

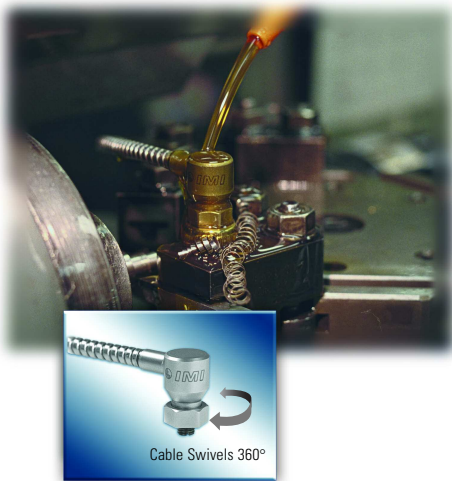
# Spindler® ICP® Industrial Accelerometer

Miniature yet Rugged Sensor Monitors Vibration Levels of High-Speed Spindle Bearing

- Ideal for High-Speed Spindle Vibration Monitoring
- Unique Patented Swivel Mounting Facilitates 360° Cable Orientation (US Patent Number 6,435,902)
- Small Size (9/16 Inch Footprint, Low-profile)
- Lower Cost Alternative to Through-bolt Sensors
- Internal Electronic Filter Prevents High Frequency Saturation Problems
- Armored Cable Prevents Damage from Flying Metal Chips
- Cable May be Positioned in Any Direction

Model 607A61 Spindler® ICP® Industrial Accelerometer from the IMI Sensors division of PCB® provides unique advantages for monitoring vibration levels of high-speed rotating machinery. The small size and swivel mounting permit installation in close quarters, yet the durable, stainless steel housing, with sealed armored cable stands up to the rigors of cutting fluids and flying debris. Integrated electronic filtering prevents saturation problems while maintaining the ability to respond to high frequency vibrations. The sensor is ideal for predictive maintenance and condition based monitoring applications, as well as facilitating machined part quality assurance by detecting tool wear.

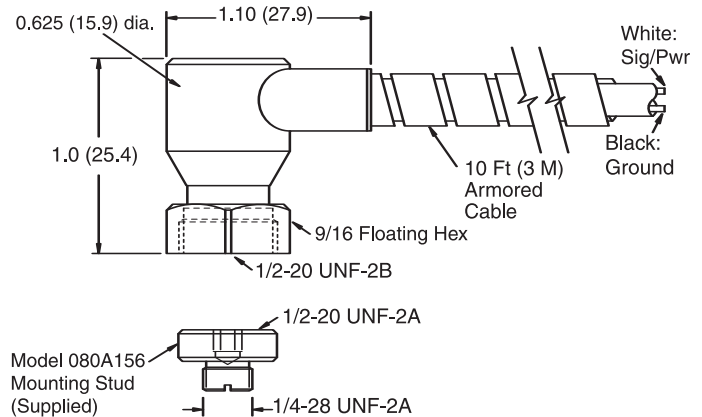
As with all PCB® instrumentation, this equipment is complemented with toll-free applications assistance, 24-hour customer service, and is backed by a no-risk policy that guarantees satisfaction or your money refunded.





## Specifications

Model 607A61 Spindler®		
Dynamic 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 (± 3dB)	30 to 600k cpm	0.5 to 10k Hz
Resonant Frequency	1500k cpm	25k Hz
Broadband Resolution (1 to 10k Hz)	350 µg	3434 µm/s <sup>2</sup>
Non-linearity	± 1 %	
Traverse 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
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 ohm	
Output Bias Voltage	8 to 12 VDC	
Electrical Isolation (Case)	> 10 <sup>8</sup> ohm	
Physical		
Size (Hex x Height)	9/16 x 1.0 inch	9/16 inch x 25.4 mm
Weight (without cable)	1.1 oz	31 gm
Mounting	Stud	
Mounting Thread	1/4-28 Male	
Mounting Torque (stud)	7 to 8 ft-lb	9.5 to 10.8 N-m
Mounting Torque (hex nut)	2 to 5 ft-lb	2.7 to 6.8 N-m
Sensing Element	Ceramic Shear	
Housing Material	Stainless Steel	
Sealing	Welded Hermetic	
Electrical Connector	Integral Armored Cable	
Electrical Connection Position	Side	
Cable Length	10 ft	3.0 m
Cable Type	Polyurethane (Model 067)	
Optional Versions		
Intrinsically Safe	EX	
Metric Installation	M	
Temperature Output	TO	
Supplied Accessories		
Mounting Hardware	Model 080A156 Mounting Stud	
Metric Mounting Hardware	Model M080A159 Mounting Stud	



**Model 607A61  
Spindler® Industrial Accelerometer**

### Available Versions

- Model 607A61** - Standard 10 ft (3 m) integral, armor-jacketed cable
- Model 607A61/020BZ** - 20 ft (6 m) integral, armor-jacketed cable
- Model 607A61/030BZ** - 30 ft (9 m) integral, armor-jacketed cable
- Model M607A61** - Supplied with Model M080A159 metric mounting stud (with M6 x 1.0 installation thread)
- Model T0607A61** - Additional temperature output signal of 10 mV/°C supplied by a 3-conductor integral cable

**CE** This product conforms to applicable European Directives for CE marking.



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ISO 9001:2000 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, switches, 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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