AC220 Series

High Frequency mini-MIL Accelerometer, Top Exit Connector/Cable, 10 mV/g
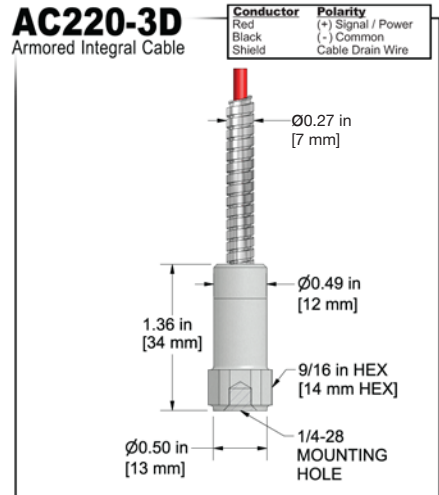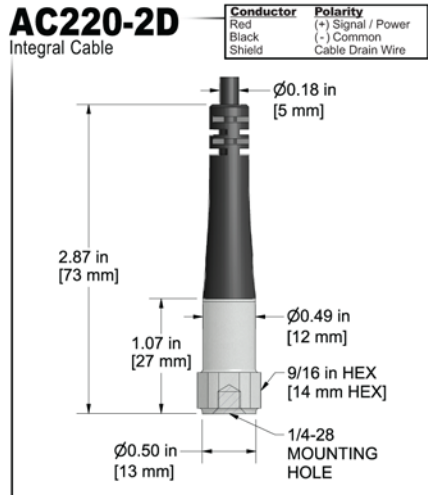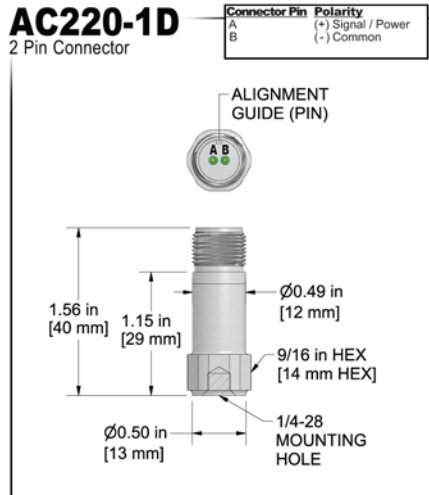
mini-MIL Must Use J2X Series Connectors

Product Features

Very High g Side Exit Accelerometer for High Frequency Applications
Helps to Detect Gearbox Defects and Other High Frequency Faults

Actual Product Size Shown

- *1,0 - 25000 Hz (60 - 1,500,000 CPM) Frequency Response*
- *10 mV/g, ±5% Sensitivity*
- *34 kHz Resonant Frequency*

AC220-1D
2 Pin Connector

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

ALIGNMENT GUIDE (PIN)

A B

1.56 in [40 mm]
1.15 in [29 mm]
Ø0.49 in [12 mm]
9/16 in HEX [14 mm HEX]
Ø0.50 in [13 mm]
1/4-28 MOUNTING HOLE

AC220-2D
Integral Cable

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

Ø0.18 in [5 mm]
2.87 in [73 mm]
1.07 in [27 mm]
Ø0.49 in [12 mm]
9/16 in HEX [14 mm HEX]
Ø0.50 in [13 mm]
1/4-28 MOUNTING HOLE

AC220-3D
Armored Integral Cable

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

Ø0.27 in [7 mm]
1.36 in [34 mm]
Ø0.49 in [12 mm]
9/16 in HEX [14 mm HEX]
Ø0.50 in [13 mm]
1/4-28 MOUNTING HOLE

Specifications	Standard	Metric
Part Number	AC220	M/AC220
Sensitivity (±5%)	10 mV/g	
Frequency Response (±3dB)	60-1,500,000 CPM	1,0-25000 Hz
Frequency Response (±10%)	90-420,000 CPM	1,5-7000 Hz
Frequency Response (±5%)	180-180,000 CPM	3,0-3000 Hz
Dynamic Range	± 500 g, peak	
Electrical		
Settling Time	<2 Seconds	
Voltage Source (IEPE)	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	100 µg/√Hz	
Spectral Noise @ 100 Hz	19 µg/√Hz	
Spectral Noise @ 1000 Hz	5 µg/√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	
Submersible Depth (AC220-2D/3D)	200 ft.	60 m
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	0.7 oz	20 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	2 Pin mini-MIL	
Resonant Frequency	2,040,000 CPM	34000 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	**AC220-1D** (1/4-28 Stud) *Stock Product*	**AC220-2D - /** (1/4-28 Stud) *Build To Order* (length in feet) (termination)	**AC220-3D - /** (1/4-28 Stud) *Build To Order* (maximum armor length 100 ft.) / (cable length in feet) - (termination)	
Metric	**M/AC220-1D** (M6x1 Adapter Stud) *Stock Product*	**M/AC220-2D - /** (M6x1 Adapter Stud) *Build To Order* (length in feet) (termination) / M - (length in meters) (termination)	**M/AC220-3D - /** (M6x1 Adapter Stud) *Build To Order* (maximum armor length 100 ft.) / (cable length in feet) - (termination) M / (maximum armor length 30 m) M / (cable length in meters) (termination)	

Cable Termination Options: E F L Z

Backed by our Unconditional Lifetime Warranty

VIBRATION ANALYSIS HARDWARE

• 800-999-5290