

# POLYMERIC ULTRAFILTRATION

TECHNOLOGY THAT IS EASY TO UNDERSTAND.



The Nelsen Poly-UF™ system offers filtration down to 0.02 micron at service flow rates up to 12gpm. Utilizing ENPRESS' patented and industry exclusive liner design, the internal UF module treats colloids, bacteria, cysts, viruses, turbidity, tannins, and other particles down to 0.02 micron size.

**MEMBRANE:** The patented polysulfonebased Outside/In Ultrafiltration Membrane is designed for turbidity, cyst reduction and fine sediment filtration applications, and is NSF 61 certified. The membrane operates with flow from the outside-to-inside.

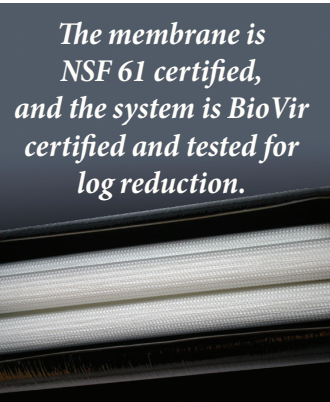
Benefits include minimized risk of deep clogging, simple cleaning with water and/or air, and a compact design. The membrane is non-biodegradable, and has superior mechanical and chemical resistance. The high surface area UF bundles require normal line pressure to operate, low waste discharge when in backwash/cleaning mode, and offer low pressure drop with high service flow rates.

The Nelsen Poly-UF™ can be utilized as a final polishing stage or on water reclamation systems for rainwater or Grey water, along with offering protection during power outages and intermittent power. The system is BioVir certified and tested for log reduction.

## Residential/ Light Commercial System

The Nelsen Poly UF System features the Polymeric Ultrafiltration (Poly-UF) Vessel system and the "C-Series" backwash control valve for daily backwashing of the membranes. The vessel also comes standard with a bottom drain opening and ball valve for ease of drainage and cleaning purposes of the tank system.

*The cut-away on the system shows the membrane bundle inside the Enpress Pressure Vessel.*



*The membrane is NSF 61 certified, and the system is BioVir certified and tested for log reduction.*

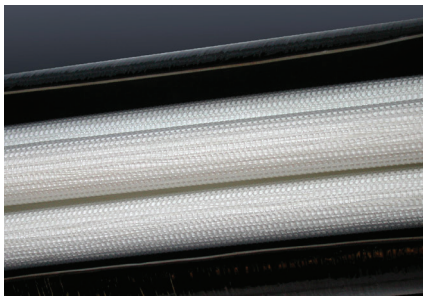


# Poly-UF™



This pressure vessel is tested and certified by NSF International against NSF/ANSI Standard 44 for materials and structural integrity requirements.

# Poly-UF™



## MEMBRANE:

The patented polysulfone-based Outside/In Ultrafiltration Membrane is designed for turbidity, cyst reduction and fine sediment filtration applications, and is NSF 61 certified. The membrane operates with flow from the outside-to-inside, with benefits of minimized risk of deep clogging, simple cleaning of the membrane surface with water and/or air, and a high area volume ratio that allows for a compact design. The membrane is non-biodegradable, and has superior mechanical and

chemical resistance. The Poly UF Vessel System provides point-of-entry (POE) filtration, for safe and clean water at every faucet.



## MEMBRANE

- Patented Outside/In Polymeric Membrane Filtration Module that is NSF 61, EPA, ACS and CDHS certified.
- BioVir certified and tested system for log reduction of Bacteria and Virus.
- Four bundles of 0.02 micron filtration.
- High performance flow rates, up to 12 gpm.
- Standard 2.5" top inlet opening for connection with standard backwashable control valves to in/out heads, for metered service.
- Standard bottom drain and opening for drainage and cleaning purposes of the system.
- No special controller or programming needed.
- Economical POE packaging that looks like standard water treatment equipment.
- Low waste water discharge used when cleaning.
- Designed for cyst reduction, turbidity, and fine sediment filtration applications.
- Protection during power outages and intermittent power.

## APPLICATIONS

- Grey Water and Rainwater use, catchment, and recycling.
- Tannin removal.
- RO Pre-filter.
- Polishing post filter filtration.
- Colloid removal.
- Bacteria, cyst and virus removal.

## TECHNICAL INFORMATION

- Continuous flow at 10 gpm filtration at 0.02 microns.
- 4.4 log reduction of Bacteria.
- 2.4 log reduction of Virus.
- 2.0 log (est) reduction of Cyst.
- 100,000 MWC)

## FILTRATION LEVEL

- 0.02 micron.
- Operating Temperature: 35 to 100 degrees F.
- Operation Pressure: 10 to 100 psi.
- Continuous Flow Rate: 10 gpm.
- The system provides a treated flow of up to 12 gpm at 25 C and 60 psi.
- Membrane is NSF 61 Certified.
- Raw Water Specification:
- Pre-filtration: 5 microns or less.
- Chlorine: 1.0 ppm maximum for continuous flow (up to 2000 ppm for cleaning only).
- Iron: Less than 0.30 ppm.
- Manganese: Less than 0.05 ppm.
- Silt Density Index: Less than 6.0
- pH: 3 to 11.
- Pressure Decay Test (PDT) is required upon installation.

## TECHNICAL INFORMATION

- Backflush: Once per day (5 minutes at 0.7 to 2 gpm).
- Drain Flush: Once per week (2 minutes at 5 gpm).

**NelsenWater™**  
Treatment Solutions