

Instruction Manual

1. Marking

7500 series purge and pressurization system for Zone 2 or Zone 22
Control unit: 7500-01-*
Enclosure protection vent: EPV-7500-*
Mounted versions: 7500-MTD-*
ATEX and IECEx:
See the nameplate on the device side or lid for the exact designation.
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Internet: www.pepperl-fuchs.com

Modifications are permitted only if approved in this instruction manual and in the device-related documentation.

Observe the specific conditions of use.

2. Target Group, Personnel

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

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

3. Reference to Further Documentation

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

Observe Directive 1999/92/EC in relation to hazardous areas.

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.

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/device-information.

Observe the instructions according to NEC article 501.

Refer to manufacturer declaration for further information.

4. Intended Use

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

The device is only approved for appropriate and intended use.

Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

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

The device must only be operated in the specified ambient temperature range and at the specified relative humidity without condensation.

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

5. Improper Use

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

6. Mounting and Installation

Prior to mounting, installation, and commissioning of the device you should make yourself familiar with the device and carefully read the instruction manual.

Observe the ambient and operating conditions when mounting and installing the device.

Do not mount a damaged or polluted device.

If you intend to install the device or enclosure in areas that may be exposed to aggressive substances, ensure that the stated surface materials are compatible with these substances. If required, contact Pepperl+Fuchs for further information.

Mount the device in a way that the device is protected against mechanical hazard.

If you use the device in environments subject to adverse conditions, you must protect the device accordingly.

Place warning marking "Warning – Refer to instruction manuals!" visibly on the surrounding enclosure.

Protect pneumatic components against mechanical hazard.

Ensure that the overpressure in the cabinet does not exceed the permissible peak value.

Requirements for Cable Glands

Observe the tightening torque of the terminal screws.

Only use cable glands that are suitably certified for the application.

Only use stopping plugs that are suitably certified for the application. Only use cable glands with a temperature range appropriate to the application.

Ensure that the degree of protection is not violated by the cable glands and the stopping plugs.

Requirements for Cables and Connection Lines

Only use cables and connection lines with a temperature range appropriate to the application.

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

Observe the permissible core cross section of the conductor.

Observe the insulation stripping length.

Protect plastic cable glands against mechanical hazard.

In order to guarantee the temperature classes, ensure that power dissipation is lower than the figure stated in the certificate. Most of the power dissipation arises from current flowing in the cables.

Use seals that are suitable for the specified application.

Use only one conductor per terminal.

Ensure that unused terminal screws are properly tightened down.

Adjust the sealing element of the cable gland to the diameter of the cables and connection lines used.

Observe the tightening torque of the cable glands.

Only use cable glands with a temperature range appropriate to the application.

7. Device-Related Information

Observe the tightening torque of the screws.

Safety-relevant markings are found on the nameplate of the device or the nameplate supplied.

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

To mount the enclosure, use the fasteners provided.

Ensure that all fasteners are present.

Observe the tightening torque of the screws.

The housing has an earth connection. Connect to this earth connection an equipotential bonding conductor with a minimum cross section of 4 mm².

8. Non-Hazardous Area

The device may be installed in the non-hazardous area.

9. Hazardous Area

The enclosure has an earth connection. Connect to this earth connection an equipotential bonding conductor with a minimum cross section of 4 mm².

The device contains aluminum. Thereby the device is considered to constitute an ignition hazard by impact effect or friction. Avoid impact effect or friction during mounting and operating.

Information on electrostatic hazards can be found in the technical specification IEC/TS 60079-32-1.

Avoid inadmissibly high electrostatic charge of the non-metal housing components on the device.

10. Gas

Only remove the cover in the absence of a potentially explosive atmosphere.

The device may be installed in gas group IIC.

11. Zone 2

The device may be installed in Zone 2.

Connection or disconnection of energized circuits is only permitted in the absence of a potentially explosive atmosphere.

12. Zone 22

The device may be installed in Zone 22.

13. Operation, Maintenance, Repair

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

Do not remove the nameplate.

Observe the warning markings.

Do not use a damaged or polluted device.

Do not connect or disconnect the electrical connection when energized.

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

Do not exceed the maximum power dissipation. Refer to nameplate for maximum power dissipation.

If the voltage is greater than 50 V AC or 120 V DC, switch off the voltage before connecting or disconnecting the device.

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

The device may be operated in Zone 2.

Substitution of components may impair suitability for Zone 2.

When energized, only open the housing in the absence of a potentially explosive dust atmosphere.

Remove all adhering residues from the device. These residues can be hazardous to health.

The device must not be repaired, changed, or manipulated. In case of failure, always replace the device with an original device.

If there is a defect, the device must be repaired by Pepperl+Fuchs.

If cleaning is necessary while the device is located in a hazardous area, in order to avoid electrostatic charging only use a clean damp cloth.

14. 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.

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