

# Data Sheet



## Seawater Reverse Osmosis (RO) Membranes LG SW 400 GR G2

**LENNTECH**  
WATER TREATMENT SOLUTIONS

### 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 GR (Great Rejection) membranes offer a combination of high rejection and low energy requirements to reduce the total cost of desalination; suitable for high salinity seawater applications.

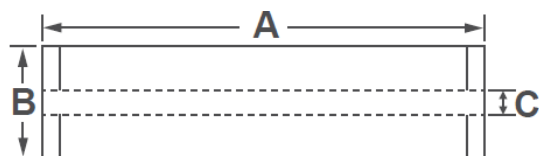
#### LG SW G2 Benefits

- ▶ 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 Area, ft <sup>2</sup> (m <sup>2</sup> ) | Permeate Flow Rate, GPD (m <sup>3</sup> /d) | Stabilized Salt Rejection, % | Minimum Salt Rejection, % | Boron Rejection, % | Feed Spacer, mil |
|---------------------------------------------------------|---------------------------------------------|------------------------------|---------------------------|--------------------|------------------|
| 400 (37)                                                | 7,500 (28.4)                                | 99.89                        | 99.75                     | 93                 | 28 or 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, mm (in.) | B, mm (in.) | C, mm (in.)  | Weight, kg (lbs.) |
|-------------|-------------|--------------|-------------------|
| 1,016 (40)  | 200 (7.9)   | 28.6 (1.125) | 16 (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 (ΔP) for each element                   | 15 psi (1.0 bar)              |

The information and data contained herein are deemed to be accurate and reliable and are offered in good faith, but without guarantee of performance. LG Chem assumes no liability for results obtained or damages incurred through the application of the information contained herein. Customer is responsible for determining whether the products and information presented herein are appropriate for the customer's use and for ensuring that customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Specifications subject to change without notice. NanoH<sub>2</sub>O is the Trademark of The LG Water Solutions or an affiliated company of LG Chem. All rights reserved. © LG Chem, Ltd.

**LENNTECH**  
WATER TREATMENT SOLUTIONS

info@lennotech.com Tel. +31-152-610-900  
www.lennotech.com Fax. +31-152-616-289

(20.07.06.)  
**NanoH<sub>2</sub>O™**