KIMA Echtzeitsysteme

V Sens
product information

Vibration velocity sensor system with current loop 4 .. 20 mA
for monitoring bearings and plants

Highlights:

- Robust industrial sensor for **vibration velocity** (VDI 2056)
- Vibration velocity directly as **4 ... 20 mA-signal no additional electronics**
- Plugs directly to any PLC, SCADA or limit switch
- **Diagnostic output for analysing frequency (optional)**
- Power supply 24 Volts
- **Automatic selftest including sensing element, without dismounting!**
- Protection class (IP 67)

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KIMA Gesellschaft für Echtzeitsyteme und Prozessautomation mbH

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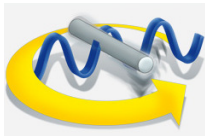

Applications:
Monitoring of rotating machines and bearings e.g.:
- Fans
- Turbo-engines
- Mills
- Kilns
- Classifiers
- Cyclones
- Drives

Operating principle:
Vibration acceleration is measured by means of an innovative micromechanical sensing element.

According to ISO 2372 / VDI2056 / BS 4675 (part 1) V-Sens10 computes a signal, which gives the absolute value of **vibration velocity**.

Vibration velocity and its absolute value are computed by high precision analog computing electronics. The mean value over time is fed out by a current loop 4 .. 20 mA.

Power supply is 24 volts, which is compatible with usual industrial control systems. There is no need for any additional electronics. Just fit the sensor system to your machine, connect power supply and output to your PLC and you're done.

V-Sens 10 features a selftesting function, which can be initiated by a digital signal from your PLC. Testing is done right from the sensing element. So you are sure, that sensor and electronics are working properly. There is no need for any manual intervention.

Technical data:
Measurement:
Vibration velocity
0 - 10 mm / sec -> 4 .. 20 mA
Special: 0 - 20 mm / sec -> 4 .. 20 mA

optional:
acceleration ± 5 g -> 200 mV / g
others on request

Measurement uncertainty:
10 % of actual level
Direction of measurement:
Radial (V-Sens 10 Q) or
Axial (V-Sens 10 L)
(according to housing)

Frequencies:
Standard:
10 – 1000 Hz
(acc. to VDI 2056 /ISO 2372)
Special versions:
(1 – 100 Hz; 60 – 6000 rpm)
others on request

Power supply:
24 V ± 10 % , 50 mA

Output:
Current loop 4 - 20 mA,
max burden 500 Ohms,
short circuit protected

Plugs:
High quality sensor plug

Housing:
Stainless steel, screw M12

Protection class:
IP 67

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