

Model Number  
039301-01103

# ROTARY TORQUE, W/ENCODER AND AUTO ID

Revision: A  
ECN #: 55688

	ENGLISH	SI	
<b>Performance</b>			
Measurement Range(Full Scale Capacity)	7,376 lbf-ft	10 kNm	
Sensitivity(output at rated capacity)	2.0 mV/V	2.0 mV/V	[1]
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	[3][2]
<b>Environmental</b>			
Overload Limit	8,851 lbf-ft	12 kNm	
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	[4]
Temperature Effect on Zero	± 0.002 %FS/°F	± 0.0018 %FS/°C	[4]
Balance(Maximum)			
<b>Electrical</b>			
Bridge Resistance	350 Ohm	350 Ohm	
Excitation Voltage	10 VDC	10 VDC	[5]
Insulation Resistance	≥ 5 GOhm	≥ 5 GOhm	
Zero Balance	≤ 2 % FS	≤ 2 % FS	[2]
Counts Per Revolution	3,600	3,600	[6]
Resolution w/ Quadrature	1/8 °	1/8 °	[6]
Output Voltage	High 5V to Low 0.5V	High 5V to Low 0.5V	[6]
Power Required(maximum)	5 VDC @ 120mA	5 VDC @ 120mA	[6]
Magnetic Encoder(Poles)	720	720	[6]
Magnetic Encoder(Output)	See Note	See Note	[7][6]
Shunt Calibration	≤ 0.25 % FS	≤ 0.25 % FS	[8][2]
Auto ID	TTL Proprietary	TTL Proprietary	
<b>Physical</b>			
Size (Shaft Length x Housing Length x Housing Height)	5.50 in x 2.63 in x 4.88 in	139.7 mm x 66.8 mm x 123.9 mm	[9]
Weight	7.5 lb	3,402 gm	
Mounting	1.50 inch Sq Drive	38.1 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	750 RPM	750 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] Matched to ±0.25% F.S.
- [2] FS - Full Scale.
- [3] Matched for mV/V and shunt calibration.
- [4] Over compensated temperature range.
- [5] Calibrated at 10 VDC, usable 5 to 20 VDC or VAC RMS.
- [6] Magnetic Encoder Specifications.
- [7] A-B Track 90° Phase Difference, Flat Over Operating Speed
- [8] Matched with 43.575 kOhm Precision Resistor.
- [9] See Outline Drawing LT36492 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 080962-01000 MODEL 962 DATA RECORDER  
Model 097000-34445 INTERCONNECT CABLE  
Model 4242R-000630 MATING CONNECTOR PT06A-12-10S(SR)

Entered: ND	Engineer: JM	Sales: BS	Approved: JM	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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