Capillary and Tubing Installation Guide

LabSmith's CapTite™ one-piece fittings enable connection of components (valves, syringe pumps, interconnects, bonded-port connectors, Luer Locks, and cartridges) to 360um capillary, 1/32" tubing, or 1/16" tubing. To install the capillary or tubing:

1. Cut the capillary or tubing to length.

   For PEEK capillary or tubing: use a sharp blade such as a razor blade or X-acto knife.

   For fused-silica capillary: cleave capillary with a cutting stone (refer to the capillary packaging for cleaving instructions)

2. Insert the capillary into the nut end of the one-piece fitting until the tubing extends through the tapered ferrule end approximately 2 mm.
3. Insert the one-piece fitting into the component and turn the fitting to finger-tighten.

   CAUTION: Do not over-tighten the fitting.

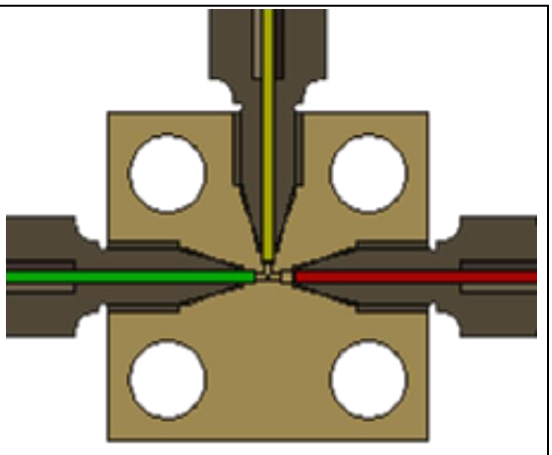
   C360-100 and T132-100 fittings are typically installed "finger-tight" to avoid damage. The 1/8" hex wrench can be used to tighten or loosen difficult-to-reach fittings, or to tighten the T116-100 fittings.
4. Gently pull on the capillary tubing to ensure that it is held securely by the fitting. If the capillary comes free, loosen the fitting and repeat steps 2 and 3.
5. If the fitting leaks or the capillary cannot be secured, the following troubleshooting items should be checked prior to further tightening the fitting:
   a. The capillary may be cut too short and so it is not protruding through the end of the fitting when installed
   b. The capillary may not have a "clean cut". An angled or jagged edge will cause the fittings to leak
   c. Broken capillary or other debris may be stuck inside the fitting or component. Try flushing the port from the opposite side to clear the debris.
6. If pressures greater than 10,000 psi are required, first finger-tighten all fittings and test for leaks at low pressure. Then, use the 1/8" hex wrench to tighten the fittings approximately ¼ extra revolution.

   Torque specifications (given for reference only, follow steps above to ensure fittings are properly tightened):

   C360-100 and T132-100: 4-6 in-oz recommended, 10 in-oz maximum

   T116-100: 12-14 in-oz recommended, 18 in-oz maximum

- Red capillary does not protrude through the one-piece fitting. The fitting will leak, and also there is a chance of compressing and damaging the tip of the one-piece fitting during installation.
- Yellow capillary may properly seal, but the capillary is not fully seated into the interconnect, creating dead volume.
- Green capillary is properly installed.



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