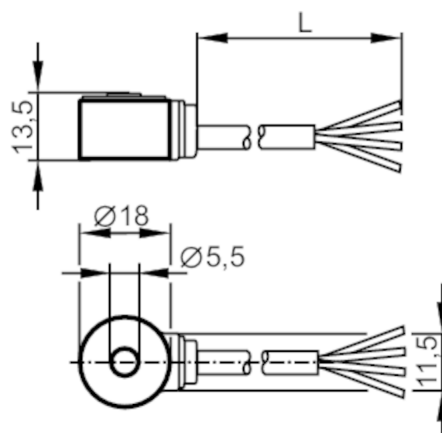


Acceleration sensor

VIBRATION SENSOR



Product characteristics

Measuring range of vibration	[g]	-150...150
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]	-150...150
Frequency range	[Hz]	1...10000
Measuring principle		capacitive
Sensitivity	[μA/g]	35.5
Number of measurement axes		1

Accuracy / deviations

Linearity deviation		0,2 %
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VSA205



Acceleration sensor

VIBRATION SENSOR

Operating conditions		
Ambient temperature	[°C]	-20...80
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]	2104
UL approval	Ta	80 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	File number UL	E251902
Mechanical data		
Weight	[g]	309.7
Type of mounting		mounting screw
Materials		housing: stainless steel (316L/1.4404)
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 use	: min. 15 x cable diameter
Accessories		
Items supplied		head cap screw: 1 x M5 x 20, Torx 15
Remarks		
Pack quantity		1 pcs.
Electrical connection		
Cable: 10 m, PUR, Ø 4 mm, shielded; Maximum cable length: 250 m; drain wire connected to the housing; 4 x 0.14 mm²		
blue	GND	
black	test	
brown	L+	
white	Out	
Screen	drain wire	