

INDUSTRIAL ICP® ACCELEROMETER

ENGLISH

Performance
 Sensitivity(± 15 %) 10.2 mV/(m/s²) [2]
 Measurement Range ± 50 g ± 490 m/s²
 Frequency Range 0.5 to 10,000 Hz
 Resonant Frequency 18 kHz [1]
 Broadband Resolution(1 to 10,000 Hz) 3434 µm/s² [3]
 Non-Linearity ± 1 %
 Transverse Sensitivity ≤ 7 %

Environmental
 Overload Limit(Shock) 5000 g pk
 Temperature Range -65 to +250 °F
 Temperature Response See Graph
 Enclosure Rating IP68

Electrical
 Settling Time(within 1% of bias) ≤ 2.0 sec
 Discharge Time Constant ≥ 0.3 sec
 Excitation Voltage 18 to 28 VDC
 Constant Current Excitation 2 to 20 mA
 Output Impedance <150 ohm
 Output Bias Voltage 8 to 12 VDC
 Spectral Noise(10 Hz) 8 µg/√Hz
 Spectral Noise(100 Hz) 5 µg/√Hz
 Spectral Noise(1 kHz) 4 µg/√Hz
 Electrical Isolation(Case) >10⁸ ohm

Physical
 Size (Hex x Height) 7/8 in x 1.23 in
 Weight 3.7 oz
 Mounting Stud
 Mounting Thread 1/4-28 Male [4]
 Mounting Torque(stud) 7 to 8 ft-lb [5][6]
 Mounting Torque(hex nut) 2 to 5 ft-lb
 Sensing Element Ceramic
 Housing Material Stainless Steel
 Sealing Welded Hermetic
 Electrical Connector 2-Pin MIL-C-5015
 Electrical Connection Position Side

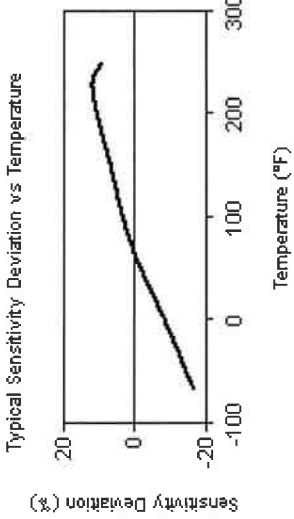
SI

[2] 10.2 mV/(m/s²)
 ± 490 m/s²
 0.5 to 10,000 Hz
 18 kHz [1]
 3434 µm/s² [3]
 ± 1 %
 ≤ 7 %

[1] 5000 g pk
 -65 to +250 °F
 See Graph
 IP68

≤ 2.0 sec
 ≥ 0.3 sec
 18 to 28 VDC
 2 to 20 mA
 <150 ohm
 8 to 12 VDC
 8 µg/√Hz
 5 µg/√Hz
 4 µg/√Hz
 >10⁸ ohm

22 mm x 31.2 mm
 105 gm
 Stud
 Not Applicable [4]
 9.5 to 10.8 N-m [5][6]
 2.7 to 6.8 N-m
 Ceramic
 Shear
 Stainless Steel
 Welded Hermetic
 2-Pin MIL-C-5015
 Side



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.

- EX - ATEX or CSA Hazardous Area Approval** EEx ia IIC T4, -40°C≤Tas121° C, II 1 G
- Hazardous Area Approval** EEx ia IIC T4, -40°C≤Tas121° C, II 1 G
- Hazardous Area Approval** Cl I, Div 1, Groups A, B, C, D; Cl II, Div 1, Groups A, B, C, D; Cl II, Div 1, Groups E, F, G, Cl III, Div 1
- Hazardous Area Approval** Cl I, Div 2, Groups A, B, C, D; Cl I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4
- Hazardous Area Approval** Exia IIC T4, AExia IIC, T4
- Hazardous Area Approval** EEx nL IIC T4, -40°C≤Tas 121°C, II 3 G

M - Metric Mount
 Supplied Accessory : Model M080A163 (*) replaces Model 080A162

- TO - Temperature Output** +36 to +250 °F
- Temperature Output Range** +2 to +121 °C
- Temperature Scale Factor** 5.56 mV/°F + 32
- Electrical Connector** 3-Pin MIL-C-5015
- Electrical Connections(Pin A)** Acceleration Output
- Electrical Connections(Pin B)** Ground
- Electrical Connections(Pin C)** Temperature Output

NOTES:

- [1] Typical.
- [2] Conversion Factor 1g = 9.81 m/s².
- [3] Zero-based, least-squares, straight line method.
- [4] 1/4-28 has no equivalent in S.I. units.
- [5] 1/8" hex Allen key required for English version, 4 mm hex Allen key required for Metric version.
- [6] Stud torque must exceed sensor hex nut torque to ensure proper dismantling.
- [7] See PCB Declaration of Conformance PS023 or PS060 for details.

SUPPLIED ACCESSORIES:

Model 080A162 Mounting Stud (1)
 Model ICS-2 NIST-traceable single-axis single-point amplitude response calibration at 6000 cpm (100 Hz) (1)

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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.
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