

#### THE PRINCIPLE

UCT Fluid Solutions ONE-LOK® is designed to provide leak-tight, secure connections that withstand high-pressure, vibration and vacuum applications. ONE-LOK tube fittings are made up of three parts that are precision-engineered and machined: body, ferrule and nut.

# **APPLICATIONS**

ONE-LOK is designed for use in control systems, process for instrumentation devices and in industrial equipment for various markets:

- Pulp & paper mills
- · Petroleum process plants
- Chemical process plants
- Chromatography
- · Power generation plants

ONE-LOK offers a simple, high-quality tube fitting with excellent performance and reliability.

#### **MATERIALS**

ONE-LOK standard single-ferrule fittings are offered in 316 Stainless Steel. Cold-drawn finished bar stock is machined to produce the straight fittings. Close-grain forgings are used for the machining of the shaped bodies. For other material options, please contact your distributor or on-line:

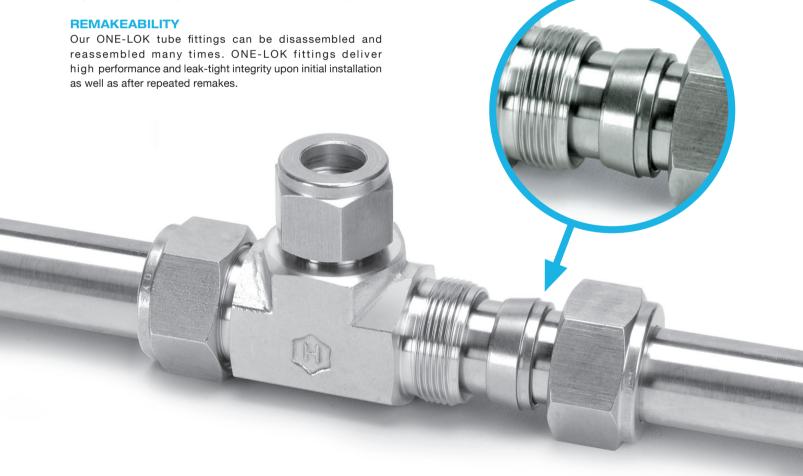
https://www.uct.com/products/fluid-solutions/default.aspx

## **TEMPERATURE CHANGES**

The single ferrule in the ONE-LOK fitting is engineered to bow during initial installation. This feature enables the fitting to maintain a leak-tight seal in thermo-cycling applications.

# UNIQUE HEAT CODE TRACING NUMBER (MATERIAL CODE)

We Stamp Or Etch ONE-LOK stainless steel body fittings with a unique heat-code tracing number. This feature allows traceability of the stainless steel material back to the original melt or cast.



### **ONE-LOK® TUBING SELECTION**

To ensure the installation of safe, leak-free systems, it is important to choose the appropriate tubing to be used with ONE-LOK fittings. Tubing data is located in the LET-LOK tube fitting catalog, page 5, in Let-Lok catalog; tables 1 and 2.

**NOTE:** Use fully annealed, high-quality stainless steel tubing of ASTM A269 or of equivalent standard.

Working pressure: Based on laboratory and field tests using ASTM A269 tubing with a safety factor of 4:1 in a metal temperature range of -20° to +100°c. However, it is the customer's responsibility to ensure safe product selection based upon the total system design and function.

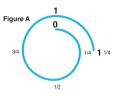
## **INSTALLATION INSTRUCTIONS**





ONE-LOK fittings are supplied assembled and finger tight. Disassembly before use may allow the entry of dirt or other particles.

1. Insert the tubing into the ONE-LOK fitting. Check that the tube rests firmly on the fitting shoulder and that the nut is finger tight.



2. Tighten the nut. 1-1/4 turns of the nut is required for 1/4" (6 mm) and



higher (See Figure A). 3/4 turns of the nut is required for 1/8" (See Figure B).

# **Reassembly Instructions:**

ONE-LOK connections may be disconnected and remade repeatedly without the loss of the leak-tight seal.

- **1.** Before disconnecting, mark the position of the nut in relation to the fitting body.
- **2.** To reassemble, use a wrench to tighten the nut to the original position.
- **3.** Tighten slightly with the wrench until a slight rise in torque is felt.

# **Tube Cutting**

Two different tools can be used to cut the tubing:

- 1. Tube cutter
- 2. Hacksaw cutting

## **Tube Cutter**

To attain a leak-free connection, the tubing must be cut square. A high quality tube cutter with the correct cutting wheel to cut the tube material is recommended. Do not try to reduce the time of cutting by taking deep cuts with each turn of the cutter. This will harden the tube.

The end of the tube must be deburred to avoid damage to the fitting and to ensure that the tube reaches the bottom of the fitting.

## **Hacksaw Cutting**

In order to cut the tube with a hacksaw and get square ends, the tube must be cut with guide blocks.

This method of cutting necessitates deburring of the tube ends.

#### NOTE:

Do not hold the tube in a vise in the place where it will be inserted into the fitting (the vise will leave a mark on the tube that may cause leaks and ovality).

## **Tube Handling**

Scratches on the tube O.D. might cause leaks. Therefore, it is important to handle the tube carefully to reduce the risk of leaks.

### **Recommended Precautions**

- 1. Do not drag tubes on the floor.
- Do not drag tubes out of the tubing rack, especially in case of large O.D. tubes.

## **ONE-LOK ORDERING INFORMATION**

**ONE-LOK** fitting part numbers are constructed from symbols that identify the type of material and size of the fitting.

The ONE-LOK part numbering system is the same as our LET-LOK Tube Fittings with the exception that an "H" must be added between the prefix number and the "L" to designate the one ferrule design.

768HL

(male connector)

Fitting type

SS

SS = Stainless Steel

1/4 x 1/4

Tube O.D. 1/4 NPT The O.D. size is always the first to be described.



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