

AC915 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, 100 mV/g, ±10%



Regulatory Information

CSA 221421

Ex ia IIC T3/T4 Ga

Ex ia I Ma

AEx ia IIC T3/T4

CL I Groups A, B, C, D

CL II Groups E, F, G; CL III

CL I, 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 IIC 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

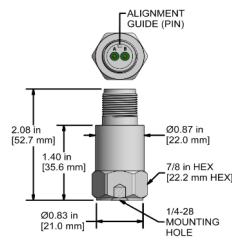
Applications Only)

Requires one IS111-1B Intrinsic Safety Barrier

AC915-1A

2 Pin Connector

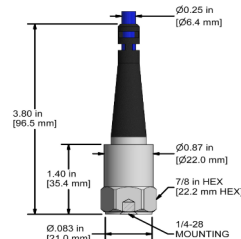
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



AC915-2C

CB193 Molded Integral Cable

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

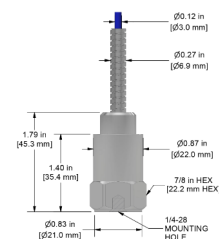


Built To Order

AC915-3C

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	AC915	M/ or M8/AC915	<u>Environmental</u>		
Sensitivity (±10%)		100 mV/g	Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Frequency Response (±3dB)	30-900,000 CPM	0.5-15000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response (±10%)	60-360,000 CPM	1,0-6000 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range		± 80 g, peak	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	2-4 mA		Sensing Structure	Shear Mode	
Spectral Noise @ 10 Hz	6.5 µg/√Hz		Weight	3.2 oz	90 grams
Spectral Noise @ 100 Hz	2 µg/√Hz		Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz	1.8 µg/√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

