

# VSA205

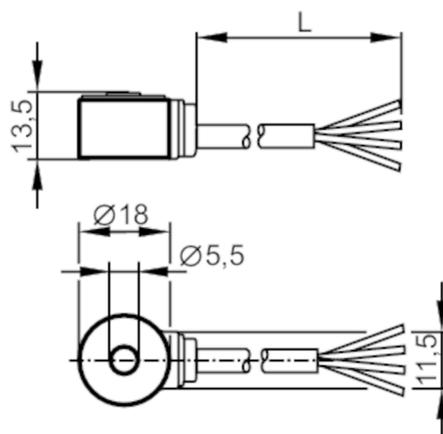


## Accelerometer

VIBRATION SENSOR

Article to be discontinued  
Discontinuation date: 03/31/2026

Alternative articles: VSA201  
When selecting an alternative article and accessories please note that technical data may differ!



### Product characteristics

Measuring range of vibration	[g]	-150...150
Frequency range	[Hz]	1...10000
Measuring principle		capacitive

### Application

System	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]	-150...150
Frequency range	[Hz]	1...10000
Measuring principle		capacitive

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Sensitivity	[ $\mu$ A/g]	35.5
Number of measurement axes		1
<b>Accuracy / deviations</b>		
Linearity deviation		0,2 %
<b>Operating conditions</b>		
Ambient temperature	[°C]	-20...80
Storage temperature	[°C]	-20...80
Max. relative air humidity	[%]	80; (40 °C: 50 % non condensing)
Protection		IP 67
<b>Tests / approvals</b>		
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
	voltage supply	Limited Voltage/Current
	File number UL	E251902
<b>Mechanical data</b>		
Weight	[g]	309.7
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
<b>Accessories</b>		
Items supplied		head cap screw: 1 x (M5 x 20 mm), Torx 15
<b>Remarks</b>		
Pack quantity		1 pcs.
<b>Electrical connection</b>		
Cable: 10 m, PUR, Ø 4 mm, screened; Maximum cable length: 250 m; drain wire applied to the housing; 4 x 0.14 mm <sup>2</sup>		
blue	GND	
black	test	
brown	L+	
white	Out	
screen	drain wire	