**Appleton CJPPB1775GMTDOW**

# Appleton CG50100 1-Inch Aluminum Liquid-Tight Cord and Cable Connector User Manual

**Model: CJPPB1775GMTDOW**

## 1. Introduction

This manual provides essential information for the proper installation, operation, and maintenance of the Appleton CG50100 1-inch aluminum liquid-tight cord and cable connector. Please read these instructions thoroughly before installation and retain them for future reference. This connector is designed for use in industrial and commercial applications where a liquid-tight seal is required for electrical cords and cables.

## 2. Safety Information

**WARNING: Risk of Electric Shock or Fire.**

- Installation must be performed by qualified personnel in accordance with all national and local electrical codes.
- Ensure power is disconnected before installing or servicing the connector.
- Use only approved tools and equipment.
- Verify that the connector is suitable for the specific cable type, size, and environmental conditions of the application.
- Do not modify the connector in any way.

## 3. Product Overview

The Appleton CG50100 is a robust 1-inch aluminum liquid-tight cord and cable connector designed to

secure and seal electrical cables entering or exiting enclosures, preventing the ingress of liquids, dust, and other contaminants. It features a male NPT threaded end for connection to conduit or enclosure knockouts and a compression-style grip for the cable.

**Figure 1:** Appleton CG50100 1-inch aluminum liquid-tight cord and cable connector. An image showing the Appleton CG50100 connector, featuring a threaded male end for conduit connection and a knurled compression nut for securing a cable, designed for liquid-tight applications.

## 4. Setup and Installation

1. **Preparation:** Ensure the power supply to the circuit is completely disconnected and locked out. Select the appropriate cable size for the connector's specified range.
2. **Disassembly:** Unscrew the compression nut from the connector body. Remove the sealing gland and grip ring.
3. **Cable Insertion:** Insert the cable through the compression nut, then through the sealing gland, and finally through the grip ring. Ensure the cable jacket is clean and free of damage where it will be sealed.
4. **Connector Mounting:** Thread the male NPT end of the connector body into the appropriate knockout or threaded hub of the enclosure. Tighten securely using a wrench. For non-threaded openings, use a

locknut (not included) on the inside of the enclosure.

5. **Cable Sealing:** Push the cable through the connector body until the desired length is achieved inside the enclosure. Ensure the sealing gland is properly seated around the cable and inside the connector body.
6. **Final Tightening:** Hand-tighten the compression nut onto the connector body. Then, use a wrench to tighten the compression nut further until the cable is firmly gripped and a liquid-tight seal is achieved. Do not overtighten, as this can damage the cable or connector.
7. **Verification:** Visually inspect the installation to ensure all components are properly seated and tightened.

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## 5. Operating Instructions (Application)

Once properly installed, the Appleton CG50100 connector provides a secure and liquid-tight termination for electrical cables. No further operational steps are required beyond ensuring the integrity of the electrical system it is part of. The connector's function is passive, maintaining the seal and strain relief for the cable.

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## 6. Maintenance

Regular inspection of the Appleton CG50100 connector is recommended to ensure its continued performance and safety.

- **Visual Inspection:** Periodically check the connector for any signs of physical damage, corrosion, or wear.
- **Tightness Check:** Ensure the compression nut and the connector body's mounting threads remain tight. Re-tighten if any looseness is detected, ensuring not to overtighten.
- **Seal Integrity:** Inspect the area where the cable enters the connector for any signs of liquid ingress or degradation of the sealing gland.
- **Cleaning:** If necessary, clean the exterior of the connector with a damp cloth. Avoid using harsh chemicals that could damage the aluminum finish or sealing materials.

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## 7. Troubleshooting

Most issues related to the CG50100 connector stem from improper installation or damage.

- **Liquid Ingress:** If moisture is found inside the enclosure near the connector, it indicates a compromised seal.
    - **Solution:** Disconnect power, disassemble the connector, inspect the sealing gland and cable jacket for damage. Reassemble, ensuring the sealing gland is correctly seated and the compression nut is tightened sufficiently to create a liquid-tight seal. Replace damaged components if necessary.
- **Cable Pull-Out:** If the cable can be easily pulled out of the connector, the strain relief is insufficient.
    - **Solution:** Disconnect power, re-tighten the compression nut. Ensure the cable diameter is within the specified range for the connector.
- **Corrosion:** Visible corrosion on the aluminum body.

- **Solution:** Clean the affected area. If corrosion is severe and compromises the structural integrity or sealing capability, replace the connector.

## 8. Specifications

| Attribute | Value |
|---|---|
| Brand | Appleton |
| Model Number | CJPPB1775GMTDOW (CG50100) |
| Material | Aluminum |
| Nominal Size | 1 inch |
| Product Dimensions (L x W x H) | 5 x 5 x 9 inches |
| Item Weight | 30.4 pounds |
| Color | Black (Gland/Seal) |
| ASIN | B008SBY06S |
| UPC | 781381191708 |
| Date First Available | April 12, 2017 |

## 9. Warranty Information

This Appleton product is subject to the manufacturer's standard warranty terms and conditions. For detailed warranty information, including coverage, duration, and claims procedures, please refer to the official Appleton website or contact their customer service directly. Proof of purchase may be required for warranty claims.

## 10. Support

For technical assistance, product inquiries, or further support regarding your Appleton CG50100 connector, please visit the official Appleton website or contact their customer support department.

**Appleton Official Website:** www.emerson.com/en-us/automation/brands/appleton