

# AC911 Series

Nonincendive Intrinsically Safe Accelerometer, CSA North America Class 1, Division 1 and IECEx/ATEX Zone 0,1 Approved Accelerometer, Top Exit 2 Pin Connector, 10 mV/g, ±10%



## Regulatory Information

CSA 221421  
 Ex ia IIC T3/T4 Ga  
 Ex ia I Ma  
 AEx ia IIC T3/T4  
 CLI Groups A, B, C, D  
 CLII Groups E, F, G; CLIII  
 CLI, Zone 0  
 Operating Temp Code: T3  
 Ambient Temp Range = -40 to 121°C  
 Operating Temp Code: T4  
 Ambient Temp Range = -40 to 80°C  
 Control Drawing INS10012  
 Ex ia IIC T3 -40°C < Ta < +121°C  
 Ex ia IIC T4 -40°C < Ta < +80°C

Sira 15ATEX2152X  
 IECEx SIR 15.0060X  
 Ex ia IIC T3/T4 Ga  
 Ex ib IIIC T135°C...T143°C Db  
 Operating Temp Code: T143°C Db  
 Ambient Temp Range = -40°C to 121°C  
 Operating Temp Code: T135°C  
 Ambient Temp Range = -40°C to +80°C  
 Ex ia I Ma

Connector Exit Entity Parameters:  
 Ui = 28 Vdc, li = 120 mA, Pi = 1W, Ci = 0nF, Li = 0µH

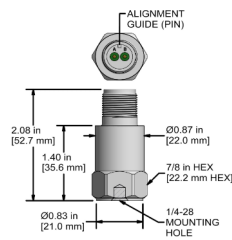
Integral Cable Entity Parameters  
 Ui = 28 Vdc, li = 120 mA, Pi = 1W, Ci = 80.4nF, Li = 336µH

1600 ft (488 m) Maximum Allowable  
 Integral Cable Length  
 Approved Cabling: CB102, CB103\*, CB111, CB190\*,  
 CB193\*, CB296 (\*Approved for Use in T4  
 Applications Only)  
 Requires one IS111-IB Intrinsic Safety Barrier

### AC911-1A

2 Pin Connector

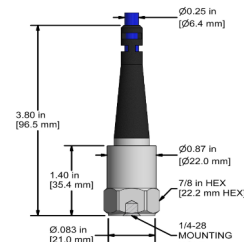
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



### AC911-2C

CB193 Molded Integral Cable

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

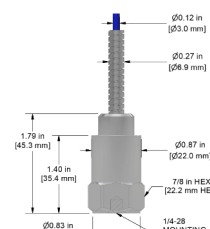


Built To Order

### AC911-3C

CB296 Armored Integral Cable

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



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC911	M/ or M8/AC911	<b>Environmental</b>		
Sensitivity (±10%)		10 mV/g	Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Frequency Response (±3dB)	60-900,000 CPM	1,0-15000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range		± 800 g, peak	Electromagnetic Sensitivity	CE	
<b>Electrical</b>			Sealing	Welded, Hermetic	
Settling Time	<3 Seconds		Submersible Depth	200 ft.	61 m
Voltage Source	18-28 VDC		<b>Physical</b>		
Constant Current Excitation	2-4 mA		Sensing Element	PZT Ceramic	
Spectral Noise @ 10 Hz	100 µg/√Hz		Sensing Structure	Shear Mode	
Spectral Noise @ 100 Hz	90 µg/√Hz		Weight	3.2 oz	91 grams
Spectral Noise @ 1000 Hz	85 µg/√Hz		Case Material	316L Stainless Steel	
Output Impedance	<100 ohm		Mounting Thread	1/4-28 Blind Tapped Hole	
Bias Output Voltage	10-14 VDC		Connector (Non-Integral)	2 Pin MIL-C-5015	
Case Isolation	>10 <sup>8</sup> ohm		Resonant Frequency	1,380,000 CPM	23000 Hz
			Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
			Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
			Calibration Certificate	CA10	

## Typical Frequency Response

