

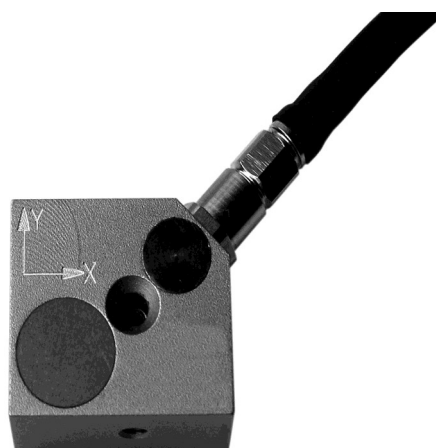
Applications

- Measurement of exposure of the workers to vibrations transmitted to the hand arm system
- Verification, analysis and measurement of vibration in accordance with ISO 5349 and 2002/44/EC

Main features

- Triaxial IEPE accelerometer
- Sensitivity: 10 mV/g
- Frequency range ($\pm 10\%$):
0.4 – 17000 Hz

The accelerometer **AC031** is the perfect transducer to measure the exposure of workers to vibrations transmitted to the hand-arm system. This triaxial accelerometer can measure simultaneously the vibration on the three axes.



The accelerometer is small to make easy the measurement process. The accelerometer has a central thread which allows the use of adapters (tool adapter and handle adapter) and a correctly position of its axes.

The **AC031** is made of aluminium. The mounting of the accelerometer is easy both for short measurements and for permanent measurements (with tool adapter and handle adapter). The **AC031** includes a cable with Binder 712 termination and can be used with vibrometers which have IEPE powering (see technical characteristics).

Since many hand tools do not have surfaces where the accelerometer can be screwed on or fixed, the **AC031** has mounting accessories for curved surfaces.

The **AA031** adapter for the **AC031** accelerometer is used to hold it between the hand and the tool's grip: lever, handle, etc.



AA031

The **AA131** adapter is used to fix the accelerometer to the tool with a cable tie.



AA131

Supplied accessories

- AA031** Handle adapter
- AA131** Tool adapter

Characteristics

• Output:	IEPE	
• Transducer:	Piezoelectric	
• Design of the accelerometer:	Shear	
• Sensitivity:	10 ± 5%	mV/g
• Dynamic acceleration range:	± 600	g
• Maximum shock acceleration:	8000	g
• Frequency range (f _{10%}):	0.4 .. 17000	Hz
• Resonance frequency:	42	kHz
• Cross sensitivity:	< 5	%
• Intrinsic noise (3 .. 50kHz):	< 3000	µg
• Constant power feed current:	2 – 20	mA
• Polarisation output voltage:	12 – 14	V
• Output impedance:	< 150	Ω

Environmental Characteristics

• Operating range:	-20 to 120	°C
• Temperature sensitivity gradient:	0.03	ms ⁻² /K
• Degree of protection:	IP60	

Mechanical Characteristics

• Weight without cable:	14	g
• Housing material:	Aluminium	
• Connector:	BINDER 712 (4 contacts)	
• Mounting:	M3 thread	

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