

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

Section I - Vibration Sensors



Actual Product Size Shown

IECEX  
CE

**Requires Intrinsically Safe Barrier**

## Product Features

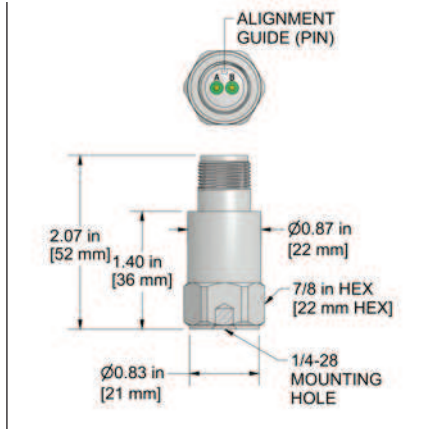
### IECEX Approvals

**Helps to Detect Bearing Defects and Other High Frequency Faults**

- 1,2 - 15000 Hz (72 - 900,000 CPM) Frequency Response
- 10 mV/g Sensitivity ±10%
- Requires Intrinsic Safety Barrier (see page 348)

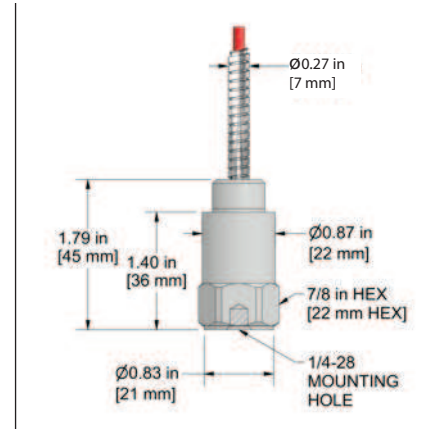
### AC951-1A 2 Pin Connector

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



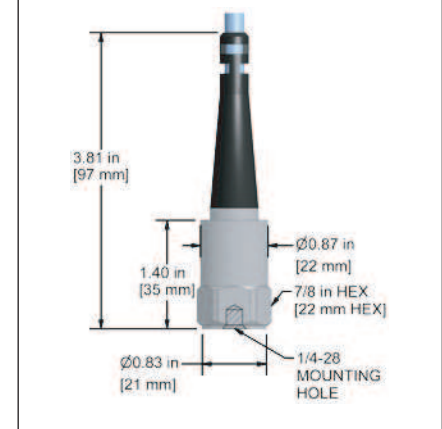
### AC951-3C Armored Integral Cable

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



### AC951-9C Integral Cable

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



| Specifications              | Standard             | Metric       |
|-----------------------------|----------------------|--------------|
| Part Number                 | AC951                | M/AC951      |
| Sensitivity ( ±10%)         | 10 mV/g              |              |
| Frequency Response (±3dB)   | 72-900,000 CPM       | 1,2-15000 Hz |
| Frequency Response (±10%)   | 150-360,000 CPM      | 2,5-6000 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      | 500 µg/√Hz           |              |
| Spectral Noise @ 100 Hz     | 65 µg/√Hz            |              |
| Spectral Noise @ 1000 Hz    | 11 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           | -58 to 250°F         | -50 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               | 90 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 | AC951-1A<br>(1/4-28 Stud) | AC951-3C - /<br>(1/4-28 Stud) | AC951-9C - /<br>(1/4-28 Stud) |
|----------|---------------------------|-------------------------------|-------------------------------|
|          |                           |                               |                               |
|          |                           |                               |                               |

**Read Before Purchasing**  
Important information on  
**Regulatory Approvals and Requirements**  
on Page 77

Cable Termination Options: L Z

Backed by our Unconditional Lifetime Warranty

