

AC965 Series

Low Capacitance, IEC Certified (IECEX/ANZEx), Intrinsically Safe Accelerometer, Top Exit Connector/Cable, 100 mV/g

SECTION 1 - VIBRATION SENSORS
Low Capacitance Accelerometers

Actual Product Size Shown

IECEX
CE
ANZEx



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

REGULATORY INFORMATION

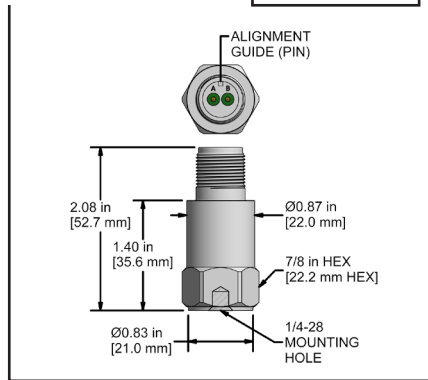
Ex ia IIC T3/T4
AEx ia IIC T3/T4
CLI Groups A, B, C, D
CLII Groups F, G
CLIII

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

IECEX CSA 07.0001
Ex ia IIC T3 or T4
ANZEx 18.4160

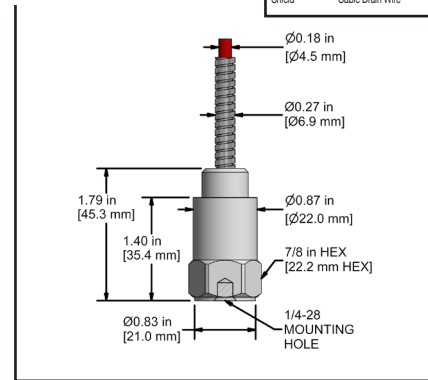
AC965-1A
2 Pin Connector

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



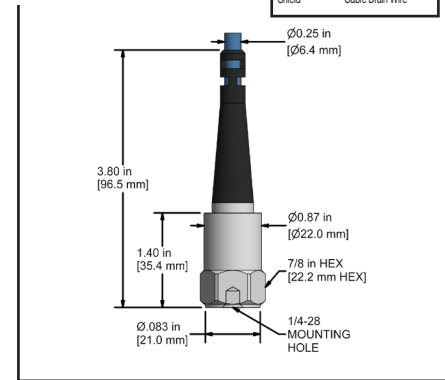
AC965-3C
Armored Integral Cable

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



AC965-9C
Integral Cable

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



Specifications	Standard	Metric
Part Number	AC965	M/AC965
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 (AC965-1A)	2 Pin MIL-C-5015	
Armored Cable (AC965-3C)	Armor Jacketed Cable	
Integral Cable (AC965-9C)	RAL 5015 Blue Polyurethane 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	AC965-1A (1/4-28 Stud)	AC965-3C / (1/4-28 Stud)	AC965-9C / (1/4-28 Stud)
	Stock	Build To Order	Build To Order
		(maximum armor length 100 ft.) (cable length in feet) (termination)	(length in feet) (termination)
Metric	M/AC965-1A (M6x1 Adapter Stud)	M/AC965-3C / (M6x1 Adapter Stud)	M/AC965-9C / (M6x1 Adapter Stud)
	Stock	Build To Order	Build To Order
		(maximum armor length 30 m) (cable length in meters) (termination)	(length in meters) (termination)

Cable L Z

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

Backed by our Unconditional Lifetime Warranty

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