Model Number 607A12

INDUSTRIAL ICP® ACCELEROMETER

Revision: C

ECN #: 42246

007A12			
Performance	<u>ENGLISH</u>	<u>SI</u>	
Sensitivity(± 20 %)	500 mV/g	51.0 mV/(m/s²)	[2]
Measurement Range	± 10 g	± 98 m/s ²	
Frequency Range(± 3 dB)	30 to 180,000 cpm	0.5 to 3000 Hz	[3]
Resonant Frequency	1500 kcpm	25 kHz	[1]
Broadband Resolution(1 to 10,000 Hz)	300 µg	2943 µm/sec ²	[1]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 7 %	≤ 7 %	
Environmental			
Overload Limit(Shock)	5000 g pk	49,050 m/s² pk	
Temperature Range	-65 to +200 °F	-54 to +93 °C	
Temperature Response	See Graph	See Graph	[1]
Enclosure Rating	IP68 IP68		
Electrical			
Settling Time(within 1% of bias)	≤ 5.0 sec	≤ 5.0 sec	
Discharge Time Constant	≥ 0.3 sec	≥ 0.3 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	<500 Ohm	<500 Ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise(10 Hz)	8 μg/√Hz	78.5 (µm/sec ²)/√Hz	[1]
Spectral Noise(100 Hz)	3 μg/√Hz	29.4 (µm/sec ²)/√Hz	[1]
Spectral Noise(1 kHz)	3 μg/√Hz	29.4 (μm/sec ²)/√Hz	[1]
Electrical Isolation(Case)	>10 ⁸ Ohm	>10 ⁸ Ohm	
Physical			
Size (Hex x Height)	9/16 in x 0.97 in	14 mm x 24.6 mm	
Weight	1.1 oz	31 gm	[1]
Mounting	Stud	Stud	
Mounting Torque	7 to 8 ft-lb	9.5 to 10.8 Nm	[5][6]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 Nm	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	Molded Integral Cable	Molded Integral Cable	
Electrical Connection Position	Side	Side	
Cable Termination	Blunt cut	Blunt cut	
Cable Length	10 ft	3.0 m	
Cable Type	Polyurethane	Polyurethane	[7]
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Typical Sensitivity Deviation vs Temperature Sensitivity Deviaition(%) -5 -75 -25 25 125 175 225 Temperature (°F)





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. ICP® is a registered trademark of PCB Group, Inc.

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 - Hazardous Area Approval- contact factory for specific approvals

Supplied Accessory : Model M080A159A Mounting stud, 1/2-20 to M6 x 1 (1) replaces Model 080A156

NOTES:

- [1] Typical.

- [2] Conversion Factor 1g = 9.81 m/s².
 [3] The high frequency tolerance is accurate within ±10% of the specified frequency.
 [4] Zero-based, least-squares, straight line method.
 [5] 1/8" hex Allen key required for English version, 3mm hex Allen key required for metric
- [6] Stud torque must exceed sensor hex nut torque to ensure proper dismantling.
 [7] Twisted shielded pair.
 [8] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

Model 080A156 Mounting Base (1)

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

Entered: AP	Engineer: jg	Sales: BRS	Approved: BAM	Spec Number:
Date: 11/12/2013	Date: 11/12/2013	Date: 11/12/2013	Date: 11/12/2013	45591



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