

# AC953 Series

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



Actual Product Size Shown

IECEx

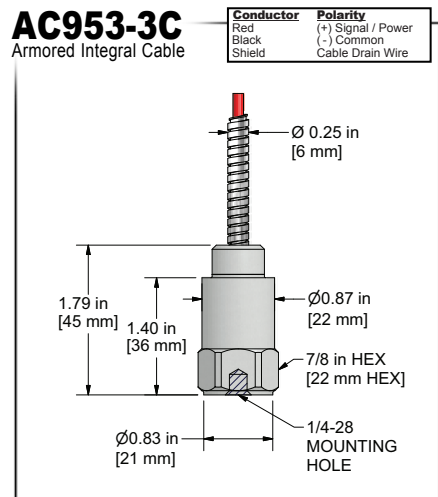
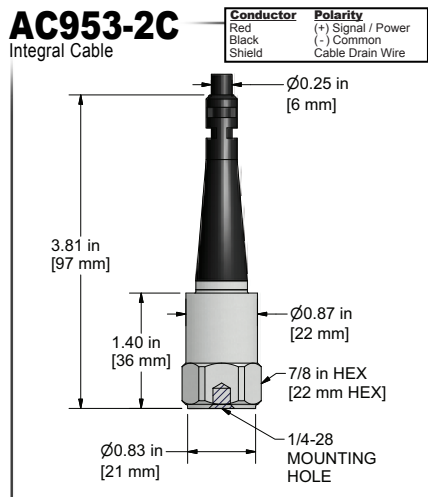
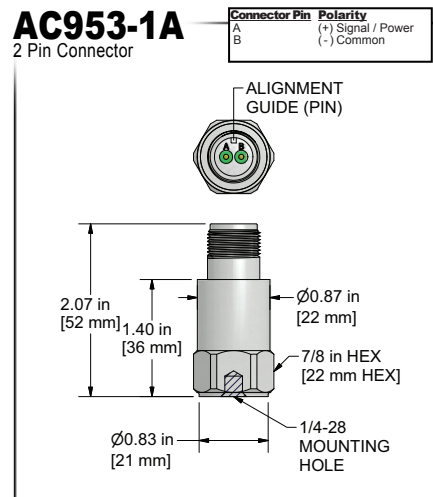
Requires **Intrinsically Safe Barrier**

## Product Features

### IECEx Approvals

Excellent for Higher g Applications

- 50 mV/g Sensitivity  $\pm 10\%$
- 1,0-15000 Hz (60-900,000 CPM)
- Requires Intrinsic Safety Barrier (see page 206)



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 ( $\pm 10\%$ )	120-240,000 CPM	2,0-4000 Hz
Dynamic Range	$\pm 100$ g, peak	
<b>Electrical</b>		
Settling Time	<3 Seconds	
Voltage Source	18-28 VDC	
Constant Current Excitation	2-4 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 <sup>8</sup> ohm	

Specifications	Standard	Metric
<b>Environmental</b>		
Temperature Range	-58 to 250°F	-50 to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	Welded, Hermetic	
Submersible Depth (AC953-2C)	200 ft.	61 m
<b>Physical</b>		
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 (1/4-28 Stud)	AC953-2C (1/4-28 Stud)	- / [ ] - [ ] (length in feet) (termination)	AC953-3C (1/4-28 Stud)	- / [ ] - [ ] - [ ] (armor length in feet) (cable length in feet) (termination)
Metric	M/AC953-1A (M6x1 Adapter Stud)	M/AC953-2C (M6x1 Adapter Stud)	- / [ ] - [ ] (length in feet) (termination)	M/AC953-3C (M6x1 Adapter Stud)	- / [ ] - [ ] - [ ] (armor length in feet) (cable length in feet) (termination)
			[ ] M - [ ] (length in meters) (termination)		[ ] M - [ ] (armor length in meters) (cable length in meters) (termination)

**Read Before Purchasing**  
Important information on  
**Regulatory Approvals and Requirements**  
on Page 55

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



2 Pin Connector

Integral Cable

Armored Integral Cable

2 Pin Connector

Integral Cable

Armored Integral Cable



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