

# AC966 Series

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

Actual Product Size Shown  
IECEX  
ANZEx



**Must Use "Class I, Division 2" CB190 or CB206 Cable and D2Q Connector**

### REGULATORY INFORMATION

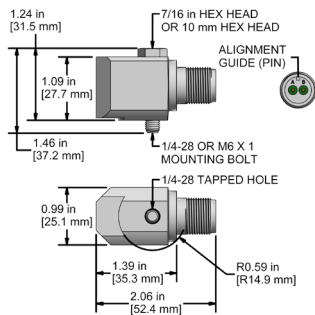
Ex ia IIC T3/T4  
AEx ia IIC T3/T4  
CLI Groups A, B, C, D  
CLII Groups F, G  
CLIII

Operating Temperature Code: T3 or T4  
Ambient Temperature Range =  
-40°C to +125°C (T3) or -40°C to +80°C (T4)  
U<sub>i</sub> = 28 Vdc I<sub>i</sub> = 100 mA  
CSA 221421  
IECEX CSA 07.0001  
Ex ia IIC T3 or T4  
ANZEx 18.4160

### AC966-1A

2 Pin Connector

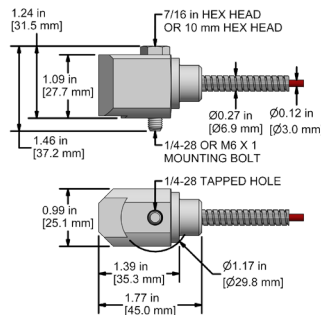
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



### AC966-3C

Armored Integral Cable

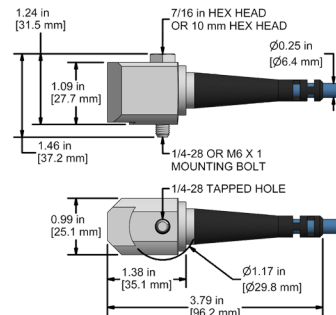
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



### AC966-9C

Integral Cable

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



Specifications	Standard	Metric
Part Number	AC966	M/AC966
<b>Vibration</b>		
Sensitivity (±10%)		100 mV/g
Frequency Response (±3dB)	30-516,000 CPM	0.5-8600 Hz
Frequency Response (±10%)	60-360,000 CPM	1.0-6000 Hz
Dynamic Range		± 80 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 µg/√Hz
Spectral Noise @ 100 Hz		19 µg/√Hz
Spectral Noise @ 1000 Hz		15 µg/√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		Welded, Hermetic
<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 (AC966-1A)		2 Pin MIL-C-5015
Armored Cable (AC966-3C)		Armor Jacketed Cable
Integral Cable (AC966-9C)		RAL 5015 Blue Polyurethane Cable
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)	(1/4-28 Captive Bolt)	(1/4-28 Captive Bolt)
	Stock	Build To Order	Build To Order
		(maximum armor length 100 ft.) / (cable length in feet)	(length in feet) (termination)
Metric	M/AC966-1A	M/AC966-3C /	M/AC966-9C /
	(M6x1 Captive Bolt)	(M6x1 Captive Bolt)	(M6x1 Captive Bolt)
	Stock	Build To Order	Build To Order
		(maximum armor length 30 m) / (cable length in meters)	(length in meters) (termination)

**Read Before Purchasing**  
Important information on  
**Regulatory Approvals** and  
**Requirements**  
on Page 87



**Backed by our Unconditional Lifetime Warranty**

SECTION 1 - VIBRATION SENSORS  
Low Capacitance Accelerometers