

**Low Capacitance, IEC Certified (IECEx), Intrinsically Safe Accelerometer, Top Exit Connector/Cable, 10 mV/g**

Section I - Vibration Sensors



Actual Product Size Shown

IECEx



Requires **Intrinsically Safe Barrier**

## Product Features

### IECEx Approvals

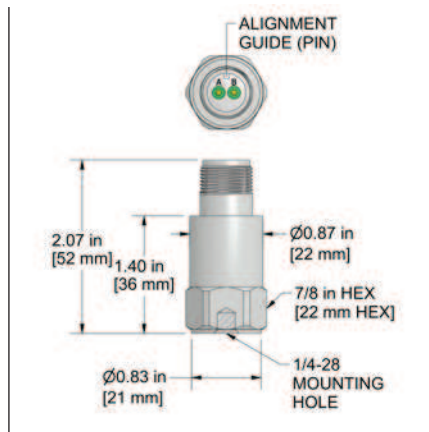
Helps to Detect Bearing Defects and Other High Frequency Faults

- 1,0 - 15000 Hz (60 - 900,000 CPM) Frequency Response
- 10 mV/g Sensitivity  $\pm 10\%$
- Requires Intrinsic Safety Barrier (see page 348)

### AC961-1A

2 Pin Connector

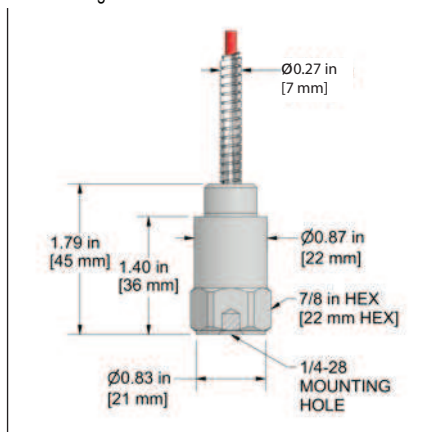
Connector Pin	Polarity
A	(+) Signal / Power
B	(-) Common



### AC961-3C

Armored Integral Cable

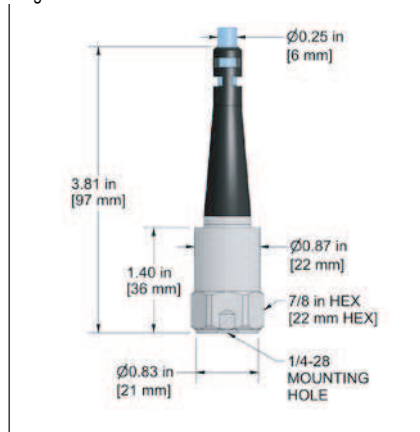
Conductor	Polarity
Red	(+) Signal / Power
Black	(-) Common
Shield	Cable Drain Wire



### AC961-9C

Integral Cable

Conductor	Polarity
Red	(+) Signal / Power
Black	(-) Common
Shield	Cable Drain Wire



Specifications	Standard	Metric
Part Number	AC961	M/AC961
Sensitivity ( $\pm 10\%$ )	10 mV/g	
Frequency Response ( $\pm 3dB$ )	60-900,000 CPM	1,0-15000 Hz
Frequency Response ( $\pm 10\%$ )	120-360,000 CPM	2,0-6000 Hz
Dynamic Range	$\pm 500$ g, peak	
<b>Electrical</b>		
Settling Time	<3 Seconds	
Voltage Source (IEPE)	18-28 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	100 $\mu g/\sqrt{Hz}$	
Spectral Noise @ 100 Hz	90 $\mu g/\sqrt{Hz}$	
Spectral Noise @ 1000 Hz	85 $\mu g/\sqrt{Hz}$	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 <sup>8</sup> ohm	

Specifications	Standard	Metric
<b>Environmental</b>		
Temperature Range	-40° to 250°F	-40° to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	IP68	
<b>Physical</b>		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	3.2 oz	91 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	2 Pin MIL-C-5015	
Resonant Frequency	1,380,000 CPM	23000 Hz
Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Mounting Hardware	1/4-28 Stud	M6x1 Adapter Stud
Calibration Certificate	CA10	

## Ordering Information

	Standard	Metric
AC961-1A (1/4-28 Stud)		
AC961-3C - / (1/4-28 Stud)		
AC961-9C - / (1/4-28 Stud)		

**Read Before Purchasing**  
Important information on Regulatory Approvals and Requirements on Page 97

