

AC911 Series

Nonincendive Intrinsically Safe Accelerometer, CSA North America Class I
Div 1, Class II Div 1, Class III and IECEx/ATEX Zone 0,1 Approved
Accelerometer, Top Exit 2 Pin Connector, 10 mV/g, $\pm 10\%$



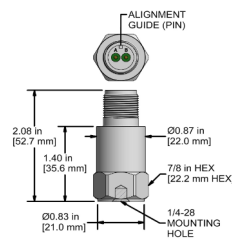
Regulatory Information

CSA 221421	T3: Ta @ -40°C to +121°C
CSA 26CA80263367X	T4: Ta @ -40°C to +80°C
CLI, DIV 1, GRP A, B, C and D	Mining Group I: Ta @ -40°C to +121°C
CLII, DIV 1, GRP E, F and G; CLIII	T147°C: Ta @ -40°C to +121°C
Ex ia IIC T3-T4 Ga	T135°C: Ta @ -40°C to +80°C
Ex ib IIC T135°C...T147°C Db	Install per drawing INS10210
CLI, ZN 0, AEx ia IIC T3-T4 Ga	Refer to product manual
ZN 21, AEx ib IIC T135°C...T147°C Db	MNX10134
T3: Ta = -40°C to +121°C	
T4: Ta = -40°C to +80°C	
T147°C: Ta = -40°C to +121°C	
T135°C: Ta = -40°C to +80°C	
Install per drawing INS10187	
Refer to product manual MNX10127	
1600 ft (488 m) Maximum Allowable Integral Cable Length	
Approved Cabling: CB102, CB103*, CB111, CB190*, CB193*, CB206, CB296 (*Approved for Use in T4 Applications Only)	
Requires one IS111-1B Intrinsic Safety Barrier	
IECEx SIR 15.0060X	Sira 15ATEX2152X
Ex ia IIC T3-T4 Ga	Ex ia IIC T3 -T4 Ga
Ex ib IIC T135°C ... T147°C Db	T3: Ta @ -40°C to +121°C
Ex ia I Ma	T4: Ta @ -40°C to +80°C
	Ex ib IIC T135°C ... T147°C Db
	T147°C: Ta @ -40°C to +121°C
	T135°C: Ta @ -40°C to +80°C
	Ex ia I Ma
	Ta @ -40°C to +121°C
	Install per drawing INS10211
	Refer to product manual
	MNX10135
	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

AC911-1A

2 Pin Connector

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

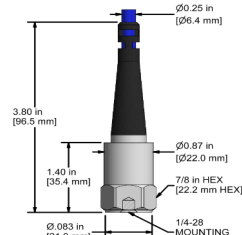


Stock Product

AC911-2C

CB193 Molded Integral Cable

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

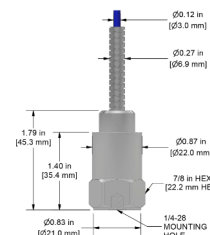


Built To Order

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	<u>Environmental</u>		
Sensitivity ($\pm 10\%$)	10 mV/g		Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Frequency Response ($\pm 3dB$)	60-900,000 CPM	1,0-15000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range	± 800 g, peak		Electromagnetic Sensitivity	CE	
Transverse Sensitivity	$\leq 5\%$		Sealing	Welded, Hermetic	
<u>Electrical</u>			Submersible Depth	200 ft.	61 m
Settling Time	<3 Seconds		<u>Physical</u>		
Voltage Source	18-28 VDC		Sensing Element	PZT Ceramic	
Constant Current Excitation	2-10 mA		Sensing Structure	Shear Mode	
Spectral Noise @ 10 Hz	100 $\mu g/\sqrt{Hz}$		Weight	3.2 oz	91 grams
Spectral Noise @ 100 Hz	90 $\mu g/\sqrt{Hz}$		Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz	85 $\mu g/\sqrt{Hz}$		Mounting Thread	1/4-28 Blind Tapped Hole	
Output Impedance	<100 ohm		Connector (Non-Integral)	2 Pin MIL-C-5015	
Bias Output Voltage	10-14 VDC		Resonant Frequency	1,380,000 CPM	23000 Hz
Case Isolation	>10 ⁸ ohm		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

