

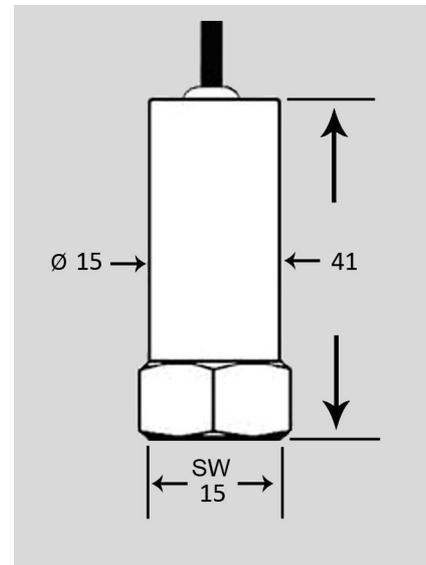
Sensing Vibrations

Accelerometers HMA 11xx / 18xx

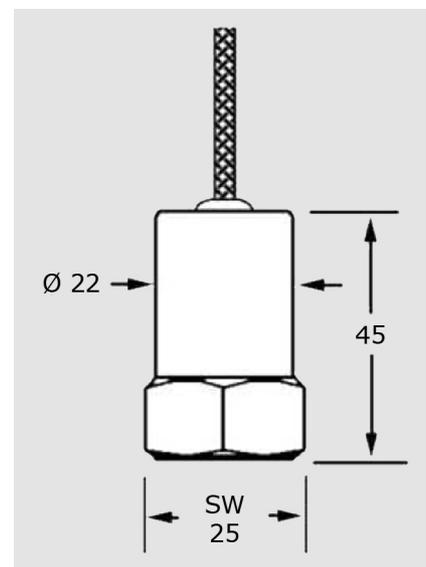


Advantages

- Rugged
- Compact design
- Low weight
- Standardised sensor interface



HMA 1140



HMA 1150

Applications

- Capturing mechanical vibrations at machines
- Measuring absolute vibrational acceleration
- Connecting to vibration measuring and monitoring devices

Options

- Length of connection cable
- Various connectors
- Versions for Ex-zones
- Magnetic mounting base
- Version for use in wet areas

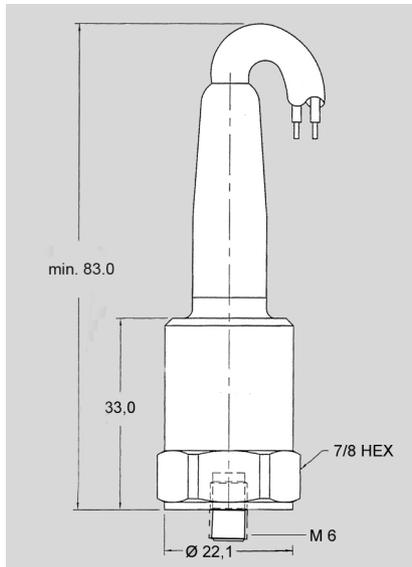
Description

The HMA 11xx / 18xx series vibration transducers are used to convert mechanical vibrations to analogue alternating electric signals. The magnitude, frequency and phase of these signals can then be evaluated depending on the application.

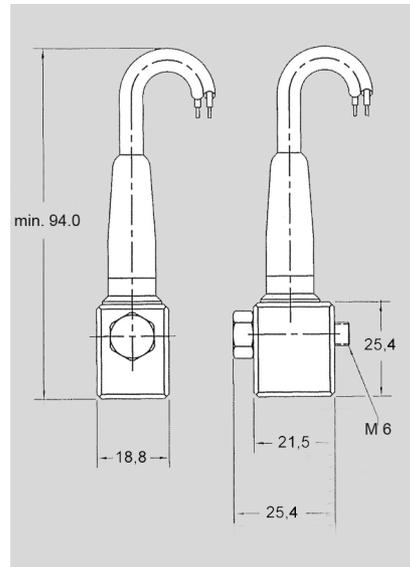
The sensors differ in sensitivity and configuration.

Their rugged design makes them suitable both for mobile and fixed installations for continuous vibration monitoring.

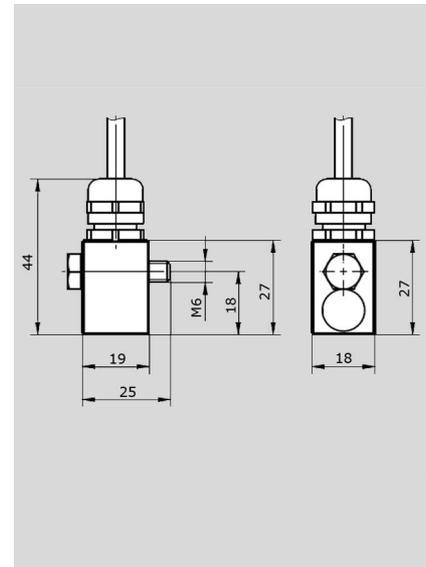
**All information without obligation,
subject to change without notice!**



HMA 1135



HMA 1835



HMA 1840

Technical data

Input	Vibration acceleration	
Physical principle of measurement	Piezo	
Type of reference system	Absolute vibration transducer	
Sensitivity	HMA 1140 / 1150 / 1840	100 mV/g
	HMA 1135 / 1835	500 mV/g
Natural frequency	HMA 1140 / 1150 / 1840	22 kHz
	HMA 1135 / 1835	15 kHz
Operating frequency range	3 dB	1 to 8,000 Hz
Measuring range	HMA 1140 / 1150 / 1840	+/- 50 g or +/- 500 m/sec. ²
	HMA 1135 / 1835	+/- 10 g or +/- 100 m/sec. ²
Orientation	any spatial orientation	
Measuring direction	HMA 1140 / 1135 / 1150	in the direction of cylinder axis
	HMA 1840 / 1835	in the direction of mounting screw
Directional sensitivity	better than 1:20	
Power supply	2 to 8 mA	
Bias Voltage	10 bis 12 VDC	
Internal resistance	HMA 1140 / 1150	< 200 Ω
	HMA 1135 / 1840 / 1835	< 150 Ω
Operating temperature	-40 to +100°C	
Protective rating	HMA 1140 / 1150	IP 65
	HMA 1135 / 1840 / 1835	IP 68
Acceleration, max.	5.000 g	
Case material	Stainless steel, non-magnetic	
Mounting method	M6 screw	
Weight (w/o cable)	HMA 1140	approx. 30 g
	HMA 1150	approx. 110 g
	HMA 1135	approx. 80 g
	HMA 1840 / 1835	approx. 80 g
Connecting cable	1.5 m or 5 m non removable cable	Free end or various connectors