AC117 Series



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

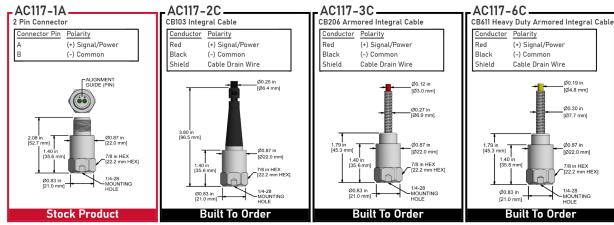




Product Features

50 mV/g General Purpose Sensor Excellent for Higher g Applications

- ▶ ±100 g, Dynamic Range
- ▶ 50 mV/g, ±10% Sensitivity
- ▶ 1,0-12500 Hz (60-750,000 CPM)



| Specifications | Standard | | Metric | Specifications | Standard | | Metric |
|-----------------------------|-----------------|-------------------------|----------------|-----------------------------|-----------------|------------------|----------------|
| Part Number | AC117 | | M/ or M8/AC117 | <u>Environmental</u> | | | |
| Sensitivity (±10%) | | 50 mV/g | | Operating Temperature Range | -58 to 250 °F | | -50 to 121 °C |
| Frequency Response (±3dB) | 60-750,000 CPM | | 1,0-12500 Hz | Maximum Shock Protection | | 5,000 g, peak | |
| Frequency Response (±10%) | 240-540,000 CPM | | 4,0-9000 Hz | Electromagnetic Sensitivity | | CE | |
| Dynamic Range | | ± 100 g, peak | | Sealing | | Welded, Hermetic | |
| | | *Vsource ≥ 22V, 12Vbias | | Submersible Depth | 200 ft. | | 60 m |
| <u> Electrical</u> | | | | SIL Rating | | SIL 2 | |
| Settling Time | | 5 Seconds | | Physical | | | |
| Voltage Source (IEPE) | | 18-30 VDC | | Sensing Element | | PZT Ceramic | |
| Constant Current Excitation | | 2-10 mA | | Sensing Structure | | Shear Mode | |
| Spectral Noise @ 10 Hz | | 8 μg/√Hz | | Weight | 3.2 oz | | 90 grams |
| Spectral Noise @ 100 Hz | | 2.5 μg/√Hz | | Case Material | | 316L Stainless | |
| Spectral Noise @ 1000 Hz | | 1.7 μg/√Hz | | Case Material | | Steel | |
| Output Impedance | | <100 ohm | | Mounting Thread | | 1/4-28 Blind | |
| Bias Output Voltage | | 10-14 VDC | | Mounting Timeau | | Tapped Hole | |
| Case Isolation | | >10 ⁸ ohm | | 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 Supplied | 1/4-28 Stud | | M6x1 or M8x1.2 |
| | | | | Mounting Hardware Supplied | 1/4-28 5144 | | Adapter Stud |
| | | | | Calibration Certificate | | CA10 | |

Typical Frequency Response

**3 dB

**10%
-10%
-3 dB

**3 dB