		ENGLISH	SI		OPTIONAL VERSIONS		
Measurement Range(Full Scale Capacity)		500 in-lb	55 Nm	[1]	Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.		
Sensitivity(± 15 %)(output at rated capacity)		2.5 mV/V	2.5 mV/V	[1][3]			
Non-Linearity		≤ 0.05 % FS	≤ 0.05 % FS	[3]			
Hysteresis		≤ 0.05 % FS	≤ 0.05 % FS	[3]			
Non-Repeatability		≤ 0.03 % FS	≤ 0.03 % FS	[3]			
Environmental							
Overload Limit		1500 in-lb	170 Nm				
Temperature Range(Operating)		-65 to 225 °F	-54 to 107 °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]	NOTES: [1]Nominal. [2]Recommended 10 VAC RMS. [3]FS - Full Scale. [4]Over compensated operating temperature range. [5]Mounting per AND10262 and AND20002. [6]See PCB Declaration of Conformance PS062 for details.		
Temperature Effect on Zero Balance(Maximum)		± 0.002 %FS/°F	± 0.0036 %FS/°C	[4][3]			
Electrical							
Bridge Resistance		350 Ohm	350 Ohm	[1]			
Excitation Frequency		3.28 kHz	3.28 kHz				
Excitation Voltage		2 to 10 VAC rms	2 to 10 VAC rms	[2]			
Insulation Resistance		>5,000,000 kohm	>5,000,000 kohm				
Zero Balance		≤ 2 % FS	≤ 2 % FS	[3]			
Bridge Current(at 5 VAC)		50 mA	50 mA				
Physical					SUPPLIED ACCESSORIES:		
Size (Shaft Length x Housing Length x Housing Height)		9.56 in x 8.25 in x 6.00 in	242.82 mm x 209.55 mm x 152.40 mm		Model 180-019A 5-socket mating connector for Series 3100, 4100, 4200 torque sensors Model 8113-105A Relay activated precision shunt calibration module		
Weight		47 lb	21.3 kg				
Mounting		Flange w/ Splined Shaft	Flange w/ Splined Shaft	[5]			
Sensing Element		Strain Gage	Strain Gage				
Housing Material		Black Oxidized Steel	Black Oxidized Steel				
Shaft Material		Steel	Steel				
Electrical Connector		MS3102A-14S-5P	MS3102A-14S-5P				
Torsional Stiffness		94,000 in-lb/radian	10,600 N-m/radian				
Rotating Inertia		0.0051 in-lb sec ²	0.0006 N-m sec ²				
Maximum Speed		15,000 RPM	15,000 RPM				
 [6]						 PCB Load & Torque 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	
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.							