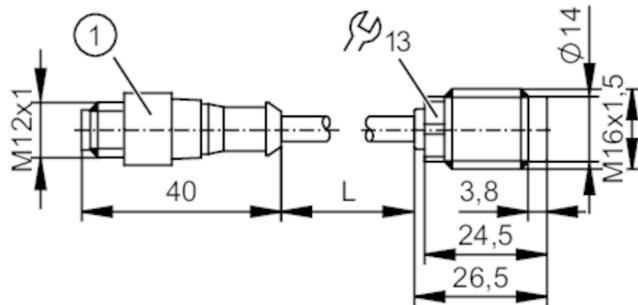


VSA002



Acceleration sensor

VIBRATION SENSOR



1 illustration (example)
L 760 mm



Product characteristics

Measuring range of vibration [g]	-25...25
Frequency range [Hz]	1...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
Current consumption [mA]	< 15
Min. insulation resistance [MΩ]	100; (500 V 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]	1...10000
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 [°C]	-30...85
Note on ambient temperature	cULus: < 80 °C

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Storage temperature	[°C]	-30...85
Protection		IP 67

Tests / approvals

EMC	EN IEC 61000-6-2 2019
	EN 61000-6-3
Shock resistance	DIN EN 60068-2-27
Vibration resistance	DIN EN 60068-2-20
MTTF [years]	2642

Mechanical data

Weight	[g]	87.5
Type of mounting		M16 x 1,5
Materials		housing: stainless steel (316L/1.4404)
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.
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Electrical connection

Cable: 0.76 m, PUR, Ø 5 mm, shielded; Maximum cable length: 250 m; screen (connected to the housing)

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



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