

AC954 Series

IEC Certified (IECEX), Intrinsically Safe Accelerometer,
Side Exit Connector/Cable, 50 mV/g

SECTION 1 - VIBRATION SENSORS
Intrinsically Safe Accelerometers: IEC Certified



Actual Product Size Shown

IECEX



Requires Intrinsically Safe Barrier Product Features

IECEX Approvals

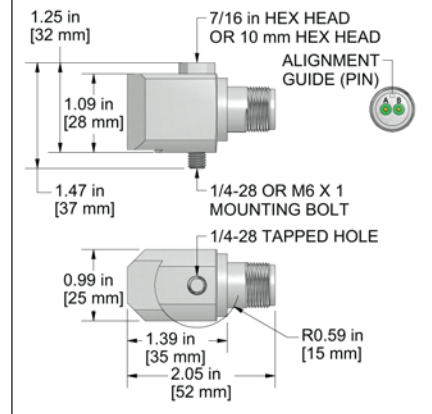
Excellent for Higher g Applications

- $\pm 100g$, Peak Dynamic Range
- 50 mV/g Sensitivity $\pm 10\%$
- Requires Intrinsic Safety Barrier (see page 348)

AC954-1A

2 Pin Connector

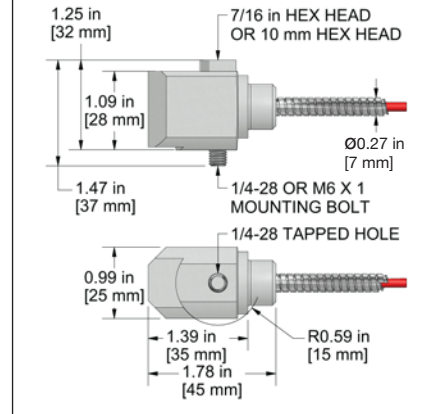
Connector Pin	Polarity
A	(+) Signal / Power
B	(-) Common



AC954-3C

Armored Integral Cable

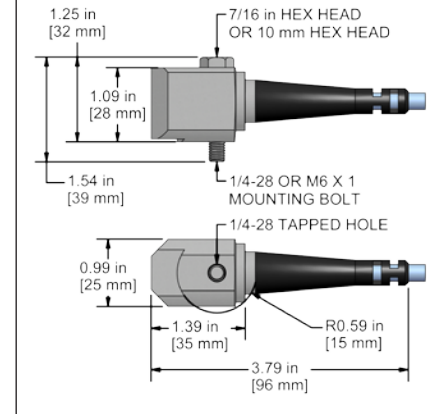
Conductor	Polarity
Red	(+) Signal / Power
Black	(-) Common
Shield	Cable Drain Wire



AC954-9C

Integral Cable

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



Specifications	Standard	Metric
Part Number	AC954	M/AC954
Sensitivity ($\pm 10\%$)	50 mV/g	
Frequency Response ($\pm 3dB$)	60-480,000 CPM	1,0-8000 Hz
Frequency Response ($\pm 10\%$)	120-180,000 CPM	2,0-3000 Hz
Dynamic Range	± 100 g, peak	
Electrical		
Setting Time	<3 Seconds	
Voltage Source (IEPE)	18-28 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	9 $\mu g/\sqrt{Hz}$	
Spectral Noise @ 100 Hz	2 $\mu g/\sqrt{Hz}$	
Spectral Noise @ 1000 Hz	1.6 $\mu g/\sqrt{Hz}$	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁸ 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	IP68	
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	5.3 oz	150 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	2 Pin MIL-C-5015	
Resonant Frequency	1,260,000 CPM	21000 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	AC954-1A (1/4-28 Captive Bolt)	AC954-3C - / (1/4-28 Captive Bolt)	AC954-9C - / (1/4-28 Captive Bolt)
Metric	M/AC954-1A (M6x1 Captive Bolt)	M/AC954-3C - / (M6x1 Captive Bolt)	M/AC954-9C - / (M6x1 Captive Bolt)

Read Before Purchasing
Important information on
Regulatory Approvals and Requirements
and
on Page 77

Cable Termination Options: L Z

Backed by our Unconditional Lifetime Warranty

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