

AC968-M12A Series

Nonincendive, Intrinsically Safe, CSA North America Class 1 Div 1, Class II Div 1, Class III and IECEx/ATEX Zone 0,1,2,21,22 Approved Accelerometer, Side Exit 4 Pin M12 Connector, M8x1.25 Captive Bolt, 100 mV/g, ±10%



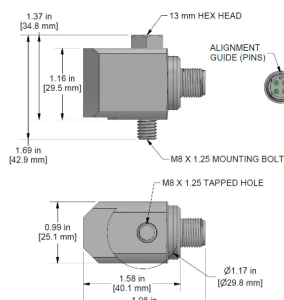
Regulatory Information

CSA 221421	T3: Ta @ -40°C to +121°C
CSA 26CA80263367X	T4: Ta @ -40°C to +80°C
CLII, DIV 1, GRP A, B, C and D	Mining Group I: Ta @ -40°C to +121°C
CLIII, DIV 1, GRP E, F and G; CLIII	T147°C: Ta @ -40°C to +121°C
Ex ia IIC T3-T4 Ga	T135°C: Ta @ -40°C to +80°C
Ex ib IIC T135°C...T147°C Db	Install per drawing INS10210
CLII, ZN 0, AEx ia IIC T3-T4 Ga	Refer to product manual
ZN 21, AEx ib IIC T135°C...T147°C Db	MNX10134
T3: Ta = -40°C to +121°C	
T4: Ta = -40°C to +80°C	
T147°C: Ta = -40°C to +121°C	Sira 15ATEX2152X
T135°C: Ta = -40°C to +80°C	Ex ia IIC T3 -T4 Ga
Install per drawing INS10187	T3: Ta @ -40°C to +121°C
Refer to product manual MNX10127	T4: Ta @ -40°C to +80°C
	Ex ib IIC T135°C ... T147°C Db
1600 ft (488 m) Maximum Allowable	T147°C: Ta @ -40°C to +121°C
Integral Cable Length	T135°C: Ta @ -40°C to +80°C
Approved Cabling: CB102, CB103*, CB111,	Ex ia I Ma
CB190*, CB193*, CB296 (*Approved for Use in T4	Ta @ -40°C to +121°C
Applications Only)	Install per drawing INS10211
Requires one IS111-1B Intrinsic Safety Barrier	Refer to product manual
	MNX10135
IECEx SIR 15.0060X	Connector Exit Entity Parameters:
Ex ia IIC T3-T4 Ga	Ui = 28 Vdc, li = 120 mA, Pi = 1W, Ci
Ex ib IIC T135°C ... T147°C Db	= 0nF, Li = 0µH
Ex ia I Ma	
	Integral Cable Entity Parameters
	Ui = 28 Vdc, li = 120 mA, Pi = 1W, Ci
	= 80.4nF, Li = 336µH

AC968-M12A

4 Pin Connector

Connector Pin	Polarity
1	(+) Signal/Power
2	(-) Common
3	Not Used
4	Not Used



Stock Product

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC968-M12A		Environmental		
Sensitivity (±10%)	100 mV/g		Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Frequency Response (±3dB)	30-480,000 CPM	0.5-8000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range	± 50 g, peak		Electromagnetic Sensitivity	CE	
Transverse Sensitivity	≤5%		Sealing	Welded, Hermetic	
Electrical			Submersible Depth	200 ft.	61 m
Settling Time	<3 Seconds		Physical		
Voltage Source	18-28 VDC		Sensing Element	PZT Ceramic	
Constant Current Excitation	2-10 mA		Sensing Structure	Shear Mode	
Spectral Noise @ 10 Hz	6.5 µg/√Hz		Weight	5.3 oz	150 grams
Spectral Noise @ 100 Hz	2 µg/√Hz		Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz	1.8 µg/√Hz		Mounting Thread	M8x1.25 Captive Bolt	
Output Impedance	<100 ohm		Connector (Non-Integral)	4 Pin M12	
Bias Output Voltage	10-14 VDC		Resonant Frequency	1,320,000 CPM	
Case Isolation	>10^8 ohm		Mounting Torque	2 to 5 ft. lbs.	
			Mounting Hardware Supplied	M8x1.25 Captive Bolt	
			Calibration Certificate	CA10	

Typical Frequency Response

