

Clariphex

BRANEX XLE series – Extra Low Energy Brakish Water RO Membranes

Product description:

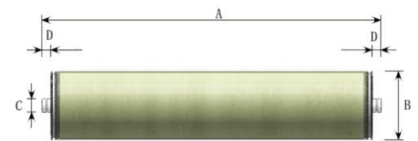
Through revolutionary modifications to membrane surface properties and chemical composition—paired with optimized formulations for both the support layer and thin-film composite (TFC) layer—XLE membranes achieve a significantly increased specific surface area and enhanced hydrophilicity. These advancements enable exceptional permeate flux rates at substantially reduced operating pressures. The XLE membranes are particularly well-suited for municipal wastewater treatment applications, standing as one of today's highest-flux, lowest-energy-consumption membrane elements.

Product Highlights:

- * Exceptional flux rates maintained at ultra-low operating pressures
- * Significantly reduced energy consumption—without compromising rejection performance
- * Enhanced hydrophilicity boosts the membrane's anti-fouling characteristics

Product Dimensions:

Membrane Code	Dim. A		Dim. B		Dim. C		Dim. D	
	mm	inch	mm	inch	mm	inch	mm	inch
BRANEX-XLE-8x40-400	1016	40	201	7.9	29	1.125		
BRANEX-XLE-8x40-440	1016	40	201	7.9	29	1.125		
BRANEX-XLE-4x40-82	963	37.9	99	3.9	19	0.75	26.7	1.05



Product Specifications:

Membrane Code	Effective Area		Permeate flowrate		Min Rejection (%)	Stable Rejection (%)	Material
	(m ²)	(ft ²)	(m ³ /d)	(gpd)			
BRANEX-XLE-8x40-400	37.2	400	47.5	12500	98.00	99.00	
BRANEX-XLE-8x40-440	41	440	53	14000	98.00	99.00	
BRANEX-XLE-4x40-82	7.6	82	9.1	2400	98.00	99.00	

Note: Flux and rejection rate is based on the following standard test conditions: 1.55 MPa (225 psi) feedwater pressure, 25°C (77°F), 2,000 ppm NaCl solution, pH 8, 15% recovery.

Operation & Cleaning Limits:

- * Maximum Operating Pressure: 41 bar (600 psi)
- * Maximum Operating Temperature: 45°C (113°F)
- * Maximum Element Pressure Drop: 1.0 bar (15psi)
- * pH Range Continuous Operation: 2-11
- * pH Range Short-Term (Cleaning): 1-13
- * Maximum Feed SDI (SDI₁₅): 5.0
- * Free Chlorine Tolerance: < 0.1 ppm

Notes:

- * Permeate flow for individual elements may vary ±15 percent from the value specified.
- * Active membrane area guaranteed ±4%.
- * Stabilized salt rejection is generally achieved within 24-48 hours of continuous use; depending upon feedwater characteristics and operating conditions.