



## FRESHPOINT™ ULTRAFILTRATION SYSTEM

- Designed for cyst reduction, turbidity, and fine sediment filtration applications
- > 98% reduction of 0.025 micron (25 nanometer) particles\*
- > 99.99% (> 4 Log) reduction of 0.065 micron (65 nanometer) particles\*

The PENTEK® FreshPoint™ Ultrafiltration System provides complete point-of-entry (POE) filtration proven to reduce turbidity, particulates and cysts for safer, cleaner water at every tap. The system employs hollow-fiber Ultrafiltration membrane technology to filter impurities as small as 0.025 microns.

To maximize membrane capacity and service life, a metered flushing cycle is controlled using an advanced controller and high-performance turbine meter. The self-cleaning forward and back-flush cycles are initiated when the programmed capacity of the membrane is reached. During the backwash, flow is reversed and particles are ejected from the pores of the membrane

- Forward-flush and back-flush cleaning cycles provide extended filter life in a wide range of applications
- Proprietary hollow-fiber ultrafiltration membrane
- Professional-grade housing, controller and flush valve

and flushed to drain. In the forward-flush cycle, service water passes through the capillaries at a high speed, scouring particles from the membrane surface and rinsing them from the system. Since power is only required to flush the system, outages and interruptions will not jeopardize the integrity of membrane or its ability to provide safer, cleaner water.

The advanced electronic controller provides a programmable day override which allows the unit to flush every day with fresh water when the system is not in use. Critical system diagnostics, including totalized flow, instantaneous flow rate, and previous day's water usage, are available to optimize flushing cycles and monitor performance.

- Metered self-cleaning cycle flushes only when needed
- Day override feature flushes module daily with fresh water when system is not in use
- Peak flow rates up to 10 gpm (2271 L/h)

The high-performance industrial fiberglass housing is pressure rated to 300 psi. Inside the housing, the membrane is sealed with double radial o-rings, minimizing the potential for leak paths. Quick-connect endcaps allow the membrane to be easily removed for cleaning or replacement.

The system can be applied to solve "known" water problems including high turbidity, suspended solids, and certain microbiological contaminants. It can also serve as a flushable prefilter to extend the life of media filters downstream.

This product is not certified as a microbiological purifier and should not be applied as a stand-alone disinfection solution for microbiologically unsafe water.

\*Performance based on MS-2 (25 nm) and PRD-1 (65 nm) virus particle tests. Data available upon request.



## ULTRAFILTRATION FreshPoint™

### Advantages of FreshPoint™ Filter Technology

- Removes turbidity, cysts, and other particles down to 0.025 micron in size
- Multi-bore membrane structure combines seven single capillaries into one resistant structure to maximize membrane integrity, virtually eliminating the potential for fiber breakage
- Requires only normal line pressure to operate
- Protects during power outages or intermittent power
- Retains natural mineral content of the water
- High surface area and tolerance to plugging
- Low pressure drop / High flow rates



### ET Electronic Metered Controller

- Metered self-cleaning cycle flushes only when needed, using less than 7 gallons per flush cycle
- Day override feature flushes module daily with fresh water when system is not in use
- Suitable for indoor or outdoor applications
- All parameters are adjusted via timer programming and can be modified at any time
- Bright 7 digit VFD display with user panel utilizing LED status/programming indicators
- A regeneration lockout input is available
- Diagnostic display for Totalized Flow, Instantaneous Flow Rate, Days Since Last Flush, Prior Service Volume, Previous Day's Water Usage
- Programmable auxiliary relay
- 9V battery backup maintains time of day

### System Specifications and Performance Data

Membrane	
Material	Polyethersulfone, modified (PESM)
Pore Size	0.025 micron (nominal) 0.065 micron (absolute)
Molecular Weight Cut Off (MWCO)	100-150 kD
Active Membrane Surface	51 sq. ft.
Service Flow Rate @ 15 psi drop	6.23 gpm to 10 gpm (1,416 L/h to 2,271 L/H)

Controller	
Electrical Rating	50/60 Hz
Forward Flush Cycle	1-99 minutes
Metered Volume	1-9999 gallons
Meter Accuracy	1-50 gpm +/- 5%

System	
Inlet/Outlet	3/4-inch NPT

### Pentair Water Solutions for Complete POE Treatment

