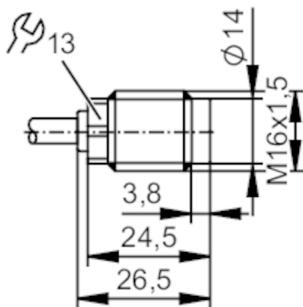


# VSA006

## Accelerometer

VIBRATION SENSOR



### Product characteristics

Measuring range of vibration [g]	-25...25
Frequency range [Hz]	1...10000
Measuring principle	capacitive

### Application

System	screened cable; Drag chain suitability
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 [ $M\Omega$ ]	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 [ $\Omega$ ]	300

### Measuring/setting range

Measuring range of vibration [g]	-25...25
Frequency range [Hz]	1...10000
Measuring principle	capacitive
Sensitivity [ $\mu\text{A/g}$ ]	142
Number of measurement axes	1

### Accuracy / deviations

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

### Operating conditions

Ambient temperature [ $^{\circ}\text{C}$ ]	-30...85
Note on ambient temperature	cULus: < 80 °C
Storage temperature [ $^{\circ}\text{C}$ ]	-30...85

# VSA006



## Accelerometer

VIBRATION SENSOR

Protection

IP 67

### Tests / approvals

EMC	EN IEC 61000-6-2 2019	
	EN 61000-6-3	
Shock resistance	DIN EN 60068-2-27	50 g 11 ms
Vibration resistance	DIN EN 60068-2-20	20 g / 10 ... 2000 Hz
MTTF [years]		2642

### Mechanical data

Weight [g]		257.5
Type of mounting		M16 x 1,5
Material		housing: stainless steel (1.4404 / 316L)
Tightening torque [Nm]		8
Mechanische Überlastfestigkeit [g]		500
Drag chain suitability		yes
Drag chain suitability	Bending radius for fixed installation	: min. 4 x cable diameter
	Bending radius for flexible applications	: min. 15 x cable diameter

### Remarks

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

### Electrical connection

Cable: 6 m, PUR, Ø 5 mm, screened; Maximum cable length: 250 m; drain wire applied to the housing; 4 x 0.25 mm<sup>2</sup>

blue	GND
brown	L+
black	test
white	OUT
screen	drain wire