

Model Number 039201-53102/B		ROTARY TORQUE, W/ENCODER AND AUTO ID			Revision: NR ECN #: 47364	
Performance		ENGLISH	SI		OPTIONAL VERSIONS	
Measurement Range(Full Scale Capacity)	1000 lbf-ft	1356 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	1500 lbf-ft	2034 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 49635 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	
Excitation Voltage	10 VDC	10 VDC		[1]		
Insulation Resistance	≥ 5 GOhm	≥ 5 GOhm				
Zero Balance	≤ 2 % FS	≤ 2 % FS		[2]		
Counts Per Revolution	2880	2880		[3]		
Resolution w/ Quadrature	1/8 °	1/8 °		[3]	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)	
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)	720	720		[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)	4.00 in x 2.00 in x 3.63 in	101.6 mm x 50.8 mm x 92.2 mm		[9]		
Weight	3.2 lb	1452 gm				
Mounting	1 inch Sq Drive	25.4 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	1000 RPM	1000 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.						
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