

SINGLE FERRULE FITTINGS **ONE-LOK**[®]



TUBE FITTINGS 1/16" THROUGH 1"



ONE-LOK TUBE FITTINGS

THE PRINCIPLE

HAM-LET's ONE-LOK is designed to give you leak-proof, secure connections that can withstand high pressure, vibration and vacuum applications. To this end, 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 and instrumentation devices and in industrial equipment used in various applications. For example:

- 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's 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 HAM-LET distributor or HAM-LET on-line: www.ham-let.com

REMAKEABILITY

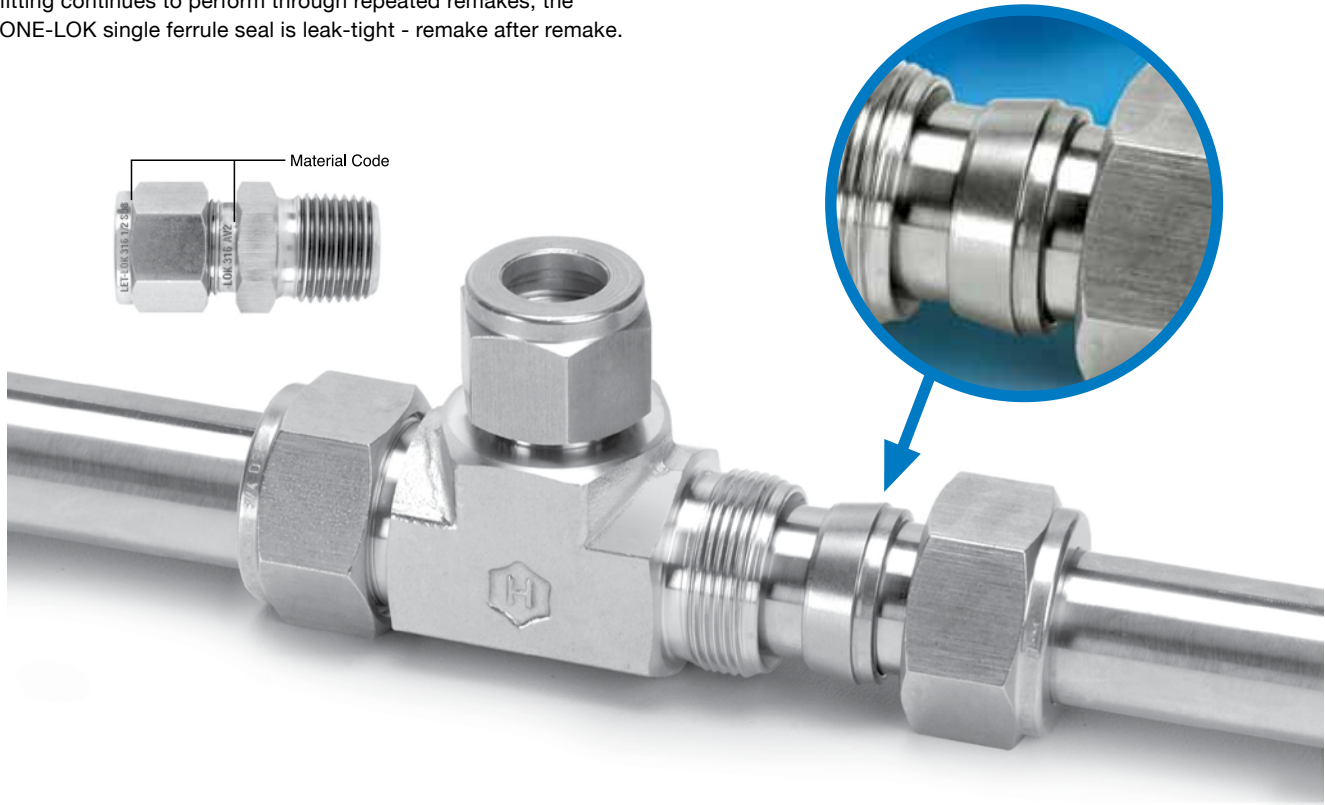
Owing to the single ferrule design, HAM-LET's ONE-LOK tube fitting continues to perform through repeated remakes; the ONE-LOK single ferrule seal is leak-tight - remake after remake.

TEMPERATURE CHANGES

The ONE-LOK single ferrule is capable of bowing during make-up. This feature introduces a 'live' element, allowing the device to maintain a leak-tight seal, despite expansion and contraction due to temperature changes.

UNIQUE HEAT CODE TRACING NUMBER (MATERIAL CODE)

Ham-Let stamps or etches all ONE-LOK stainless steel body fittings with a unique heat-code tracing number. This is particularly valuable for critical applications. Full documentation can be made available via this code in order to trace the St.St. 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 ONE-LOK single ferrule for your application. ONE-LOK fittings are engineered to the highest standards. The table below lists tube sizes, which have been tested to bursting pressure with both maximum and minimum wall thickness. Correctly assembled ONE-LOK fittings were installed and no leaks or other failures were noted at the connection points. If you plan to use tubing with different wall thicknesses than those noted in this

chart, please contact the HAM-LET Technical Department for advice regarding the appropriate working pressure.

Note: Use fully annealed, high-quality stainless steel tubing of ASTM A269 or 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 that is based upon the total system design and function.

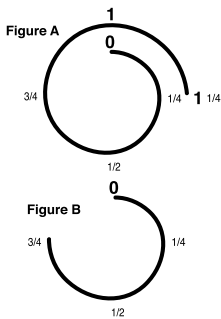
For Stainless Steel Tubing Data, See page 9

INSTALLATION INSTRUCTIONS



ONE-LOK fittings are supplied assembled, finger tight. Disassembly before use can 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 loss of leaktight seal.

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

Tube cutting

Two different methods can be used to cut tubes

1. Tube cutter
2. Hacksaw

Tube cutter

To attain a leak free connection, the tubing must be cut squarely. A good quality tube cutter with an appropriate blade for tubing material is recommended.

Do not try to reduce the time of cutting by taking deep cuts with each turn of the cutter. This will work 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.

Warning

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 might cause ovality).

Tube handling

Scratches on the tube might cause leaks. It is therefore important to handle the tube carefully to reduce the risk of leaks.

Some precautions to be taken:

1. Tubes must not be dragged on the floor.
2. Tubes must not be dragged out of a tubing rack, especially in case of large OD 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 you add an "H" between the prefix number and the "L" to designate the one ferrule design.

768HL	SS	1/4	x	1/4
Fitting type (male connector)	SS = Stainless Steel	Tube O.D. The O.D. size is always the first to be described		1/4 NPT

