



## Data Sheet



Seawater Reverse Osmosis (RO) Membranes

LG SW 400 R G2

## **Overview**

The next generation LG SW G2 membranes have achieved record-breaking salt rejection, improving the product quality up to 45% compared with the conventional technology. With enhanced Thin Film Nanocomposite (TFN) technology, LG SW G2 membranes can significantly reduce the cost of desalination.

LG SW R (High Rejection) membranes offer a combination of high rejection and low energy requirements to reduce the total cost of desalination; suitable for medium to high salinity seawater applications.

LG SW G2 Benefits

- Improved permeate quality without increasing operating pressure
- Reduced energy cost without sacrificing the permeate quality
- Reduced capital and operation costs for multi-pass SWRO systems

## **Product Specifications**

Active Membrane	Permeate Flow	Stabilized Salt	Minimum Salt	Boron	Feed Spacer,
Area, ft <sup>2</sup> (m <sup>2</sup> )	Rate, GPD (m <sup>3</sup> /d)	Rejection, %	Rejection, %	Rejection, %	mil
400 (37)	9,000 (34.1)	99.88	99.75	93	34

Test Conditions : 32,000 ppm NaCl, 5 ppm boron at 25°C (77°F), 800 psi (55 bar), pH 8, Recovery 8%. Permeate flows for individual elements may vary +/-15%.

A,	B,	C,	Weight,
mm (in.)	mm (in.)	mm (in.)	kg (lbs.)
1,016	200	28.6	16
(40)	(7.9)	(1.125)	(35)

All dimensional information is indicative and for reference purpose only. Please contact LG Chem for detailed technical specification.

## **Operating Specifications**

Max. Applied pressure	1,200 psi (82.7 bar)
Max. Chlorine concentration	< 0.1 ppm
Max. Operating temperature	45°C (113°F)
pH Range, Continuous (Cleaning)	2-11 (2-13)
Max. Feedwater turbidity	1.0 NTU
Max. Feedwater SDI (15 mins)	5.0
Max. Feed flow	75 gpm (17 m <sup>3</sup> /h)
Min. Ratio of concentrate to permeate flow for any element	5 : 1
Max. Pressure drop ( $\Delta P$ ) for each element	15 psi (1.0 bar)

The Membrane Elements performance is expressly conditioned on Buyer's storing, installing, operating, and maintaining Product in accordance with industry-accepted good practices and Seller's written instructions provided in the Seller's Technical Manual, which consists of LG Chem, Ltd <u>Technical Service Bulletins ("TSB"</u>) and <u>Technical Applications Bulletins ("TAB"</u>) and may be viewed and downloaded at www.lgwatersolutions.com.

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