

# Instruction Manual

## 1. Marking

Safe Positioning System
PXV100AQ-F200-B28-V1D, PXV100AQ-F200-B28-V1D-6011
Up to: SIL 3, PL e

Pepperl+Fuchs Group
Lilienthalstraße 200, 68307 Mannheim, Germany
Internet: <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a>

## 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, original instructions, manuals, declarations of conformity, certificates, etc. if applicable supplement this document. You can find this information under [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

In order to access this documentation, enter the product name, i. e. the type code, or the item number of the product in the search field of the website.

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).

## 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 reading head is part of the Pepperl+Fuchs reflected-light positioning system. The device consists of a camera module with an integrated lighting unit that tracks a DataMatrix code band. The code band is attached to the floor in a stationary position and in parallel to the device. By tracking the code band, the reading head determines safe positions in accordance with SIL 3/PL e.

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

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.

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

## 6. Mounting and Installation

Do not mount a damaged or polluted device.

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

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

In order to achieve a high immunity against electromagnetic interference for the system, during the electrical installation ensure the following:

- Use a shielded and stranded data cable.
- Use shielded supply cables.
- Connect the shield on both sides and with good conductivity.
- In the event of a fault, ground the device shield on one side in the control cabinet.

When connecting the device to a DC power supply network according to IEC/EN 61000-6-2:2005, take suitable measures to protect the device against surge voltages.

For the electrical supply use a PELV circuit according to IEC/EN 60204-1. Observe the general requirements for PELV circuits.

Supply the device with a power supply that meets the requirements for safety extra-low voltage (SELV) or protective extra-low voltage (PELV).

Protect the circuit against overvoltage (e. g., lightning).

## 7. Operation, Maintenance, Repair

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

Do not repair, modify, or manipulate the device.

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

## 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.