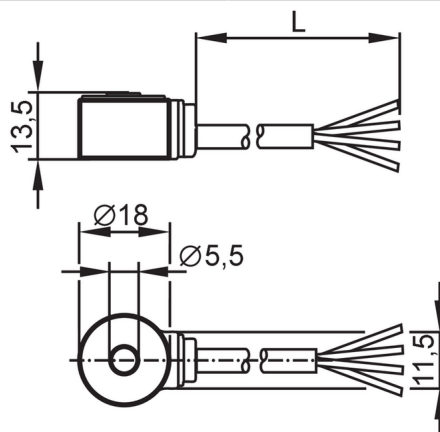


VSA004



Accelerometer

VIBRATION SENSOR



Product characteristics

Measuring range of vibration	[g]	-25...25
Frequency range	[Hz]	1...10000
Measuring principle		capacitive

Application

Special feature	Halogen-free; 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
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...10000
Measuring principle		capacitive
Sensitivity	[μA/g]	142
Number of measurement axes		1

Accuracy / deviations

Linearity deviation		0,2 %
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Operating conditions

Ambient temperature	[°C]	-20...80
Note on ambient temperature		cULus: < 80 °C

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VIBRATION SENSOR

Storage temperature	[°C]	-20...80
Max. relative air humidity	[%]	80; (40 °C: 50 % non condensing)
Protection		IP 67

Tests / approvals

EMC	EN 61000-6-2	
	EN 61000-6-3	
Shock resistance	DIN EN 60068-2-27	50 g 11 ms
Vibration resistance	DIN EN 60068-2-6	20 g / 10 ... 2000 Hz
MTTF	[years]	2660

Mechanical data

Weight	[g]	120.5
Type of mounting		mounting screw
Material		housing: stainless steel (1.4404 / 316L)
Tightening torque	[Nm]	5
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 applications : min. 15 x cable diameter

Accessories

Items supplied	head cap screw: 1 x (M5 x 20 mm), Torx 15
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Remarks

Pack quantity	1 pcs.
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Electrical connection

Cable: 3 m, PUR, Halogen-free, Ø 4 mm, screened; Maximum cable length: 250 m; drain wire applied to the housing; 4 x 0.14 mm²

blue	GND
black	test
brown	L+
white	Out
screen	drain wire