

AC965 Series

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

SECTION I - VIBRATION SENSORS
Low Capacitance Accelerometers

Actual Product Size Shown

IECEX



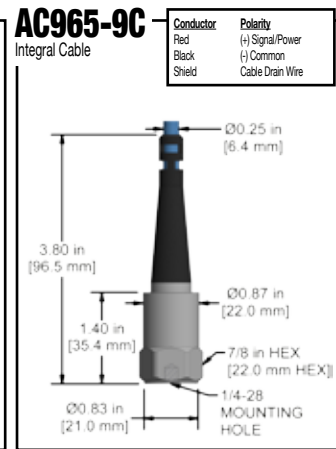
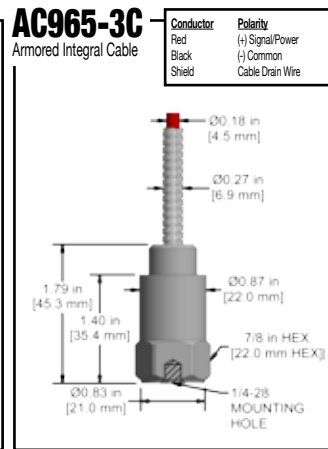
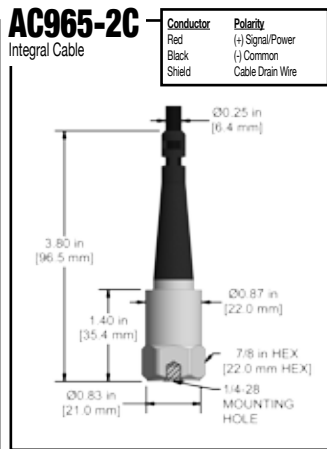
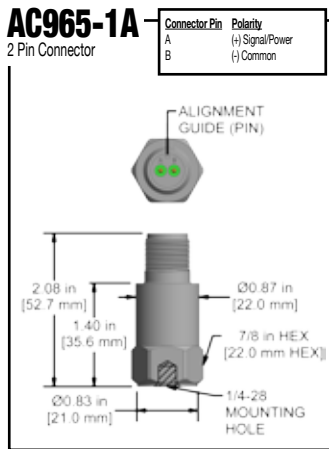
Must Use "Class I, Division 2" CB190 or CB206 Cable and D2Q Connector

REGULATORY INFORMATION

Ex ia IIC T3/T4
AEx ia IIC T3/T4
CLII 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)
Ui = 28 Vdc li = 100 mA
CSA 221421

IECEX CSA 07.0001
Ex ia IIC T3 or T4



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
Integral Cable (AC965-2C)		Black Polyurethane Cable
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)	AC965-2C / (1/4-28 Stud)	AC965-3C / (1/4-28 Stud)	AC965-9C / (1/4-28 Stud)

Cable Terminations: L Z

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

Backed by our Unconditional Lifetime Warranty

www.ctconline.com

