

NN LK15WC-JP02

YUMINST FLEXLEAK Sensor Film Connector User Manual

Model: LK15WC-JP02 (4-Corner Type)

1. INTRODUCTION

This manual provides instructions for the proper installation, operation, and maintenance of the YUMINST FLEXLEAK LK15WC-JP02 Corner Sensor Film Connector. This connector is designed to facilitate the installation and extension of FLEXLEAK sensor films, particularly for changing direction by 90 degrees.

2. PRODUCT OVERVIEW AND FEATURES

Product Overview

The YUMINST FLEXLEAK LK15WC-JP02 is a waterproof corner connector specifically designed for use with FLEXLEAK sensor films. It allows for a 90-degree change in the sensor film's installation direction, ensuring continuous leak detection coverage around corners.

Key Features

- Simple bolt fastening-type assembly structure for easy installation.
- Excellent shock-resistance and chemical-resistance, ensuring durability in various environments.
- Adhered film installation with IP67-grade (dual water-proof structure) for reliable protection against water ingress.
- Suitable for environments with chemical substances, including strong acids and alkalis.
- Thermal deformation temperature: 90°C ~ 120°C, indicating high heat resistance.
- Specifically designed for turning the sensor installation direction 90°.



Image: The YUMINST FLEXLEAK LK15WC-JP02 Corner Sensor Film Connector, showing its robust black casing and screw points for secure assembly.

3. SAFETY INFORMATION

Important Safety Instructions

- **Power Disconnection:** Always ensure power is disconnected from the sensor system before handling connectors or sensor films to prevent electrical hazards.
- **Proper Tools:** Use appropriate tools for installation to prevent damage to the connector or sensor film.
- **Temperature Limits:** Do not expose the connector to temperatures outside its specified thermal deformation range (90°C ~ 120°C).
- **Chemical Exposure:** While the connector offers chemical resistance, avoid direct and prolonged exposure to highly corrosive substances unless specifically designed for such conditions.
- **Child Safety:** Keep out of reach of children.

For more detailed safety guidelines related to the overall sensor system, refer to the main sensor film manual.

4. PACKAGE CONTENTS

What's Included

Your package should contain:

- 1 x YUMINST FLEXLEAK LK15WC-JP02 Corner Sensor Film Connector
- Necessary fastening bolts (pre-installed or included separately)

Note: Sensor film is sold separately and is required for the connector's function.

5. SETUP AND INSTALLATION

How to Couple the Film Sensor with the Connector

Follow these steps carefully to ensure a secure and waterproof connection:

1. **Prepare the Sensor Film:** Take off approximately 4 cm of the double-sided tape from the end of the sensor film where the connection will be made.
2. **Open the Connector:** Separate the top and bottom case of the LK15WC-JP02 connector by loosening the bolts.
3. **Position the Sensor Film:** Carefully place the prepared sensor film into the connector guide. Ensure the film aligns with the reference red line inside the connector for proper contact.
4. **Tighten the Bolts:** Reassemble the top and bottom cases and tighten the bolts securely. A manual driver is recommended to avoid over-tightening.
5. **Secure with Tape:** Stick the double-sided tape (removed in step 1) onto the bottom cover of the connector to further secure the film and enhance waterproofing.
6. **Completion:** The coupling process is now complete.

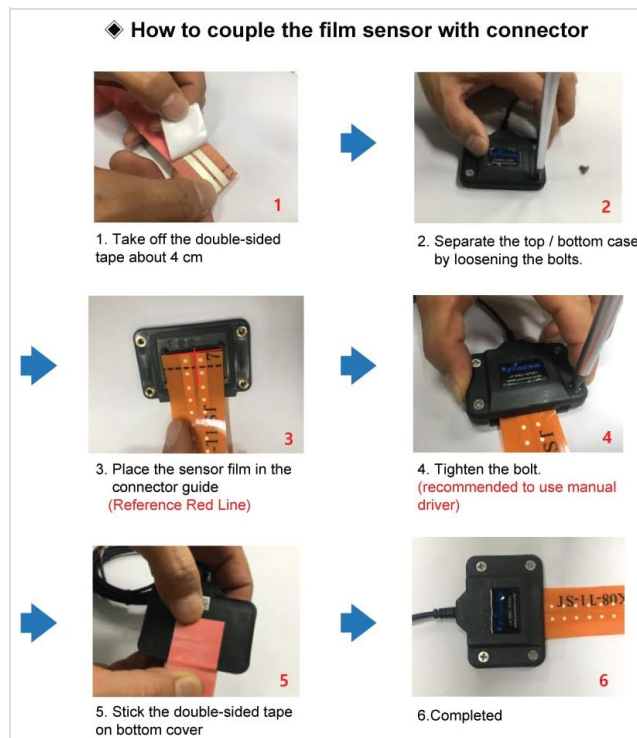


Image: A visual step-by-step guide demonstrating the process of coupling the FLEXLEAK sensor film with the LK15WC-JP02 connector, from preparing the film to final assembly.

6. OPERATION

Usage

The LK15WC-JP02 connector itself does not require active operation. Its function is passive, providing a secure and waterproof connection point for the FLEXLEAK sensor film, allowing it to turn 90 degrees. Once installed, the connected sensor film will function as part of your leak detection system, with the connector ensuring continuity around corners.

7. MAINTENANCE

Care and Maintenance

- **Cleaning:** If necessary, gently wipe the exterior of the connector with a damp cloth. Avoid using harsh chemicals or abrasive cleaners, which could damage the material or seals.

- **Inspection:** Periodically inspect the connector for any signs of physical damage, loose bolts, or degradation of the waterproofing seals. Address any issues promptly to maintain performance.
- **Storage:** Store unused connectors in a cool, dry place away from direct sunlight and extreme temperatures to preserve their integrity.

8. TROUBLESHOOTING

Common Issues

Sensor Film Not Detecting Leaks After Connector Installation

- **Check Connection:** Ensure the sensor film is correctly seated within the connector and aligned with the reference red line. Re-open and re-seat if necessary, ensuring proper electrical contact.
- **Tightness of Bolts:** Verify that all bolts are securely tightened to ensure proper contact and waterproofing. Loose bolts can lead to intermittent or no detection.
- **Film Damage:** Inspect the sensor film itself for any cuts, kinks, or damage near the connection point that might interrupt the circuit.
- **System Check:** Confirm that the main sensor alarm module is functioning correctly and that other parts of the sensor film (not connected to this specific corner) are operational.

Water Ingress at Connector Point

- **Seal Integrity:** Ensure the double-sided tape is properly adhered to the bottom cover and that the connector halves are tightly sealed. The tape is crucial for the dual waterproof structure.
- **Proper Assembly:** Re-check the installation steps to ensure all components are correctly assembled and tightened. Any misalignment can compromise the seal.
- **Damage:** Inspect the connector for any cracks or physical damage that might compromise its IP67 rating. If damaged, replace the connector.

9. SPECIFICATIONS

Technical Specifications

Parameter	Value
Model	LK15WC-JP02 (4-Corner Type)
Dimensions (W x H x D)	90mm x 90mm x 10mm
Waterproof Rating	IP67 (Dual water-proof structure)
Thermal Deformation Temperature	90°C ~ 120°C
Chemical Resistance	Strong acid-resistance, alkali-resistance
Assembly Type	Bolt fastening

10. WARRANTY AND SUPPORT

Warranty Information

This product is manufactured by YUMIN Sensor Technology Co., Ltd. For specific warranty terms and conditions, please refer to the documentation provided with your complete FLEXLEAK sensor system or

contact the manufacturer directly. Warranty coverage typically applies to manufacturing defects.

Customer Support

For technical assistance, troubleshooting, or inquiries regarding the YUMINST FLEXLEAK connectors, please visit the official YUMINST website or contact their customer support.

Manufacturer: YUMIN Sensor Technology Co., Ltd.

Website: www.yuminst.co.kr

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