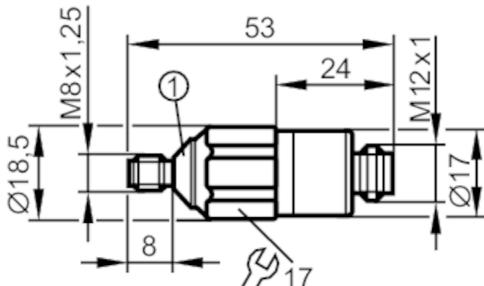


VNA001



Vibration sensor

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 vibration sensor VNB211
Application	vibration detection

Electrical data

Operating voltage [V]	7.2...30 DC
Current consumption [mA]	< 16
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 [Ω]	300

Measuring/setting range

Measuring range of vibration [g]	-25...25
Frequency range [Hz]	1...6000
Measuring principle	capacitive
Sensitivity [$\mu\text{A/g}$]	142
Number of measurement axes	1

Accuracy / deviations

Linearity deviation	0,2 %
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Operating conditions

Ambient temperature [$^{\circ}\text{C}$]	-30...125
Note on ambient temperature	cULus: < 85 °C
Storage temperature [$^{\circ}\text{C}$]	-30...125
Protection	IP 67; IP 68; IP 69K

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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]		1818
Mechanical data		
Weight [g]		49
Type of mounting		M8 x 1,25
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+ (7.2...30 V DC)	
2	I out	
3	GND	
4	Test	