AC968 Series

Nonincedive, Intrinsically Safe, CSA North America Class I Div 1, Class II Div 1, Class III and IECEx/ATEX Zone 0,1,2,21,22 Approved Accelerometer, Side Exit 2 Pin Connector, M8x1.25 Captive Bolt, 100 mV/g, ±10%

VIBRATION ANALYSIS HARDWARE

Regulatory Information

CSA 221421
CSA 26CA80263367X
CLI, DIV 1, GRP A, B, C and D
CLII, DIV 1, GRP E, F and G; CLIII
Ex ia IIC T3-T4 Ga
Ex ib IIIC T135°C...T147°C Db
CLI, ZN 0, AEx ia IIC T3-T4 Ga
ZN 21, AEx ib IIIC T135°C...T147°C Db
T3: Ta = –40°C to +121°C
T4: Ta = –40°C to +80°C
T147°C: Ta = – 40°C to +121°C
T135°C: Ta = – 40°C to +80°C
Install per drawing INS10187
Refer to product manual MNX10127

1600 ft (488 m) Maximum Allowable Integral Cable Length
Approved Cabling: CB102, CB103*, CB111, CB190*, CB193*, CB206, CB296 (*Approved for Use in T4 Applications Only)
Requires one IS111-1B Intrinsic Safety Barrier

IECEx SIR 15.0060X
Ex ia IIC T3-T4 Ga
Ex ib IIIC T135°C ... T147°C Db
Ex ia I Ma
T3: Ta @ -40°C to +121°C
T4: Ta @ -40°C to +80°C
Mining Group I: Ta @-40°C to +121°C
T147°C: Ta @ -40°C to +121°C
T135°C: Ta @ -40°C to +80°C
Install per drawing INS10210
Refer to product manual MNX10134

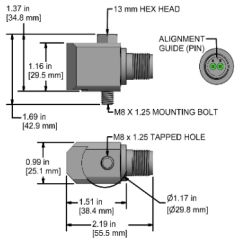
Sira 15ATEX2152X
Ex ia IIC T3 -T4 Ga
T3: Ta @ -40°C to +121°C
T4: Ta @ -40°C to +80°C
Ex ib IIIC T135°C ... T147°C Db
T147°C: Ta @ -40°C to +121°C
T135°C: Ta @ -40°C to +80°C
Ex ia I Ma
Ta @-40°C to +121°C
Install per drawing INS10211
Refer to product manual MNX10135

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

AC968-1A
2 Pin Connector

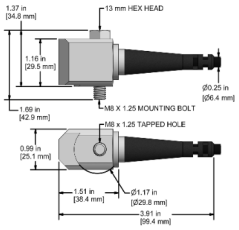
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



Stock Product

AC968-2C
CB193 Integral Cable

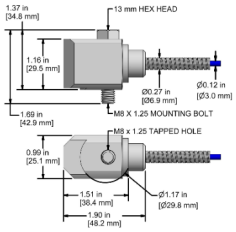
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

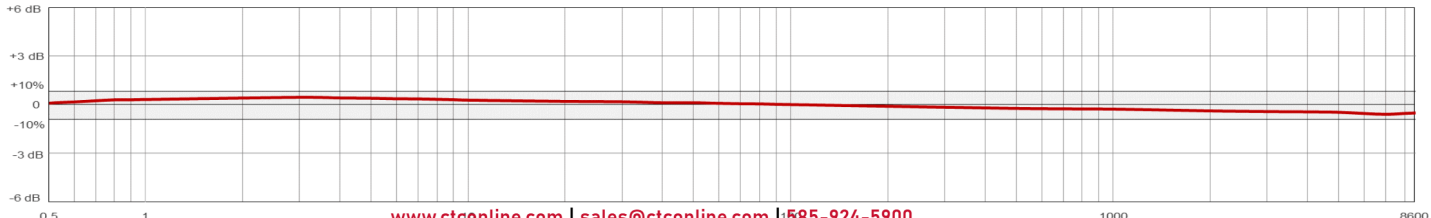
AC968-3C
CB296 Armored Integral Cable

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



Built To Order

Specifications	Standard	Metric
Part Number	AC968	
Sensitivity (±10%)	100 mV/g	
Frequency Response (±3dB)	30-480,000 CPM	0,5-8000 Hz
Dynamic Range	± 50 g, peak	
Transverse Sensitivity	≤5%	
Electrical		
Settling Time	<3 Seconds	
Voltage Source	18-28 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	6.5 µg/√Hz	
Spectral Noise @ 100 Hz	2 µg/√Hz	
Spectral Noise @ 1000 Hz	1.8 µg/√Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10^8 ohm	

Specifications	Standard	Metric
Environmental		
Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	Welded, Hermetic	
Submersible Depth	200 ft.	61 m
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	5.3 oz	150 grams
Case Material	316L Stainless Steel	
Mounting Thread	M8x1.25 Captive Bolt	
Connector (Non-Integral)	2 Pin MIL-C-5015	
Resonant Frequency	1,320,000 CPM	22000 Hz
Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Mounting Hardware Supplied		M8x1.25 Captive Bolt
Calibration Certificate	CA10	

Typical Frequency Response