MemTeck™ BW-ULP200 4040 & 8040

Brackish Water-Ultra Low Pressure (BW-ULP) RO Membranes

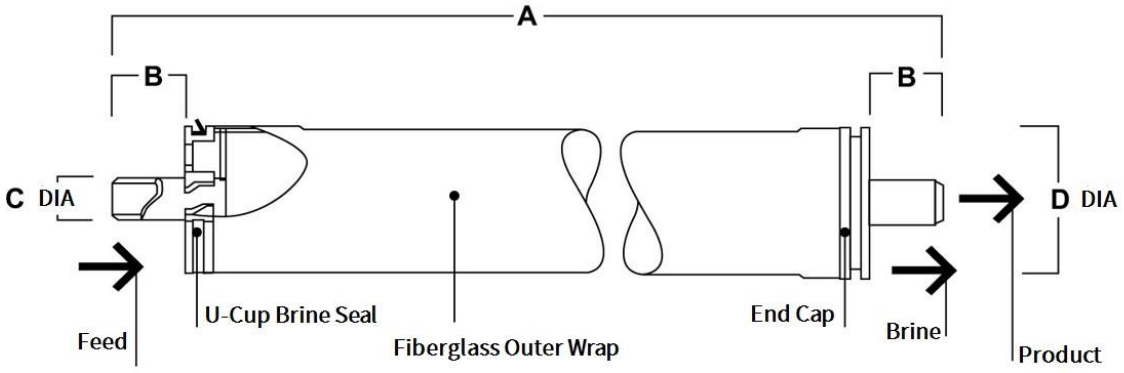
KEY FEATURES	Applications
The BW-ULP has key features of: ➢ Low operation pressure, ➢ High permeate flow, ➢ BW-LP 100 membrane elements offer the best salt rejection (99.5%) at **3,000 ppm** salt concentrations and high productivity at lower feed pressures. ➢ The RO element incorporates a proprietary feed spacer technology to reduce the pressure drop and provide long-term stable performance, ➢ As a result, the product has excellent anti-fouling properties, less chemicals are used, and less energy consumption are required.	The BW-LP series of low-pressure elements is generally suitable for treating: ➢ Brackish water, ➢ Surface water, ➢ Municipal wastewater ➢ Dairy applications ➢ Domestic water

Typical Properties

Product	Act17ive Membrane Area ft2 (m2)	Permeate Flow Rate GPD (m3/d)	Stabilized Salt Rejection %	Feed Spacer mil
BWULP-200- 4040	**100(9.2)**	**3000 (11)**	**99.5**	**28**
BWULP-200- 8040	**400(37.2)**	**14,000 (50)**	**99.5**	**28**

1. Test conditions:2000 ppm NaCl, 150 psig (10 bar), pH 8, 77˚F (25˚C), 15 % recover.
2. Minimum salt rejection is 99 %.
3. Individual elements may have different permeate flows by +/15%.

Element Dimensions



Product	Dimensions – inches (mm) 1 inch = 25.4 mm A	B	C	D
BWLP-4040	40.0 (1,016)	1.05 (26.7)	0.75 (19)	3.9 (99)
BWLP-8040	40.0 (1,016)	1.19 (30.2)	1.25 (28.6)	7.9 (200)

Operation Specifications and cleaning limits*

Membrane Type	BWULP-4040	BWULP-8040
Membrane Materials	Polyamide Thin-Film Composite	
Maximum Operating Temperature[a]	113°F (45°C)	113°F (45°C)
Maximum Operating Pressure	600 psi (41 bar)	600 psi (41 bar)
Maximum Feed Flow Rate	16 gpm (3.6 m^3/h)	75 gpm（17 m^3/h)
Maximum Pressure Drop	15 psig (1.0 bar)	15 psig (1.0 bar)
pH Range	2 - 11	2 - 11
Maximum Feed Silt Density Index (SDI)	SDI 5	SDI 5
Free Chlorine Tolerance	< 0.1 ppm	< 0.1 ppm

1. Over pH 10, the maximum continuous temperature is 95°F (35°C).
2. In certain conditions, free chlorine and other oxidizing agents can cause premature membrane failure. Pretreatment prior to membrane exposure is recommended to prevent oxidation damage, since oxidation damage is not covered by warranty.

General Information

1. After initial wetting, keep elements moist at all times
2. The limited warranty will be null and void if the operating limits and guidelines are not strictly followed.
3. For the purpose of preventing biological growth during prolonged system operation shutdowns, membrane elements should be immersed in a preservative solution
4. The customer is fully responsible for the effects of incompatible chemicals and lubricants on elements
5. The maximum pressure drop across an entire pressure vessel (housing) is 50 psi (3.4 bar).
6. Always avoid static backpressure on the permeate side
7. The permeate obtained from the first hour of operation should be discarded.
8. Make sure there are no abrupt changes in pressure or crossflow
9. During start-up, shutdown, cleaning, or other sequences, spiral elements should be protected from damage. It is recommended to gradually transition from a standstill to an operating state during startup:
10. The feed pressure should be gradually increased over a 30-60-minute period
11. The crossflow velocity should be gradually increased over 15-20 seconds to reach the set operating point.
12. It is crucial that the system is designed and operated correctly in order to reduce cysts and pathogens effectively.
13. The permeate obtained from the first hour of operation should be discarded.

Important Information

14. To prevent membrane damage due to overfeeding or hydraulic shock, it is essential to start up reverse osmosis water treatment systems properly. As a result of following the proper start-up sequence, system water quality and productivity goals can also be achieved.
15. Pretreatment of the membrane, loading of the membrane elements, instrument calibration, and other system checks should be completed before starting the system

Regulatory Note

Please check the application status of this product before using or selling it; some countries may restrict the use of this product in drinking water.

Would you like to ask a question? Contact us at: www.memteck.com