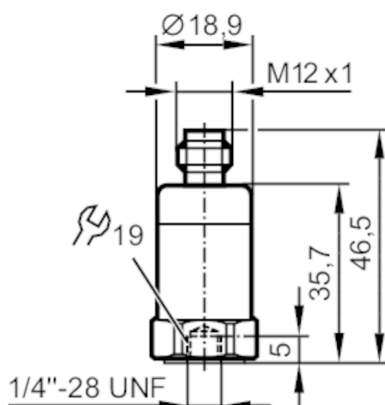




## Acceleration sensor

VIBRATION SENSOR



## Product characteristics

|                              |      |                                                |
|------------------------------|------|------------------------------------------------|
| Measuring range of vibration | [g]  | -80...80; (-50...50 g when connected to a VSE) |
| Frequency range              | [Hz] | 2...10000                                      |
| Measuring principle          |      | piezoelectric                                  |
| Communication interface      |      | IEPE                                           |

## Application

|        |  |                                                       |
|--------|--|-------------------------------------------------------|
| Design |  | for connection to external diagnostic electronics VSE |
|--------|--|-------------------------------------------------------|

## Electrical data

|                             |      |                 |
|-----------------------------|------|-----------------|
| Bias voltage DC             | [V]  | 10...12         |
| Current consumption         | [mA] | 0.5...8         |
| Min. insulation resistance  | [MΩ] | 100; (500 V DC) |
| Reverse polarity protection |      | yes             |

## Measuring/setting range

|                              |      |                                                |
|------------------------------|------|------------------------------------------------|
| Measuring range of vibration | [g]  | -80...80; (-50...50 g when connected to a VSE) |
| Frequency range              | [Hz] | 2...10000                                      |
| Measuring principle          |      | piezoelectric                                  |
| Noise density                | [mg] | 0.1                                            |
| Max. transverse sensitivity  | [%]  | 5                                              |
| Minimum measuring time       | [s]  | 2                                              |
| Number of measurement axes   |      | 1                                              |

## Accuracy / deviations

|                       |  |          |
|-----------------------|--|----------|
| Accuracy              |  | ± 5 %    |
| Measuring sensitivity |  | 100 mV/g |

## Interfaces

|                         |  |      |
|-------------------------|--|------|
| Communication interface |  | IEPE |
|-------------------------|--|------|

## Operating conditions

|                     |      |           |
|---------------------|------|-----------|
| Ambient temperature | [°C] | -55...125 |
| Storage temperature | [°C] | -55...125 |

# VSP001



## Acceleration sensor

VIBRATION SENSOR

|            |       |
|------------|-------|
| Protection | IP 67 |
|------------|-------|

### Tests / approvals

|                  |            |        |
|------------------|------------|--------|
| EMC              | EN 61326-1 | : 2013 |
| Shock resistance |            | 5000 g |
| MTTF [years]     |            | 1142   |

### Mechanical data

|                        |                          |
|------------------------|--------------------------|
| Weight [g]             | 73.5                     |
| Type of mounting       | set screw                |
| Materials              | housing: stainless steel |
| Tightening torque [Nm] | 8                        |

### Accessories

|                |            |
|----------------|------------|
| Items supplied | set screws |
|----------------|------------|

### Remarks

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

### Electrical connection

Connector: 1 x M12; coding: A; Maximum cable length: 1000 m



|   |          |
|---|----------|
| 1 | not used |
| 2 | IEPE +   |
| 3 | not used |
| 4 | IEPE -   |