PENTEK
Pentair Water

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Performance Bulletin

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FreshPoint™ U440 Backflush Kit

To maximize membrane performance, FreshPoint™ U440 installations with high fouling potential (see table below) require plumbing-in a dedicated backflush kit. The kits are available in the following configurations:

Part Number:	**61667-11**	**61667-12**	**61667-13**	**61667-14**
Description:	Backflush Kit, 120V w/ tank	Backflush Kit, 120V	Backflush Kit, 230V w/ tank	Backflush Kit, 230V
Solenoid Valve, 3/4" Normally Open	▲	▲	▲	▲
Solenoid Wire Harness	▲	▲	▲	▲
Tee 3/4" NPT, Sch 80 PVC	▲	▲	▲	▲
Transformer, US 120V/24V 108Va	▲	▲		
Transformer, US 230V/24V 108Va			▲	▲
Backflush Tank, ROMate 40	▲		▲	

▲ = Included in Kit

In backflush mode, filtered water from a pressure tank flows backward through the membrane from the filtrate side during the flushing cycle. This reverse flow removes the foulant from the membrane surface as well as material that may have entered into the porous structure.

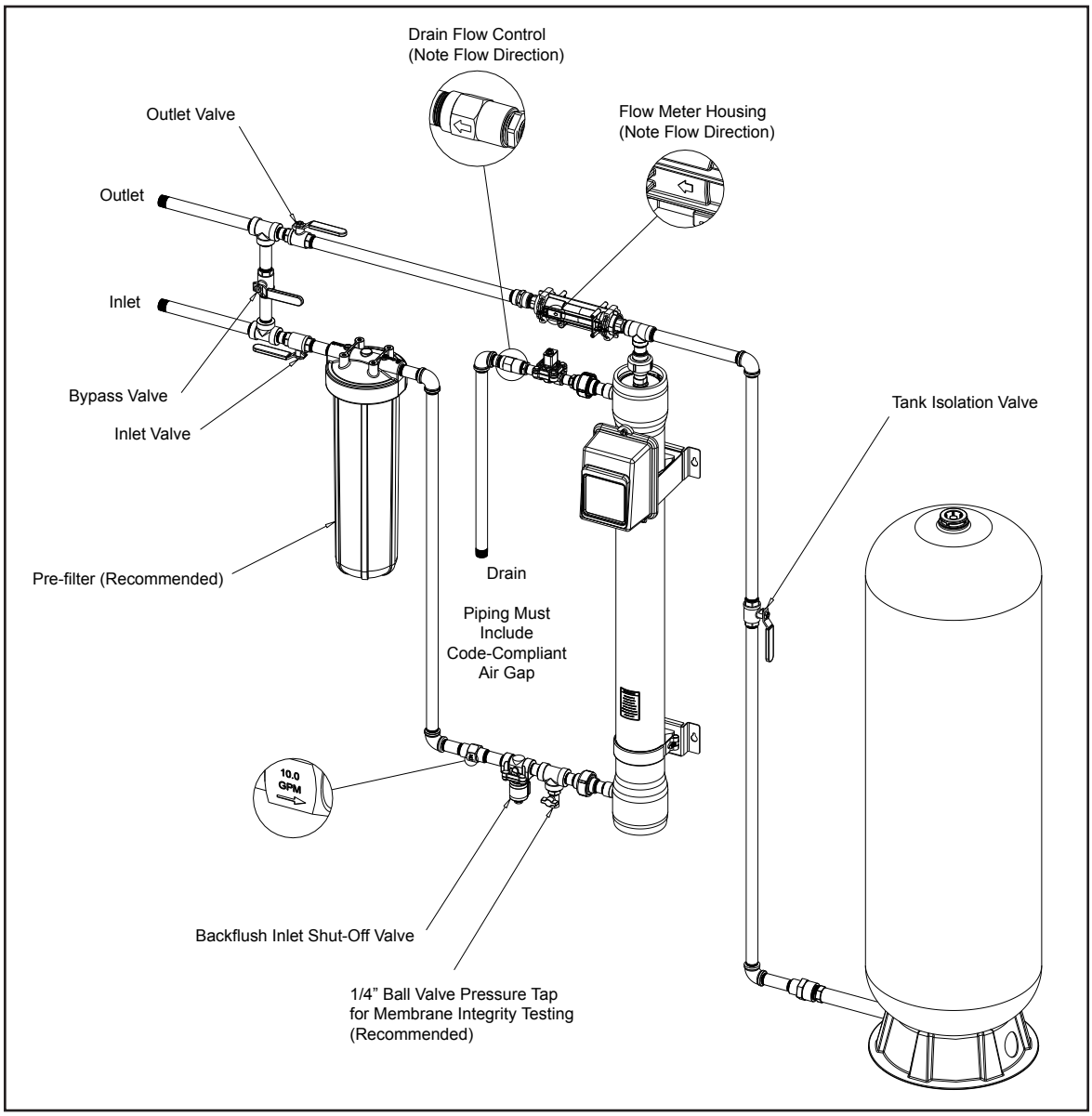
Initial Recommended Flushing Parameters by Water Source and Treatment					
Water Source	**Typical Water Quality to Filter (with Recommended Pre-Treatment)**	**Recommended Pre-Treatment**	**Backflush Kit**	**Flush Frequency (Gallons Throughput)**	**Flush Duration (Seconds)**
Surface Water (Municipally Treated)	• Chlorine < 4.0 mg/l • Turbidity < 1.0 NTU • TOC < 2.0 mg/L • SDI15 < 6.67 • Metals (Fe, Mn, Cu, etc.) < 1 mg/l	• 200 micron prefilter	Recommended	100	30
Surface Water (Private Multi Barrier Treatment)	• Chlorine > 2mg/l, < 4.0 mg/l • Turbidity < 5.0 NTU • TOC < 10.0 mg/L • SDI5 < 20 • Metals (Fe, Mn, Cu, etc.) < 1 mg/l	• In-Line coagulation and filtration with multimedia filter • Disinfection with chlorine • 200 micron prefilter	Recommended	50	60
Well (Municipally Treated)	• Chlorine < 4.0 mg/l • Turbidity < 1.0 NTU • TOC < 2.0 mg/L • SDI15 < 6.67 • Metals (Fe, Mn, Cu, etc.) < 1 mg/l	• Iron removal filtration (if iron over 1 mg/l) • 200 micron prefilter	Recommended with high turbidity, suspended solids, colloids, or ferric iron	200	30
Well (Private)	• Chlorine < 4.0 mg/l • Turbidity < 1.0 NTU • TOC < 2.0 mg/L • SDI15 < 6.67 • Metals (Fe, Mn, Cu, etc.) < 1 mg/l	• Iron removal filtration (if iron over 1 mg/l) • Disinfection – optional • 200 micron prefilter	Recommended with high turbidity, suspended solids, colloids, or ferric iron	100	30

FreshPoint™ U440 Backflush Kit

Installation

Connect the FreshPoint™ U440 to the plumbing supply as shown in the illustration below. It is recommended that the plumbing include a system bypass for future servicing. A 200 µm sediment pre-filter is recommended. For ease of membrane element replacement, unions are also recommended as indicated below.

The backflush tank should be installed on a tee before the flow meter*. The backflush tank pre-charge pressure should be set to 20 psig.



***NOTE: Installation of the backflush tank after the meter will cause reverse flow through the meter, which could have a detrimental effect on meter performance.**