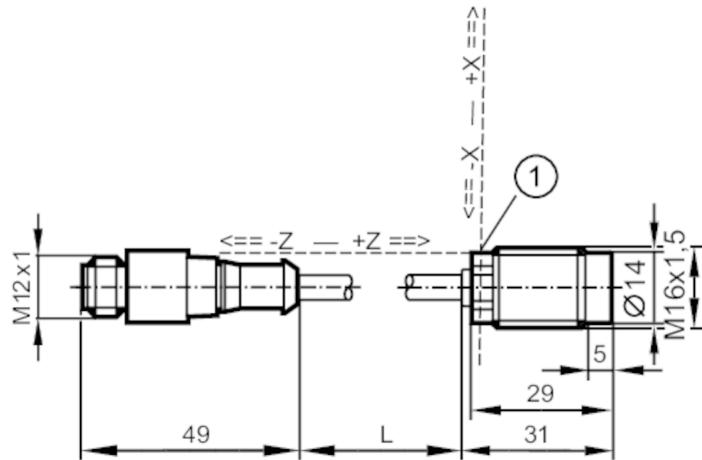


VSM102



Acceleration sensor

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

Special feature	Drag chain suitability
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Electrical data

Bias voltage DC [V]	13...16
Operating current [mA]	4...10
Min. insulation resistance [$M\Omega$]	100; (500 V DC)
Protection class	III
Reverse polarity protection	yes
Sensor type	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

VSM102



Acceleration sensor

VIBRATION SENSOR

Protection

IP 67

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
	power supply	Limited Voltage/Current
	File number UL	E251902

Mechanical data

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

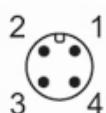
Remarks

Pack quantity 1 pcs.

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