Energy Savings

Seawater Reverse Osmosis (RO) Element LG SW 400 ES



Overview

LG NanoH₂O's thin-film nanocomposite (TFN) membranes lower water treatment costs by improving energy efficiency and productivity. Qfx membranes feature benign nanomaterials incorporated into the thin-film polyamide layer of a composite membrane. This innovative patented and patent-pending technology significantly increases membrane permeability while matching best-in-class salt rejection.

- · Higher flux with requisite salt rejection
- Standard 8-inch spiral wound element design
- · Easy to retrofit existing RO plants
- NSF Standard 61 Certified



Anti-telescoping device with raised lip and bi-directional seal for easy element loading and removal



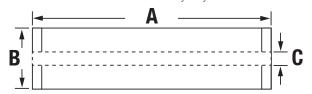
Product Specifications

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 400 ES	52 (13,700)	99.6	99.8	37 (400)	28	89

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 400	1016 mm	200 mm	28.6 mm	16.4
ES	(40 in.)	(7.9 in.)	(1.125 in.)	(36)

Operating Specifications

For more information and operating guidelines, visit www.lg-nanoh2o.com

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Max. Applied Pressure:	8.27 MPa (1200 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:	17.0 m³/h (75 GPM)		
Min. Ratio of Concentrate to Permeate Flow for any Element:	5:1		
Max. Pressure Drop (ΔP) for Each Element:	0.7 bar (10 psi)		
Max. Feedwater SDI (15 mins): Max. Feed Flow: Min. Ratio of Concentrate to Permeate Flow for any Element:	5.0 17.0 m³/h (75 GPM) 5:1		

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