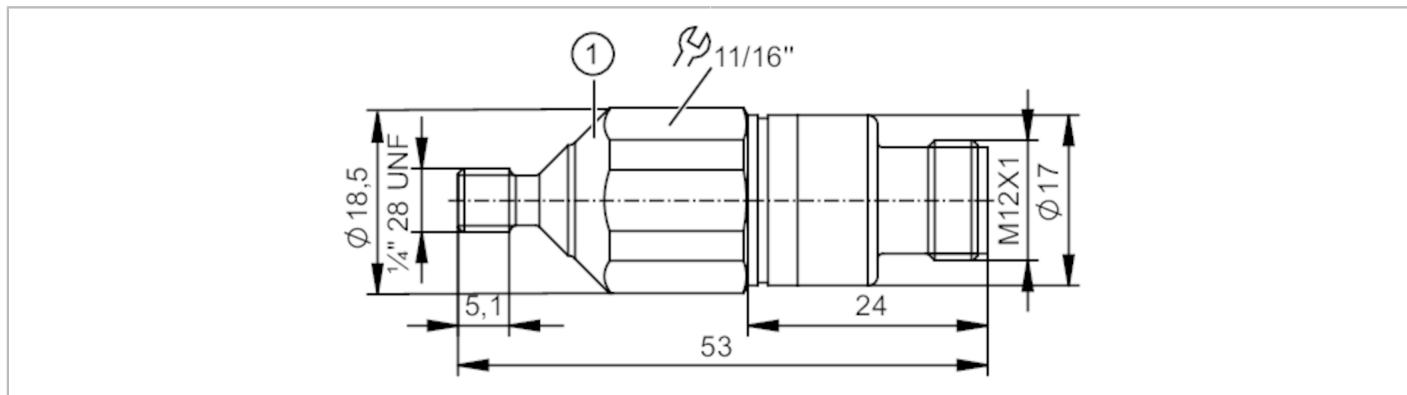


VSA007

Accelerometer

VIBRATION SENSOR



Product characteristics

| | | |
|------------------------------|------|------------|
| Measuring range of vibration | [g] | -25...25 |
| Frequency range | [Hz] | 1...6000 |
| Measuring principle | | capacitive |

Application

| | |
|-------------|---|
| Design | for connection to external diagnostic electronics VSE |
| Application | vibration detection |

Electrical data

| | | |
|-----------------------------|------|--------------------------------------|
| Operating voltage | [V] | 7.2...10.8 DC |
| Current consumption | [mA] | < 15 |
| Min. insulation resistance | [MΩ] | 100; (500 V DC) |
| Protection class | | III |
| Reverse polarity protection | | yes |
| Type of sensor | | Microelectromechanical system (MEMS) |

Outputs

| | | |
|-----------------------|------|--------|
| Analog current output | [mA] | 0...10 |
| Max. load | [Ω] | 300 |

Measuring/setting range

| | | |
|------------------------------|--------|------------|
| Measuring range of vibration | [g] | -25...25 |
| Frequency range | [Hz] | 1...6000 |
| Measuring principle | | capacitive |
| Sensitivity | [µA/g] | 142 |
| Number of measurement axes | | 1 |

Accuracy / deviations

| | | |
|---------------------|--|-------|
| Linearity deviation | | 0,2 % |
|---------------------|--|-------|

Operating conditions

| | | |
|-----------------------------|------|----------------------|
| Ambient temperature | [°C] | -30...125 |
| Note on ambient temperature | | cULus: < 85 °C |
| Storage temperature | [°C] | -30...125 |
| Protection | | IP 67; IP 68; IP 69K |

VSA007



Accelerometer

VIBRATION SENSOR

| Tests / approvals | | |
|--|-------------------|--|
| EMC | EN 61000-6-2 | |
| | EN 61000-6-3 | |
| Shock resistance | DIN EN 60068-2-27 | 50 g 11 ms 500 g 1 ms |
| Vibration resistance | DIN EN 60068-2-6 | 20 g / 10 ... 2000 Hz |
| UL approval | Ta | < 85 °C |
| | Enclosure type | Type 1 |
| | voltage supply | Limited Voltage/Current |
| | File number UL | E251902 |
| Mechanical data | | |
| Weight | [g] | 49.9 |
| Type of mounting | | 1/4"-28 UNF |
| Material | | housing: stainless steel (1.4404 / 316L) |
| Tightening torque | [Nm] | 8 |
| Mechanische Überlastfestigkeit | [g] | 500 |
| Accessories | | |
| Items supplied | | washer, conical |
| Remarks | | |
| Pack quantity | | 1 pcs. |
| Electrical connection | | |
| Connector: 1 x M12; coding: A; Maximum cable length: 250 m | | |
| | | |
| 1 | | L+ (+9 V) |
| 2 | | I out |
| 3 | | GND |
| 4 | | Test |