

XLE(EXtraLowEnergy) Brackish RO membrane

► Brief introduction

Daltonen XLE series reverse osmosis membranes change the formula and production process of the bottom membrane and composite membrane, change the surface and chemical properties of the membrane, improve the membrane area and hydrophilicity, and maximize membrane flux. It is currently one of the highest water production and lowest operating pressure reverse osmosis membrane components in the membrane industry. As the latest generation of ultra-low energy consumption and high-performance reverse osmosis membrane components, Its operating pressure is about 50% of the operating pressure of ordinary brackish water desalination reverse osmosis membrane components, and the desalination rate can reach over 99%. It's widely suitable for municipal water treatment.

► Advantage

- With extremely high water flux and extremely low operating pressure
- Can significantly reduce membrane system energy consumption while also considering desalination rate



► Product dimension

Model	A inch (mm)	B inch(mm)	C inch (mm)	D inch (mm)
XLE8400	40(1,016)	/	1.125(29)	7.9 (201)
XLE8440	40(1,016)	/	1.125(29)	7.9(201)
XLE4040-82	37.9(963)	1.05(26.7)	0.75(19)	3.9 (99)

► Specification

Model	Affective area ft ² (m ²)	Stable salt rejection %	Min. Salt rejection %	Capacity gpd(m ³ /d)
XLE8400	400(37.2)	99.0	98.5	11,500(44)
XLE8440	440(41)	99.0	98.5	12,650(48)
XLE4040-82	82(7.6)	99.0	98.5	2,250(8.7)

Test conditions: inlet pressure 1.55 MPa (225 psi); Water inlet temperature 25 °C (77 ° f); Inlet water quality: 2000 ppm NaCl;

Influent pH 8; The recovery was 15%.

► Operation condition

- Max.work pressure 83 bar (1200psi)
- Max.work temp: 45°C (113°F)
- Max pressure drop 1.0 bar (15 psi)
- Continuous operation pH range 2-11
- Chemical cleaning pH range 1-13
- Max feed water SDI(SDI₁₅) 5.0
- Free chlorine <0.1 ppm

► Instruction

- The flow variation range of single membrane element is ± 15%.
- The variation range of effective membrane area is ± 4%.
- The stable desalination rate is obtained after 24-48 hours of continuous operation, depending on the inlet water quality and operating condition.