

Global Project Wins Driven by Performance



Seawater Reverse Osmosis (RO) Membranes

Overview

LG Chem's NanoH₂O™ 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 1,000 Million Liter per Day (MLD) projects backlog for the last two years.



LG SW SR, GR and R | High Rejection Membranes

Well suited for high feed TDS and high permeate quality requirements



LG SW ES | Energy-Saving Membranes

Well suited for low feed TDS and low temperature seawater applications



LG SW GR G2 and SR G2

The next generation membranes with industry-leading 99.89% rejection

Product Specifications

8-inch spiral wound membranes

Product	Active Membrane Area, ft ² (m ²)	Permeate Flow Rate, GPD (m ³ /d)	Stabilized Salt Rejection, %	Minimum Salt Rejection, %	Boron Rejection, %	Feed Spacer, mil
LG SW 400 SR	400 (37)	6,000 (22.7)	99.85	99.7	93	28 or 34
LG SW 440 SR	440 (41)	6,600 (25.0)	99.85	99.7	93	28
LG SW 400 GR	400 (37)	7,500 (28.4)	99.85	99.7	93	28 or 34
LG SW 440 GR	440 (41)	8,250 (31.2)	99.85	99.7	93	28
LG SW 400 R	400 (37)	9,000 (34.1)	99.85	99.7	93	28 or 34
LG SW 440 R	440 (41)	9,900 (37.5)	99.85	99.7	93	28
LG SW 400 ES	400 (37)	13,700 (51.9)	99.80	99.6	89	34
LG SW 440 ES	440 (41)	15,070 (57.0)	99.80	99.6	89	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 +/-15%.

LG SW G2 Product Specifications

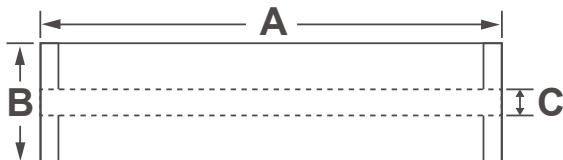
- With industry's **highest** 99.89% rejection, LG SW G2 membranes can provide
 - **Improved permeate quality** without increasing operating pressure
 - **Reduced energy cost** without sacrificing the permeate quality
 - **Reduced capital and operation costs** for multi-pass SWRO systems

8-inch spiral wound membranes

Product	Active Membrane Area, ft ² (m ²)	Permeate Flow Rate, GPD (m ³ /d)	Stabilized Salt Rejection, %	Minimum Salt Rejection, %	Boron Rejection, %	Feed Spacer, mil
LG SW 400 SR G2	400 (37)	6,000 (22.7)	99.89	99.75	93	28 or 34
LG SW 440 SR G2	440 (41)	6,600 (25.0)	99.89	99.75	93	28
LG SW 400 GR G2	400 (37)	7,500 (28.4)	99.89	99.75	93	28 or 34
LG SW 440 GR G2	440 (41)	8,250 (31.2)	99.89	99.75	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%.

Product Dimensions



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

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 ³ /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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