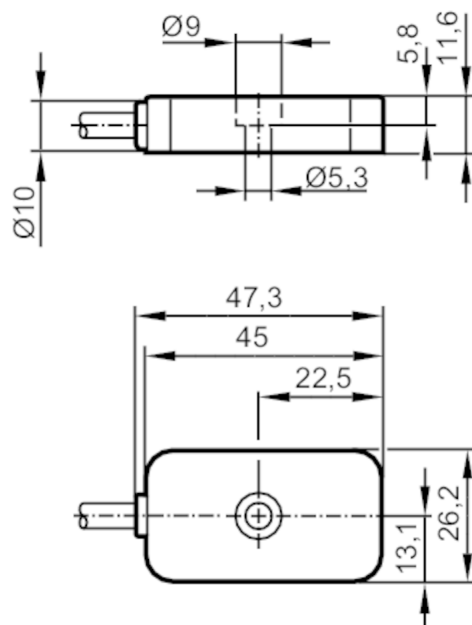


Acceleration sensor

VIBRATION SENSOR



Product characteristics

| | | |
|------------------------------|------|------------|
| Measuring range of vibration | [g] | -40...40 |
| Frequency range | [Hz] | 0...4500 |
| Measuring principle | | capacitive |

Application

| | |
|-----------------|------------------------|
| Special feature | Drag chain suitability |
|-----------------|------------------------|

Electrical data

| | | |
|-----------------------------|---------------|--------------------------------------|
| Bias voltage DC | [V] | 13...16 |
| Operating current | [mA] | 4...6 |
| Min. insulation resistance | [M Ω] | 100; (500 V DC) |
| Protection class | | III |
| Reverse polarity protection | | yes |
| Sensor type | | microelectromechanical system (MEMS) |

Measuring/setting range

| | | |
|------------------------------|------|------------|
| Measuring range of vibration | [g] | -40...40 |
| Frequency range | [Hz] | 0...4500 |
| Measuring principle | | capacitive |
| Max. transverse sensitivity | [%] | 5 |
| Number of measurement axes | | 3 |

Accuracy / deviations

| | | |
|-----------------------|--|--|
| Accuracy | | 0...3 kHz: +/- 10 % 3...4.5 kHz: 3 dB |
| Measuring sensitivity | | 100 mV/g |
| Linearity deviation | | 2 |



Acceleration sensor

VIBRATION SENSOR

[% of the span]

Operating conditions

| | | |
|---------------------|------|----------------------|
| Ambient temperature | [°C] | -30...85 |
| Storage temperature | [°C] | -30...100 |
| Protection | | IP 67; IP 68; IP 69K |

Tests / approvals

| | | |
|----------------------|-------------------|-------------------------|
| EMC | DIN EN 61000-6-2 | |
| | DIN EN 61000-6-3 | |
| Shock resistance | DIN EN 60068-2-27 | 50 g 11 ms |
| Vibration resistance | DIN EN 60068-2-6 | 20 g / 10...3000 Hz |
| MTTF | [years] | 529 |
| UL approval | Ta | 70 °C |
| | Enclosure type | Type 1 |
| | power supply | Limited Voltage/Current |
| | UL Approval no. | L005 |
| | File number UL | E251902 |

Mechanical data

| | | |
|------------------------|---------------------------------------|---|
| Weight | [g] | 105.6 |
| Type of mounting | | mounting screw |
| Dimensions | [mm] | 26.2 x 47.3 x 11.6 |
| Materials | | housing: stainless steel (1.4404 / 444) |
| Tightening torque | [Nm] | 3.5 |
| Drag chain suitability | | yes |
| Drag chain suitability | bending radius for flexible use | min. 10 x cable diameter |
| | bending radius for fixed installation | min. 4 x cable diameter |

Accessories

| | |
|----------------|--------------------------------|
| Items supplied | socket head screw: 1 x M5 x 12 |
|----------------|--------------------------------|

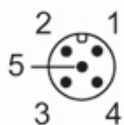
Remarks

| | |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

Electrical connection

Cable: 0.3 m, PUR, Ø 4.9 mm; Maximum cable length: 250 m; screen (connected to the housing); 5 x 0.14 mm²

Electrical connection - M12 connector



- 1 brown = IEPE X
- 2 white = IEPE Z
- 3 blue = GND
- 4 black = self-test
- 5 grey = IEPE Y