

Model Number 039250-50101/B		ROTARY TORQUE, W/ENCODER AND AUTO ID			Revision: NR ECN #: 47364		
Performance		ENGLISH	SI		OPTIONAL VERSIONS		
Measurement Range(Full Scale Capacity)		100 lbf-ft	136 Nm		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(output at rated capacity)		2.0 mV/V	2.0 mV/V	[7]			
Non-Linearity		≤ 0.25 % FS	≤ 0.25 % FS	[2]			
Hysteresis		≤ 0.25 % FS	≤ 0.25 % FS	[2]			
Non-Repeatability		≤ 0.05 % FS	≤ 0.05 % FS	[2]			
Interchangeability		≤ 0.30 % FS	≤ 0.30 % FS	[8][2]			
Environmental							
Overload Limit		150 lbf-ft	203 Nm		NOTES: [1] Calibrated at 10 VDC, usable 5 to 20 VDC or VAC RMS. [2] FS - Full Scale. [3] Magnetic Encoder Specifications. [4] A-B Track 90° Phase Difference, Flat Over Operating Speed [5] Matched with 43.575 kOhm Precision Resistor. [6] Over compensated temperature range. [7] Matched to ±0.25% F.S. [8] Matched for mV/V and shunt calibration. [9] See Outline Drawing 48350 for Complete Dimensions [10] Per ANSI B107.4 Specifications [11] See PCB Declaration of Conformance PS119 for details.		
Temperature Range(Operating)		0 to +200 °F	-18 to +93 °C				
Temperature Range(Compensated)		+70 to +150 °F	+21 to +66 °C				
Temperature Effect on Output(Maximum)		± 0.002 %Reading/°F	± 0.0018 %Reading/°C	[6]			
Temperature Effect on Zero Balance(Maximum)		± 0.002 %FS/°F	± 0.0018 %FS/°C	[6]			
Electrical							
Bridge Resistance		350 Ohm	350 Ohm		SUPPLIED ACCESSORIES: Model 7122R-04352A PRECISION CAL RESISTOR 43.575 kOhm OPTIONAL ACCESSORIES: Model 080920-01000 Model 920 Portable Digital Peak Meter for torque, torque-angle or load measurement; Click-Wrench calc feature, w/battery charger, instruction manual & shoulder strap Model 080962-01000 MODEL 962 DATA RECORDER Model 097000-34445 INTERCONNECT CABLE Model 4242R-000630 MATING CONNECTOR PT06A-12-10S(SR)		
Excitation Voltage		10 VDC	10 VDC	[1]			
Insulation Resistance		≥ 5 GOhm	≥ 5 GOhm				
Zero Balance		≤ 2 % FS	≤ 2 % FS	[2]			
Counts Per Revolution		1472	1472	[3]			
Resolution w/ Quadrature		1/4 °	1/4 °	[3]			
Output Voltage		High 5V to Low 0.5V	High 5V to Low 0.5V	[3]			
Power Required(maximum)		5 VDC @ 120mA	5 VDC @ 120mA	[3]			
Magnetic Encoder(Poles)		360	360	[3]			
Magnetic Encoder(Ouput)		See Note	See Note	[4][3]			
Shunt Calibration		≤ 0.25 % FS	≤ 0.25 % FS	[5][2]			
Auto ID		TTL Proprietary	TTL Proprietary				
Physical							
Size (Shaft Length x Housing Length x Housing Height)		3.23 in x 2.30 in x 2.00 in	82.0 mm x 58.4 mm x 50.8 mm	[9]			
Weight		.85 lb	386 gm				
Mounting		1/2 inch Sq Drive	12.7 mm Sq Drive	[10]			
Sensing Element		Strain Gage	Strain Gage				
Housing Material		Aluminum	Aluminum				
Shaft Material		Steel	Steel				
Electrical Connector		PT02H-12-10P	PT02H-12-10P				
Maximum Speed		2500 RPM	2500 RPM				
							
[11]							
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.							