

# AC911 Series

Low Capacitance, Intrinsically Safe Accelerometer,  
Top Exit Connector/Cable, 10 mV/g

SECTION 1 - VIBRATION SENSORS  
Low Capacitance Accelerometers



Actual Product Size Shown



Requires Intrinsically Safe Barrier

## Product Features

**CSA/ATEX Approved**

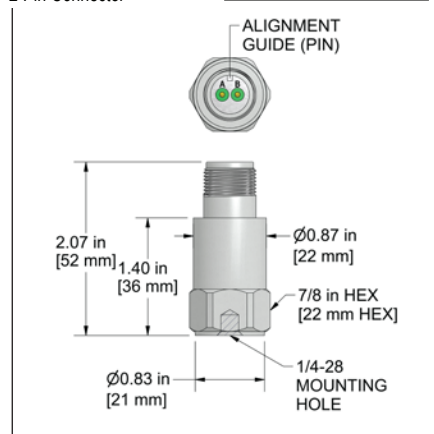
Helps to Detect Bearing Defects and Other High Frequency Faults

- ±500 g, Peak Dynamic Range
- 1,0 - 15000 Hz (60 - 900,000 CPM) Frequency Response
- Requires Intrinsic Safety Barrier (see page 348)

### AC911-1A

2 Pin Connector

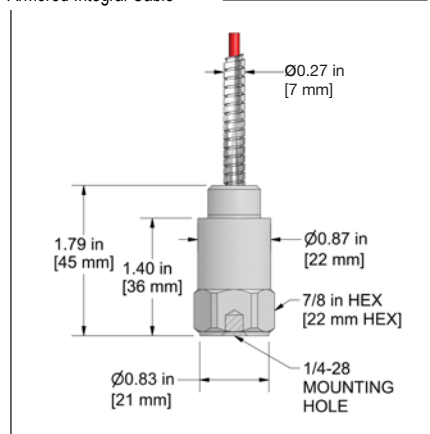
Connector Pin	Polarity
A	(+) Signal / Power
B	(-) Common



### AC911-3C

Armored Integral Cable

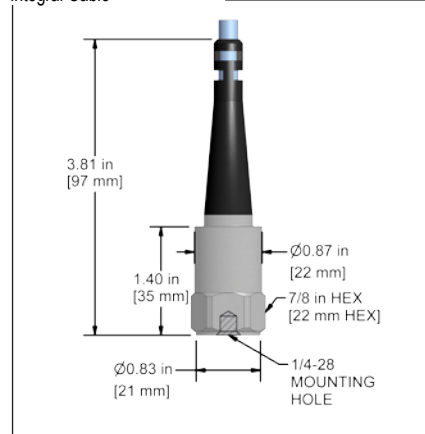
Conductor	Polarity
Red	(+) Signal / Power
Black	(-) Common
Shield	Cable Drain Wire



### AC911-9C

Integral Cable

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



Specifications	Standard	Metric
Part Number	AC911	M/AC911
Sensitivity (±10%)	10 mV/g	
Frequency Response (±3dB)	60-900,000 CPM	1,0-15000 Hz
Frequency Response (±10%)	120-360,000 CPM	2,0-6000 Hz
Dynamic Range	± 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 µg/√Hz	
Spectral Noise @ 100 Hz	90 µg/√Hz	
Spectral Noise @ 1000 Hz	85 µg/√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 (AC911-1A)	2 Pin MIL-C-5015	
Armored Cable (AC911-3C)	Armor Jacketed Cable	
Integral Cable (AC911-9C)	RAL 5015 Blue Polyurethane Cable	
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	AC911-1A (1/4-28 Stud)	AC911-3C - / (1/4-28 Stud)	AC911-9C - / (1/4-28 Stud)
Metric	M/AC911-1A (M6x1 Adapter Stud)	M/AC911-3C - / (M6x1 Adapter Stud)	M/AC911-9C - / (M6x1 Adapter Stud)

**Read Before Purchasing**  
Important information on  
**Regulatory Approvals and Requirements**  
on Page 90 & 91

Cable Termination Options: L Z

Backed by our Unconditional Lifetime Warranty

www.ctconline.com

