

AC963 Series

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

SECTION 1 - VIBRATION SENSORS
Low Capacitance Accelerometers



Actual Product Size Shown

IECEX



Requires **Intrinsically Safe Barrier**

Product Features

IECEX Approvals

Excellent for Higher g Applications

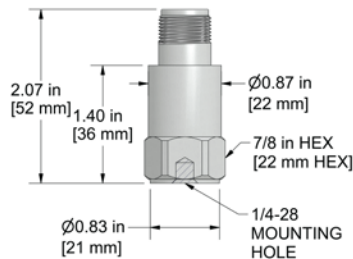
- 50 mV/g Sensitivity $\pm 10\%$
- 0,8 - 15000 Hz (48 - 900,000 CPM) Frequency Response
- Requires Intrinsic Safety Barrier (see page 348)

AC963-1A

2 Pin Connector

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

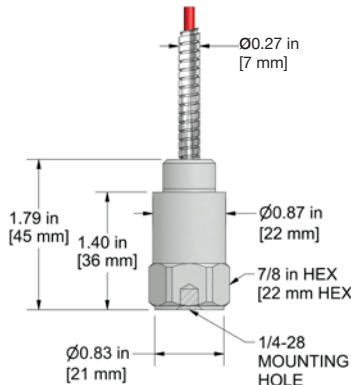
ALIGNMENT GUIDE (PIN)



AC963-3C

Armored Integral Cable

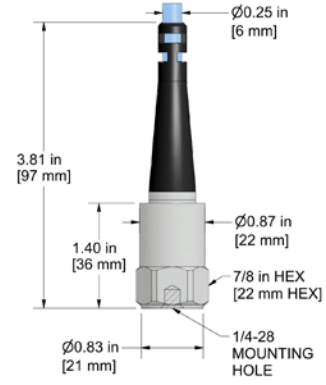
Conductor	Polarity
Red	(+) Signal / Power
Black	(-) Common
Shield	Cable Drain Wire



AC963-9C

Integral Cable

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



Specifications	Standard	Metric
Part Number	AC963	M/AC963
Sensitivity ($\pm 10\%$)	50 mV/g	
Frequency Response ($\pm 3\text{dB}$)	48-900,000 CPM	0,8-15000 Hz
Frequency Response ($\pm 10\%$)	90-390,000 CPM	1,5-6500 Hz
Dynamic Range	± 100 g, peak	
Electrical		
Settling Time	<3 Seconds	
Voltage Source (IEPE)	18-28 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	30 $\mu\text{g}/\text{Hz}$	
Spectral Noise @ 100 Hz	25 $\mu\text{g}/\text{Hz}$	
Spectral Noise @ 1000 Hz	25 $\mu\text{g}/\text{Hz}$	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁸ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-40° to 250°F	-40° 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	91 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	AC963-1A (1/4-28 Stud)	AC963-3C - / (1/4-28 Stud)	AC963-9C - / (1/4-28 Stud)
		(length in feet) (termination)	(maximum armor length 100 ft.) (cable length in feet) (termination)
Metric	M/AC963-1A (M6x1 Adapter Stud)	M/AC963-3C - / (M6x1 Adapter Stud)	M/AC963-9C - / (M6x1 Adapter Stud)
		(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 97

Cable Termination Options: L Z



VIBRATION ANALYSIS HARDWARE

Backed by our Unconditional Lifetime Warranty