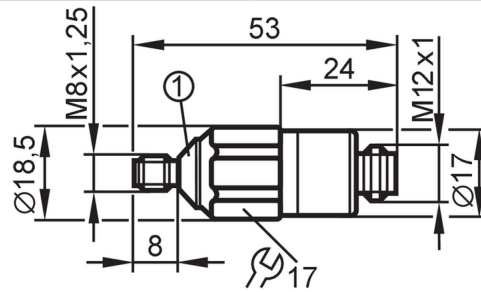


VSA001



Accelerometer

VIBRATION SENSOR



1 conical angle = 90°



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 %
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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

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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
MTTF [years]		1701

Mechanical data		
Weight [g]		50
Housing		tubular
Type of mounting		M8 x 1,25
Dimensions [mm]		Ø 17 / L = 53
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; Contacts: 4; Maximum cable length: 250 m	
	

1	L+ (+9 V)
2	I out
3	GND
4	Test