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| Model Number 176M03 | CHARGE OUTPUT PRESSURE SENSOR | Revision: K ECN #: 46623 |
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| | ENGLISH | SI | |
|---|------------------------|------------------------|--------|
| Performance | | | |
| Sensitivity(± 20 %) | 17 pC/psi | 247 pC/bar | |
| Measurement Range | 20 psi | 1.4 bar | |
| Maximum Pressure(Total) | 400 psi | 27.6 bar | |
| Resonant Frequency | >50 kHz | >50 kHz | |
| Transverse Resonance | ≥ 5 kHz | ≥ 5 kHz | |
| Frequency Response | 10 kHz | 10 kHz | [2][3] |
| Non-Linearity | ≤ 1 % FS | ≤ 1 % FS | [4] |
| Environmental | | | |
| Acceleration Sensitivity | ≤ 0.01 psi/g | ≤ .00069 bar/g | |
| Temperature Range(Continuous) | -94 to 986 °F | -70 to 530 °C | |
| Temperature Range(Receptacle) | -76 to 500 °F | -60 to 260 °C | |
| Temperature Response | See Graph | See Graph | [1] |
| Hazardous Area Approval | See Manual | See Manual | |
| Radiation Exposure Limit(Integrated Gamma Flux) | 1E8 rad | 1E8 rad | |
| Radiation Exposure Limit(Integrated Neutron Flux) | 1E10 N/cm ² | 1E10 N/cm ² | |
| Electrical | | | |
| Output Polarity(Differential) | Differential | Differential | |
| Capacitance(with cable pin - pin) | <165 pF | <165 pF | |
| Internal Resistance(room temp) | ≥ 10 ¹² Ohm | ≥ 10 ¹² Ohm | |
| Insulation Resistance(room temp) | ≥ 10 ¹² Ohm | ≥ 10 ¹² Ohm | |
| Internal Resistance(986°F/530°C) | ≥ 50 kohm | ≥ 50 kohm | |
| Insulation Resistance(986°F/530°C) | ≥ 100 kohm | ≥ 100 kohm | |
| Physical | | | |
| Sensing Element | UHT-12™ | UHT-12™ | |
| Sensing Geometry | Compression | Compression | |
| Housing Material | Nickel Alloy | Nickel Alloy | |
| Sealing | Welded Hermetic | Welded Hermetic | |
| Electrical Connector | 7/16-27 2-Pin | 7/16-27 2-Pin | |
| Cable Type | Overbraided Hardline | Overbraided Hardline | |
| Weight(with clamp nut & cable) | 4.9 oz | 140 gm | |

OPTIONAL VERSIONS

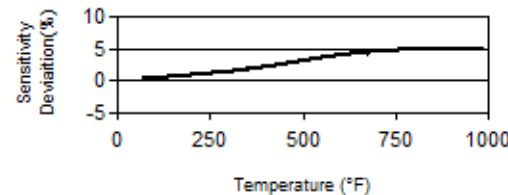
Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

NOTES:

[1] Typical.
 [2] Low frequency response is determined by external signal conditioning electronics.
 [3] Upper frequency response is calculated from Resonant Frequency.
 [4] Zero-based, least-squares, straight line method.
 [5] See PCB Declaration of Conformance PS058 for details.

SUPPLIED ACCESSORIES:
 Model 30498-01 Clamp nut (1)
 Model 40890-01 Silver plated, ss, seal (6)

Typical Sensitivity Deviation vs Temperature



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.
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| Entered: LK | Engineer: GJR | Sales: JC | Approved: BAM | Spec Number: |
| Date: 3/30/2017 | Date: 3/30/2017 | Date: 3/30/2017 | Date: 3/30/2017 | 35041 |

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