

# AC913 Series

Low Capacitance, Intrinsically Safe Accelerometer,  
Top Exit Connector / Cable, 50 mV/g



Actual Product Size Shown



Requires **Intrinsically Safe Barrier**

## Product Features

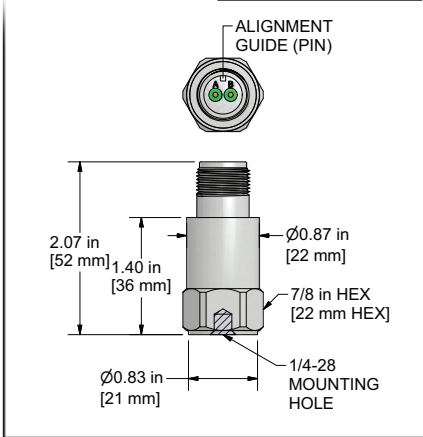
**CSA / ATEX Approved**

**Excellent for Higher g Applications**

- 1,0 - 15000 Hz (60-900,000 CPM) Frequency Response
- ±100g Dynamic Range
- Requires Intrinsic Safety Barrier (see page 228)

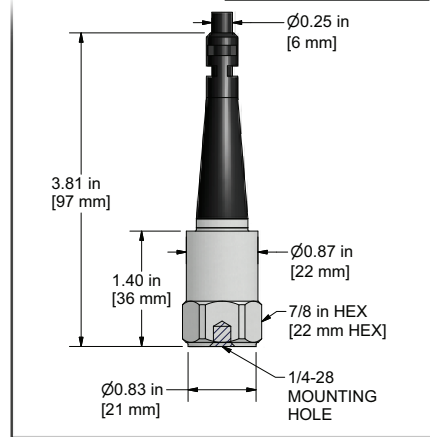
### AC913-1A 2 Pin Connector

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



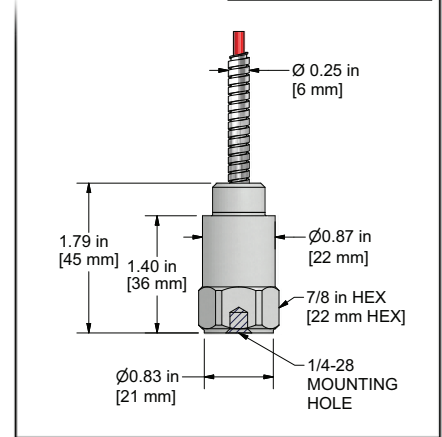
### AC913-2C Integral Cable

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



### AC913-3C Armored Integral Cable

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



| Specifications              | Standard             | Metric       |
|-----------------------------|----------------------|--------------|
| Part Number                 | AC913                | M/AC913      |
| Sensitivity (±10%)          |                      | 50 mV/g      |
| Frequency Response (±3dB)   | 60-900,000 CPM       | 1,0-15000 Hz |
| Frequency Response (±10%)   | 120-240,000 CPM      | 2,0-4000 Hz  |
| Dynamic Range               | ± 100 g, peak        |              |
| <b>Electrical</b>           |                      |              |
| Settling Time               | <3 Seconds           |              |
| Voltage Source              | 18-28 VDC            |              |
| Constant Current Excitation | 2-4 mA               |              |
| Spectral Noise @ 10 Hz      | 40 µg/√Hz            |              |
| Spectral Noise @ 100 Hz     | 25 µg/√Hz            |              |
| Spectral Noise @ 1000 Hz    | 26 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                      | Welded, Hermetic     |                   |
| Submersible Depth (AC913-2C) | 200 ft.              | 61 m              |
| <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           | 1,260,000 CPM        | 21000 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 | AC913-1A<br>(1/4-28 Stud)         | AC913-2C<br>(1/4-28 Stud)         | - / [ ] - [ ]<br>(length in feet) (termination) | AC913-3C<br>(1/4-28 Stud)         | - / [ ] - [ ] - [ ]<br>(armor length in feet) (cable length in feet) (termination)     |
|----------|-----------------------------------|-----------------------------------|-------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------|
| Metric   | M/AC913-1A<br>(M6x1 Adapter Stud) | M/AC913-2C<br>(M6x1 Adapter Stud) | - / [ ] - [ ]<br>(length in feet) (termination) | M/AC913-3C<br>(M6x1 Adapter Stud) | - / [ ] - [ ] - [ ]<br>(armor length in feet) (cable length in feet) (termination)     |
|          |                                   |                                   | [ ] M - [ ]<br>(length in meters) (termination) |                                   | [ ] M - [ ] M - [ ]<br>(armor length in meters) (cable length in meters) (termination) |

**Read Before Purchasing**  
Important information on  
**Regulatory Approvals** and  
**Requirements**  
on Pages 68 & 69

**Cable Termination Options:** L Z



VIBRATION ANALYSIS HARDWARE

**Backed by our Unconditional Lifetime Warranty**



VIBRATION ANALYSIS HARDWARE

- LEFT CLICK & DRAG TO ROTATE MODEL
- RIGHT CLICK & DRAG TO ZOOM
- HOLD BOTH MOUSE BUTTONS TO PAN



2 Pin Connector

Integral Cable

Armored Integral Cable



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