### PS-1000 Ultrafiltration System Operating Conditions

<table>
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<th>Operating temperature</th>
<th>Min 40°F (4.4°C) / Max 100°F (37.8°C)</th>
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</table>
| Operating pressure     | Min 30 psi (2.11 kg/cm²) / Max 85 psi (6.0 kg/cm²)  
A pressure regulator is required for pressures over 75 psi |
| pH parameters          | Min 6 / Max 10  |
| Flow rate              | 8 GPM @ 60 psi* (*dependent on water pressure and water temperature) |
| Maintenance Schedule   | Flush ultrafiltration (UF) membrane at least once per month. Flushing the membrane more frequently may be required depending on your water conditions. Read more on page 3. Replace UF membrane every 3 - 5 years. |

### Installation Diagram (shown with optional components)

![Installation Diagram](image-url)
Pre-Installation

**Location.** Here are some guidelines to determine where to install the PS-1000:

- This system has three ports that require connection: inlet, outlet, and flush (membrane backflush).
- This system installs into the main water line (where freshwater enters your home), and before other water treatment such as a water softener or water heater.
- For the flush port (membrane backflush), this system should be installed near a floor drain, or plumb for irrigation use to recycle to backflush water.
- Install in a place where you can easily access the system for maintenance.
- Make sure the location is place where the system will not experience any rough contact such as from heavy objects bumping or falling into it.
- Avoid direct sunlight and protect your system from freezing temperatures. Preferably this system should be installed inside (if you have a well house, it can go in there), or if it’s outside please ensure that it is covered and protected.
- For units with a bracket, leave at least 3” below the housings so that you can easily unscrew the filter housings and replace the cartridges when it’s time.

**Water shut-off valve on incoming water supply (inlet) side.** For ease of installation and to allow for periodic system maintenance, a water shut-off valve on the inlet side is recommended as close to the system as possible. You will need to supply this part yourself. Please consult a plumbing professional for guidance if you wish to install a water shut-off valve on incoming water supply that is closer to the system.

**Water bypass.** To allow for periodic system maintenance, you may want to install a water bypass (also known as a water loop). A water bypass enables you to stop water flowing to/from the system, but you will continue to have water (unfiltered) to the rest of your home or application.

Installing a water bypass will require additional parts and time. Please consult a plumbing professional for guidance on installing a water bypass.

**Clean water pressure storage tank.** If you have a clean water pressure storage tank, this goes on the outlet side of the system. A clean water pressure storage tank will let you flush the membrane with filtered water.

**Pressure regulator.** A pressure regulator is required for pressures over 75 psi. They are available at most home improvement stores. A pressure regulator is installed before water comes into the system.
Installing the PS-1000 Ultrafiltration System

Locate the three double o-ring fittings and insert each of these fittings into the inlet, outlet, and flush ports on the system. Push the fitting in until it comes to a secure stop in the port.

There are two metal clips. Put a clip into the two holes above where you just installed the double o-ring fitting. The clip drops down to secure the fitting. You may need to gently wiggle or slightly tap the clip. Make sure the clip is flush against the filter head.

If you have not done so already, shut off the main water supply. Or, if you have a water by-pass installed, shut off the water to the line that the system is going to be installed on. Relieve pressure in the line by turning on a cold water tap/faucet downstream of where the system is to be installed.

This system has three ports that require connection: inlet, outlet, and flush (membrane backflush).

Install check valve into the elbow on the inlet connection of the system. The check valve prevents back flow of water when the system goes into the backflush mode, ensuring the rinse water goes to drain.

Install the PVC ball valve on the outlet side.

Slowly turn back on the main water supply. Check all the connections on the PS-1000 and these connections to your plumbing to ensure that there are no leaks.

Open a cold water tap/faucet downstream of where the system is installed. Make sure that any air sputtering stops and that water is running clear, then close the tap/faucet. This may take up to 10 minutes.

Check all the connections again to ensure there are no leaks.

Important Information About the Ultrafiltration Membrane

How to Flush the Ultrafiltration Membrane

If you have a clean water pressure tank installed, you will close the inlet water valve and open the flush valve on the ultrafiltration membrane housing. Leave open for up to 15 seconds.

If you do not have a pressure tank installed, you will close the outlet valve and open the flush valve on the ultrafiltration membrane housing. Leave open for up to 15 seconds.

When to Flush the Ultrafiltration Membrane

The ultrafiltration membrane should be flushed on a regular basis to ensure longest membrane life. How often you flush the membrane will depend on your water conditions. The ultrafiltration membrane should be flushed at least once per month, and some users may find they need to flush it a few times a month, weekly, or even daily.

In general, you will know it is time to flush the membrane when there is noticeable a drop in water pressure (but your incoming water pressure has not changed).