

AC916 Series

Nonincendive, Intrinsically Safe Accelerometer, CSA North America Class 1, Division 1 and IECEx/ATEX Zone 0,1 Approved Accelerometer, Side 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, Ii = 120 mA, Pi = 1W, Ci = 0nF, Li = 0μH

Integral Cable Entity Parameters

Ui = 28 Vdc, Ii = 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

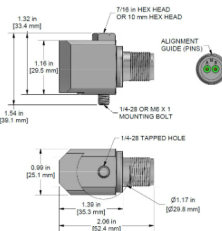
Applications Only)

Requires one IS111-1B Intrinsic Safety Barrier

AC916-1A

2 Pin Connector

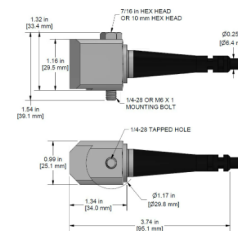
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



AC916-2C

CB193 Molded Integral Cable

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

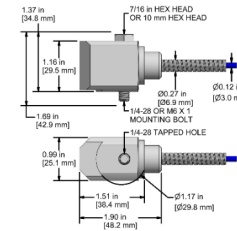


Built To Order

AC916-3C

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	AC916	M/AC916	<u>Environmental</u>		
Sensitivity (±10%)	100 mV/g		Operating Temperature Range	-65 to 257 °F	-54 to 125 °C
Frequency Response (±3dB)	30-600,000 CPM	0.5-10,000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response (±10%)	60-300,000 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		SIL Rating	SIL 2	
Voltage Source	18-28 VDC		<u>Physical</u>		
Constant Current Excitation	2-4 mA		Sensing Element	PZT Ceramic	
Spectral Noise @ 10 Hz	6.5 μg/√Hz		Sensing Structure	Shear Mode	
Spectral Noise @ 100 Hz	2 μg/√Hz		Weight	5.3 oz	150 grams
Spectral Noise @ 1000 Hz	1.8 μg/√Hz		Case Material	316L Stainless Steel	
Output Impedance	<100 ohm		Mounting Thread	1/4-28	
Bias Output Voltage	10-14 VDC		Connector (Non-Integral)	2 Pin MIL-C-5015	
Case Isolation	>10 ⁸ ohm		Resonant Frequency	1,320,000 CPM	22000 Hz
			Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
			Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
			Calibration Certificate	CA10	

Typical Frequency Response

