

# Data Sheet



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

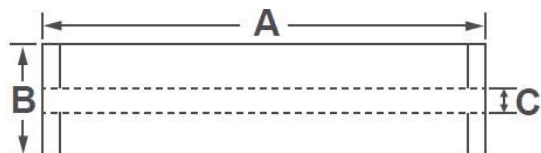
#### LG SW G2 Benefits

- ▶ 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

For more information and operating guidelines, visit [www.lgwatersolutions.com](http://www.lgwatersolutions.com)

|                                                            |                               |
|------------------------------------------------------------|-------------------------------|
| 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)              |

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