

Model Number
039225-50101/B

ROTARY TORQUE, W/ENCODER AND AUTO ID

Revision: A
ECN #: 50139

| Performance | ENGLISH | SI | |
|---|-----------------------------|-----------------------------|--------|
| Measurement Range(Full Scale Capacity) | 100 lbf-in | 11.3 Nm | |
| 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] |
| Environmental | | | |
| Overload Limit | 150 lbf-in | 16.9 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 | [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 | 1,472 | 1,472 | [6] |
| Resolution w/ Quadrature | 1/4 ° | 1/4 ° | [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) | 368 | 368 | [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 | |
| 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 | .75 lb | 340 gm | |
| Mounting | 1/4 inch Sq Drive | 6.35 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 | 5,000 RPM | 5,000 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 45187 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: RB | Engineer: PE | Sales: DM | Approved: JSD | Spec Number: |
| Date: 11/07/2019 | Date: 11/07/2019 | Date: 11/07/2019 | Date: 11/07/2019 | 68201 |



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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.