SOMMER 7029V000

Sommer 7029V000 One-Way Photoelectric Sensor

Instruction Manual

1. Introduction

This manual provides essential information for the safe and efficient operation of your Sommer 7029V000 One-Way Photoelectric Sensor. Please read these instructions carefully before installation and use, and keep them for future reference.





Figure 1: Front view of the Sommer 7029V000 One-Way Photoelectric Sensor. The device is black with a textured finish and a smooth, reflective upper section. The CE mark is visible at the bottom.

2. Safety Information

Always observe the following safety precautions to prevent injury or damage to the device:

- Installation and wiring must be performed by qualified personnel in accordance with local electrical codes.
- Ensure the power supply is disconnected before performing any installation, maintenance, or troubleshooting.
- Do not expose the sensor to extreme temperatures outside its specified operating range (-10 to +60).
- Protect the sensor from direct impact or excessive vibration.
- This device is designed for specific applications. Do not use it for purposes other than those described in this manual.

3. Product Overview

The Sommer 7029V000 is a robust one-way photoelectric sensor designed for reliable detection in various environments,

including outdoor installations. Its key features include:

- **Model:** 7029V000
- **Type:** One-Way Photoelectric Sensor
- **Range:** Up to 20 meters
- **Rotation Angle:** 180 degrees, allowing flexible alignment without additional mounting brackets.
- **Protection Class:** IP55 (dust protected and protected against low-pressure water jets from any direction).
- **Dimensions (LxWxD):** Approximately 105 mm x 37 mm x 35 mm.
- **Weight:** Approximately 140 grams.
- **Color:** Black.

4. Setup and Installation

Follow these steps for proper installation of the photoelectric sensor:

1. **Mounting Location:** Select a stable, flat surface for mounting. Ensure the sensor has a clear line of sight to its corresponding reflector or receiver within the 20-meter range. The 180-degree rotatable design allows for versatile positioning.
2. **Power Supply:** Connect the sensor to an AC/DC 12-24V power source. Refer to the wiring diagram provided with the product packaging for correct polarity and connections. Ensure power is off during wiring.
3. **Alignment:** Once mounted and powered, align the sensor precisely. The 180-degree rotation feature simplifies this process. Use any built-in indicators (e.g., LED) to confirm proper alignment and signal reception.
4. **Securing:** Securely fasten the sensor using appropriate screws or mounting hardware. Verify that the sensor is stable and will not shift during operation.

5. Operating Instructions

Once installed and powered, the Sommer 7029V000 sensor operates automatically. It emits an infrared beam and detects its interruption or reflection, depending on whether it's used as a transmitter/receiver pair or with a reflector.

- **Detection:** When an object breaks the beam, the sensor's output changes state, signaling detection.
- **Indicators:** Observe any status LEDs on the sensor. A steady light typically indicates proper alignment and no detection, while a change or flicker indicates detection or misalignment.
- **Environmental Factors:** Performance may be affected by heavy rain, fog, or direct sunlight. Ensure the sensor's lens is clean for optimal operation.

6. Maintenance

Regular maintenance ensures the longevity and reliable performance of your sensor:

- **Cleaning:** Periodically clean the sensor's lens and housing with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Inspection:** Regularly inspect the wiring for any signs of damage or wear. Check mounting screws for tightness.
- **Alignment Check:** If the sensor's performance degrades, verify its alignment. Minor adjustments may be necessary due to environmental shifts or vibrations.

7. Troubleshooting

If you encounter issues with your Sommer 7029V000 sensor, refer to the following table:

Problem	Possible Cause	Solution
Sensor not responding	No power; Incorrect wiring; Damaged unit	Check power supply and connections; Verify wiring against diagram; Replace unit if damaged
Intermittent detection	Misalignment; Obstruction; Dirty lens	Re-align sensor; Remove obstruction; Clean lens
Short detection range	Dirty lens; Environmental interference (e.g., heavy fog)	Clean lens; Consider environmental conditions

8. Specifications

- **Model Number:** 7029V000
- **Manufacturer:** Sommer
- **Product Dimensions:** 10.49 x 3.71 x 3.51 cm
- **Item Weight:** 140 grams
- **Color:** Black
- **Voltage Range:** AC/DC 12-24V
- **Operating Temperature:** -10 to +60 Celsius
- **Protection Class:** IP55
- **Range:** 20 meters
- **Rotation Angle:** 180 degrees

9. Warranty and Support

For information regarding warranty terms and conditions, please refer to the documentation included with your purchase or visit the official SOMMER website. For technical support or service inquiries, please contact your authorized SOMMER dealer or customer service representative.
Contact Information: Please refer to the contact details provided on the product packaging or the official SOMMER website.

© 2024 SOMMER. All rights reserved.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question