

AC972 Series

Intrinsically Safe, Modal/ODS, Triaxial Accelerometer, Connector/Cable, 10 mV/g



VIBRATION ANALYSIS HARDWARE



IECEx
IECEx SIR 15.0060X



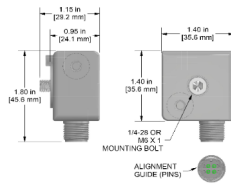
Regulatory Information

| | |
|------------------------------------------|----------------------------------|
| Ex ia IIC T3/T4 Ga | Control Drawing INS10012 |
| AEx ia IIC T3/T4 Ga | Ui = 28 Vdc li = 112 mA |
| CL I Groups A, B, C, D | Pi = 1W, Ci = 63.036nF, Li = 0μH |
| CL II Groups E, F, G; CL III | CSA 221421 |
| CL I, Zone 0 | Sira 15ATEX2152X |
| Operating Temperature Code: T4 | Ex ia IIC T3 Ga |
| Ambient Temperature Range = -40 to 80°C | |
| Operating Temperature Code: T3 | IECEx SIR 15.0060X |
| Ambient Temperature Range = -40 to 121°C | Ex ia IIC T3 Ga |

AC972-1D

4 Pin Connector

| Connector Pin | Polarity |
|---------------|------------------|
| A (Axis Y) | (+) Signal/Power |
| B (Axis X) | (+) Signal/Power |
| C (Axis Z) | (+) Signal/Power |
| D | (-) Common |

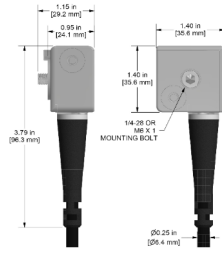


Stock Product

AC972-2D

CB192 Integral Cable

| Conductor | Polarity |
|----------------|------------------|
| Red (Axis Y) | (+) Signal/Power |
| Green (Axis X) | (+) Signal/Power |
| White (Axis Z) | (+) Signal/Power |
| Black | (-) Common |

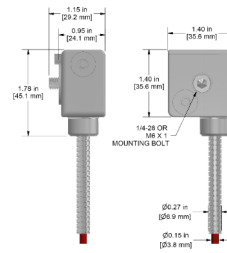


Built To Order

AC972-3D

CB218 Armored Integral Cable

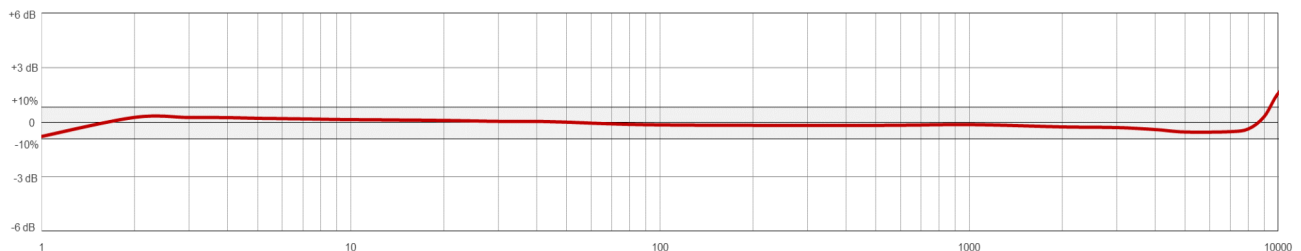
| Conductor | Polarity |
|----------------|------------------|
| Red (Axis Y) | (+) Signal/Power |
| Green (Axis X) | (+) Signal/Power |
| White (Axis Z) | (+) Signal/Power |
| Black | (-) Common |



Built To Order

| Specifications | Standard | Metric | Specifications | Standard | Metric |
|-----------------------------|-----------------|----------------------|-----------------------------|---------------------|----------------------------------------|
| Part Number | AC972 | M/AC972 | Environmental | | |
| Sensitivity (±10%) | | 10 mV/g | Temperature Range | -65 to 250°F | -54 to 121°C |
| Frequency Response (±3dB) | 60-600,000 CPM | 1.0-10000 Hz | Electromagnetic Sensitivity | | CE |
| Frequency Response (±10%) | 90-420,000 CPM | 1.5-7000 Hz | Sealing | | Welded, Hermetic Rated to IP68/IP69 |
| Frequency Response (±5%) | 180-360,000 CPM | 3.0-6000 Hz | Physical | | |
| Dynamic Range | | ± 500 g, peak | Sensing Element | | PZT Ceramic |
| Transverse Sensitivity | | <5% | Sensing Structure | | Shear Mode |
| Electrical | | | Weight | 7.1 oz | 200 grams |
| Settling Time | | <2.5 seconds | Case Material | | 316L Stainless Steel |
| Voltage Source (IEPE) | | 18-28 VDC | Mounting | | 1/4-28 |
| Constant Current Excitation | | 2-10 mA | Connector (Non-Integral) | | 4 Pin J Connector |
| Spectral Noise @ 10 Hz | | 27 μg/√Hz | Mounting Torque | 1 to 2 ft. lbs. | 1,4 to 2,7 Nm |
| Spectral Noise @ 100 Hz | | 6.5 μg/√Hz | Mounting Hardware | 1/4-28 Captive Bolt | M6x1 Captive Bolt |
| Spectral Noise @ 1000 Hz | | 2.5 μg/√Hz | Calibration Certificate | | CA10 |
| Output Impedance | | <100 ohm | | | |
| Bias Output Voltage | | 10-14 VDC | | | |
| Case Isolation | | >10 ⁹ ohm | | | |

Typical Frequency Response



Backed by our Unconditional Lifetime Warranty

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