

# 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**

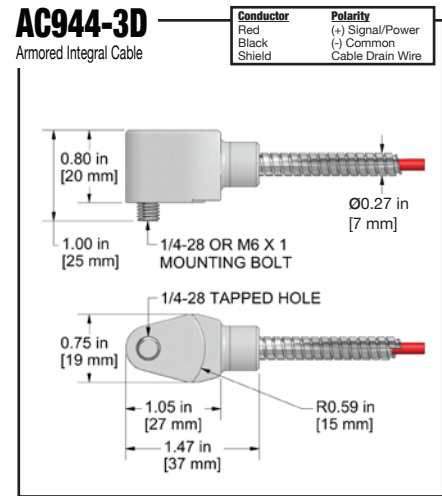
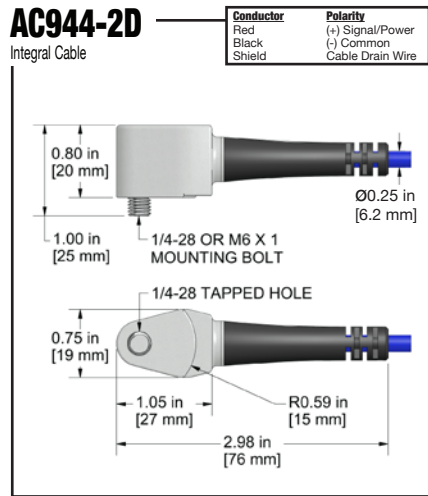
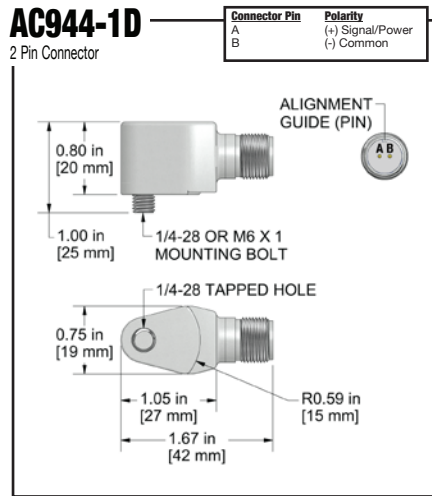


Actual Product Size Shown



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<sub>i</sub> = 28 Vdc I<sub>i</sub> = 100 mA  
 CSA 221421  
 Sira 15ATEX2152  
 Ex nA IIC T3 Ga



Specifications	Standard	Metric
Part Number	AC944	M/AC944
<b>Vibration</b>		
Sensitivity (±10%)	100 mV/g	
Frequency Response (±3dB)	36-600,000 CPM	0,6-10000 Hz
Dynamic Range	± 50 g, peak	
<b>Electrical</b>		
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 <sup>9</sup> ohm	

Specifications	Standard	Metric
<b>Environmental</b>		
Temperature Range	-58 to 250°F	-50 to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	Welded, Hermetic	
<b>Physical</b>		
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) <b>Stock Product</b>	(1/4-28 Captive Bolt) <b>Build To Order</b>	(1/4-28 Captive Bolt) <b>Build To Order</b>
		(length in feet) (termination)	(maximum armor length 100 ft.) (cable length in feet) (termination)
Metric	M/AC944-1D (M6x1 Captive Bolt) <b>Stock Product</b>	M/AC944-2D / (M6x1 Captive Bolt) <b>Build To Order</b>	M/AC944-3D / (M6x1 Captive Bolt) <b>Build To Order</b>
		(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**



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