

 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® FreshPointTM 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 and flushed to drain. In the forward-

- 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

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 new high performance industrial stainless steel housing is pressure rated to 300 PSI. The new housing includes one piece endcaps with robust o-ring seals, all plumbing connection points, as well as, locking bars which allow for easier installation and service while minimizing the potential for leakage. In addition, test ports/pressure taps are built into the endcaps to allow for easier integrity testing to ensure your membrane fibers are intact.

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.



ULTRAFILTRATION

FreshPoint™

Advantages of FreshPoint™ Filter Technology

- Reduces 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



NOTE: This setup is used for most applications.



