Model	Number
039201	53302/B

ROTARY TORQUE, W/ENCODER AND AUTO ID

Revision: B ECN #: 50498

033201-33302/B			
Performance	ENGLISH	SI	
Measurement Range(Full Scale Capacity)	3,000 lbf-ft	4,068 Nm	
Sensitivity(output at rated capacity)	1.8 mV/V	1.8 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]
Environmental			
Overload Limit	3,500 lbf-ft	4,845 Nm	[3]
Temperature Range(Operating)	0 to +200 °F	-18 to +93 ℃	
Temperature Range(Compensated)	+70 to +150 °F	+21 to +66 ℃	
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)			
Electrical			
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	4,160	4,160	[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)	1,040	1,040	[6]
Magnetic Encoder(Ouput)	See Note	See Note	[7][6]
Auto ID	TTL Proprietary	TTL Proprietary	
Physical			
Size (Shaft Length x Housing Length x	4.33 in x 2.44 in x 4.74 in	104.9 mm x 68.3 mm x 74.7	[8]
Housing Height)		mm	
Weight	4.0 lb	1,815 gm	
Mounting	1 inch Sq Drive	25.4 mm Sq Drive	[9]
Sensing Element	Strain Gage	Strain Gage	
Housing Material	Aluminum	Aluminum	
Shaft Material	Steel	Steel	
Electrical Connector	PT02H-12-10P	PT02H-12-10P	
Maximum Speed	1,000 RPM	1,000 RPM	



NOTES:

[1]Nominal (±10% FS)

[2]FS - Full Scale.

[3] Replaceable Male Drive is designed to fail at overload to protect sensing element

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.

[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]See Outline Drawing LT38325 for Complete Dimensions

[9] Per ANSI B107.4 Specifications

[10] 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.