

# AC966 Series

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

SECTION 1 - VIBRATION SENSORS  
Low Capacitance Accelerometers



Actual Product Size Shown

IECEX



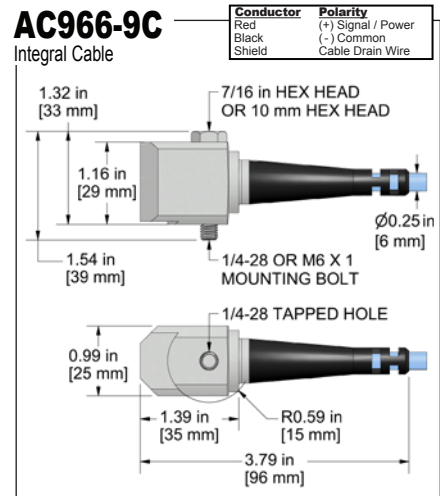
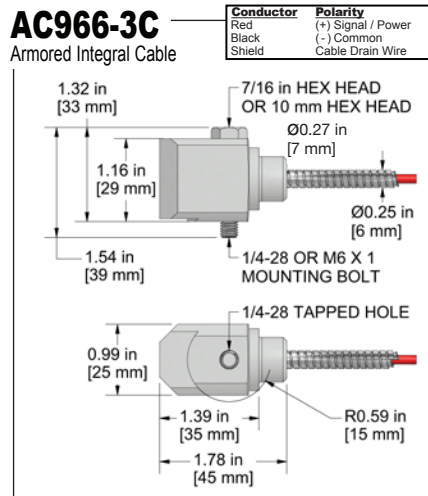
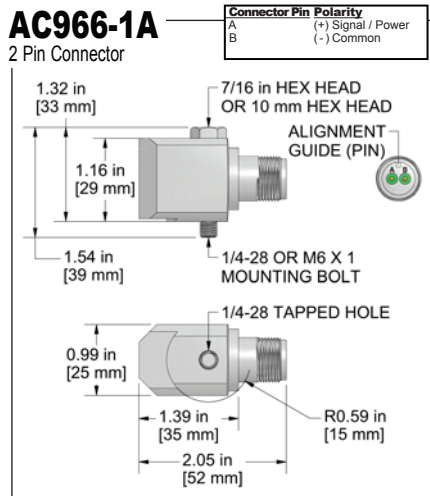
Requires **Intrinsically Safe Barrier**

## Product Features

### IECEX Approvals

High Performance in a Low Cost Sensor

- 0,5 - 8600 Hz (30 - 516,000 CPM) Frequency Response
- 100 mV/g Sensitivity  $\pm 10\%$
- Requires Intrinsic Safety Barrier (see page 348)



Specifications	Standard	Metric
Part Number	AC966	M/AC966
Sensitivity ( $\pm 10\%$ )	100 mV/g	
Frequency Response ( $\pm 3\text{dB}$ )	30-516,000 CPM	0,5-8600 Hz
Frequency Response ( $\pm 10\%$ )	60-360,000 CPM	1,0-6000 Hz
Dynamic Range	$\pm 50$ g, peak	
<b>Electrical</b>		
Settling Time (IEPE)	<3 Seconds	
Voltage Source	18-28 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	30 $\mu\text{g}/\text{Hz}$	
Spectral Noise @ 100 Hz	19 $\mu\text{g}/\text{Hz}$	
Spectral Noise @ 1000 Hz	15 $\mu\text{g}/\text{Hz}$	
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	-40° to 250°F	-40° to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	IP68	
<b>Physical</b>		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	5.3 oz	151 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	2 Pin MIL-C-5015	
Resonant Frequency	1,260,000 CPM	21000 Hz
Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Mounting Hardware	1/4-28 Captive Bolt	M6x1 Captive Bolt
Calibration Certificate	CA10	

## Ordering Information

Standard	AC966-1A	AC966-3C - /	AC966-9C - /
	(1/4-28 Captive Bolt) <b>Stock Product</b>	(1/4-28 Captive Bolt) <b>Build To Order</b>	(1/4-28 Captive Bolt) <b>Build To Order</b>
		(length in feet) (termination)	(maximum armor length 100 ft.) (cable length in feet) (termination)
Metric	M/AC966-1A	M/AC966-3C - /	M/AC966-9C - /
	(M6x1 Captive Bolt) <b>Stock Product</b>	(M6x1 Captive Bolt) <b>Build To Order</b>	(M6x1 Captive Bolt) <b>Build To Order</b>
		(length in meters) (termination)	(maximum armor length 30 m) (cable length in meters) (termination)
		M	M

**Read Before Purchasing**  
Important information on **Regulatory Approvals and Requirements** and on Page 97

Cable Termination Options: L Z

Backed by our Unconditional Lifetime Warranty

[www.ctconline.com](http://www.ctconline.com)

