

# The Swiveler® and Spindler® **Patented ICP® Accelerometers**

Small, Submersible Sensors with Swiveling Mounting Stud

# Highlights

- Unique 360° swivel mount that allows for easy cable orientation
- Small footprint and low-profile design permits mounting in tight spaces
- Waterproof housing, ideal for submersible applications
- Independent 1/4-28 mounting stud for simple installation
- Intrinsically-safe options available

# **Typical Applications**

- Gearboxes
- Motors
- Oil and Gas Wells & Pipelines
- Pumps and Submersible Pumps
- Wind Turbines

### **Hazardous Area Approvals** (EX Versions)

#### CSA (Canada & US)

- AEx/Ex ia IIC T4 Class I, Div. 1, Groups A, B, C, D
- AEx/Ex ia IIC T4 Class II, Div. 1, Groups E, F and G
- AEx/Ex ia IIC T4 Class III. Div. 1
- Ex nL IIC T4 Class I, Div. 2, Groups A, B, C and D

#### **ATEX**

- EEx nL IIC T4
- Ex nA IIC T4 Gc
- EEx ia IIC T4



Installing vibration sensors into tight spots is quick and easy with Models 607A11 (Swiveler®) and 607A61 (Spindler®) ICP® Industrial Accelerometers. The unique design facilitates positioning of the integral, side-exit cable while the floating lock nut secures the sensor into place.

A low-cost, smaller-sized alternative to ring-style accelerometers, both products have definite advantages over other industrial grade vibration sensors. Offering a small footprint (only 9/16 inch) and 360° cable rotation, both products are excellent for permanent installations in space-restricted locations.







## Swiveler® and Spindler® ICP® Accelerometers



	607A11	607A61	
Performance	0071111		
	100 mV/g		
Sensitivity (± 15%)	10.2 m	10.2 mV/(m/s²)	
Measurement Range	± 50 g ± 490 m/s²		
Frequency Range (± 3 dB)	0.5 to 10,000 Hz		
Resonant Frequency	25,000 Hz		
Broadband Resolution (1 to 10k Hz)		350 µg 3,434 µm/s²	
Non-Linearity	± 1 %		
Transverse Sensitivity	< 7 %		
Environmental			
Overload Limit (Shock)		5,000 g pk 49,050 m/s² pk	
Temperature Range		-65 to +250 °F	
	-54 to	-54 to +121 °C	
Enclosure Rating <b>Electrical</b>	เกอด	IP6/	
Settling Time (within 1% of bias)	≤ 2.0 sec		
Discharge Time Constant	≤ 2.0 sec ≥ 0.3 sec		
Excitation Voltage	18 to 28 VDC		
Constant Current Excitation	2 to 20 mA		
Output Impedance	< 150 ohm		
Output Bias Voltage	8 to 12 VDC		
Spectral Noise (10 Hz)	8 μg/√Hz		
Spectral Noise (100 Hz)	5 μg/√Hz		
Spectral Noise (1 kHz)	4 μg/√Hz		
Electrical Isolation (Case)	> 10 <sup>8</sup> ohm		
Physical			
Size (Hex x Height)	9/16 in x 0.97 in		
		14 mm x 24.6 mm 1.1 oz	
Weight (with cable)		31 gm	
Mounting	S	Stud	
Mounting Thread	1/4-2	1/4-28 Male	
Mounting Torque (stud)		3 to 4 ft-lb 4.1 to 5.4 Nm	
Managina Tamang Banang N		2 to 3 ft-lb	
Mounting Torque (hex nut)		2.7 to 4.1 Nm	
Sensing Element	Ceram	Ceramic Shear	
Housing Material	Stainle	Stainless Steel	
Sealing	Welded	Welded Hermetic	
Electrical Connector	Integr	Integral Cable	
Electrical Connection Position		Side	
Cable Length		10 ft 3.0 m	
Cable Type	Polyurethane	Armored Polyuretha	
Similar Models			
Hazardous Area Approved	EX607A11	EX607A61	
Dual Output	T0607A11	T0607A61	



3425 Walden Avenue, Depew, NY 14043-2495 USA

Toll-Free in USA 800-959-4464

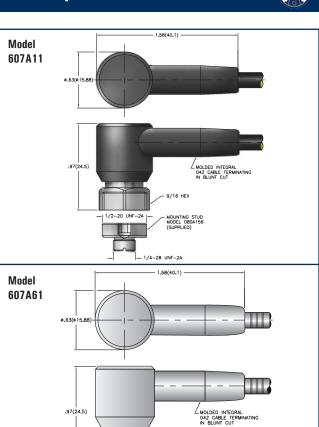
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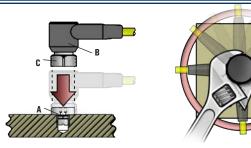
**Fax** 716-684-3823 **E-mail** imi@pcb.com

Web Site www.imi-sensors.com

ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025

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- 1/4-28 UNF-24

Mounting hole is prepared on machine surface to accept sensor's mounting stud (A). Stud is then tightened to recommended torque w/ hex Allen key. Sensor (B) floating hex nut (C) is threaded onto mounting stud.

Using the 360° capabilities, the cable is positioned into desired orientation & temporarily hand tightened. Using a wrench, the hex nut is tightened to the recommended torque while holding the cable or connector in the desired location.

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.

Visit **www.imi-sensors.com** to locate your nearest sales office

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