

# Instruction Manual

## 1. Marking

Vibration Sensor VIM8***_*****_2*_*****
ATEX certificate: UL 22 ATEX 2870 X ATEX marking: Ⓢ II 3G Ex ec IIC T4 Gc Ⓢ II 3D Ex tc IIIC T135°C Dc
IECEx certificate: IECEx ULD 22.0031X IECEx marking: II 3G Ex ec IIC T4 Gc II 3D Ex tc IIIC T135°C Dc
North America Certificates: E106378 (UL) Proc. Cont. Eq. Haz. Loc. Class I, Division 2, Groups A-D, T4 Class II, Division 2, Groups F and G, T4

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

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## 2. Target Group, Personnel

Responsibility for planning, assembly, commissioning, operation, maintenance, and dismantling lies with the plant operator.

The personnel must be appropriately trained and qualified in order to carry out mounting, installation, commissioning, operation, maintenance, and dismantling of the device. The trained and qualified personnel must have read and understood the instruction manual.

Prior to using the product make yourself familiar with it. Read the instruction manual carefully.

## 3. Reference to Further Documentation

Observe laws, standards, and directives applicable to the intended use and the operating location.

The corresponding datasheets, manuals, declarations of conformity, EU-type examination certificates, certificates, and control drawings if applicable supplement this document. You can find this information under [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

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](http://www.pepperl-fuchs.com).

If you use the device in safety-related applications, observe the requirements for functional safety. You can find these requirements in the functional safety documentation under [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

Due to constant revisions, documentation is subject to permanent change. Please refer only to the most up-to-date version, which can be found under [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

## 4. Intended Use

The device is only approved for appropriate and intended use. Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

The device is used to measure mechanical vibrations on machines and mechanical equipment.

The device is an electrical apparatus for hazardous areas.

Use the device only within the specified ambient and operating conditions.

The maximum surface temperature of the device was determined without a dust layer on the apparatus.

Observe the instruction manual and the EU-type examination certificate of the installed apparatus.

Devices for which specific conditions of use apply have the X marking at the end of the certificate number.

If you use the device in safety-related applications, observe the information for safety function and safe state.

## 5. Improper Use

Protection of the personnel and the plant is not ensured if the device is not used according to its intended use.

If the device has already been operated in general electrical installations, the device may subsequently no longer be installed in electrical installations used in combination with hazardous areas.

The device must not be installed in Zone 0.

The device must not be installed in Zone 20.

## 6. Mounting and Installation

Do not mount a damaged or polluted device.

Use mounting materials which are suitable to secure the device safely.

Ensure that all fasteners are present.

Observe the tightening torque of the screws.

Only use accessories specified by the manufacturer.

If you install the device in safety-related applications, observe the requirements for functional safety.

Observe the installation instructions according to IEC/EN 60079-14.

Use shielded connection lines.

Observe the tightening torque of the cable glands.

Install cables and cable glands in a way that they are not exposed to mechanical hazards.

The cables and connection lines must not be strained. Provide an adequate strain relief.

The device must be disconnected from the power supply prior to installation and maintenance. The power supply may be activated only after all the circuits required for operation have been fully assembled and connected.

Include the metal housing components in the equipotential bonding.

Ensure that the equipotential bonding connections are in good condition, and are not damaged or corroded.

In order to protect the circuit and the load, install an external fuse.

## 7. Operation, Maintenance, Repair

If you operate the device in safety-related applications, observe the requirements for functional safety. In case of operating in low demand mode, plan appropriate intervals for the proof test.

Do not use a damaged or polluted device.

The device is maintenance-free.

Do not repair, modify, or manipulate the device.

If there is a defect, always replace the device with an original device.

Do not connect or disconnect the electrical connection when energized.

Observe IEC/EN 60079-17 for maintenance and inspection.

Close all unused connections with an appropriate protective cover.

Do not exceed the maximum permissible operating voltage  $U_{b\ max}$ .

Tolerances are not permitted.

Do not exceed the maximum permitted output current. Prevent short circuits.

Prevent the inside of the device from becoming contaminated when the connector is disconnected.

Lock the connection with an interlock protection.

Observe the warning markings.

Do not remove the warning marking "Warning – Do not separate when energized!".

## 8. Delivery, Transport, Disposal

Check the packaging and contents for damage.

Check if you have received every item and if the items received are the ones you ordered.

Always store and transport the device in the original packaging.

Store the device in a clean and dry environment. The permitted ambient conditions must be considered, see datasheet.

The device, built-in components, packaging, and any batteries contained within must be disposed in compliance with the applicable laws and guidelines of the respective country.