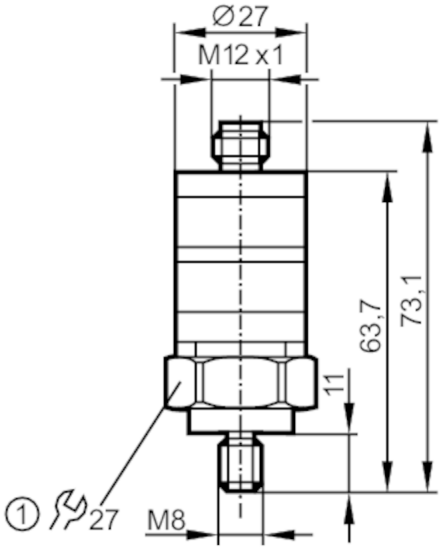
VKV021

Vibration monitor with intuitive switch point setting

VIBRATION MONITOR



1 Tightening torque 15 Nm
M8 x 1.25 mm

Product characteristics		
Measuring range of vibration	[mm/s]	0...25; (RMS)
Frequency range	[Hz]	10...1000
Application		
Application		vibration monitor to DIN ISO 10816
Electrical data		
Operating voltage	[V]	18...32 DC
Current consumption	[mA]	< 50
Protection class		III
Sensor type		microelectromechanical system (MEMS)
Inputs / outputs		
Total number of inputs and outputs		2
Number of inputs and outputs		Number of digital outputs: 1; Number of analogue outputs: 1
Outputs		
Output signal		switching signal; analogue signal
Electrical design		PNP
Number of digital outputs		1
Output function		normally closed
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	500
Number of analogue outputs		1
Analogue current output	[mA]	4...20
Max. load	[Ω]	500

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Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes
Measuring/setting range		
Measuring range of vibration [mm/s]		0...25; (RMS)
Frequency range [Hz]		10...1000
Number of measurement axes		1
Accuracy / deviations		
Measuring error [% of the final value]		< ± 3
Switch point accuracy		< ±4; (% of the final value)
Repeatability		< 0,5; (% of the final value)
Linearity deviation		0,25 %
Response times		
Response time [s]		1...60
Software / programming		
Adjustment of the switch point		setting ring
Operating conditions		
Ambient temperature [°C]		-25...80
Note on ambient temperature		UL application: < 80 °C
Storage temperature [°C]		-25...80
Protection		IP 67
Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V
Shock resistance		400 g
MTTF [years]		510
Mechanical data		
Weight [g]		113.5
Type of mounting		M8 x 1,25
Materials		PBT; PC; FKM; stainless steel (316L/1.4404)
Tightening torque [Nm]		15
Displays / operating elements		
Display	operation	LED, green
	switching status	LED, yellow
With scale		yes
Operating elements	setting ring	setting ring
Remarks		
Pack quantity		1 pcs.

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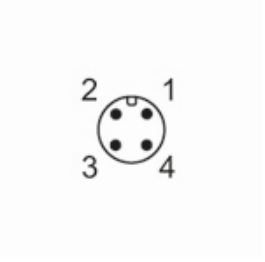
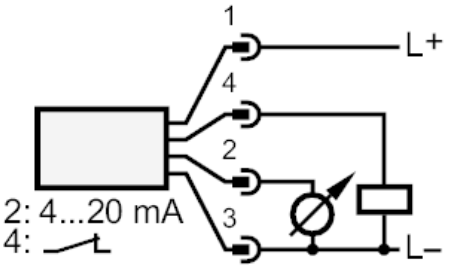
Electrical connection

Connector: 1 x M12; coding: A



Connection



1	L+
2	4...20 mA
3	GND
4	switching output