



SPECIALIST SERIES™ ULTRAFILTER (UF) SYSTEM

ULTRAFILTER SYSTEMS

Pipe Size 3/4" and 1"
Control Valve Clack WS1EE
Polylined FRP Tank
Single Tank/Duplex/Twin

Filtration down to 0.02 micron
NSF 44 Certified Pressure Vessel
NSF 61 Certified Membrane
Continuous Flow

Introducing the Specialist Series™ Ultrafilter System

Blake Water Solutions' Specialist Series™ point-of-entry (POE) UF Systems incorporate an innovative design in which miles of hollow fiber tubes are bundled together and encapsulated inside an 8" diameter composite pressure vessel. The UF vessel is coupled with a standard residential control valve for backwashing. The addition of a timer-controlled bottom flush valve creates, a complete, automatically controlled system requiring very little homeowner intervention.



UF is a filtration process whereby solids and high molecular weight organic molecules are removed from a liquid stream as the liquid passes through the semi-permeable UF membrane. Tiny pores in the membrane allow the liquid (i.e. water) and any dissolved minerals to pass through the membrane, while any solids and organic compounds larger than the membrane's molecular weight cut off (MWCO) are rejected. The result is treated water with reduced levels of bacteria, viruses, and cysts**, that is also virtually free of colloids, sediment, tannins, turbidity, and other particles >0.02 micron.

Filtration flow direction is from the outside of the membrane tube to the inside. This reduces the risk of the membrane clogging and makes for easy cleaning of the membrane surface via backwash with treated water. The membrane is non-biodegradable, and has superior mechanical and chemical resistance. The BWS Specialist Series™ UF System provides whole-house filtration, for safe and clean water at every tap.

** This product is not certified as a microbiological purifier and should not be applied as a stand-alone disinfection



SPECIFICATIONS

MODEL NUMBER SERIES	UF04C	UF04CS	UF04CT	UF04CTS	UF04CD	UF04CDS	UF10C1	UF10C1S	UF10C1T	UF10C1TS	UF10C1D	UF10C1DS
Nominal Service Flow (GPM)	4				8		10			20		
Backwash Flow (GPM)	5.3											
Bottom Flush Flow (GPM)	5											
BW/Flush Flow Duration (Mins)	4				3	8		4			8	
BW/Flush Flow Total Vol (Gal)	16* 32				2	16*		32				
In/Out Connections (in)	3/4" SharkBite						1"SharkBite					
Backwash Drain Connect (in)	5/8" O.D. Tube or 3/4"NPTM											
Bottom Flush Drain Connect (in)	1" NPTF											
System Configuration	Single Tank		Twin Alternating		Duplex Parallel		Single Tank		Twin Alternating		Duplex Parallel	
Sanitant Option Included	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Space Required W/D/H (in)	10/18/50	22/18/50	20/18/50	32/18/50	20/18/50	32/18/50	10/18/72	22/18/72	20/18/72	32/18/72	20/18/72	32/18/72
Shinning Weight (lbs)	23	28	46	51	46	51	33	38	66	71	66	71

^{*} Install bladder tank(sold separately) on UF outlet with minimum 10.6 gallon drawdown capacity to provide filtered water for backwash on single tank units only. Increase tank capacity to also supply treated water for use during backwash.





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MEMBRANE VESSEL SPECS / FEATURES:

- Outside/In Filtration
- Filtration down to 0.02 micron
- 100,000 Da Molecular Weight Cutoff (MWCO)
- NSF 61 Certified Membrane
- BioVir tested and certified
 - 4.4 log Bacteria Reduction
 - 2.4 log Virus Reduction
 - 2 log (approx.) Cyst Reduction
- NSF 44 Certified Pressure Vessel
- Short backwash cycle with limited waste discharge
- Continues filtering during power loss
- poætoftdoordrain / flush
- Temp Range 35-100°F
- Pressure Range 10-100 psi
- Continuous Flow in increments of 4 or 10 gpm

CONTROLLER SPECS / FEATURES:

- Solid state microprocessor
- Displays time of day, days until next regeneration, volume remaining, current flow rate and total volume used (Totalizer)
- Fully adjustable cycle times with up to 6-cycle control
- Battery back-up with 8 hr. capacity
- Patented one piece expanding seal spacer stack assembly
- Patented linearly reciprocating piston operation
- · Reliable and proven DC drive
- Automatically initiates backwash based on time (days) or volume (gallons treated)

STANDARD SYSTEM SPECS / FEATURES:

- Available in 4 gpm or 10 gpm sizes
- SharkBite® Inlet/Outlet Fittings
- 3/4" for 4 gpm, 1" for 10 gpm
- 1" NPTF Bottom Flush Solenoid Valve
- Motorized Raw Water Isolation Valve allows for Clean Water Backwash
- Inline Bypass Assembly
- 120 VAC Power (AC Adapter Included)

RAW WATER SPECS:

- Prefiltration ≤ 5 Micron
- Chlorine 1 ppm continuous/2000 ppm for cleaning / sanitization
- Iron <0.3 ppm
- Manganese <0.05 ppm
- Silt Density Index (SDI) < 6
- pH 3 11

OPERATING SPECS:

- Continuous Flow 4 or 10 gpm (install multiple units in parallel for higher flow applications)
- Backwash w/ filtered water 2 mins @ 5.3 gpm
- Bottom Flush w/ raw water 1 min @ 5 gpm

SYSTEM OPTIONS / ACCESSORIES:

- Clean Water Backwash Tank (Adequately Sized Bladder Tank) required on Filtered Water Outlet of single tank units only.
- Duplex Parallel or Twin Alt. Configuration
- Automatic Sanitant Dosing during Backwash
- Pressure Decay Testing
- Pilot Testing is available

Designed for turbidity removal, cyst reduction and fine sediment filtration applications.

Authorized Dealer: