

## uxcell E0508

# uxcell E0508 22 AWG Pre-Insulated Ferrules Connectors Instruction Manual

Brand: uxcell | Model: E0508

## 1. PRODUCT OVERVIEW

The uxcell E0508 pre-insulated ferrules are designed for reliable and safe termination of 22 AWG stranded electrical wires into terminal blocks. Their tube-type design ensures a secure connection, enhancing the integrity of electrical circuits.

### Key Features:

- **Product Name:** Insulate Ferrule
- **Model:** E0508
- **Design:** Tube Type
- **Material:** Plastic, Metal (Copper)
- **Color:** Silver Tone, Green, Blue, Yellow, Black, Red (Mixed Colors)
- **Fit Cable Size:** 0.5 mm<sup>2</sup> (22 AWG)
- **Metal Tube Size:** 1.0 x 1.2 x 8 mm (Inner Dia\*OD\*L)
- **Plastic Tube Inner Diameter:** 3 mm
- **Total Length:** 14 mm
- **Package Content:** 950 Pcs (±2%) x Insulate Ferrules



An assortment of uxcell E0508 pre-insulated ferrules and corresponding 22 AWG wires, showcasing the product's design and color variety.

## 2. SETUP AND INSTALLATION

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Proper installation of ferrules ensures a reliable and safe electrical connection. Follow these steps for optimal results:

1. **Prepare the Wire:** Carefully strip approximately 8-10 mm of insulation from the end of the 22 AWG stranded wire. Ensure the wire strands are not damaged or frayed.
2. **Insert Wire into Ferrule:** Twist the exposed wire strands tightly together. Insert the twisted wire completely into the metal tube of the ferrule until the insulation meets the plastic collar.
3. **Crimp the Ferrule:** Use a dedicated ferrule crimping tool. Place the ferrule (with the wire inserted) into the appropriate crimping die for 22 AWG. Crimp firmly to secure the wire within the ferrule. A proper crimp will create a strong, gas-tight connection.
4. **Verify Connection:** Gently tug on the wire to ensure the ferrule is securely attached and the wire cannot be pulled out. Inspect the crimped area for any signs of damage or incomplete crimping.

5. **Insert into Terminal Block:** Insert the crimped ferrule into the designated terminal block opening. Tighten the terminal screw or engage the spring clamp mechanism to secure the ferrule.

Your browser does not support the video tag.

This video illustrates the process of connecting 22 AWG silicone wires to XH 3-pin connectors, providing a visual guide for proper wire termination and assembly.

### 3. OPERATING INSTRUCTIONS

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Ferrules are passive components designed to improve the reliability of electrical connections. Once properly installed, they function by providing a consistent, solid contact point for stranded wires within screw terminals or spring clamps. No active operation is required beyond correct installation.

#### Best Practices:

- Always use the correct size ferrule for your wire gauge (22 AWG for E0508).
- Ensure the wire is fully inserted into the ferrule before crimping.
- Use a high-quality, calibrated crimping tool designed for insulated ferrules.
- Avoid over-crimping or under-crimping, as both can lead to poor connections.
- Periodically check connections in high-vibration or high-temperature environments.

### 4. MAINTENANCE

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Ferrules themselves require minimal maintenance once installed. However, proper care and storage are essential for their longevity and performance.

#### Storage:

- Store ferrules in a dry, cool environment, away from direct sunlight and moisture.
- Keep them in their original packaging or a sealed container to prevent contamination and oxidation.

#### Inspection:

- Before use, inspect ferrules for any signs of damage, corrosion, or deformation. Discard any compromised ferrules.
- After installation, periodically inspect the crimped connections for looseness or discoloration, especially in critical applications.

#### Cleaning:

- Ferrules do not typically require cleaning. If they become dirty, wipe them with a clean, dry cloth. Avoid using harsh chemicals or abrasive materials.

### 5. TROUBLESHOOTING

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Most issues related to ferrule connections stem from improper installation. Here are common problems and their solutions:

#### Loose Connection:

- **Symptom:** Wire pulls out easily from the ferrule or terminal block; intermittent electrical contact.
- **Cause:** Insufficient crimping, incorrect ferrule size, or terminal screw not tightened enough.
- **Solution:** Re-crimp with proper force and correct die, ensure ferrule matches wire gauge, or tighten terminal screw securely.

Damaged Wire Strands:

- **Symptom:** Visible damage to wire strands after stripping or crimping.
- **Cause:** Improper wire stripping tool or technique, or incorrect crimping die.
- **Solution:** Use a sharp, correctly sized wire stripper. Ensure the crimping tool is set to the appropriate ferrule size. Always cut and re-strip damaged wire sections.

Ferrule Not Fitting Terminal:

- **Symptom:** Crimped ferrule does not fit into the terminal block opening.
- **Cause:** Ferrule size too large for the terminal, or improper crimp profile.
- **Solution:** Verify the terminal block specifications for compatible ferrule sizes. Ensure the crimping tool creates a square or hexagonal profile that fits the terminal.

6. SPECIFICATIONS

Attribute	Value
Product Name	Insulate Ferrule
Model	E0508
Design	Tube Type
Material	Plastic, Metal (Copper)
Color	Multicolor (Silver Tone, Green, Blue, Yellow, Black, Red)
Fit Cable Size	0.5 mm² (22 AWG)
Metal Tube Size	1.0 x 1.2 x 8 mm (Inner Dia*OD*L)
Plastic Tube Inner Diameter	3 mm
Total Length	14 mm
Temperature Rating	257 degrees Fahrenheit
Number of Items	950
Item Weight	2.11 ounces
Package Dimensions	5.12 x 4.53 x 1.18 inches
ASIN	B00NPZ79TW
Date First Available	September 19, 2014

7. SAFETY INFORMATION

When working with electrical components, always prioritize safety to prevent injury or damage to equipment.

- Always disconnect power to the circuit before installing or removing ferrules.
- Use appropriate personal protective equipment (PPE), such as safety glasses and insulated gloves.
- Ensure all tools used are in good working condition and suitable for electrical work.

- Avoid touching live electrical components.
- Do not use damaged ferrules or wires.
- If unsure about any electrical procedure, consult a qualified electrician.

## 8. WARRANTY AND SUPPORT

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For information regarding product warranty, returns, or technical support, please refer to the official uxcell website or contact their customer service directly. Specific warranty terms may vary by region and purchase date.

You can visit the uxcell store for more products and information:[uxcell Store](#)