

# Data Sheet



Seawater  
Reverse Osmosis (RO) Membranes

**LG SW 440 R**

## Overview

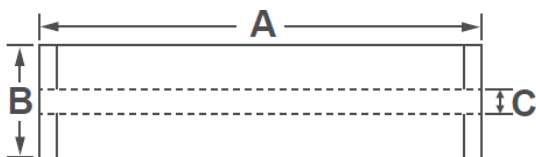
LG Chem's NanoH<sub>2</sub>O™ seawater RO membranes, incorporated with innovative Thin Film Nanocomposite (TFN) technology, reduce the cost of desalination while delivering superior water quality. Our seawater RO membranes provide industry leading salt rejection and produce 20% more flow than membranes manufactured with conventional technologies. We continue to leverage the technological advantages of our seawater RO membranes to expand our market share, accruing more than 3,000 Million Liter per Day (MLD) projects for both new and replacement market since the establishment.

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.

## 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
440 (41)	9,900 (37.5)	99.85	99.7	93	28

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)

## 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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