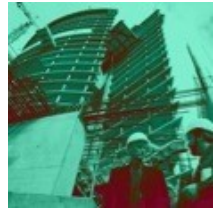




PRODUCT INFORMATION

PCHcompact VIBRATION SENSOR PCH 1106



The vibration sensor PCH 1106 can be used on many different machines in a production. It is suitable for monitoring blowers, ventilators, pumps, decanters, separators, compressors and mills. The vibration sensor continuously monitors the machine vibration level and gives a DC output in relation to this. When connected to a PLC or a CTS system the operator will gain an active protection of the machine, which limits the damages to the machine and consequently will reduce the maintenance costs .

Bearing damages

A bearing damage often occurs due to undetected unbalance or misalignment of a machine. Hence the machine runs for a very long time period with a much too high vibration level. This is the most common reason for serious machine crashes and down time.

Avoid unscheduled production stops

Deciding not to invest in vibration monitoring simply due to price can be a very unwise decision. Often will this leads to unexpected expenses to machine repairs, not to mentioned the further economic loss due to the production stop.

Price attractive alternative

For users who want a simple protection against damaging vibrations. PCH 1106 is very **price attractive** and can easily be connected to a PLC or CTS system.

Functionality

The vibration sensor consists of a vibration sensor as well as output electronics, which is embedded in a stainless steel housing. The PCH 1106 monitors mechanical vibrations according to **DIN/ISO 10816**. PCH

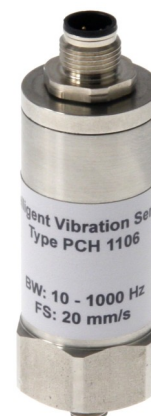
1106 can be configured to measure velocity (**mm/s**), acceleration (**m/s²**) or displacement (**mm**) and measures in true RMS.

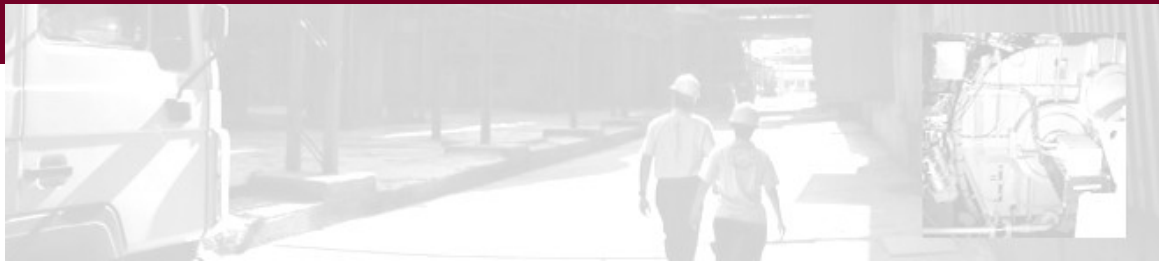
The vibration sensor can be connected to a PLC or a machine monitoring system. When connected the measured vibration level is delivered as a **4-20 mA** or **1-6 V DC signal** proportional to Full Scale to the PLC.

Alarms for individual vibration levels can be programmed in the PLC or CTS system, where also an preventive action can be initiated.

Connecting the vibration sensor to the PLC or CTS system only requires a single cable with 4 wires incl +24 V DC power supply. The measuring and frequency range is preset from PCH, so the vibration sensor is ready for use at delivery.

PCH 1106 can also be used for periodic measurements by connecting a portable meter, like PCH 1033, which displays the actual vibration level from the permanently mounted PCH 1106.





Technical data

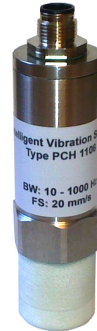
PCHcompact VIBRATION SENSOR PCH 1106



Vibration sensor PCH 1106



Vibration meter PCH 1033



CHA 1012 HT adaptor

Type

Sensor type: Capacitive accelerometer
Measuring parameter: Velocity (mm/s), Acceleration (m/s²) or Displacement (mm) Peak-Peak

Measuring range: 0,1-10 mm/s, 0,1-20 mm/s or to be agreed upon

Measuring accuracy: ± 5 %

Max. measuring range: ± 18 g

Shock: 1000 g

Frequency range: 10 Hz - 1000 Hz, 18 dB/oct (-3 dB, -60 dB/dec) or to be agreed upon

Detector: True RMS Detektor

Output

Output signal: 4-20 mA and 1-6 V DC relative to 0-100 % of measuring range

Connection

Grounding: Ground (0 V) to chassis

Power supply: +24 V DC, ± 10 %, max. 50 mA DC

Operating temperature: -20 °C to +70 °C

Housing (IP65): Stainless steel type 1.4305

Weight: Approx 110 g

Connector: M 12

Cable (option): 1.5, 3, 5, 10 m

Mounting: Threaded stud, M 8 mm

Ordering

At order please inform requested measuring range, frequency range and as an option cable length.

Options

PCH 1033 Vibration meter for displaying in mm/s
 CHA 1012 High Temperatur adaptor, 90 °C radiation
 CHL 1073 Cable with M 12 connector, L=1500 mm
 CHL 1074 Cable with M 12 connector, L=3000 mm
 CHL 1075 Cable with M 12 connector, L=5000 mm
 CHL 1088 Cable w. M12 90° connector, L = 5000 mm
 CHL 1077 Cable with M 12 connector, L=10000 mm