

Sleeved stainless steel tubing installation

In this document describes the detailed connection procedure for 1/32" OD stainless steel tubing with fused 1/16" sleeves.

In case these types of tubing are connected while bottomed well into the receiving port, they can become deformed and start leaking (Fig. 1). The creation of a small dead volume in the connection prevents deformation (Fig. 2).

Note: this procedure is only to be applied with the sleeved SS tubing, for connections at pump and pulse-damper (outside the critical flow path).



Fig. 1. Sleeved SS tubing leaks and shows deformation after tightening the nut with the tubing end bottomed into the receiving port.

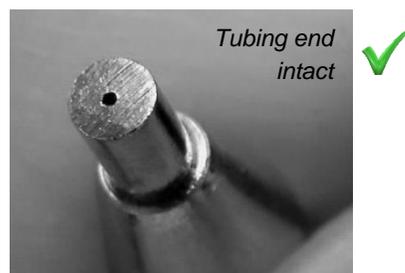


Fig. 2. Sleeved SS tubing does not leak after installation with the described procedure.

Installation procedure

1. Mount the nut and ferrule on the tubing end and **bottom the tubing into the receiving port**.
2. Screw the nut into the port, but do not tighten it yet (the tubing should still be able to move)



3. With a marker, draw a line at the point where the tubing goes into the nut.



4. Retract the tubing **about 0.5 - 1 mm** and tighten the nut.

5. Disconnect the tubing, and visually inspect if the ferrule is attached a bit away from the tubing end.
6. If OK, make the connection.



This procedure is specific for sleeved SS tubing and crucial for making leak-free connections. Wrong installation of such tubing may result in irreparably damaging the tubing end, which results in leakage.