

#### Applications

- Measurement of vibrations transmitted to the whole body inside buildings
- Verification, analysis and measurement of vibration in accordance with ISO 2631-2 and 2002/49/EC

#### Main features

- Triaxial IEPE accelerometer
- Sensitivity: 500 mV/g
- Low noise level
- Frequency range ( $\pm 10\%$ ):  
0.13 – 4800 Hz

The AC032 accelerometer is the perfect transducer for measuring whole body vibrations in buildings and structural vibrations produced by heating, ventilation, air conditioning machinery, traffic, presses, urban transports, etc. Its high sensitivity and low noise allows to measure vibrations of very low level (residual vibrations).

The AC032 is a triaxial piezoelectric accelerometer that allows the simultaneous measurement of the vibration in three axes. The most important feature for the evaluation of human exposure to different types of vibration, is its excellent low frequency response. The AC032 is designed with a piezo-electric crystal in shear mode, virtually eliminating base strain, temperature transient and other phenomena that occur at low frequencies. Being an active accelerometer requires a constant current source to power the internal circuitry, which allows low



impedance output.

The AC032 is made of stainless steel and is electrically isolated. The mounting of the accelerometer is easy both for short measurements and for permanent systems (internal mounting screw). The accelerometer includes the connection cable and it can be used with vibrometers which have IEPE powering (see technical characteristics).

### **Characteristics**

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• Output:	IEPE	
• Transducer:	Piezoelectric	
• Design of the accelerometer:	Shear	
• Sensitivity:	500 ± 5%	mV/g
• Dynamic acceleration range:	± 12	g
• Maximum shock acceleration:	2000	g
• Frequency range (f <sub>10%</sub> ) :	0.13 .. 4800	Hz
• Resonance frequency:	9	kHz
• Cross sensitivity:	< 5	%
• Intrinsic noise (0.5 .. 20 kHz):	< 26	µg
• Constant power feed current:	2 – 20	mA
• Polarisation output voltage:	12 – 14	V
• Output impedance:	< 100	Ω

### **Environmental Characteristics**

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• Operating range:	-30 to 90	°C
• Temperature sensitivity gradient:	0.0005	ms <sup>-2</sup> /K
• Degree of protection:	IP67	

### **Mechanical Characteristics**

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• Weight without cable:	365	g
• Housing material:	Stainless steel	
• Connector:	BINDER 768	
• Mounting:	M8 thread	

*The characteristics, technical specifications and accessories may vary without prior notice*