



# Low Cost, Industrial ICP® Accelerometer

Small Size Conveniently Installs into Tight Places

## Highlights

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



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 from reduced downtime and maintenance costs, many will now find it easier to implement additional measurement points. Model 608A11 industrial ICP® accelerometer offers features most requested by 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 (10k Hz), is isolated from ground noise, and can be transmitted over long distances. Together with its competitive price, Model 608A11 represents one of the best value for sensors in the industry.

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.

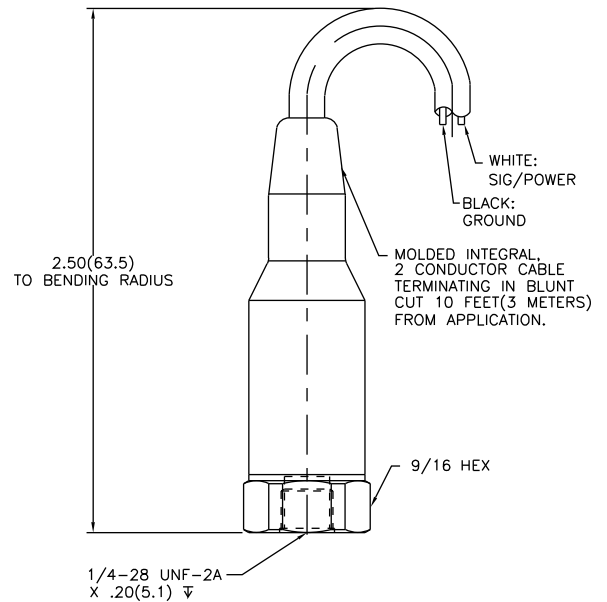


**Model 608A11**  
Industrial ICP® Accelerometer



# Specifications

Model 608A11		
Performance	English	SI
Sensitivity (± 15 %)	100 mV/g	10.2 mV/(m/s <sup>2</sup> )
Measurement Range	± 50 g	± 490 m/s <sup>2</sup>
Frequency Range (± 3 dB)	30 to 600k cpm	0.5 to 10k Hz
Resonant Frequency	1320 kcpm	22 kHz
Broadband Resolution (1 to 10,000 Hz)	350 mg	3434 mm/s <sup>2</sup>
Non-Linearity	± 1%	
Transverse Sensitivity	≤ 7%	
Environmental		
Overload Limit (Shock)	5000 g pk	49,050 m/s <sup>2</sup> pk
Temperature Range	-65 to +250 °F	-54 to +121 °C
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	2-20 mA	
Output Impedance	< 150 ohms	
Output Bias Voltage	8 to 12 VDC	
Spectral Noise (10 Hz)	8 µg/√Hz	78.5 (µm/s <sup>2</sup> )/√Hz
Spectral Noise (100 Hz)	5 µg/√Hz	49.1 (µm/s <sup>2</sup> )/√Hz
Spectral Noise (1k Hz)	4 µg/√Hz	39.2 (µm/s <sup>2</sup> )/√Hz
Electrical Isolation (Case)	>108 ohms	
Mechanical		
Size (Hex x Height)	9/16 in x 2.5 in	9/16 in x 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	
Housing Material	Stainless Steel	
Electrical Connection / Position	Molded Integral Cable / Top	
Cable Length	10 ft	3 m
Cable Type	042 Polyurethane	
Optional Versions (specify using prefix letter shown)		
M — Metric Mount	Via supplied Model M081A61 Mounting Stud 1/4-28 to M6 x 1	
TO — Temperature Output	Adds third cable conductor with +10 mV/°C (5.56 mV/°F + 32) output signal	
EX — Intrinsically Safe	ATEX and CSA Certified	



### 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)

CE These products conform to applicable European Directives for CE marking.



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ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025

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IMI Sensors designs and manufactures a full line of accelerometers, sensors, vibration switches, vibration transmitters, cables and accessories for predictive maintenance, continuous vibration monitoring, and machinery equipment protection. Products include rugged industrial ICP® accelerometers, 4-20 mA industrial vibration sensors and transmitters for 24/7 monitoring, electronic and mechanical vibration switches, the patented Bearing Fault Detector, high temperature accelerometers to +900 °F (+482 °C), 2-wire Smart Vibration Switch, and the patented Reciprocating Machinery Protector. CE approved and intrinsically safe versions are available for most products.

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