

AC965 Series

Low Capacitance, IEC Certified (IECEx), Intrinsically Safe Accelerometer, Top Exit Connector / Cable, 100 mV/g



Actual Product Size Shown



Requires **Intrinsically Safe Barrier**

Product Features

IECEx Approvals

High Performance in a Low Cost Sensor

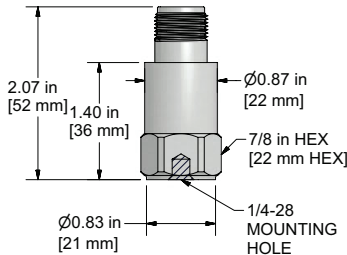
- 0.5-15000 Hz (30-900,000 CPM) Frequency Response
- 100 mV/g Sensitivity $\pm 10\%$
- Requires Intrinsic Safety Barrier (see page 228)

AC965-1A

2 Pin Connector

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

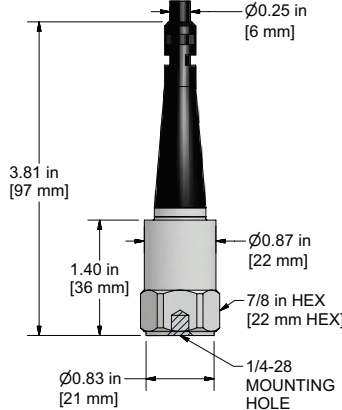
ALIGNMENT GUIDE (PIN)



AC965-2C

Integral Cable

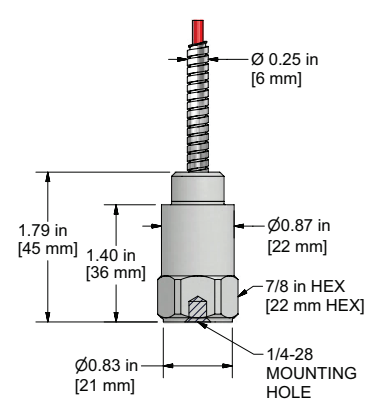
Conductor	Polarity
Red	(+) Signal / Power
Black	(-) Common
Shield	Cable Drain Wire



AC965-3C

Armored Integral Cable

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



Specifications	Standard	Metric
Part Number	AC965	M/AC965
Sensitivity ($\pm 10\%$)	100 mV/g	
Frequency Response ($\pm 3\text{dB}$)	30-900,000 CPM	0.5-15000 Hz
Frequency Response ($\pm 10\%$)	60-600,000 CPM	1.0-10000 Hz
Dynamic Range	± 50 g, peak	
Electrical		
Settling Time	<3 Seconds	
Voltage Source	18-28 VDC	
Constant Current Excitation	2-4 mA	
Spectral Noise @ 10 Hz	40 $\mu\text{g}/\sqrt{\text{Hz}}$	
Spectral Noise @ 100 Hz	25 $\mu\text{g}/\sqrt{\text{Hz}}$	
Spectral Noise @ 1000 Hz	26 $\mu\text{g}/\sqrt{\text{Hz}}$	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁸ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-40° to 250°F	-40° to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	Welded, Hermetic	
Submersible Depth (AC965-2C)	200 ft.	61 m
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	AC965-1A (1/4-28 Stud)	AC965-2C (1/4-28 Stud)	- / <input type="text"/> - <input type="text"/> (length in feet) (termination)	AC965-3C (1/4-28 Stud)	- / <input type="text"/> - <input type="text"/> - <input type="text"/> (armor length in feet) (cable length in feet) (termination)
Metric	M/AC965-1A (M6x1 Adapter Stud)	M/AC965-2C (M6x1 Adapter Stud)	- / <input type="text"/> - <input type="text"/> (length in feet) (termination)	M/AC965-3C (M6x1 Adapter Stud)	- / <input type="text"/> - <input type="text"/> - <input type="text"/> (armor length in feet) (cable length in feet) (termination)
			<input type="text"/> M - <input type="text"/> (length in meters) (termination)		<input type="text"/> M - <input type="text"/> (armor length in meters) (cable length in meters) (termination)



Read Before Purchasing
Important information on
Regulatory Approvals and
Requirements
on Page 75

Cable Termination Options: L Z



VIBRATION ANALYSIS HARDWARE

Backed by our Unconditional Lifetime Warranty



VIBRATION ANALYSIS HARDWARE

- LEFT CLICK & DRAG TO ROTATE MODEL
- RIGHT CLICK & DRAG TO ZOOM
- HOLD BOTH MOUSE BUTTONS TO PAN



3D
DATA SHEET

2 Pin Connector

Integral Cable

Armored Integral Cable



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RECOMMENDED
(Adobe® Reader® 8 Required)

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