

AC935 Series

Low Capacitance, Class I, Division 2/Zone 2 Accelerometer, For Use In "Non-Arcing, Non-Sparking" Environments, Top Exit Connector/Cable, 100 mV/g

SECTION 1 - VIBRATION SENSORS
Low Capacitance Accelerometers



Must Use "Class I, Division 2" CB190 or CB206 Cable and D2Q Connector

REGULATORY INFORMATION

Ex nA IIC T3/T4
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CL I Groups A, B, C, D
CL II Groups F, G
CL III

Operating Temperature Code: T3 or T4
Ambient Temperature Range =
-40°C to +125°C (T3) or -40°C to +80°C (T4)
Ui = 28 Vdc li = 100 mA
CSA 221421

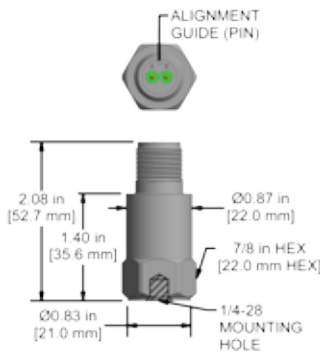
KEMA 04ATEX1066
Ex nA II T3 or T4



AC935-1A

2 Pin Connector

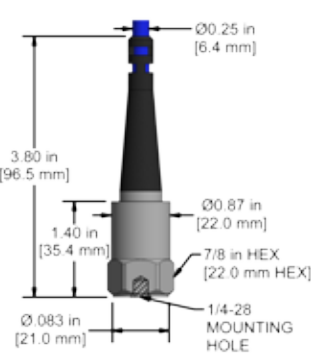
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



AC935-2C

Integral Cable

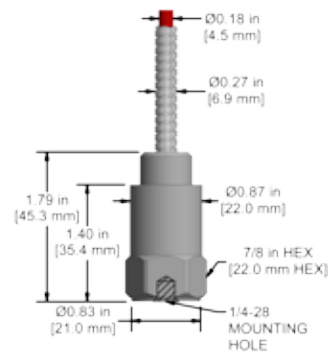
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



AC935-3C

Armored Integral Cable

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



Specifications	Standard	Metric
Part Number	AC935	M/AC935
Vibration		
Sensitivity (±10%)	100 mV/g	
Frequency Response (±3dB)	30-900,000 CPM	0.5-15000 Hz
Frequency Response (±10%)	60-600,000 CPM	1.0-10000 Hz
Dynamic Range	± 80 g, peak	
Electrical		
Settling Time	<3 Seconds	
Voltage Source (IEPE)	18-28 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	30 µg/√Hz	
Spectral Noise @ 100 Hz	19 µg/√Hz	
Spectral Noise @ 1000 Hz	15 µg/√Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁸ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-40 to 250°F	-40 to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	Welded, Hermetic	
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	3.2 oz	91 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (AC935-1A)	2 Pin MIL-C-5015	
Integral Cable (AC935-2C)	Blue TPE Cable	
Armored Cable (AC935-3C)	Armor Jacketed Cable	
Resonant Frequency	1,380,000 CPM	23000 Hz
Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Mounting Hardware	1/4-28 Stud	M6x1 Adapter Stud
Calibration Certificate	CA10	

Ordering Information

Standard	AC935-1A (1/4-28 Stud)	AC935-2C / (1/4-28 Stud)	AC935-3C / (1/4-28 Stud)
		(length in feet) (termination)	(maximum armor length 100 ft.) (cable length in feet) (termination)
Metric	M/AC935-1A (M6x1 Adapter Stud)	M/AC935-2C / (M6x1 Adapter Stud)	M/AC935-3C / (M6x1 Adapter Stud)
		(length in meters) (termination)	(maximum armor length 30 m) (cable length in meters) (termination)

Read Before Purchasing
Important information on
Regulatory Approvals and
Requirements
on Page 87



Backed by our Unconditional Lifetime Warranty