High Rejection
Seawater Reverse Osmosis (RO) Element
LG SW 440 GR

Overview

LG Chem's thin-film NanoH$_2$O™ 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 and improves salt rejection.

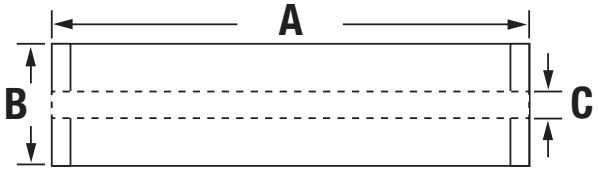
- Industry-standard flux with highest salt rejection
- Standard 8-inch spiral wound element design
- Easy to retrofit existing RO plants
- NSF Standard 61 Certified

Product Specifications

Configuration: 8-inch spiral wound
Membrane Polymer: Thin-film nanocomposite (TFN) polyamide

Product Number	Permeate flow rate m³/d (gpd)	Minimum NaCl Rejection %	Stabilized NaCl Rejection %	Active Membrane Area m² (ft²)	Feed Spacer mil	Stabilized Boron Rejection %
LG SW 440 GR	31.2 (8,250)	99.7	99.85	41 (440)	28	93

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%.



Part Number	Length A	Element O.D. B	Perm Tube I.D. C	Weight kg (lbs.)
LG SW 440 GR	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

Max. Applied Pressure:	82.7 bar (1200 psi)
Max. Chlorine Concentration:	< 0.1 ppm
Max. Operating Temperature:	45°C (113°F)
pH Range, Continuous (Cleaning):	2-11 (2-12)
Max. Feedwater Turbidity:	1.0 NTU
Max. Feedwater SDI (15 mins):	5.0
Max. Feed Flow:	17.0 m³/h (75 GPM)
Min. Ratio of Concentrate to Permeate Flow for any Element:	5:1
Max. Pressure Drop (ΔP) for Each Element:	1.0 bar (15 psi)

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