



# Quick Start Guide

## Minimate™ TFF Capsule



### Component Information

Part No.	Description
OAxxxC12	<b>Minimate TFF Capsule</b>
88216	<b>Minimate Fitting Kit</b> Kit Contains: <b>A</b> Male luer to 3.2 mm (1/8") hose barb <b>B</b> Female luer to 3.2 mm(1/8") hose barb <b>C</b> 3.2 mm (1/8") tubing <b>D</b> Tubing screw clamp <b>E</b> Tubing clamps <b>F</b> Adhesive strips (loop and hook)
FS700X06	<b>3-port valves</b> (not supplied)



Minimate Fitting Kit



3-port valves



### Assemble the Components

**Installation** (Refer to schematic on reverse side)

1. Remove the caps from the feed and retentate ports of the Minimate TFF capsule.
2. Screw a male-luer-to-hose-barb connector (included) into the feed/retentate ports.
3. Cut a length of tubing long enough to reach from the reservoir, through the pump head to the capsule.
4. Connect the tubing to the hose-barb on one of the feed ports. Install the tubing in the pump head. Put the other end of the tubing into the reservoir.
5. Cut another piece of tubing, long enough to return from the retentate port to the sample reservoir. Attach the tubing to the retentate hose-barb and put the other end in the reservoir. Place the retentate screw clamp on the retentate tubing close to the retentate port (after the pressure gauge if installed). Secure in place but do not tighten to restrict the tubing.
6. Remove one of the filtrate caps. Choose port that is highest in orientation. This allows air to be expelled from the capsule.
7. Attach a female luer-to-hose-barb fitting to the filtrate port.
8. Cut a length of tubing long enough to reach from the filtrate port to your filtrate collection vessel. Connect the tubing to the filtrate hose barb.
9. Install a tubing clamp over each piece of tubing where it connects to the hose barb. Pinch the clamp to tighten.

### Notes:

1. Do not discard caps. They are required for storage.
2. Keep tubing lengths as short as possible to reduce hold-up volume.
3. Feed and retentate ports are interchangeable. Depending on the orientation of the capsule, choose the port that is at the lowest elevation as the feed port. This allows for air to be easily expelled when liquid is pumped through the capsule.
4. If a pressure gauge or transducer is used, the feed or retentate tubing connects to the pressure device, which must then be connected to the feed or retentate ports.
5. Pall strongly recommends the use of pressure gauges or transducers connected on both the feed and retentate ports. If only one gauge is available, it should be used on the feed port. The use of pressure gauges allows accurate adjustment of feed pressures and provide for better reproducibility between process runs. They also help diagnose system problems.

## Attach the Minimate™ TFF Capsule to Your System

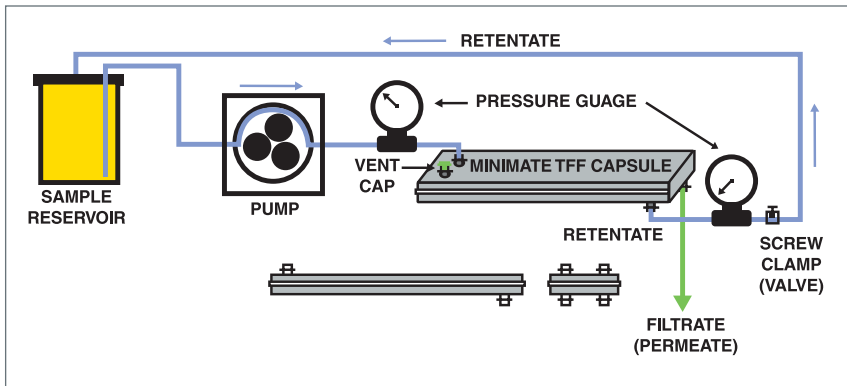


Photo of Minimate TFF Capsule on a Minim™ pump station with 0-4 bar (0-60 psi) pressure gauges

### Where to Find More Information

To learn more about using your Minimate TFF Capsule, consult the user guides supplied on the CD-ROM enclosed with the product. You can obtain support services and replacement parts by contacting Pall Corporation.

### Learn about Safety

You should use pressure gauges or pressure sensing devices in your system so you can monitor the system pressure and differential pressure across the capsule.

Check that sample and solutions are compatible with membrane and plastic components.

Complete the following safety procedures:

- Read about the capsules operating limits in the Minimate TFF Capsule Care and Use Procedures.
- Follow good laboratory practices when using a TFF system – wear safety glasses and protective clothing.
- Take special care when using cleaning and sanitizing solutions. Refer to MSDS for proper handling and safety precautions.

### Process Tips

- Connect the Minimate TFF Capsule to your system using properly sized tubing to ensure minimal holdup volume and good control over process flows and pressures. To prevent leaks, secure tubing to hose barbs using tubing clamps.
- Before processing your product, measure the holdup volume of the system. Also measure the minimum reservoir volume you can use without drawing air into the pump. Knowing the holdup volume and minimum operating volume enables you to determine appropriate process volumes and product recovery procedures.
- Properly precondition the capsule before use. Storage agents and air should be removed before product is introduced. Refer to operating instructions



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