

# AC104 Series

Multipurpose Accelerometer, Side Exit 2 Pin Connector, 100 mV/g, ±10%



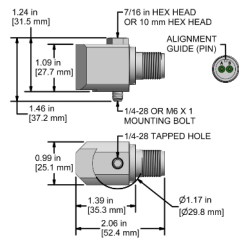
## Product Features

Affordably Priced, Hermetically Sealed Sensors

- ▶ 100 mV/g Sensitivity
- ▶ ± 80 g, peak Dynamic Range
- ▶ Standard 2 Pin MIL Connection or Integral Cable.  
-6N Integral Cable Option Features Food Safe FDA Compliant 21 CFR 177.1330 Polyolefin Heat Shrink

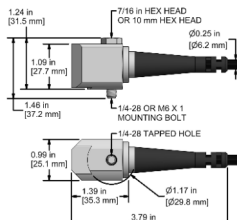
### AC104-1A 2 Pin Connector

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



### AC104-2C CB103 Integral Cable

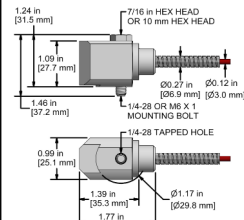
| Conductor | Polarity         |
|-----------|------------------|
| Red       | (+) Signal/Power |
| Black     | (-) Common       |
| Shield    | Cable Drain Wire |



Built To Order

### AC104-3C CB206 Armored Integral Cable

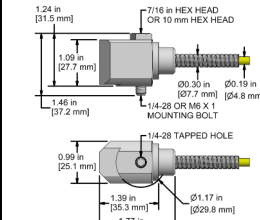
| Conductor | Polarity         |
|-----------|------------------|
| Red       | (+) Signal/Power |
| Black     | (-) Common       |
| Shield    | Cable Drain Wire |



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### AC104-6C CB611 Heavy Duty Armored Integral Cable

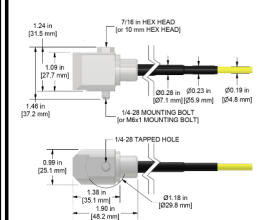
| Conductor | Polarity         |
|-----------|------------------|
| Red       | (+) Signal/Power |
| Black     | (-) Common       |
| Shield    | Cable Drain Wire |



Built To Order

### AC104-6N CB111 FEP Jacketed Integral Cable

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



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| Specifications              | Standard                 | Metric       | Specifications              | Standard             | Metric            |
|-----------------------------|--------------------------|--------------|-----------------------------|----------------------|-------------------|
| Part Number                 | AC104                    | M/AC104      | <b>Environmental</b>        |                      |                   |
| Sensitivity (±10%)          | 100 mV/g                 |              | Operating Temperature Range | -58 to 250 °F        | -50 to 121 °C     |
| Frequency Response (±3dB)   | 30-600,000 CPM           | 0.5-10000 Hz | Maximum Shock Protection    | 5,000 g, peak        |                   |
| Dynamic Range               | ± 80 g, peak             |              | Electromagnetic Sensitivity | CE                   |                   |
|                             | *Vsource ≥ 22V, 12V Bias |              | Sealing                     | Welded, Hermetic     |                   |
| <b>Electrical</b>           |                          |              | Submersible Depth           | 200 ft.              | 60 m              |
| Settling Time               | <2.5 seconds             |              | SIL Rating                  | SIL 2                |                   |
| Voltage Source              | 18-30 VDC                |              | <b>Physical</b>             |                      |                   |
| Constant Current Excitation | 2-10 mA                  |              | Sensing Element             | PZT Ceramic          |                   |
| Spectral Noise @ 10 Hz      | 14 µg/√Hz                |              | Sensing Structure           | Shear Mode           |                   |
| Spectral Noise @ 100 Hz     | 2.3 µg/√Hz               |              | Weight                      | 5.1 oz               | 145 grams         |
| Spectral Noise @ 1000 Hz    | 2 µg/√Hz                 |              | Case Material               | 316L Stainless Steel |                   |
| Output Impedance            | <100 ohm                 |              | Connector (Non-Integral)    | 2 Pin MIL-C-5015     |                   |
| Bias Output Voltage         | 10-14 VDC                |              | Resonant Frequency          | 1,320,000 CPM        | 22000 Hz          |
| Case Isolation              | >10 <sup>9</sup> ohm     |              | Mounting Torque             | 2 to 5 ft. lbs.      | 2.7 to 6.8 Nm     |
|                             |                          |              | Mounting Hardware Supplied  | 1/4-28 Captive Bolt  | M6x1 Captive Bolt |
|                             |                          |              | Calibration Certificate     | CA10                 |                   |

## Typical Frequency Response

