# LVL-M3

# **Vibration Limit Switch**

**Control Drawing IS** 

**Temperature Tables** 













With regard to the supply of products, the current issue of the following document is applicable: The General Terms of Delivery for Products and Services of the Electrical Industry, published by the Central Association of the Electrical Industry (Zentralverband Elektrotechnik und Elektroindustrie (ZVEI) e.V.) in its most recent version as well as the supplementary clause: "Expanded reservation of proprietorship"

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# 1 Associated Documentation

The corresponding datasheets, manuals, instruction manuals, declarations of conformity, EUtype examination certificates, certificates, and control drawings if applicable are an integral part of this document. You can find this information under www.pepperl-fuchs.com.

This document does not substitute the instruction manual.

For full information on the product, refer to the instruction manual and further documentation on the Internet at www.pepperl-fuchs.com.

This document is an integral part of the following documents: DOCT-8106, DOCT-8109, DOCT-8480.

For specific device information such as the year of construction, scan the QR code on the device. As an alternative, enter the serial number in the serial number search at www.pepperl-fuchs.com.

# 2 Supplementary Documentation

Information for explosion protection:

The information can be found on the Internet at www.pepperl-fuchs.com.

# 3 Manufacturer's Certificates

## **CSA C/US certificate**

Certificate number: CSA C/US 80140625

The certificate is available on the product detail page of the devices on the internet at www.pepperl-fuchs.com.

Enter the order designation in the search field → Select the appropriate product → Open the product detail page → Open the **Approvals+Certificates** tab.

# 4 Manufacturer Address

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Internet: www.pepperl-fuchs.com



# **5** Device Versions

Device type	Basic specifications	Optional specifications
LVL-M3	-XXXXXX-XXXXXXXXX	+XX

The X-marked letters of the type code are placeholders for versions of the device.

The following specifications reproduce an extract from the product structure and are used to assign.

# **Basic specifications**

Option	Type of probe
Α	Compact version
В	Short tube version
С	Tube extension

Option	Housing, material				
Α	Single compartment, aluminum, coated				
Р	Single compartment, plastic				

Option	Electrical connection					
A Gland M20, plastic, IP66/68, NEMA type 4X/6P						
B <sup>1</sup> Gland M20, brass nickel plated, IP66/68, NEMA type 4X/6P						
F Thread M20, IP66/68, NEMA type 4X/6P						
H <sup>2</sup>	Thread NPT1/2, IP66/68, NEMA type 4X/6P					
I 1	Thread NPT3/4, IP66/68, NEMA type 4X/6P					
M <sup>1</sup>	Plug M12, IP66/67, NEMA type 4X					

Only in connection with feature **Housing, material**, option **A** 

<sup>&</sup>lt;sup>2</sup> Only in connection with feature **Housing, material**, option **P** 

Option	Electrical output
N	FEL48, 2-wire NAMUR

	Option	Approval
F	СН	CSA C/US IS CI. I Div. 1 Gr. A-D, Cl. I Zone 0, AEx/Ex ia IIC T6

# **Optional specifications**

Option	Accessory enclosed		
WP 1	Weather protection cover, plastic		

<sup>&</sup>lt;sup>1</sup> Only in connection with feature **Housing, material**, option **A** 

# **6** Temperature Tables

# **General notes**

Optional specification, feature Accessories enclosed, option WP



### Note

When using the weather protection cover: Reduce the values T<sub>amb</sub> of P1, P2, P3 by 16 K.

# **Description notes**



### Note

Unless otherwise indicated, the positions always refer to the basic specification.

- 1st column: basic specification, feature Electrical output, option N
- 2nd column: temperature classes T6 (85 °C) to T1 (450 °C)
- Column P1 to P5: position (temperature value) on the axes of the derating
  - T<sub>amb</sub>: ambient temperature in °C
  - T<sub>p</sub>: process temperature in °C

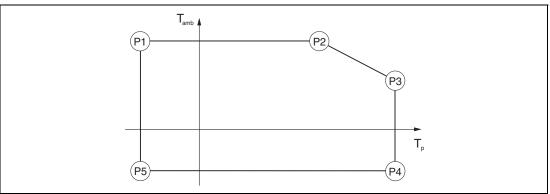


Figure 1

# Zone 0, Zone 1, Class I, Div. 1

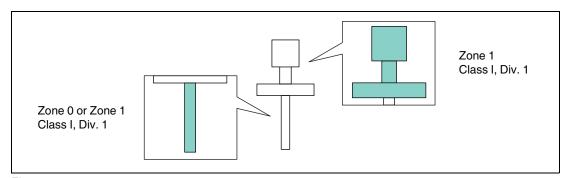


Figure 2

## **Basic specification, feature Electrical output**

Option N											
		P1		P2		P3		P4		P5	
		T <sub>p</sub>	T <sub>amb</sub>	T <sub>p</sub>	T <sub>amb</sub>						
	Т6	-40	67	67	67	75	60	75	0 <sup>1</sup> -40	-40	0 <sup>1</sup> -40
	T5	-40	70	70	70	90	60	90	0 <sup>1</sup> -40	-40	0 <sup>1</sup> -40
	T4	-40	70	70	70	125	60	125	0 <sup>1</sup> -40	-40	0 <sup>1</sup> -40
	T3T1	-40	70	70	70	150	60	150	0 <sup>1</sup> -40	-40	0 <sup>1</sup> -40

<sup>1</sup> In connection with basic specifications, feature **Housing, material**, option **P**: Standard ambient temperature range: 0 to +70 °C

Table 1

# 7 Connection Data

Associated intrinsically safe power supply unit with max. electrical specifications below the characteristic values of the electronic inserts

## **Basic specification, feature Electrical output**

Option	Power supply circuit
N	$U_i \text{ (or } V_{max}) = 16 \text{ V}$ $I_i \text{ (or } I_{max}) = 52 \text{ mA}$ $P_i = 170 \text{ mW}$
	$I_i$ (or $I_{max}$ ) = 52 mA
	$P_i = 170 \text{ mW}$
	$L_i = 0$
	$C_i = 30 \text{ nF}$

Table 2



# Your automation, our passion.

# **Explosion Protection**

- Intrinsic Safety Barriers
- Signal Conditioners
- FieldConnex® Fieldbus
- Remote I/O Systems
- Electrical Ex Equipment
- Purge and Pressurization
- Industrial HMI
- Mobile Computing and Communications
- HART Interface Solutions
- Surge Protection
- Wireless Solutions
- Level Measurement

# **Industrial Sensors**

- Proximity Sensors
- Photoelectric Sensors
- Industrial Vision
- Ultrasonic Sensors
- Rotary Encoders
- Positioning Systems
- Inclination and Acceleration Sensors
- Fieldbus Modules
- AS-Interface
- Identification Systems
- Displays and Signal Processing
- Connectivity

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