

AC913 Series

Nonincendive Intrinsically Safe Accelerometer, CSA North America Class I Div 1, Class II Div 1, Class III and IECEx/ATEX Zone 0, 1, 2, 21, 22 Approved Accelerometer, Top Exit 2 Pin Connector, 50 mV/g, $\pm 10\%$



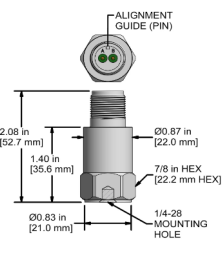
Regulatory Information

CSA 221421	T4: Ta @ -40°C to +80°C
CSA 26CA80263367X	Mining Group I: Ta @ -40°C to +121°C
CL I, DIV 1, GRP A, B, C and D	T147°C: Ta @ -40°C to +121°C
CL II, DIV 1, GRP E, F and G; CL III	T135°C: Ta @ -40°C to +80°C
Ex ia IIC T3-T4 Ga	Install per drawing INS10210
Ex ib IIC T135°C...T147°C Db	Refer to product manual
CL I, ZN 0, AEx ia IIC T3-T4 Ga	MXN10134
ZN 21, AEx ib IIC T135°C...T147°C Db	
T3: Ta = -40°C to +121°C	
T4: Ta = -40°C to +80°C	Sira 15ATEX2152X
T147°C: Ta = -40°C to +121°C	Ex ia IIC T3 -T4 Ga
T135°C: Ta = -40°C to +80°C	T3: Ta @ -40°C to +121°C
Install per drawing INS10187	T4: Ta @ -40°C to +80°C
Refer to product manual MXN10127	Ex ib IIC T135°C ... T147°C Db
	T147°C: Ta @ -40°C to +121°C
1600 ft (488 m) Maximum Allowable Integral Cable Length	T135°C: Ta @ -40°C to +80°C
Approved Cabling: CB102, CB103*, CB111, CB190*, CB193*, CB206, CB296 (*Approved for Use in T4 Applications Only)	Ex ia I Ma
Requires one IS111-1B Intrinsic Safety Barrier	Ta @ -40°C to +121°C
	Install per drawing INS10211
	Refer to product manual
	MXN10135
IECEx SIR 15.0060X	Connector Exit Entity Parameters:
Ex ia IIC T3-T4 Ga	Ui = 28 Vdc, li = 120 mA, Pi = 1W, Ci = 0nF, Li = 0μH
Ex ib IIC T135°C ... T147°C Db	
Ex ia I Ma	Integral Cable Entity Parameters
T3: Ta @ -40°C to +121°C	Ui = 28 Vdc, li = 120 mA, Pi = 1W, Ci = 80.4nF, Li = 336μH

AC913-1A

2 Pin Connector

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

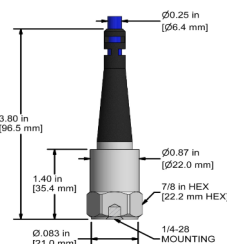


Stock Product

AC913-2C

CB193 Molded Integral Cable

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

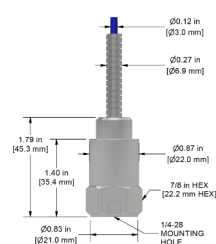


Built To Order

AC913-3C

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	AC913	M/ or M8/AC913	Environmental		
Sensitivity ($\pm 10\%$)	50 mV/g		Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Frequency Response ($\pm 3\text{dB}$)	60-900,000 CPM	1,0-15000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range	± 100 g, peak		Electromagnetic Sensitivity	CE	
Transverse Sensitivity	$\leq 5\%$		Sealing	Welded, Hermetic	
Electrical			Submersible Depth	200 ft.	61 m
Settling Time	<3 Seconds		Physical		
Voltage Source	18-28 VDC		Sensing Element	PZT Ceramic	
Constant Current Excitation	2-10 mA		Sensing Structure	Shear Mode	
Spectral Noise @ 10 Hz	9 $\mu\text{g}/\sqrt{\text{Hz}}$		Weight	3.2 oz	90 grams
Spectral Noise @ 100 Hz	2 $\mu\text{g}/\sqrt{\text{Hz}}$		Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz	1.6 $\mu\text{g}/\sqrt{\text{Hz}}$		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	M6x1or M8x1.25 Adapter Stud
			Calibration Certificate	CA10	

Typical Frequency Response

