

Model Number 039250-51201/B	ROTARY TORQUE, W/ENCODER AND AUTO ID	Revision: NR ECN #: 47364
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	<u>ENGLISH</u>	<u>SI</u>	
Performance			
Measurement Range(Full Scale Capacity)	148 lbf-ft	200 Nm	
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	221 lbf-ft	300 Nm	
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	
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	
Magnetic Encoder(Output)	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	

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.

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.

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)

Entered: LK	Engineer: PE	Sales: DM	Approved: JSD	Spec Number:
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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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