

AC944 Series

Class I, Division 2/Zone 2 Accelerometer, For Use In "Non-Arcing, Non-Sparking" Environments, Side Exit Connector/Cable, 100 mV/g

CSA/ATEX Approved

Must Use "Class I, Division 2" CB190 or CB206 Cable and J2Q Connector

REGULATORY INFORMATION

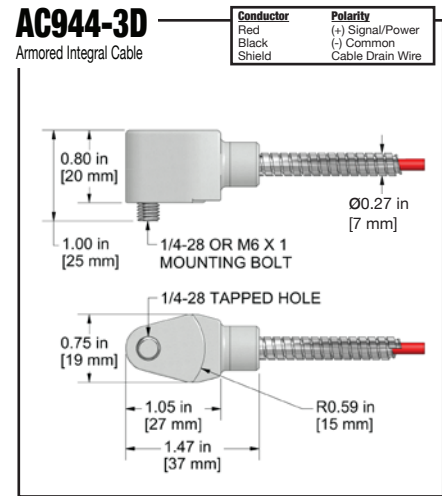
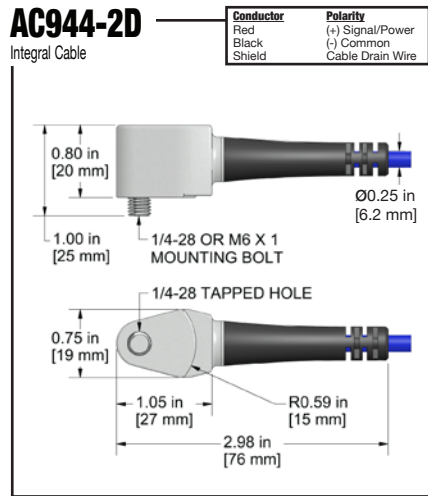
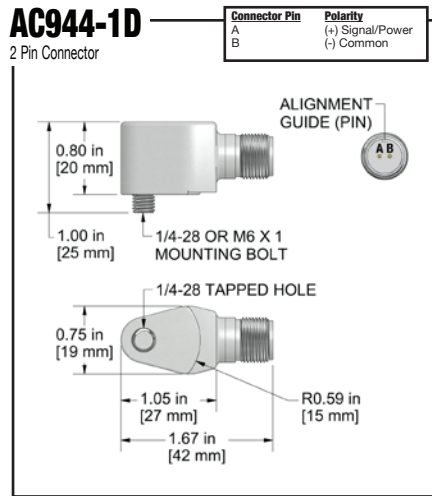


Actual Product Size Shown



Ex nA IIC T3C Gc
 AEx nA IIC T3C Gc
 CLI Groups A, B, C, D
 CLII Groups E, F, G; CLIII
 CLI, Zone 2

Operating Temperature Code: T3C
 Ambient Temperature Range = -40°C to +121°C
 U_i = 28 Vdc I_i = 100 mA
 CSA 221421
 Sira 15ATEX2152
 Ex nA IIC T3 Ga



| Specifications | Standard | Metric |
|-----------------------------|----------------------|--------------|
| Part Number | AC944 | M/AC944 |
| Vibration | | |
| Sensitivity (±10%) | 100 mV/g | |
| Frequency Response (±3dB) | 36-600,000 CPM | 0,6-10000 Hz |
| Dynamic Range | ± 50 g, peak | |
| Electrical | | |
| Settling Time | <2.5 seconds | |
| Voltage Source (IEPE) | 18-28 VDC | |
| Constant Current Excitation | 2-10 mA | |
| Spectral Noise @ 10 Hz | 30 µg/√Hz | |
| Spectral Noise @ 100 Hz | 4 µg/√Hz | |
| Spectral Noise @ 1000 Hz | 2 µg/√Hz | |
| Output Impedance | <100 ohm | |
| Bias Output Voltage | 10-14 VDC | |
| Case Isolation | >10 ⁹ ohm | |

| Specifications | Standard | Metric |
|-----------------------------|-------------------------------------|-------------------|
| Environmental | | |
| Temperature Range | -58 to 250°F | -50 to 121°C |
| Maximum Shock Protection | 5,000 g, peak | |
| Electromagnetic Sensitivity | CE | |
| Sealing | Welded, Hermetic | |
| Physical | | |
| Sensing Element | PZT Ceramic | |
| Sensing Structure | Shear Mode | |
| Weight | 2.1 oz | 60 grams |
| Case Material | 316L Stainless Steel | |
| Mounting | 1/4-28 | |
| Connector (AC944-1D) | 2 Pin mini-MIL, J Series Connectors | |
| Integral Cable (AC944-2D) | Blue TPE Cable | |
| Armored Cable (AC944-3D) | Armor Jacketed Cable | |
| Resonant Frequency | 1,920,000 CPM | 32000 Hz |
| Mounting Torque | 2 to 5 ft. lbs. | 2,7 to 6,8 Nm |
| Mounting Hardware | 1/4-28 Captive Bolt | M6x1 Captive Bolt |
| Calibration Certificate | CA10 | |

Ordering Information

| Standard | AC944-1D | AC944-2D / | AC944-3D / |
|----------|-----------------------|----------------------------------|---|
| | (1/4-28 Captive Bolt) | (1/4-28 Captive Bolt) | (1/4-28 Captive Bolt) |
| | Stock Product | Build To Order | Build To Order |
| | | (length in feet) (termination) | (maximum armor length 100 ft.) (cable length in feet) (termination) |
| Metric | M/AC944-1D | M/AC944-2D / | M/AC944-3D / |
| | (M6x1 Captive Bolt) | (M6x1 Captive Bolt) | (M6x1 Captive Bolt) |
| | Stock Product | Build To Order | Build To Order |
| | | (length in meters) (termination) | (maximum armor length 30 m) (cable length in meters) (termination) |

Cable Terminations: L Z

Read Before Purchasing
 Important information on Regulatory Approvals and Requirements on Page 87

Backed by our Unconditional Lifetime Warranty

www.ctconline.com



SECTION 1 - VIBRATION SENSORS
 Class 1, Division 2/Zone 2 Accelerometers