

Diagnostic Monitoring with our u-sense VIB24 vibration sensor

From RMS to dynamic data - all in one sensor

Our vibration sensors offer a comprehensive solution for monitoring and analyzing machine conditions. From simple, efficient monitoring of RMS vibration parameters to dynamic data for machine diagnostics. Everything for precise analysis, continuous monitoring and predictive maintenance.

Rely on innovative and future-proof technologies for the maximum performance of your machines.



Main functions

- **RMS vibration characteristics:** Variably adjustable bandpasses for precise measurements of vibration velocity and vibration acceleration. **1**
- **Rolling bearing condition:** Use of the Crest value to assess the bearing condition. **2**
- **Versatile connectivity:** Analog and digital outputs for flexible application options - can also be used as a hybrid.
- **Integrated switching outputs:** Simple vibration monitoring and automated alarms.
- **Dynamic data:** Recording of up to 320,000 samples with up to 64 KHz sample rate for detailed analyses such as FFTs. **3**
- **BLOB functionality:** Acyclical transmission of dynamic data via IO-Link during cyclical IO-Link operation.

Advantages

- **Multifunctionality:** Reduces the need for additional diagnostic and monitoring devices.
- **Easy installation:** Quick commissioning and parameterization.
- **Future-proof:** Integration into existing machine control systems and transfer of smart data to higher-level systems for predictive maintenance.

Frequency ranges

vRMS, aRMS

acc. to DIN ISO 10816

10 ... 1.000 Hz	1 ... 1.000 Hz
10 ... 500 Hz	1 ... 500 Hz
10 ... 100 Hz	1 ... 100 Hz
10 ... 50 Hz	1 ... 50 Hz

Bandpass parameterizable

1

**aPeak, Crest-factor,
bearing condition**

acc. to DIN ISO 13373-3

10 ... 10.000 Hz

2

Dynamic Data

Filter @ Sample Rate

0 ... 12.000 Hz	@ 64 kHz
0 ... 6.000 Hz	@ 32 kHz
0 ... 3.000 Hz	@ 16 kHz
0 ... 1.500 Hz	@ 8 kHz
0 ... 750 Hz	@ 4 kHz
0 ... 300 Hz	@ 2 kHz

3

Technical data

Type	VIB24
Vibration characteristics	Vibration velocity (mm/s, RMS), vibration acceleration (g, RMS),
Cyclical transmission of measured values via IO-Link	Vibration acceleration (g, peak), temperature (°C), Crest value (a, peak / a, RMS), Bearing condition characteristic value (weighted Crest value)
Dynamic Data	Recording of raw data: Up to 320,000 data values with up to 64KHz sample rate
Transmission Rate	COM3 = 230,4 kBit/s
Device and diagnostic data	Acyclical retrieval
Interfaces	Output 1: IO-Link or switching output Output 2: Analog or switching output
Protection class	IP66/67

Vibration sensors to suit your requirements

Mechanical- & electronic sensors | Measuring and Monitoring

Download datasheet VIB24

US67-VIB24C-IOL-0UNI0002A00000 | Wired sensors

