

AC314 Series

Low Voltage Accelerometer, Side Exit Connector/Cable,
25 mV/g



VIBRATION ANALYSIS HARDWARE

REGULATORY APPROVALS



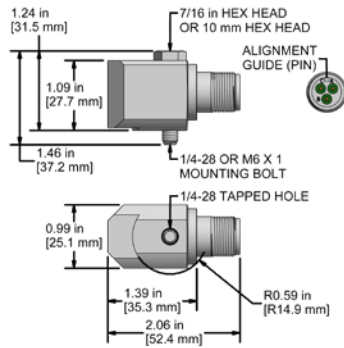
PRODUCT FEATURES

Ultra Low Power Sensor For Battery Powered Systems

Compatible with Many Wireless Transmission Systems

AC314-1A 3 Pin Connector

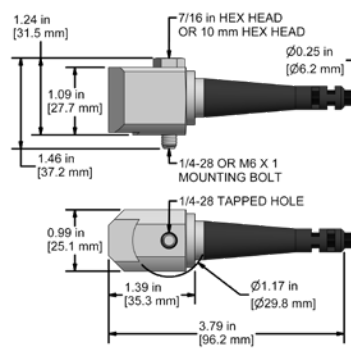
| Connector Pin | Polarity |
|---------------|------------|
| A | (+) Power |
| B | (-) Common |
| C | (+) Signal |



STOCK PRODUCT

AC314-2C Integral Cable

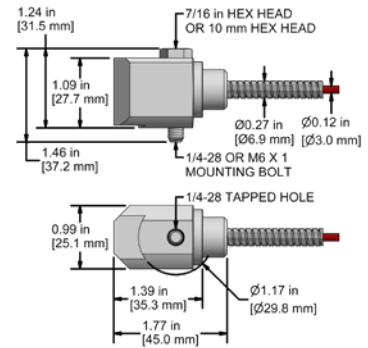
| Conductor | Polarity |
|-----------|------------|
| Red | (+) Power |
| Black | (-) Common |
| White | (+) Signal |



BUILD TO ORDER

AC314-3C Armored Integral Cable

| Conductor | Polarity |
|-----------|------------|
| Red | (+) Power |
| Black | (-) Common |
| White | (+) Signal |

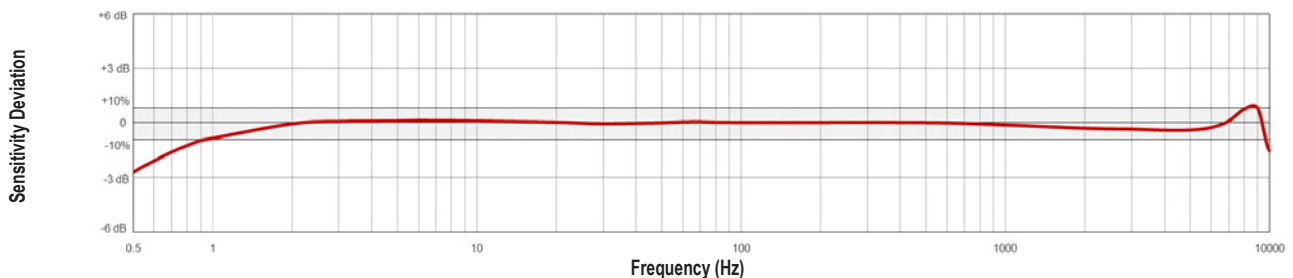


BUILD TO ORDER

| Specifications | Standard | Metric |
|-----------------------------|--------------------|-----------------------|
| Part Number | AC314 | M/AC314 |
| Vibration | | |
| Sensitivity (± 10 %) | | 25 mV/g |
| Frequency Response (± 3 dB) | 30 CPM to 60 kCPM | 0.5 Hz to 10 kHz |
| Frequency Response (± 10 %) | 60 CPM to 480 kCPM | 1 Hz to 8 kHz |
| Dynamic Range | | ± 50 g, peak |
| Electrical | | |
| Settling Time | | < 1 second |
| Power Supply Voltage | 3 Vdc to 5 Vdc | |
| Spectral Noise @ 10 Hz | | 60 µg/√Hz |
| Spectral Noise @ 100 Hz | | 20 µg/√Hz |
| Spectral Noise @ 1 kHz | | 5 µg/√Hz |
| Output Impedance | | < 100 ohm |
| Bias Output Voltage | | 1.5 V ± 10 % |
| Case Isolation | | > 10 ⁸ ohm |
| Supply Current | | < 20 µA |

| Specifications | Standard | Metric |
|--------------------------|---------------------|-------------------------|
| Environmental | | |
| Temperature Range | -58°F to 250°F | -50°C to 121°C |
| Maximum Shock Protection | | 5 kg, peak |
| Sealing | | Welded, Hermetic (IP68) |
| Physical | | |
| Sensing Element | | PZT Ceramic |
| Sensing Structure | | Shear Mode |
| Weight | 5.1 ounces | 145 grams |
| Case Material | | 316L Stainless Steel |
| Mounting | | Captive Bolt |
| Connector (non-integral) | | 3 Pin MIL-C-5015 |
| Resonant Frequency | 1260 kCPM | 21 kHz |
| Mounting Torque | 2 ft-lb to 5 ft-lb | 2.7 N-m to 6.8 N-m |
| Mounting Hardware | 1/4-28 Captive Bolt | M6x1 Captive Bolt |
| Calibration Certificate | | CA10 |

TYPICAL FREQUENCY RESPONSE



UNCONDITIONAL LIFETIME WARRANTY

TOLL-FREE: 800.999.5290

www.CTOnline.com