

AC953 Series

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



Actual Product Size Shown

IECEX



Requires **Intrinsically Safe Barrier**

Product Features

IECEX Approvals

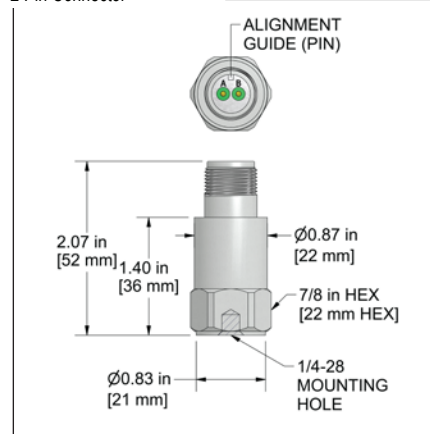
Excellent for Higher g Applications

- 50 mV/g Sensitivity $\pm 10\%$
- 1,0 - 15000 Hz (60 - 900,000 CPM) Frequency Response
- Requires Intrinsic Safety Barrier (see page 348)

AC953-1A

2 Pin Connector

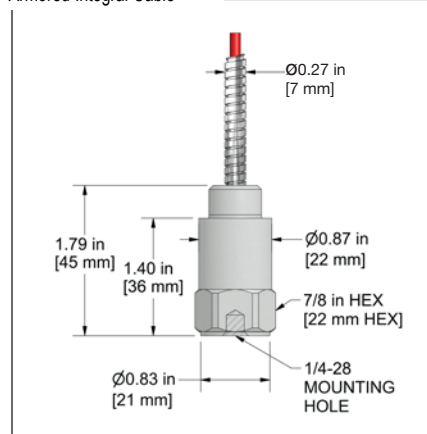
Connector Pin	Polarity
A	(+) Signal / Power
B	(-) Common



AC953-3C

Armored Integral Cable

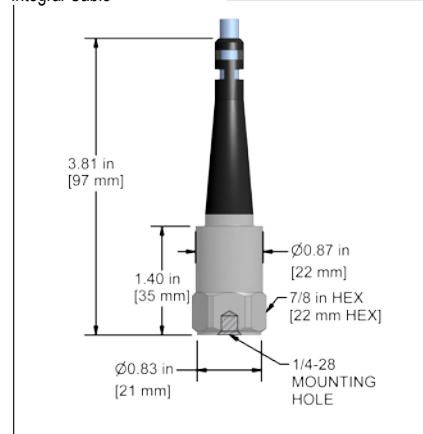
Conductor	Polarity
Red	(+) Signal / Power
Black	(-) Common
Shield	Cable Drain Wire



AC953-9C

Integral Cable

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



Specifications	Standard	Metric
Part Number	AC953	M/AC953
Sensitivity ($\pm 10\%$)		50 mV/g
Frequency Response ($\pm 3\text{dB}$)	60-900,000 CPM	1,0-15000 Hz
Frequency Response ($\pm 10\%$)	120-300,000 CPM	2,0-5000 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 $\mu\text{g}/\sqrt{\text{Hz}}$
Spectral Noise @ 100 Hz		2 $\mu\text{g}/\sqrt{\text{Hz}}$
Spectral Noise @ 1000 Hz		1.6 $\mu\text{g}/\sqrt{\text{Hz}}$
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	3.2 oz	90 grams
Case Material		316L Stainless Steel
Mounting		1/4-28
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	1/4-28 Stud	M6x1 Adapter Stud
Calibration Certificate		CA10

Ordering Information

Standard	AC953-1A	AC953-3C - /	AC953-9C - /
	(1/4-28 Stud)	(1/4-28 Stud)	(1/4-28 Stud)
		(length in feet) (termination)	(maximum armor length 100 ft.) (cable length in feet) (termination)
Metric	M/AC953-1A	M/AC953-3C - /	M/AC953-9C - /
	(M6x1 Adapter Stud)	(M6x1 Adapter Stud)	(M6x1 Adapter Stud)
		(length in feet) (termination)	(maximum armor length 100 ft.) (cable length in feet) (termination)
		(length in meters) (termination)	(maximum armor length 30 m) (cable length in meters) (termination)

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

Cable Termination Options: L Z



VIBRATION ANALYSIS HARDWARE

Backed by our Unconditional Lifetime Warranty

SECTION 1 - VIBRATION SENSORS
Intrinsically Safe Accelerometers: IEC Certified