FAAC XP 30

FAAC Photobeam Safety Eye XP 30 Instruction Manual

Model: XP 30

1. Product Overview

The FAAC Photobeam Safety Eye XP 30 is a wall-mounted photocell designed for gate opener safety applications. It provides a reliable safety barrier by detecting obstructions in the gate's path, preventing potential accidents.

Key features include a **channel selection ability** that uses coded signals to prevent interference from other nearby photocells, allowing up to four pairs of XP 30 units to be installed in close proximity without issues. The unit is also protected against interference from external light sources, such as LED headlights, ensuring consistent performance.

This model is suitable for both wall and flush/column-mounted installations with an appropriate adapter.

2. Safety Information

Important: Read all instructions carefully before installation and operation. Failure to follow these instructions may result in injury or damage to the product.

- This device is **UL 325 Compliant** when used with FAAC Control Boards, ensuring adherence to safety standards for gate operators.
- Installation and wiring should be performed by qualified personnel in accordance with local electrical codes and regulations.
- Ensure the power supply is disconnected before performing any installation, maintenance, or troubleshooting.
- Do not modify the product in any way. Use only original FAAC replacement parts if necessary.
- Keep the area around the photocells clear of obstructions that could block the beam or interfere with detection.

3. Installation

The FAAC XP 30 photocell can be installed in a wall-mounted configuration or flush/column-mounted using an adapter (sold separately).

3.1 Mounting the Photocell

1. Choose a suitable mounting location for both the transmitter (TX) and receiver (RX) units, ensuring they are aligned and have a clear line of sight. The maximum distance between units is 100 ft. (30 m).
2. Securely mount the photocell units using appropriate fasteners for the chosen surface. The plastic body with a moulded front seal cover and closed-cell cable routing area seal provides protection against environmental elements.
3. Ensure the units are level and facing each other directly for optimal performance.

Figure 1: Front view of the FAAC XP 30 Photobeam Safety Eye. This image displays the compact design of the photocell unit, highlighting its robust plastic body and potential mounting points. The unit is designed for easy integration into gate opener systems.

3.2 Wiring

- Connect the power supply (24V) to both the transmitter and receiver units as per the wiring diagram provided with your FAAC control board.
- The output type is Relay - N.C./N.O. (Normally Closed/Normally Open). Connect the relay output from the receiver to the safety input of your FAAC gate opener control board.
- Ensure all connections are secure and properly insulated to maintain the IP54 protection class.

3.3 Channel Selection

The XP 30 features **4 Channel Relay Selection**. This allows for the installation of up to 4 separate photocell pairs in close proximity without interference. Refer to the specific instructions provided with your FAAC control board for details on setting the channel for each pair.

3.4 Alignment

The XP 30 features **Automatic Auto-Alignment** with an angle of 7º - 13.5º. After power-up, the units will automatically attempt to align. Ensure a clear line of sight between the TX and RX units. Indicators on the units (refer to the specific product diagram) will confirm successful alignment.

4. Operation

Once properly installed and aligned, the FAAC XP 30 photocells continuously emit and receive an infrared beam. If an object or person breaks this beam while the gate is in motion, the photocells will signal the gate opener control board to stop or reverse the gate's movement, preventing impact.

The coded signals ensure that only the intended transmitter and receiver communicate, minimizing false triggers from other light sources or nearby photocell installations.

5. Maintenance

Regular maintenance ensures optimal performance and longevity of your FAAC XP 30 photocells.

- **Cleaning:** Periodically clean the lenses of both the transmitter and receiver units with a soft, damp cloth to remove dust, dirt, or debris that may obstruct the beam. Do not use abrasive cleaners.
- **Inspection:** Regularly inspect the wiring for any signs of damage, fraying, or loose connections. Ensure the mounting hardware is secure.
- **Functionality Test:** Periodically test the photocells by intentionally breaking the beam with an object (e.g., a cardboard box) while the gate is closing to ensure it stops or reverses as intended.

6. Troubleshooting

Problem	Possible Cause	Solution
Gate does not respond to photocell beam interruption.	Misalignment of TX/RX units. Dirty lenses. Wiring issue or no power. Incorrect channel selection.	Re-align units, ensure clear line of sight. Clean lenses with a soft cloth. Check power supply (24V) and wiring connections. Verify channel settings on both photocells and control board.
False triggers or intermittent operation.	External light interference. Interference from other photocells. Loose connections.	Ensure units are properly shielded from direct sunlight or strong artificial lights. Verify correct channel selection to avoid interference from other XP 30 units. Check and secure all wiring connections.

Problem	Possible Cause	Solution
No power indicator on units.	No power supply. Faulty wiring.	Check 24V power source. Inspect wiring for breaks or incorrect connections.

If problems persist after attempting these solutions, contact FAAC technical support or a qualified technician.

7. Specifications

Maximum Distance	100 ft. (30 m)
Power Supply Voltage	24V
Absorbed Current (RX)	30 mA
Absorbed Current (TX)	20 mA
Contact Ratings	60 VA / 24 W
Alignment	Automatic Auto-Alignment
Auto-Alignment Angle	7º - 13.5º
Output Type	Relay - N.C./N.O.
Protection Class	IP54
Operating Temperatures	-4ºF ~ 131ºF (-20ºC ~ 55ºC)
Dimensions (LxHxD)	2.16" x 3" x 0.82" (55mm x 76mm x 21mm)
Compliance	UL 325 Compliant (when used with FAAC Control Boards)

8. Warranty and Support

For warranty information, please refer to the documentation provided with your purchase or contact FAAC directly. Technical support is available through FAAC's official channels for assistance with installation, operation, or troubleshooting.

Visit the official FAAC website for the latest support resources and contact information.