

AC966 Series

Nonincendive, Intrinsically Safe, IECEx/ATEX and KC Zone 0,1,2,21,22
Approved Accelerometer, Side Exit 2 Pin Connector, 100 mV/g, ±10%



Regulatory Information

20-KA4B0-126X
Ex ia IIC T3/T4
Operating Temperature Code: T4
Ambient Temperature Range: -40 °C TO 80 °C
Operating Temperature Code: T3
Ambient Temperature Range: 40 °C TO 121 °C
Control Drawing INS10050
Vmax/UI = 28 V Imax/Ii = 120 mA

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

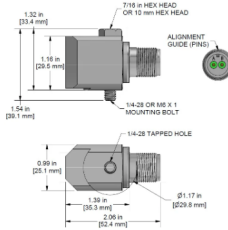
Sira 15ATEX2152X
Ex ia IIC T3 -T4 Ga
T3: Ta @ -40°C to +121°C
T4: Ta @ -40°C to +80°C
Ex ib IIIC T135°C ... T147°C Db
T147°C: Ta @ -40°C to +121°C
T135°C: Ta @ -40°C to +80°C
Ex ia I Ma
Ta @ -40°C to +121°C
Install per drawing INS10211
Refer to product manual MNX10135

Connector Exit Entity Parameters:
Ui = 28 Vdc, li = 120 mA, Pi = 1W, Ci =
0nF, Li = 0μH

Integral Cable Entity Parameters
Ui = 28 Vdc, li = 120 mA, Pi = 1W, Ci =
80.4nF, Li = 336μH

AC966-1A 2 Pin Connector

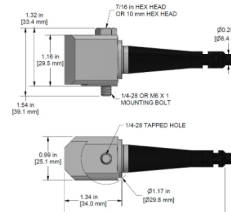
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



Stock Product

AC966-2C CB193 Integral Cable

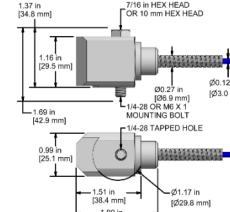
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

AC966-3C CB296 Armored Integral Cable

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



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC966	M/AC966	<u>Environmental</u>		
Sensitivity (±10%)		100 mV/g	Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Frequency Response (±3dB)	30-516,000 CPM	0.5-8600 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range		± 50 g, peak	Electromagnetic Sensitivity	CE	
Transverse Sensitivity		≤5%	Sealing	Welded, Hermetic	
<u>Electrical</u>			Submersible Depth	200 ft.	61 m
Settling Time	<3 Seconds		SIL Rating	SIL 2	
Voltage Source	18-28 VDC		<u>Physical</u>		
Constant Current Excitation	2-10 mA		Sensing Element	PZT Ceramic	
Spectral Noise @ 10 Hz	6.5 µg/√Hz		Sensing Structure	Shear Mode	
Spectral Noise @ 100 Hz	2 µg/√Hz		Weight	5.3 oz	150 grams
Spectral Noise @ 1000 Hz	1.8 µg/√Hz		Case Material	316L Stainless Steel	
Output Impedance	<100 ohm		Mounting Thread	1/4-28	
Bias Output Voltage	10-14 VDC		Connector (Non-Integral)	2 Pin MIL-C-5015	
Case Isolation	>10 ⁸ ohm		Resonant Frequency	1,320,000 CPM	22000 Hz
			Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
			Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
			Calibration Certificate	CA10	

Typical Frequency Response

