



## INSTALLATION PROCEDURE



# POLYFLOW<sup>®</sup> CAPSULES & MINI CARTRIDGES

PLEATED POLYPROPYLENE DEPTH MEDIA  
WITH POLYPROPYLENE HOUSING AND SUPPORTS

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Polyflow is a registered trademark of Parker Hannifin Corporation.

# 1. INSTALLATION PROCEDURE

## A. Capsules

1. Wipe the plastic bag clean, then cut it open and inspect the capsule for damage.
2. Using aseptic technique, install the capsule in-line following the relevant procedure below for each type of connector:
  - **Hose Barbs** – Attach tubing to the inlet and outlet hose barbs and secure with appropriate tubing clamps.
  - **Sanitary Fittings** – Attach the capsule inlet and outlet fittings to the sanitary connections of the system. Be sure to include the gaskets and fully tighten the clamps. For best results, a 3-piece clamp design is recommended, 13MHHS Tri-Clover or equivalent.
  - **NPT Fittings** – For male capsule fittings, wrap the inlet/outlet connectors with PTFE tape and thread the capsule into the system. For NPT female capsule connections, first clean the system pipe ends, then wrap with PTFE tape and thread the filter into position. **CAUTION: DO NOT OVER TIGHTEN**, as this could strip the threads and breach the system integrity.
  - **Quick-Disconnect** – Retract the collar on the female end of the quick-disconnect fitting and insert the male connection (attached to the capsule body). Release the collar to lock the male fitting in place and check to ensure the coupling is securely engaged.
  - **Swagelok®** – This fitting is designed to accept rigid, polymeric tubing (½ -inch OD), held in place with a compression nut. To install, first push the tubing through the nut followed by the retaining ferrule. Then insert the distal end of the tubing into the Swagelok fitting attached to the capsule body until it is firmly seated in the connection. Now engage the compression nut and tighten firmly to secure the capsule/tubing connection. *Use care not to over-tighten if using metal compression nuts as this could cross-thread the plastic fitting and induce leakage!*
3. Open the uppermost vent valve loosely (1/2 turn is sufficient). Vent screws are not designed to be removed completely, nor do they need to be for complete venting. Now, open the inlet valve to let the liquid fill the capsule housing. **CAUTION:** Initial flow rates should be kept low to prevent inadvertent leakage from the top vent.
4. Monitor the open vent, and when all of the air is purged from the housing (i.e., fluid escapes), tighten the vent valve and adjust the flow rate to the desired level.

**CAUTION: DO NOT EXCEED** 70 psid (4.8 bar) as the maximum operating pressure of the capsule in the forward direction, or 30 psid (2.1 bar) in the reverse direction!

## B. Mini Cartridges

1. Wipe the plastic bag clean, then cut it open at the end nearest the O-Ring fitting and inspect it for damage.
2. Lubricate the O-Ring with clean water, the product to be filtered, or another appropriate liquid.
3. Install the cartridge onto the post in the housing base using the O-Ring fitting and a slight twisting motion. (Leave the bag on the filter cartridge for protection and grasp it as near as possible to the O-Ring fitting.)
4. Once the filter cartridge is seated into the housing base, gently rotate the cartridge a few degrees in either direction to relax the O-Ring.
5. Remove the plastic bag from the filter cartridge and reassemble the remaining housing components.

**Caution:** Excessive twisting of or pushing on the pleated section of the filter cartridge may cause damage.

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