

AC931 Series

Nonincendive, CSA North America Class I, Division 2, Class II, Division 1, Class III, ATEX/IECEx Zone 2, 22 Approved Accelerometer, Top Exit 2 Pin Connector, 10 mV/g, $\pm 10\%$



Regulatory Information

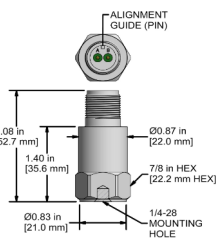
CSA 221421	T4, T135°C for ambient
CSA 25CA80263368X	temperature range of -40°C to +80°C
CL I, DIV 2, GRP A, B, C and D T3/T4	T3 for ambient temperature range of -40°C to +121°C
CL II, DIV 1, GRP E, F and G T135°C	*Temperature Class depends on the ambient temperature
CL III	Vmax=28VDC Imax=10mA
Ex ec IIC T* Gc	Install per INS10208
Ex tc IIIC T135°C Dc	Reference Product Manual MNX10132
CL I, ZN 2, AEx ec IIC T* Gc	CSACa 24 ATEX1004X
ZN 22, AEx tc IIIB T135°C Dc	Ex ec IIC T**C Gc
*Temperature Class depends on the ambient temperature	Ex tc IIIC T135°C Dc
T4, T135°C for ambient temperature range of -40°C to +80°C	T4, T135°C for ambient temperature range of -40°C to +80°C
T3 for ambient temperature range of -40°C to +121°C	T3 for ambient temperature range of -40°C to +121°C
Vmax = 28VDC Imax = 10mA	*Temperature Class depends on the ambient temperature
Reference Product Manual MNX10128 / Install Per INS10191	Vmax=28VDC Imax=10mA
IECEx CSA 24.0015X	Install per INS10209
Ex ec IIC T**C Gc	Reference Product Manual MNX10133
Ex tc IIIC T135°C Dc	

Approved Cabling: CB102, CB111, CB190*, CB206, CB296 (*Approved for Use in T4 Applications Only)

AC931-1A

2 Pin Connector

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

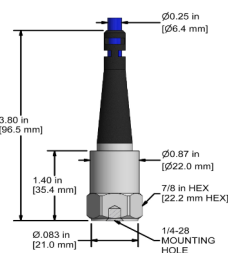


Stock Product

AC931-2C

CB190 Integral Cable

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

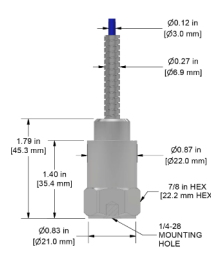


Built To Order

AC931-3C

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	AC931	M/ or M8/AC931	Environmental		
Sensitivity ($\pm 10\%$)	10 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	± 500 g, peak		Electromagnetic Sensitivity	CE	
Transverse Sensitivity	$\leq 5\%$		Sealing	Welded, Hermetic	
Electrical			Physical		
Settling Time	<2 Seconds		Sensing Element	PZT Ceramic	
Voltage Source	18-30 VDC		Sensing Structure	Shear Mode	
Constant Current Excitation	2-10 mA		Weight	3.2 oz	91 grams
Spectral Noise @ 10 Hz	100 $\mu\text{g}/\sqrt{\text{Hz}}$		Case Material	316L Stainless Steel	
Spectral Noise @ 100 Hz	90 $\mu\text{g}/\sqrt{\text{Hz}}$		Mounting Thread	1/4-28 Blind Tapped Hole	
Spectral Noise @ 1000 Hz	85 $\mu\text{g}/\sqrt{\text{Hz}}$		Connector (Non-Integral)	2 Pin MIL-C-5015	
Output Impedance	<100 ohm		Resonant Frequency	1,380,000 CPM	23000 Hz
Bias Output Voltage	10-14 VDC		Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Case Isolation	>10 ⁸ ohm		Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
			Calibration Certificate	CA10	

Typical Frequency Response

