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| Model Number<br><b>039030-50101</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)                                                                                                                                                           |  | 100 lbf-in                      | 11.3 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                     | [5]    |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| 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                  | [6][2] |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| <b>Environmental</b>                                                                                                                                                                             |  |                                 |                              |        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| Overload Limit                                                                                                                                                                                   |  | 150 lbf-in                      | 16.9 Nm                      |        | <b>NOTES:</b><br>[1] Calibrated at 10 VDC, usable 5 to 20 VDC or VAC RMS.<br>[2] FS - Full Scale.<br>[3] Matched with 43.575 kOhm Precision Resistor.<br>[4] Over compensated temperature range.<br>[5] Matched to ±0.25% F.S.<br>[6] Matched for mV/V and shunt calibration.<br>[7] See Outline Drawing 45188 for Complete Dimensions<br>[8] Per ANSI B107.4 Specifications<br>[9] 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         | [4]    |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| Temperature Effect on Zero Balance(Maximum)                                                                                                                                                      |  | ± 0.002 %FS/°F                  | ± 0.0018 %FS/°C              | [4]    |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| <b>Electrical</b>                                                                                                                                                                                |  |                                 |                              |        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| Bridge Resistance                                                                                                                                                                                |  | 350 Ohm                         | 350 Ohm                      |        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| Excitation Voltage                                                                                                                                                                               |  | 10 VDC                          | 10 VDC                       | [1]    |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| Insulation Resistance                                                                                                                                                                            |  | ≥ 5 GOhm                        | ≥ 5 GOhm                     |        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| Zero Balance                                                                                                                                                                                     |  | ≤ 2 % FS                        | ≤ 2 % FS                     | [2]    |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| Shunt Calibration                                                                                                                                                                                |  | ≤ 0.25 % FS                     | ≤ 0.25 % FS                  | [3][2] |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| Auto ID                                                                                                                                                                                          |  | TTL Proprietary                 | TTL Proprietary              |        | <b>SUPPLIED ACCESSORIES:</b><br>Model 7122R-04352A PRECISION CAL RESISTOR 43.575 kOhm                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                       |
| <b>Physical</b>                                                                                                                                                                                  |  |                                 |                              |        | <b>OPTIONAL ACCESSORIES:</b><br>Model 080920-01000 MODEL 920 PORTABLE DIGITAL INSTRUMENT<br>Model 080962-01000 MODEL 962 DATA RECORDER<br>Model 097000-34445 INTERCONNECT CABLE<br>Model 4242R-000630 MATING CONNECTOR PT06A-12-10S(SR)                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                       |
| Size (Shaft Length x Housing Length x Housing Height)                                                                                                                                            |  | 4.25 in x 2.30 in x 2.00 in     | 108.0 mm x 58.4 mm x 50.8 mm | [7]    |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| Weight                                                                                                                                                                                           |  | .75 lb                          | 340 gm                       |        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| Mounting                                                                                                                                                                                         |  | 1/4 inch Hex Drive              | 6.35 mm Hex Drive            | [8]    |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| Sensing Element                                                                                                                                                                                  |  | Strain Gage                     | Strain Gage                  |        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| Housing Material                                                                                                                                                                                 |  | Aluminum                        | Aluminum                     |        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| Shaft Material                                                                                                                                                                                   |  | Steel                           | Steel                        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| Electrical Connector                                                                                                                                                                             |  | PT02H-12-10P                    | PT02H-12-10P                 |        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| Maximum Speed                                                                                                                                                                                    |  | 5000 RPM                        | 5000 RPM                     |        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
|                                                                                                                |  |                                 |                              |        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
| <i>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.</i> |  |                                 |                              |        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                       |
|                                                                                                             |  |                                 |                              |        |                                                                                                                                                                                                                                                                                                                                                                                                                                           | <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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