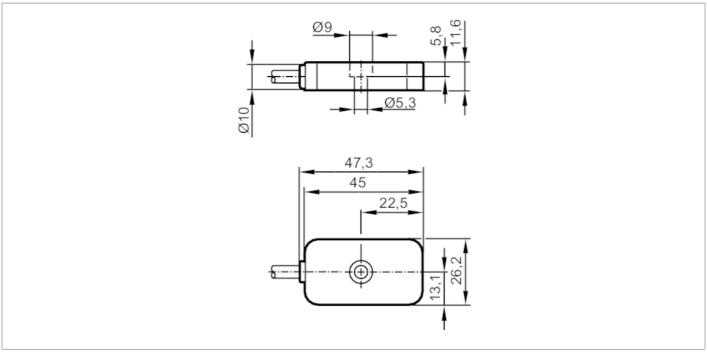
# **VSM103**

### **Acceleration sensor**







# CE CULUS UK

Product characteristics			
Measuring range of vibration	[g]	-4040	
Frequency range	[Hz]	04500	
Measuring principle		capacitive	
Application			
Special feature		Drag chain suitability	
Electrical data			
Bias voltage DC	[V]	1316	
Operating current	[mA]	46	
Min. insulation resistance	[ΜΩ]	100; (500 V DC)	
Protection class		III	
Reverse polarity protection		yes	
		microelectromechanical system (MEMS)	
Sensor type		microelectromechanical system (MEMS)	
Sensor type  Measuring/setting range		microelectromechanical system (MEMS)	
	[g]	microelectromechanical system (MEMS)  -4040	
Measuring/setting range	[g] [Hz]		
Measuring/setting range Measuring range of vibration		-4040	
Measuring/setting range Measuring range of vibration Frequency range		-4040 04500	
Measuring/setting range Measuring range of vibration Frequency range Measuring principle	[Hz]	-4040 04500 capacitive	
Measuring/setting range Measuring range of vibration Frequency range Measuring principle Max. transverse sensitivity Number of measurement	[Hz]	-4040 04500 capacitive 5	
Measuring/setting range Measuring range of vibration Frequency range Measuring principle Max. transverse sensitivity Number of measurement axes	[Hz]	-4040 04500 capacitive 5	
Measuring/setting range Measuring range of vibration Frequency range Measuring principle Max. transverse sensitivity Number of measurement axes Accuracy / deviations	[Hz]	-4040 04500 capacitive 5 3	

# **VSM103**

#### **Acceleration sensor**

VIBRATION SENSOR



[% of the span]

Operating conditions				
Ambient temperature	[°C]	-3085		
Storage temperature	[°C]	-30100		
Protection		IP 67; IP 68; IP 69K		
Tests / approvals				
EMC		DIN EN 61000-6-2		
		DIN EN 61000-6-3		
Shock resistance		DIN EN 60068-2-27	50 g 11 ms	
Vibration resistance		DIN EN 60068-2-6	20 g / 103000 Hz	
MTTF	[years]	529		
UL approval		Ta	70 °C	
		Enclosure type	Type 1	
		power supply	Limited Voltage/Current	
		UL Approval no.	L005	
		File number UL	E251902	
Mechanical data				
Weight	[g]	105.6		
Type of mounting		mounting screw		
Dimensions	[mm]	26.2 x 47.3 x 11.6		
Materials		housing: stainless steel (444/1.4404)		
Tightening torque	[Nm]	3.5		
Drag chain suitability		yes		
Drag chain suitability		bending radius for flexible use	min. 10 x cable diameter	
		bending radius for fixed installation	min. 4 x cable diameter	
Accessories				
Items supplied		socket head screw: 1 x M5 x 12		
Remarks				
Pack quantity		1 pcs.		
Electrical connection				

Cable: 0.3 m, PUR, Ø 4.9 mm; Maximum cable length: 250 m; screen (connected to the housing); 5 x 0.14 mm<sup>2</sup>

### Electrical connection - M12 connector



1	brown = IEPE X
2	white = IEPE Z
3	blue = GND
4	black = self-test
5	grey = IEPE Y