

Model Number
607M03

INDUSTRIAL SWIVEL MOUNT ICP® ACCELEROMETER

Revision A
ECN #: 42246

Performance

Sensitivity ($\pm 20\%$)
 Measurement Range
 Frequency Range ($\pm 5\%$)
 Frequency Range ($\pm 10\%$)
 Frequency Range ($\pm 3\text{ dB}$)
 Resonant Frequency
 Non-Linearity
 Transverse Sensitivity

ENGLISH

50 mV/g
 $\pm 100\text{ g}$
 72 to 3000000 cpm
 52 to 4200000 cpm
 26 to 6000000 cpm
 1500 kcpm
 $\pm 1\%$
 $\leq 5\%$

SI

5.1 mV/(m/s²)
 $\pm 981\text{ m/s}^2$
 1.2 to 5 kHz
 0.87 to 7 kHz
 0.43 to 10 kHz
 25 kHz
 $\pm 1\%$
 $\leq 5\%$

Environmental

Overload Limit (Shock)
 Temperature Range
 Enclosure Rating

5000 g pk
 -65 to +250 °F
 IP67

49050 m/s² pk
 -54 to +121 °C
 IP67

Electrical

Settling Time (within 1% of bias)
 Discharge Time Constant
 Excitation Voltage
 Constant Current Excitation
 Output Impedance
 Output Bias Voltage
 Broadband Electrical Noise (1 to 10 kHz)
 Spectral Noise (10 Hz)
 Spectral Noise (100 Hz)
 Spectral Noise (1 kHz)
 Electrical Isolation (Case)

$\leq 2.0\text{ sec}$
 $\geq 0.4\text{ sec}$
 18 to 28 VDC
 2 to 20 mA
 $< 150\text{ Ohm}$
 8 to 12 VDC
 750 μg
 18 $\mu\text{g}/\sqrt{\text{Hz}}$
 10 $\mu\text{g}/\sqrt{\text{Hz}}$
 7 $\mu\text{g}/\sqrt{\text{Hz}}$
 $> 10^8\text{ Ohm}$

$\leq 2.0\text{ sec}$
 $\geq 0.4\text{ sec}$
 18 to 28 VDC
 2 to 20 mA
 $< 150\text{ Ohm}$
 8 to 12 VDC
 7358 $\mu\text{m}/\text{sec}^2$
 176 ($\mu\text{m}/\text{sec}^2/\sqrt{\text{Hz}}$)
 98.1 ($\mu\text{m}/\text{sec}^2/\sqrt{\text{Hz}}$)
 68.7 ($\mu\text{m}/\text{sec}^2/\sqrt{\text{Hz}}$)
 $> 10^8\text{ Ohm}$

Physical

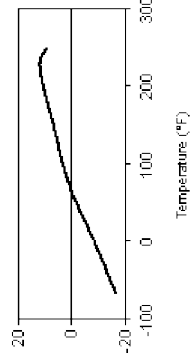
Size (Hex x Height)
 Weight (without cable)
 Mounting Thread
 Mounting Torque (stud)
 Mounting Torque (hex nut)
 Sensing Element
 Sensing Geometry
 Housing Material
 Sealing
 Electrical Connector

9/16 in x 1.0 in
 1.02 oz
 1/4-28 Male
 7 to 8 ft-lb
 3 to 5 ft-lb
 Ceramic
 Shear
 Stainless Steel
 Welded Hermetic
 Integral Armored
 Cable
 Side

14.3 mm x 25.4 mm
 29 gm
 1/4-28 Male
 9.5 to 10.8 Nm
 4.1 to 6.8 Nm
 Ceramic
 Shear
 Stainless Steel
 IP67
 Integral Armored
 Cable
 Side

Electrical Connection Position

Typical Sensitivity Deviation vs. Temperature



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

M - Metric Mount
 Supplied Accessory: Model M080A159A Mounting stud, 1/2-20 to M6 x 1 replaces Model 080A156

Notes

- [1] Typical.
- [2] Conversion Factor 1g = 9.81 m/s².
- [3] 1Hz = 60 cpm (cycles per minute).
- [4] The high frequency tolerance is accurate within $\pm 10\%$ of the specified frequency.
- [5] Zero-based, least-squares, straight line method.
- [6] Measured with mounting stud.
- [7] 1/4-28 has no equivalent in S.I. units.
- [8] Stud torque must exceed sensor hex nut torque to ensure proper dismantling.
- [9] 1/8" hex Allen key required for English version, 3mm hex Allen key required for metric version.
- [10] See PCB Declaration of Conformance PS023 for details.

Supplied Accessories

080A156 Mounting Base (1)

Entered: AP	Engineer: jg	Sales: BRS	Approved: BAM	Spec Number:
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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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