

## High Rejection



**Seawater Reverse Osmosis (RO) Element  
LG SW 440 R**



### Overview

LG Chem's thin-film nanocomposite (TFN) membranes lower water treatment costs by improving energy efficiency and productivity. These membranes feature benign nanomaterials incorporated into the thin-film polyamide layer of a composite membrane. This innovative patent-pending technology significantly increases membrane permeability.

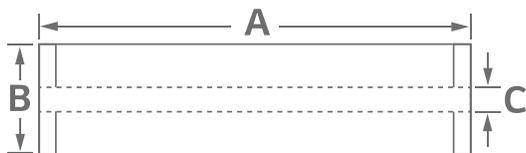
- Industry-standard flux with highest salt rejection
- Standard 8-inch spiral wound element design
- Easy to retrofit existing RO plants
- NSF Standard 61 Certified

### Product Specifications

\* 8-inch spiral wound membrane

Flow rate m <sup>3</sup> /d (GPD)	Minimum NaCl rejection (%)	NaCl rejection (%)	Boron rejection (%)	Active area m <sup>2</sup> (ft <sup>2</sup> )	Feed spacer (mil)
37.5 (9,900)	99.7	99.85	93	41 (440)	28

Note : The above values are normalized to the following conditions: 32,000 ppm NaCl, 5 ppm boron, 5.5 MPa (800 psi), 25°C (77°F), pH 8, 8% recovery. Permeate flows for individual elements may vary +/- 15%.



Length A	Element O.D. B	Perm tube I.D. C	Weight kg (lbs.)
1,016 mm (40 in.)	200 mm (7.9 in.)	28.6 mm (1.125 in.)	16.4 (36)

### Operating Specifications

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

Max. Applied pressure:	82.7 bar (1,200 psig)
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:	17 m <sup>3</sup> /h (75 GPM)
Min. Ratio of concentrate to permeate flow for any element:	5:1
Max. Pressure drop (ΔP) for each element:	1 bar (15 psi)

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