

**uxcell a19081600ux0610**

# uxcell Brass Tubing Nut Tube Fitting Instruction Manual

Brand: uxcell | Model: a19081600ux0610

## 1. INTRODUCTION

The uxcell Brass Tubing Nut is a crucial component for creating secure and reliable connections in various fluid and gas pipeline systems. This compression fitting is engineered for high pressure resistance, excellent sealing, and reusability, making it suitable for a wide range of industrial and scientific applications. Its design facilitates convenient installation and maintenance, ensuring safe and dependable operation without the need for welding.

This manual provides comprehensive information on the product's specifications, proper setup, operational procedures, maintenance guidelines, and troubleshooting tips to ensure optimal performance and longevity of your brass tubing nuts.

## 2. SPECIFICATIONS

The uxcell Brass Tubing Nut is designed with precision to meet demanding requirements. Below are the detailed technical specifications:

Attribute	Value
Product Name	Brass Tubing Nut
Color	Gold Tone
Material	Brass
Surface Treatment	Passivating
Withstand Voltage	300Mpa
Thread Size	M10
Pitch	1mm
Fit for Pipe Diameter	6mm / 0.24"
Hexagonal Width	12mm / 0.47"
Total Length	12mm / 0.47"

Attribute	Value
Number of Pieces	8

## Dimensions Overview

The following image illustrates the key dimensions of the brass tubing nut, including the pipe diameter fit, hexagonal width, and total length.



Image: Detailed dimensions of the uxcell Brass Tubing Nut.

## 3. PACKAGE CONTENTS

Upon opening the package, you will find the following items:

- 8 x uxcell Brass Tubing Nuts (M10x6mm)



Image: The complete package content of eight brass tubing nuts.

## 4. SETUP AND INSTALLATION

The installation of the brass tubing nut involves a simple, non-welding process, making it ideal for various environments, including those requiring fireproof or explosion-proof conditions, and high-altitude operations. Follow these steps for a secure connection:

### 4.1. Preparing the Tube

- Cut the Tube:** Ensure the steel, copper, aluminum, or nylon tube is cut squarely and cleanly to the desired length.
- Deburr the Tube:** Carefully remove any burrs from both the inside and outside edges of the tube to prevent damage to the fitting and ensure a proper seal.
- Clean the Tube:** Wipe the end of the tube clean to remove any debris or contaminants.

### 4.2. Assembling the Fitting

- Insert the Nut and Ferrule:** Slide the brass tubing nut onto the tube, followed by the ferrule (if separate). Ensure the ferrule's tapered end faces the fitting body.
- Insert the Tube into the Fitting Body:** Push the tube firmly into the fitting body until it bottoms out.
- Tighten the Nut:** While holding the fitting body steady, tighten the brass tubing nut by hand until it is finger-tight.
- Final Tightening:** Using a wrench, tighten the nut further. For initial installation, typically tighten 1 to

1-1/4 turns past finger-tight. The ferrule will resist, cut into the tube, and create a seal. Refer to specific torque specifications if available for your application.



Image: Close-up of the M10 thread on the brass tubing nut, essential for proper assembly.

## 5. OPERATION

Once properly installed, the uxcell Brass Tubing Nut forms a firm, high-pressure, and well-sealed connection. This type of ferrule joint is widely used in automatic control systems for various industries, including machine tools, oil circuits, oil pumps, oil refining, chemical, petroleum, food, and instrumentation. The connection is designed to be reliable and repeatable, ensuring consistent performance in demanding environments.

The primary function of the brass tubing nut is to secure the tube within the compression fitting, creating a leak-tight seal. Its robust construction allows it to withstand significant pressure, making it an advanced connecting piece for critical pipeline applications.

## 6. MAINTENANCE

While brass tubing nuts are designed for durability and long-term performance, periodic inspection can help ensure continued reliability:

- **Visual Inspection:** Regularly check the fittings for any signs of corrosion, damage, or leaks.
- **Tightness Check:** If a leak is suspected, gently re-tighten the nut. Avoid over-tightening, as this can damage the ferrule or tube.

- **Cleaning:** If the external surface becomes dirty, wipe it with a clean, damp cloth. Avoid using harsh chemicals that could damage the brass or its passivating surface treatment.
- **Replacement:** If a fitting shows significant wear, damage, or persistent leaks, it should be replaced immediately to prevent system failure.

## 7. TROUBLESHOOTING

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Most issues with compression fittings relate to improper installation or damaged components. Here are common problems and their solutions:

- **Leakage at the Connection:**
  - *Cause:* Insufficient tightening, damaged ferrule, improperly cut or deburred tube, or incorrect tube insertion.
  - *Solution:* Ensure the tube is fully seated. Re-tighten the nut by an additional quarter turn. If the leak persists, disassemble, inspect the ferrule and tube end for damage, replace components if necessary, and reassemble carefully.
- **Difficulty in Tightening the Nut:**
  - *Cause:* Cross-threading, damaged threads on the nut or fitting body.
  - *Solution:* Loosen the nut, ensure it is aligned correctly, and try again. If threads are damaged, replace the affected component.
- **Tube Pull-Out:**
  - *Cause:* Insufficient tightening, or the ferrule did not properly bite into the tube.
  - *Solution:* Disassemble and inspect the ferrule and tube. Ensure the tube is clean and free of burrs. Reassemble and tighten properly, ensuring the ferrule creates a secure grip.

## 8. WARRANTY AND SUPPORT

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Specific warranty information for the uxcell Brass Tubing Nut is not provided in the product details. For any warranty claims, technical support, or further inquiries, please contact the manufacturer, uxcell, directly through their official channels or the retailer from whom the product was purchased. Always retain your proof of purchase for any support requests.

For general product information and support, you may visit [theuxcell Store on Amazon](#).