

Installation Instructions

Installation of 20D Series Connections

For Tube O.D. 1/8", 1/4", 3/8" and 1/2"

Without Manual Presetting Tool

1. Put the nut and ferrules onto the tubing in fixed sequence and orientation (Fig. 1).
2. Insert the tubing into the fitting body or the valve. Finger tight the nut. Make sure that the tubing rests firmly on the shoulder of the fitting body or the valve (Fig. 2).
3. Mark the nut and the fitting body or the valve (Fig. 3).
4. Hold the fitting body or the valve steady. For tube O.D. 1/8", tighten the nut 1 1/4 turns with a wrench. For tube O.D. 1/4", 3/8" and 1/2", tighten the nut 1 1/2 turns with a wrench (Fig. 4).

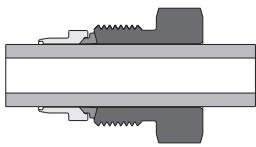


Fig.1

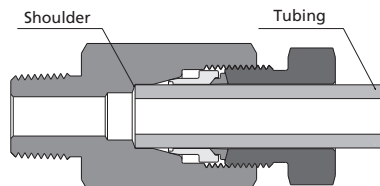


Fig.2

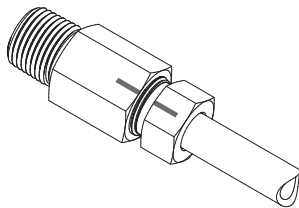


Fig.3

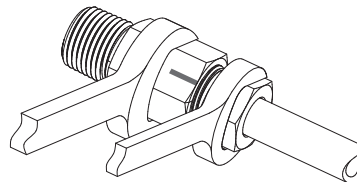


Fig.4

With Manual Presetting Tool

1. Put the nut and ferrules onto the tubing in fixed sequence and orientation (Fig. 1).
 2. Insert the tubing into the manual presetting tool. Finger tight the nut. Make sure that the tubing rests firmly on the shoulder of the presetting tool (Fig. 5).
 3. Mark the nut and the manual presetting tool (Fig. 6).
 4. Hold the manual presetting tool steady. For tube O.D. 1/8", tighten the nut 1 1/4 turns with a wrench. For tube O.D. 1/4", 3/8" and 1/2", tighten the nut 1 1/2 turns with a wrench.
 5. Loosen the nut and remove the tubing with preassembled ferrules from the manual presetting tool (Fig. 7).
- NOTE: If the tubing sticks into the manual presetting tool, remove the tubing by gently rocking it back and forth. Do not rotate the tubing.
6. Insert the tubing with preassembled ferrules into the fitting body or the valve. Finger tight the nut (Fig. 8).
 7. Tighten the nut 1/4 turn with a wrench while holding the fitting body or the valve steady.

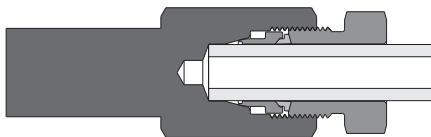


Fig.5

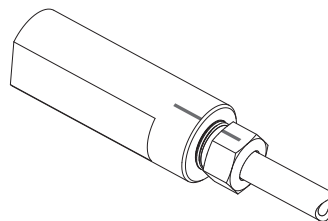


Fig.6

Fittings

Tubing

Quick Couplings

Line Filters

Valves

Sour Service Products

Subsea Valves

Tools and Installation Instructions

Technical Information

Part Number Crossover Charts

| |
|-------------------------------------|
| Fittings |
| Tubing |
| Quick Couplings |
| Line Filters |
| Valves |
| Sour Service Products |
| Subsea Valves |
| Tools and Installation Instructions |
| Technical Information |
| Part Number Crossover Charts |

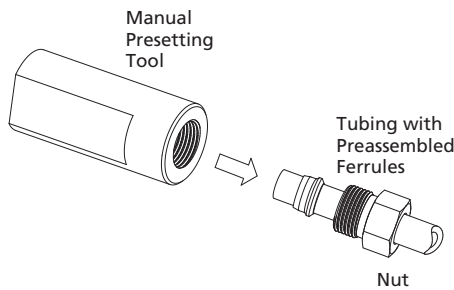


Fig.7

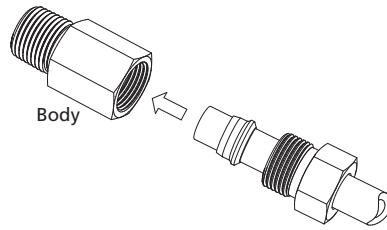


Fig.8

For Tube O.D. 1/2", 9/16", 3/4" and 1"

1. Preassemble the ferrules onto tubing using the hydraulic presetting tool. For details, please contact FITOK for instruction manual Hydraulic Presetting Tools.
2. Insert the tubing with preassembled ferrules into the fitting body or the valve. Finger tight the nut.
3. While holding the fitting body or the valve steady, tighten the nut 1/4 turn for tubing O.D. 1/2", 9/16" and 3/4" and 1/2" turn for tubing O.D. 1" with a wrench.

Reinstallation Instructions

1. Insert the tubing with preassembled ferrules into the fitting body or the valve.
2. While holding the fitting body or the valve steady, for tubing O.D. 1", tighten the nut to the previous assembly position and further tighten it with a wrench; for other dimension tubing, tighten the nut 1/4 turn with a wrench for the initial reinstallation, and for reinstallations thereafter, tighten the nut to the previous assembly position and further tighten it with a wrench.

For Plugs

1. Insert the plug into the fitting body or the valve.
2. For initial installation, finger tight the nut, further wrench tighten 1/2 turn while holding the fitting body or the valve body steady. For reinstallations thereafter, starting from the final tightened position in the previous assembly, further wrench tighten as may be necessary.

Cautions

1. Do not loosen or tighten fittings when the system is pressurized.
2. When assembling a tube fitting, screw the nut while holding the body steady.
3. Do not use 20D Series nut and ferrules with any other FITOK tube fittings.