FAAC 785105

FAAC XP30 Photocell 30M Instruction Manual

Model: 785105

1. Introduction

The FAAC XP30 Photocell 30M is a safety device designed for automatic gate systems. It detects obstacles within its operating range, enhancing the safety and reliability of your gate operation by preventing accidental closures on objects or individuals. This manual provides essential information for the correct installation, operation, and maintenance of your XP30 photocells.

2. Safety Information

Read all instructions carefully before installation and use. Failure to follow these instructions may result in injury or damage to the product. Installation should be performed by qualified personnel in accordance with local electrical codes and safety regulations. Disconnect power to the gate system before performing any installation, maintenance, or troubleshooting procedures.

- Ensure the power supply is disconnected before any electrical work.
- Do not modify the photocell units or their components.
- Keep children and pets away from the gate area during operation and installation.
- Regularly test the photocell functionality to ensure proper operation.
- Use only original FAAC replacement parts if needed.

3. Package Contents

Please verify that all components are present and undamaged before proceeding with installation.

- FAAC XP30 Photocell (1 Transmitter unit, 1 Receiver unit)
- Mounting hardware (screws, anchors)
- Instruction Manual

4. Product Overview

The FAAC XP30 Photocell is engineered for reliability and discreet integration into various gate systems. Its compact and slim design ensures it is protected from passing vehicles while maintaining a wide detection range.

- **Compact Design:** Measures 55 x 78 mm with minimal projection, making it less susceptible to damage.
- **Extended Range:** Capable of detecting obstacles up to 30 meters away.
- **Slim Profile:** Features a thin 21 mm thickness for elegant integration.
- **Versatile Mounting:** Can be mounted on a wall or an optional column.
- **Durable:** IP54 protection rating ensures resistance to dust and splashing water.

Image 1: FAAC XP30 Photocell 30M unit. This image displays the compact design of the photocell, highlighting its slim profile and robust casing.

5. Installation and Setup

Proper installation is crucial for optimal performance and safety. Always refer to the wiring diagram provided with your gate control unit for specific electrical connections.

1. **Step 1: Site Selection**: Choose a mounting location that provides a clear, unobstructed line of sight between the transmitter and receiver units. Ensure the photocells are mounted at an appropriate height to detect obstacles effectively, typically between 50-60 cm from the ground. Avoid direct sunlight into the receiver lens if possible, or use a sun shield.
2. **Step 2: Mounting**: Securely attach the transmitter and receiver units to a stable wall or column using the provided mounting hardware. Ensure they are perfectly aligned horizontally and vertically. The transmitter and receiver must face each other directly.
3. **Step 3: Wiring**: Connect the photocells to the gate control unit according to the wiring diagram specific to your gate system. Pay close attention to polarity and power requirements (typically 12-24V AC/DC). *Incorrect wiring can damage the units or the gate control board.*
4. **Step 4: Alignment**: Power on the gate system. Most photocells have an indicator light on the receiver unit that illuminates or changes color when proper alignment and signal reception are achieved. Adjust the angle of the photocells slightly until this indicator confirms optimal alignment.

5. **Step 5: Testing**: After installation and alignment, perform functional tests. Activate the gate to close and intentionally break the beam with an object (e.g., a cardboard box) or by walking through it. The gate should immediately stop or reverse its movement. Repeat this test multiple times to ensure consistent operation.

6. Operation

The FAAC XP30 Photocell operates automatically as a safety sensor for your gate system. It continuously emits an infrared beam from the transmitter to the receiver. This beam acts as a virtual barrier.

- **Normal Operation**: When the gate is closing and the path between the photocells is clear, the infrared beam remains unbroken. The photocells signal the gate control unit that the path is clear, allowing the gate to complete its closing cycle.
- **Obstacle Detection**: If an object, person, or vehicle interrupts the infrared beam during the gate's closing movement, the photocells immediately detect this interruption. They send a signal to the gate control unit, which then triggers a safety response, typically stopping the gate or reversing its direction to prevent impact.

7. Maintenance

Regular maintenance ensures reliable operation and extends the lifespan of your FAAC XP30 Photocells. Perform these checks periodically, especially after severe weather conditions.

- **Cleaning**: Periodically clean the lenses of both the transmitter and receiver units. Use a soft, damp cloth to gently wipe away dust, dirt, spiderwebs, or debris that may obstruct the infrared beam. Do not use abrasive cleaners or solvents, as these can damage the lens surface.
- **Alignment Check**: Occasionally verify that the photocells remain properly aligned. Strong vibrations or impacts can cause misalignment. If the gate exhibits unexpected behavior (e.g., reversing without an apparent obstacle), check the alignment.
- **Wiring Inspection**: Visually inspect all wiring connections for any signs of wear, fraying, corrosion, or damage. Ensure all connections are secure and properly insulated.
- **Functionality Test**: Regularly test the photocell's functionality by intentionally breaking the beam during a gate closing cycle. Confirm that the gate stops or reverses as expected. This test should be performed at least once a month.

8. Troubleshooting

This section provides solutions to common issues you might encounter with your FAAC XP30 Photocell.

Problem	Possible Cause	Solution
Gate does not close or reverses unexpectedly	Photocells are misaligned Obstruction in the beam path Dirty lenses	Realign the transmitter and receiver units. Remove any objects blocking the beam. Clean the photocell lenses with a soft, damp cloth.
Photocell indicator light is off (if present)	No power to the photocell Faulty wiring connection Damaged unit	Check power supply to the gate control unit and photocells. Inspect wiring for breaks or loose connections. If power and wiring are correct, the unit may be faulty; contact support.

Problem	Possible Cause	Solution
Intermittent operation or false detections	Loose wiring connections Environmental interference (e.g., direct sunlight, strong reflections) Partial obstruction	Check and secure all wiring connections. Consider repositioning the photocells or adding a sun shield to the receiver. Ensure the beam path is completely clear and lenses are clean.

9. Specifications

- **Model Number:** 785105
- **Product Dimensions:** 3.94 x 1.97 x 3.94 inches (100 x 50 x 100 mm approx.)
- **Item Weight:** 0.352 ounces (10 grams approx.)
- **Operating Range:** Up to 30 meters
- **Thickness:** 21 mm
- **Protection Rating:** IP54 (Dust protected, splash proof)
- **Manufacturer:** Faac Spa

10. Warranty and Support

Warranty information for the FAAC XP30 Photocell 30M is not explicitly detailed in the provided product data. For specific warranty terms, claims, or technical support, please contact your authorized FAAC dealer or visit the official FAAC website. When contacting support, please have your product model number (785105) and purchase information readily available.