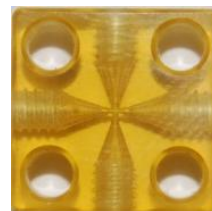


# Mounting Your Fluid Circuit on a Breadboard

## CapTite™ Components



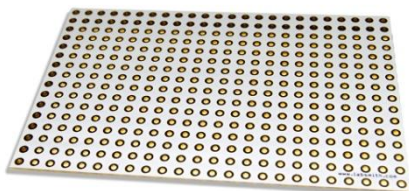
One-piece fitting (C360-100)  
One-piece plug (C360-101)



Interconnects:  
Tee (C360-203)  
Cross (C360-204)  
Y (C360-203Y)  
Union (C360-202)



Luer-lock adapter  
(C360-300)



Manual breadboard  
(LS-600)



Filter holder  
(uFilter-360)



Breadboard reservoir  
(C360-BBRES)






Manual valve  
(MV201-360)

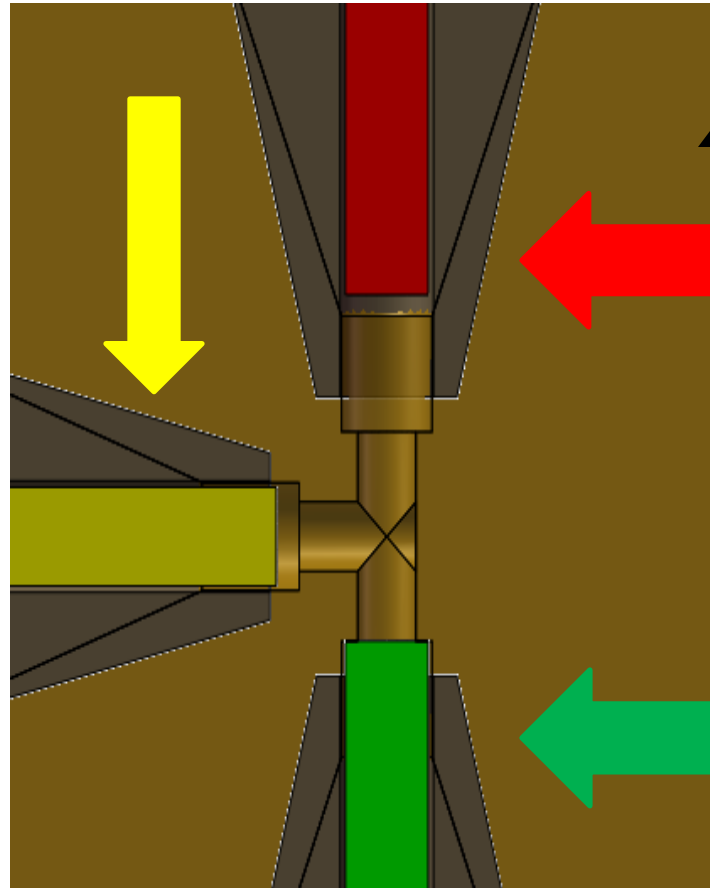
# Mounting Your Fluid Circuit on a Breadboard

## Installation Tools and Supplies

- Breadboard Mounting
  - T7 TORX driver for installing breadboard screws
  - ¼" screws to attach valve, reservoirs and chip holders to breadboard
  - ½" screws to attach interconnects to breadboard
  - ¼" standoff, spacer for interconnects
- Capillary
  - PEEK<sup>®</sup> capillary, 360 µm OD, 150 µm ID
    - PEEK capillary cutter
  - Fused-silica capillary, 360 µm OD, 150 µm ID
    - Cutting stone to score fused-silica capillary

# Zero-Dead Volume Capillary Installation

<u>Color</u>	<u>Condition</u>
	No Flow
	Dead Volume
	Unobstructed Flow ZDV



Cause

Tubing too far  
back and one-  
piece fitting will  
crush tubing

Tubing is not  
flush  
in seat, gap= dead  
volume

Tubing is flush  
in seat, no gaps &  
no obstructions

# CapTite™ Installation Instructions

- Lay out components on breadboard without fastening anything
  - Where possible, plan to use jogs or bends in the tubing between breadboard mounted components to make tubing length requirement less precise.
- Cut tubing to desired length
  - PEEK tubing use blade or knife to cut
  - Fused-silica tubing use cutting stone to score then break
- Working one leg of your fluid circuit at a time:
  - Connect tubing to fluid circuit leg and finger-tighten.
    - Ensure tubing is seated flush in the component before tightening.
    - Use hex wrench to tighten one-piece fittings ONLY if access finger-tightening is not possible because access is blocked. Use caution not to over-tighten.
    - Gently pull on tubing to ensure it is secure.
  - Use T7 Torx driver to fasten screws to fix component to the breadboard.
    - Use spacers with the interconnects to help level tubing throughout circuit.
- Test for leaks by placing plug in system outlet and pressurizing with manual syringe
- Move on to next component after verifying component is secured and leak free.