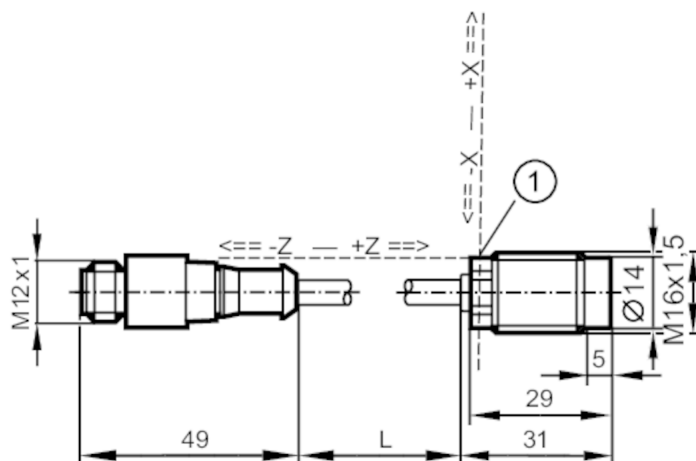


VSM102



Accelerometer

VIBRATION SENSOR



1 marking for X axis



Product characteristics

Measuring range of vibration	[g]	-40...40
Frequency range	[Hz]	1...4500
Measuring principle		capacitive

Application

System	Drag chain suitability
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Electrical data

Bias voltage DC	[V]	13...16
Operating current	[mA]	4...10
Min. insulation resistance	[MΩ]	100; (500 V DC)
Protection class		III
Reverse polarity protection		yes
Type of sensor		Microelectromechanical system (MEMS)

Measuring/setting range

Measuring range of vibration	[g]	-40...40
Frequency range	[Hz]	1...4500
Measuring principle		capacitive
Max. transverse sensitivity	[%]	5
Number of measurement axes		2

Accuracy / deviations

Measuring sensitivity		100 mV/g
Linearity deviation	[% of the span]	2

Operating conditions

Ambient temperature	[°C]	-30...85
Storage temperature	[°C]	-30...85

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Accelerometer

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Protection	IP 67
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Tests / approvals

EMC	EN IEC 61000-6-2	
	EN IEC 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]		1233
UL approval	Ta	< 75 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	File number UL	E251902

Mechanical data

Weight [g]	79.7	
Type of mounting	M16 x 1,5	
Material	housing: stainless steel (1.4404 / 316L)	
Tightening torque [Nm]	8	
Drag chain suitability	yes	
Drag chain suitability	Bending radius for flexible applications	min. 10 x cable diameter
	Bending radius for fixed installation	min. 4 x cable diameter

Remarks

Pack quantity	1 pcs.
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Electrical connection

Cable: 0.6 m, PUR, Ø 4.9 mm; 4 x 0.14 mm²

Connector: 1 x M12; coding: A



- 1 IEPE X
- 2 IEPE Z
- 3 GND
- 4 Test