

Low Cost, Industrial ICP[®] Accelerometer

Small Size Conveniently Installs into Tight Places

- Small Size (9/16 inch footprint)
- Integral Cable
- Submersible and Chemically Resistant
- 100 mV/g Sensitivity
- Withstands Temperatures to 250 °F (121 °C)
- 30 to 600k cpm Frequency Range (0.5 to 10,000 Hz)

Smaller, lower-cost vibration sensors are making permanent installation for on-line monitoring of critical industrial machinery a more attractive undertaking. Whether new to predictive maintenance or already benefitting by the reduced downtime and maintenance costs of this practice, many will now find it easier to justify implementing additional measurement points.

The Model 608A11 Industrial ICP[®] Accelerometer offers the features most requested by today's Vibration Technologists and Reliability Engineers.

The small size permits installation into confined locations. Durable stainless steel construction and hermetic sealing withstand chemical contamination and submerged installations. The integral cable facilitates easy connection to junction boxes or collection point switch boxes. The 100 mV/g, low-noise signal is accurate through 600k cpm (10 kHz), is isolated from ground noise, and can be transmitted over long distances. With an economical, low price, the 608A11 represents the best value available in the industry today.

As with all equipment from PCB[®], these sensors are complemented with toll free applications assistance, 24-hour customer service, and are backed by a no risk policy that guarantees satisfaction or your money refunded.



Model 608A11
Industrial ICP[®] Accelerometer



Specifications

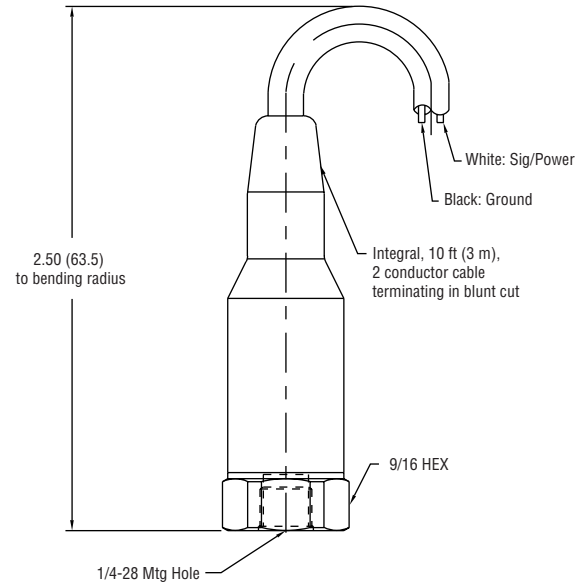
Model		608A11	
Performance		English	SI
Sensitivity	(± 20 %)	100 mV/g	10.2 mV/(m/s ²)
Measurement Range		± 50 g	± 490 m/s ²
Frequency Range	(± 3 dB)	30 to 600,000 cpm	0.5 to 10,000 Hz
Resonant Frequency		1320 kcpm	22 kHz
Broadband Resolution	(1 to 10,000 Hz)	350 mg	3434 mm/s ²
Non-Linearity		± 1 %	± 1 %
Transverse Sensitivity		≤ 7 %	≤ 7 %

Environmental			
Overload Limit	(Shock)	5000 g pk	49,050 m/s ² pk
Temperature Range		-65 to +250 °F	-54 to +121 °C
Enclosure Rating		IP68	IP68

Electrical			
Settling Time	(within 1% of bias)	≤ 2.0 sec	≤ 2.0 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		<150 ohms	<150 ohms
Output Bias Voltage		8 to 12 VDC	8 to 12 VDC
Spectral Noise	(10 Hz)	8 µg/√Hz	78.5 (µm/s ²)/√Hz
Spectral Noise	(100 Hz)	5 µg/√Hz	49.1 (µm/s ²)/√Hz
Spectral Noise	(1 kHz)	4 µg/√Hz	39.2 (µm/s ²)/√Hz
Electrical Isolation	(Case)	>10 ⁸ ohms	>10 ⁸ ohms

Physical			
Size	(Hex × Height)	9/16 in × 2.5 in	9/16 in × 64 mm
Weight	(with cable)	3.5 oz	99.3 gm
Mounting Thread		1/4-28 Female	1/4-28 Female
Mounting Torque		2 to 5 ft-lb	2.7 to 6.8 N-m
Sensing Element / Geometry		Ceramic / Shear	Ceramic / Shear
Housing Material		Stainless Steel	Stainless Steel
Electrical Connection / Position		Molded Integral Cable / Top	Molded Integral Cable / Top
Cable Length		10 ft	3 m
Cable Type		Polyurethane	Polyurethane

Optional Versions (specify using prefix letter shown)	
M — Metric Mount	Via supplied Model M081A61 Mounting Stud 1/4-28 to M6 × 1
TO — Temperature Output	Adds third cable conductor with +10 mV/°C (5.56 mV/°F + 32) output signal



Available Versions

Model 608A11 — Standard 10 ft (3m) integral cable

Model 608A11/020BZ — 20 ft (6m) integral cable

Model M607A11 — Metric installation (substitutes Model M081A61 mounting stud for 081A40)

Accessories

(supplied with standard version)

Model 081A40 mounting stud with 1/4-28 thread

Single point NIST traceable calibration at 6000 cpm (100 Hz)



3425 Walden Avenue, Depew, NY 14043-2495 USA

IMI Sensors Division toll free 800-959-4464

24-hour SensorLineSM 716-684-0003

Fax 716-684-3823 E-mail imi@pcb.com

Web site www.imi-sensors.com

ISO 9001 CERTIFIED

A2LA ACCREDITED to ISO 17025

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The IMI Sensors Division of PCB® Piezotronics, Inc. specializes in the development, application, and support of industrial vibration sensors, transmitters, meters, and accessories for machinery condition monitoring and predictive maintenance requirements. This product focus, coupled with the strengths and resources of PCB, permits the IMI Sensors Division to offer exceptional customer service, 24-hour technical assistance, and a **Total Customer Satisfaction** guarantee.

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