

# Clariphex

## MARIS XLE series – Extra Low Energy Water RO Membranes

### Product description:

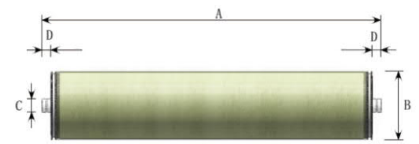
The MARIS-XLE membrane marks a breakthrough in energy-efficient seawater desalination technology. These elements deliver higher flux rates at lower pressures compared to conventional SWRO membranes, presenting an ideal solution for operators aiming to maximize productivity while minimizing energy consumption and operational costs.

### Product Highlights:

- \* High flux capability maintained at ultra-low operating pressures
- \* Superior rejection performance sustained during energy-optimized operation
- \* Enhanced membrane hydrophilicity minimizes fouling potential
- \* Cost-effective water production enabled by energy savings and high productivity

### Product Dimensions:

Membrane Code	Dim. A		Dim. B		Dim. C		Dim. D	
	mm	inch	mm	inch	mm	inch	mm	inch
MARIS-XLE-8x40-400	1016	40	201	7.9	29	1.125		
MARIS-XLE-8x40-440	1016	40	201	7.9	29	1.125		
MARIS-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 (%)	Boron rejection (%)	Material
	(m <sup>2</sup> )	(ft <sup>2</sup> )	(m <sup>3</sup> /d)	(gpd)				
MARIS-XLE-8x40-400	37.2	400	34	9000	99.60	99.80	92.00	
MARIS-XLE-8x40-440	41	440	37	9750	99.60	99.80	92.00	
MARIS-XLE-4x40-82	7.6	82	6.3	1660	99.60	99.65	-	

Note: Flux and rejection rate is based on the following standard test conditions: 5.5 MPa (800 psi) pressure, 25°C (77°F), 32000 ppm NaCl solution and pH 8 for feedwater, and 8% recovery.

### Operation & Cleaning Limits:

- \* Maximum Operating Pressure: 83 bar (1200 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<sub>15</sub>): 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.