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| Model Number 059600-01104 | FASTENER TORQUE-TENSION LOAD CELL | Revision: NR ECN #: 47765 |
|-------------------------------------|--|------------------------------|

| | <u>ENGLISH</u> | <u>SI</u> | |
|---|-----------------------------|--------------------------|--------|
| Performance | | | |
| Measurement Range(Tension) | 22.5k lbf | 100 kN | [1][3] |
| Measurement Range(Torque) | 110.6 lbf | 150 Nm | [1][3] |
| Sensitivity(Tension) | 2.0 mV/V | 2.0 mV/V | [1][3] |
| Sensitivity(Torque) | 1.0 mV/V | 1.0 mV/V | [1][3] |
| Non-Linearity | ± 0.25 % FS | ± 0.25 % FS | [3] |
| Hysteresis | ± 0.25 % FS | ± 0.25 % FS | [3] |
| Non-Repeatability | ≤ 0.2 % FS | ≤ 0.2 % FS | [3] |
| Cross Talk | ± 5.0 % FS | ± 5.0 % FS | [3] |
| Environmental | | | |
| Overload Limit | 150 % FS | 150 % FS | [3] |
| Temperature Range(Operating) | 0 to +200 °F | -18 to +93 °C | |
| Temperature Range(Compensated) | +70 to +170 °F | +21 to +77 °C | |
| Temperature Effect on Output(Maximum) | ± 0.001 %Reading/°F | ± 0.0018 %Reading/°C | [4] |
| Temperature Effect on Zero Balance(Maximum) | ± 0.001 %FS/°F | ± 0.0018 %FS/°C | [4][3] |
| Electrical | | | |
| Bridge Resistance(Tension) | 350 Ohm | 350 Ohm | [1] |
| Bridge Resistance(Torque) | 350 Ohm | 350 Ohm | [1] |
| Excitation Voltage(Recommended) | ± 10 VDC or VAC rms | ± 10 VDC or VAC rms | [2] |
| Insulation Resistance | >5 GOhm | >5 GOhm | |
| Zero Balance | ≤ 2 % FS | ≤ 2 % FS | [3] |
| Output Polarity(Compression) | Positive | Positive | |
| Output Polarity(Thread Torque CW) | Positive | Positive | |
| Bridge Current(at 10 VDC) | 30 mA | 30 mA | |
| Physical | | | |
| Size (Height x Width x Length) | 9.56 in x 4.13 in x 9.00 in | 243 mm x 105 mm x 229 mm | [5] |
| Weight | 35 lb | 16 kg | |
| Mounting | 3/8" bolts (2) | 10 mm bolts (2) | [5] |
| Housing Material | Stainless Steel | Stainless Steel | |
| Sensor Material | Aluminum | Aluminum | |
| Sensing Element | Strain Gage | Strain Gage | |
| Electrical Connector | PT02H-12-10P | PT02H-12-10P | |
| Stiffness | 1512k lbf-ft/radian | 2050k N-m/radian | |

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] Nominal.
 [2] Recommended 10 VAC RMS.
 [3] FS - Full Scale.
 [4] Over compensated operating temperature range.
 [5] See Outline Drawing 61662 for Complete Dimensions.
 [6] See PCB Declaration of Conformance PS062 for details.

SUPPLIED ACCESSORIES:

Model 7122R-02183A 218.4k Ohm Precision Calibration Resistor (1)
 Model 7122R-04352A PRECISION CAL RESISTOR 43.575 kOhm (1)
 Model 90150-030278 Mounting Plate (Base) (1)
 Model 90500-031910 Clamp Assembly (1)

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|-----------------|-----------------|-----------------|-----------------|--------------|
| Entered: LK | Engineer: PE | Sales: DM | Approved: JSD | Spec Number: |
| Date: 2/15/2018 | Date: 2/15/2018 | Date: 2/15/2018 | Date: 2/15/2018 | 61708 |



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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.