BRANEX LE series – Low Energy Brakish Water RO Membranes

Product description:

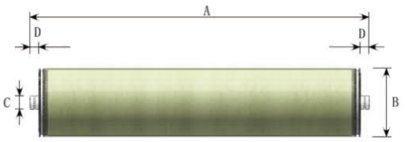
BRANEX LE membranes are manufactured by optimizing the formulations and process conditions of both the support layer and thin-film composite (TFC) layer—resulting in tailored adjustments to membrane density and performance properties. Compared to conventional brackish water RO membranes, these elements deliver a 99.3% rejection rate while operating at a 30% lower pressure. The integration of this membrane element cuts RO system energy consumption by up to one-third, all without compromising product water quality. LE RO membranes are available in 4” and 8” configurations to suit diverse system requirements.

Product Highlights:

* Significantly reduces the membrane system’s operating pressure and power consumption
* Delivers high rejection rates paired with excellent flux performance
* Enhances the overall cost-effectiveness of the membrane system

Product Dimensions:

Membrane Code	*Dim. A*		*Dim. B*		*Dim. C*		*Dim. D*	
	mm	*inch*	*mm*	*inch*	*mm*	*inch*	*mm*	*inch*
BRANEX-LE-8x40-400	1016	40	201	7.9	29	1.125		
BRANEX-LE-8x40-440	1016	40	201	7.9	29	1.125		
BRANEX-LE-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
	(m2)	(ft2)	(m3/d)	(gpd)			
BRANEX-LE-8x40-400	37.2	400	43	11350	99.10	99.30	
BRANEX-LE-8x40-440	41	440	48	12560	99.10	99.30	
BRANEX-LE-4x40-82	7.6	82	8.5	2250	99.00	99.30	

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 (SDI_{15}): 5.0
* Free Chlorine Tolerance: < 0.1 ppm

Notes:

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