

# AC118 Series

High G Measurement Accelerometer, Side Exit 2 Pin Connector, 50 mV/g, ±10%



VIBRATION ANALYSIS HARDWARE



## Product Features

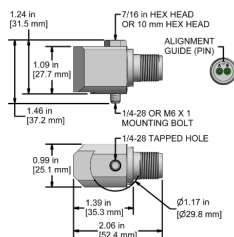
50 mV/g General-Purpose, Side-Exit Sensor

Excellent for Higher g Applications

- ▶ ±100 g, Dynamic Range
- ▶ 50 mV/g, ±10% Sensitivity

### AC118-1A 2 Pin Connector

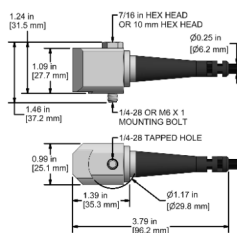
| Connector Pin | Polarity         |
|---------------|------------------|
| A             | (+) Signal/Power |
| B             | (-) Common       |



Stock Product

### AC118-2C & -7A 2C = CB103 Integral Cable 7A = CB124 Integral Cable

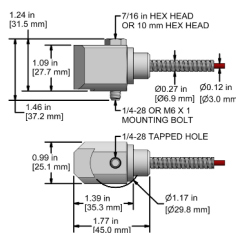
| Conductor | Polarity         |
|-----------|------------------|
| Red       | (+) Signal/Power |
| Black     | (-) Common       |
| Shield    | Cable Drain Wire |



Built To Order

### AC118-3C CB206 Armored Integral Cable

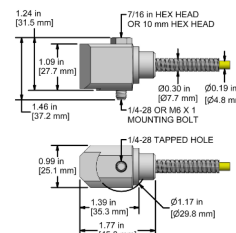
| Conductor | Polarity         |
|-----------|------------------|
| Red       | (+) Signal/Power |
| Black     | (-) Common       |
| Shield    | Cable Drain Wire |



Built To Order

### AC118-6C CB611 Heavy Duty Armored Integral Cable

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



Built To Order

| Specifications              | Standard                                 | Metric       | Specifications              | Standard             | Metric            |
|-----------------------------|------------------------------------------|--------------|-----------------------------|----------------------|-------------------|
| Part Number                 | AC118                                    | M/AC118      | <u>Environmental</u>        |                      |                   |
| Sensitivity (±10%)          | 50 mV/g                                  |              | Operating Temperature Range | -58 to 250 °F        | -50 to 121 °C     |
| Frequency Response (±3dB)   | 60-600,000 CPM                           | 1,0-10000 Hz | Maximum Shock Protection    | 5,000 g, peak        |                   |
| Dynamic Range               | ± 100 g, peak<br>*Vsource ≥ 22V, 12Vbias |              | Electromagnetic Sensitivity | CE                   |                   |
| Transverse Sensitivity      | ≤5%                                      |              | Sealing                     | Welded, Hermetic     |                   |
| <u>Electrical</u>           |                                          |              | Submersible Depth           | 200 ft.              | 60 m              |
| Settling Time               | 5 Seconds                                |              | SIL Rating                  | SIL 2                |                   |
| Voltage Source              | 18-30 VDC                                |              | <u>Physical</u>             |                      |                   |
| Constant Current Excitation | 2-10 mA                                  |              | Sensing Element             | PZT Ceramic          |                   |
| Spectral Noise @ 10 Hz      | 8 µg/√Hz                                 |              | Sensing Structure           | Shear Mode           |                   |
| Spectral Noise @ 100 Hz     | 2.5 µg/√Hz                               |              | Weight                      | 5.1 oz               | 145 grams         |
| Spectral Noise @ 1000 Hz    | 1.7 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          | 1,260,000 CPM        | 21000 Hz          |
| Case Isolation              | >10 <sup>8</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

