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| Model Number<br><b>039025-50051</b>                                                                                                                                                      |  | <b>ROTARY TORQUE, W/ AUTO ID</b>                                                                                                                                                                                                                                                      |                             |                                                                                                                                                              | Revision: NR<br>ECN #: 38721 |  |
| <b>Performance</b>                                                                                                                                                                       |  | <b>ENGLISH</b>                                                                                                                                                                                                                                                                        | <b>SI</b>                   | <b>OPTIONAL VERSIONS</b>                                                                                                                                     |                              |  |
| Measurement Range(Full Scale Capacity)                                                                                                                                                   |  | 50 lbf-in                                                                                                                                                                                                                                                                             | 5.7 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                    |                                                                                                                                                              |                              |  |
| Non-Linearity                                                                                                                                                                            |  | ≤ 0.25 % FS                                                                                                                                                                                                                                                                           | ≤ 0.25 % FS                 |                                                                                                                                                              |                              |  |
| Hysteresis                                                                                                                                                                               |  | ≤ 0.25 % FS                                                                                                                                                                                                                                                                           | ≤ 0.25 % FS                 |                                                                                                                                                              |                              |  |
| Non-Repeatability                                                                                                                                                                        |  | ≤ 0.05 % FS                                                                                                                                                                                                                                                                           | ≤ 0.05 % FS                 |                                                                                                                                                              |                              |  |
| Interchangeability                                                                                                                                                                       |  | ≤ 0.30 % FS                                                                                                                                                                                                                                                                           | ≤ 0.30 % FS                 | [6][2]                                                                                                                                                       |                              |  |
| <b>Environmental</b>                                                                                                                                                                     |  |                                                                                                                                                                                                                                                                                       |                             | <b>NOTES:</b>                                                                                                                                                |                              |  |
| Overload Limit                                                                                                                                                                           |  | 75 lbf-in                                                                                                                                                                                                                                                                             | 8.5 Nm                      | [1] Calibrated at 10 VDC, usable 5 to 20 VDC or VAC RMS.                                                                                                     |                              |  |
| Temperature Range(Operating)                                                                                                                                                             |  | 0 to +200 °F                                                                                                                                                                                                                                                                          | -18 to +93 °C               | [2] FS - Full Scale.                                                                                                                                         |                              |  |
| Temperature Range(Compensated)                                                                                                                                                           |  | +70 to +150 °F                                                                                                                                                                                                                                                                        | +21 to +66 °C               | [3] Matched with 43.575 kOhm Precision Resistor.                                                                                                             |                              |  |
| Temperature Effect on Output(Maximum)                                                                                                                                                    |  | ± 0.002 %Reading/°F                                                                                                                                                                                                                                                                   | ± 0.0018 %Reading/°C        | [4] Over compensated temperature range.                                                                                                                      |                              |  |
| Temperature Effect on Zero Balance(Maximum)                                                                                                                                              |  | ± 0.002 %FS/°F                                                                                                                                                                                                                                                                        | ± 0.0018 %FS/°C             | [5] Matched to ±0.25% F.S.                                                                                                                                   |                              |  |
| <b>Electrical</b>                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                       |                             | [6] Matched for mV/V and shunt calibration.                                                                                                                  |                              |  |
| Bridge Resistance                                                                                                                                                                        |  | 350 Ohm                                                                                                                                                                                                                                                                               | 350 Ohm                     | [7] See Outline Drawing 45187 for Complete Dimensions                                                                                                        |                              |  |
| Excitation Voltage                                                                                                                                                                       |  | 10 VDC                                                                                                                                                                                                                                                                                | 10 VDC                      | [8] Per ANSI B107.4 Specifications                                                                                                                           |                              |  |
| Insulation Resistance                                                                                                                                                                    |  | ≥ 5 GOhm                                                                                                                                                                                                                                                                              | ≥ 5 GOhm                    | [9] See PCB Declaration of Conformance PS119 for details.                                                                                                    |                              |  |
| Zero Balance                                                                                                                                                                             |  | ≤ 2 % FS                                                                                                                                                                                                                                                                              | ≤ 2 % FS                    |                                                                                                                                                              |                              |  |
| Shunt Calibration                                                                                                                                                                        |  | ≤ 0.25 % FS                                                                                                                                                                                                                                                                           | ≤ 0.25 % FS                 | [3][2]                                                                                                                                                       |                              |  |
| Auto ID                                                                                                                                                                                  |  | TTL Proprietary                                                                                                                                                                                                                                                                       | TTL Proprietary             |                                                                                                                                                              |                              |  |
| <b>Physical</b>                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                       |                             | <b>SUPPLIED ACCESSORIES:</b>                                                                                                                                 |                              |  |
| 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 | Model 7122R-04352A PRECISION CAL RESISTOR 43.575 kOhm                                                                                                        |                              |  |
| Weight                                                                                                                                                                                   |  | .75 lb                                                                                                                                                                                                                                                                                | 340 gm                      | <b>OPTIONAL ACCESSORIES:</b>                                                                                                                                 |                              |  |
| Mounting                                                                                                                                                                                 |  | 1/4 inch Sq Drive                                                                                                                                                                                                                                                                     | 6.35 mm Sq Drive            | Model 080920-01000 MODEL 920 PORTABLE DIGITAL INSTRUMENT                                                                                                     |                              |  |
| Sensing Element                                                                                                                                                                          |  | Strain Gage                                                                                                                                                                                                                                                                           | Strain Gage                 | Model 080962-01000 MODEL 962 DATA RECORDER                                                                                                                   |                              |  |
| Housing Material                                                                                                                                                                         |  | Aluminum                                                                                                                                                                                                                                                                              | Aluminum                    | Model 097000-34445 INTERCONNECT CABLE                                                                                                                        |                              |  |
| Shaft Material                                                                                                                                                                           |  | Steel                                                                                                                                                                                                                                                                                 | Steel                       | Model 4242R-000630 MATING CONNECTOR PT06A-12-10S(SR)                                                                                                         |                              |  |
| Electrical Connector                                                                                                                                                                     |  | PT02H-12-10P                                                                                                                                                                                                                                                                          | PT02H-12-10P                |                                                                                                                                                              |                              |  |
| Maximum Speed                                                                                                                                                                            |  | 5000 RPM                                                                                                                                                                                                                                                                              | 5000 RPM                    |                                                                                                                                                              |                              |  |
| <br>[9]                                                                                                |  |                                                                                                                                                                                                                                                                                       |                             |                                                                                                                                                              |                              |  |
|                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                       |                             |                                                                                                                                                              |                              |  |
| All specifications are at room temperature unless otherwise specified.<br>In the interest of constant product improvement, we reserve the right to change specifications without notice. |  |                                                                                                                                                                                                                                                                                       |                             |                                                                                                                                                              |                              |  |
|                                                                                                     |  | <b>PCB Load &amp; Torque, Inc.</b><br><b>24350 Indoplex Circle</b><br><b>Farmington Hills, MI 48335</b><br><b>UNITED STATES</b><br><b>Phone: 866-684-7107</b><br><b>Fax: 716-684-0987</b><br><b>E-Mail: ltinfo@pcbloadtorque.com</b><br><b>Web site: http://www.pcbloadtorque.com</b> |                             |                                                                                                                                                              |                              |  |
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