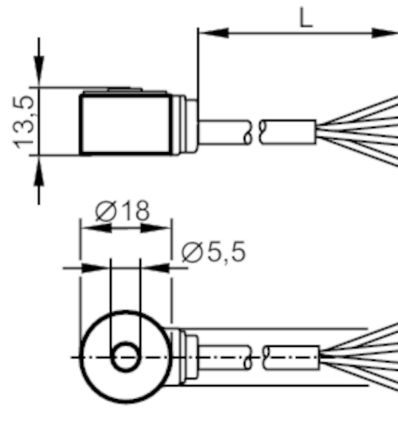


VSA005



Acceleration sensor

VIBRATION SENSOR



Product characteristics	
Measuring range of vibration [g]	-25...25
Frequency range [Hz]	0...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; (cULus: 9 V DC)
Current consumption [mA]	< 15
Min. insulation resistance [MΩ]	100; (500V 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]	0...10000
Measuring principle	capacitive
Sensitivity [μA/g]	142
Number of measurement axes	1
Accuracy / deviations	
Linearity deviation	0,2 %

VSA005



Acceleration sensor

VIBRATION SENSOR

Operating conditions			
Ambient temperature	[°C]	-20...80	
Note on ambient temperature		cULus: < 80 °C	
Storage temperature	[°C]	-20...80	
Protection		IP 67	
Tests / approvals			
EMC		EN 61000-6-2	
		EN 61000-6-3	
		EN 50178	
Shock resistance		DIN EN 60068-2-27	50 g 11 ms
Vibration resistance		DIN EN 60068-2-20	20 g / 10 ... 2000 Hz
MTTF	[years]		2660
Mechanical data			
Weight	[g]		323.5
Type of mounting			mounting screw
Materials			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 use	: min. 15 x cable diameter
Accessories			
Accessories (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 mm ²			
blue		GND	
black		test	
brown		L+	
white		Out	
Screen		drain wire	