

# Data Sheet



**Seawater  
Reverse Osmosis (RO) Membranes**

**LG SW 4040 R**

## Overview

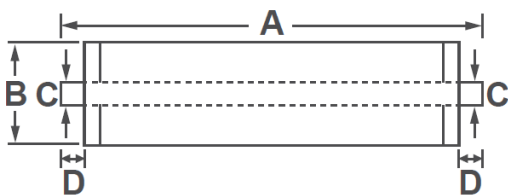
LG Chem's NanoH<sub>2</sub>O™ seawater RO membranes, incorporated with innovative Thin Film Nanocomposite (TFN) technology, deliver industry-leading salt rejection and 20% more flow than the membranes manufactured from conventional technologies. Our seawater RO membranes significantly reduce the cost of desalination while delivering superior water quality. In LG Chem, we do our utmost to fulfill customer needs and provide additional values from excellent commercial and technical supports. With state-of-the-art technology and customer focus, LG Chem has been awarded more than 3,000 Million Liter per Day (MLD) seawater projects since its 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, %	Feed Spacer, Mil
80 (7.4)	1,950 (7.4)	99.7	99.5	28

Test Conditions: 32,000 ppm NaCl at 25°C (77°F), 800 psi (55 bar), pH 8, Recovery 8%.  
Permeate flows for individual elements may vary +/-20%.



A, mm (in.)	B, mm (in.)	C, mm (in.)	D, mm (in.)	Weight kg (lbs.)
1,016 (40)	100 (3.9)	19 (0.75)	29 (1.1)	4.2 (9.3)

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)

<b>Max. Applied pressure</b>	1,200 psi (82.7 bar)
<b>Max. Chlorine concentration</b>	< 0.1 ppm
<b>Max. Operating temperature</b>	45°C (113°F)
<b>pH Range, Continuous (Cleaning)</b>	2-11 (2-13)
<b>Max. Feedwater turbidity</b>	1.0 NTU
<b>Max. Feedwater SDI (15 mins)</b>	5.0
<b>Max. Feed flow</b>	15 gpm (3.4 m <sup>3</sup> /h)
<b>Min. Ratio of concentrate to permeate flow for any element</b>	5 : 1
<b>Max. Pressure drop (ΔP) for each element</b>	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 [Technical Service Bulletins \("TSB"\)](#) and [Technical Applications Bulletins \("TAB"\)](#) and may be viewed and downloaded at [www.lgwatersolutions.com](http://www.lgwatersolutions.com).

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.

(06.21)