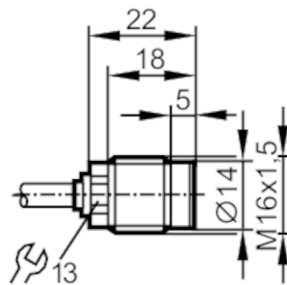


VSA002



Acceleration sensor

VIBRATION SENSOR



Product characteristics

Measuring range of vibration [g]	-25...25
Frequency range [Hz]	0...10000
Measuring principle	capacitive

Application

Special feature	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; (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]	-25...25
Frequency range [Hz]	0...10000
Measuring principle	capacitive
Sensitivity [μA/g]	142
Number of measurement axes	1

Accuracy / deviations

Linearity deviation	0,2 %
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VSA002



Acceleration sensor

VIBRATION SENSOR

Operating conditions	
Ambient temperature [°C]	-30...85
Note on ambient temperature	cULus: < 80 °C
Storage temperature [°C]	-30...85
Protection	IP 67

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]	2642	

Mechanical data		
Weight [g]	87	
Type of mounting	M16 x 1,5	
Materials	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 use	: min. 15 x cable diameter

Remarks	
Pack quantity	1 pcs.

Electrical connection	
Cable: 0.8 m, PUR, Ø 5 mm, shielded; Maximum cable length: 250 m; screen (connected to the housing)	
1	L+ (+9 V)
2	I out
3	GND
4	Test

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