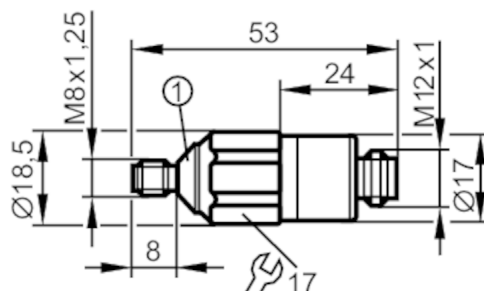


VSA101



Acceleration sensor

VIBRATION SENSOR



1 conical angle = 90°



Product characteristics

Measuring range of vibration [g]	-3.3...3.3
Frequency range [Hz]	0...1000
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; (cULus: 9 V DC)
Current consumption [mA]	< 15
Min. insulation resistance [MΩ]	100; (500V DC)
Protection class	III
Reverse polarity protection	yes
Sensor type	microelectromechanical system (MEMS)

Outputs

Analogue current output [mA]	0...10
Max. load [Ω]	300

Measuring/setting range

Measuring range of vibration [g]	-3.3...3.3
Frequency range [Hz]	0...1000
Measuring principle	capacitive
Sensitivity [μA/g]	1076
Number of measurement axes	1
Number of measurement axes	1

Accuracy / deviations

Linearity deviation	0,2 %
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Acceleration sensor

VIBRATION SENSOR

Operating conditions	
Ambient temperature [°C]	-30...125
Note on ambient temperature	UL application: < 70 °C
Storage temperature [°C]	-30...125
Protection	IP 67; IP 68; IP 69K

Tests / approvals		
EMC	EN 61000-6-2	
	EN 61000-6-3	
	EN 50178	
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]	2498	

Mechanical data	
Weight [g]	49
Type of mounting	M8 x 1,25
Materials	housing: stainless steel (1.4404 / 316L)
Tightening torque [Nm]	8
Mechanische Überlastfestigkeit [g]	500

Accessories	
Accessories (optional)	washers: 5, conical, E30115

Remarks	
Pack quantity	1 pcs.

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

Connector: 1 x M12; Maximum cable length: 250 m

