

Nano:H<sub>2</sub>O™



## Product Data Sheet

# LG SW 440 GR G2

Industry-leading salt rejection seawater RO membrane with excellent energy efficiency

- Benefits of LG Chem SW G2 membrane**
- ▶ **Better permeate quality** without increasing operating pressure
  - ▶ **Lower energy costs** without reducing permeate quality
  - ▶ **Reduced CAPEX and OPEX** for multi-pass SWRO systems

### Key Features

- Superior salt rejection
- Superior boron rejection

### Main Benefits

- A combination of excellent permeate water quality and energy efficiency
- Meets high water quality standards with lower system CAPEX requirement

### Ideal Applications

- Single-pass SWRO design requiring high permeate water quality

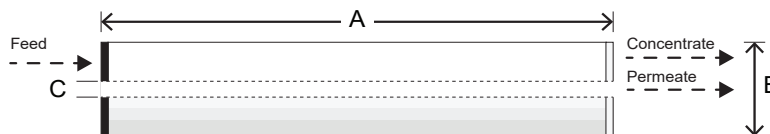
### Performance Specifications

| Item                       | Unit                              | Value        |
|----------------------------|-----------------------------------|--------------|
| Permeate Flow Rate         | GPD (m <sup>3</sup> /day)         | 8,250 (31.2) |
| Stabilized Salt Rejection  | %                                 | 99.89        |
| Minimum Salt Rejection     | %                                 | 99.75        |
| Stabilized Boron Rejection | %                                 | 93           |
| Active Membrane Area       | ft <sup>2</sup> (m <sup>2</sup> ) | 440 (41)     |
| Feed Spacer Thickness      | mil                               | 28           |

The specifications outlined above are normalized performances based on the following test conditions:

- **Test Conditions:** 32,000 ppm NaCl, 5 ppm Boron, 800 psi (55.1 bar), 25°C (77°F), pH 8, Recovery 8%
- Permeate flow rates for individual elements may vary by ±15%

### Dimensions and Weight



| Dimensions: mm (in) |              |                | Wet Weight: kg (lbs) |
|---------------------|--------------|----------------|----------------------|
| A                   | B            | C              |                      |
| Element Length      | Element O.D. | Core Tube I.D. | 16 (35)              |
| 1,016 (40)          | 200 (7.9)    | 28.6 (1.125)   |                      |

### Operating Specifications

| Item  | Unit                    | Value        |
|---|-------------------------|--------------|
| Maximum Applied Pressure                    | psi (bar)               | 1,200 (82.7) |
| Maximum Chlorine Concentration              | ppm                     | < 0.1        |
| Maximum Operating Temperature               | °C (°F)                 | 45 (113)     |
| pH Range, Continuous Operation              |                         | 2–11         |
| pH Range, Cleaning                          |                         | 2–13         |
| Maximum Feed Water Turbidity                | NTU                     | 1.0          |
| Maximum Feed Water SDI <sub>15</sub>        |                         | 5.0          |
| Maximum Feed Flow                           | gpm (m <sup>3</sup> /h) | 75 (17)      |
| Maximum Pressure Drop (ΔP) for Each Element | psi (bar)               | 15 (1.0)     |



This product is certified to NSF/ANSI/CAN Standard 61 for drinking water systems

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