

NanoH<sub>2</sub>O™



## Key Features

- High permeate flow rate
- Best-in-class salt rejection for Energy-saving SWRO membranes
- Improved fouling resistance due to thicker feed spacer

## Main Benefits

- Improved system productivity
- Reduced feed pressure and energy consumption
- Well-proven and long-lasting reliability

## Ideal Applications

- Multi-pass desalination plant design

## Product Data Sheet

# LG SW 400 ES

Energy-saving seawater RO membrane with proven, long-lasting

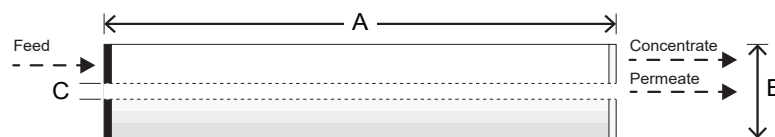
## Performance Specifications

Specification	Unit	Test condition A	Test condition B
Permeate Flow Rate	GPD (m³/d)	6,800 (25.7)	13,700 (51.9)
Stabilized Salt Rejection	%	99.6	99.8
Minimum Salt Rejection	%	99.3	99.6
Stabilized Boron Rejection	%	81	89
Active Membrane Area	ft² (m²)	400 (37)	
Feed Spacer Thickness	mil	34	

The specifications outlined above are based on the following test conditions:

- **Test Condition A:** 32,000 ppm NaCl, 5 ppm Boron, 600 psi (41.3 bar), 25°C (77°F), pH 8, Recovery 8%
  - Permeate flow rates for individual elements may vary by ±20%
- **Test Condition B (referential only):** 32,000 ppm NaCl, 5 ppm Boron, 800 psi (55.1 bar), 25°C (77°F), pH 8, Recovery 8%
  - Permeate flow rates for individual elements may vary by ±15%

## Dimensions and Weight



Dimensions: in (mm)			Wet weight: kg (lbs)
A	B	C	
Element Length	Element O.D.	Core Tube I.D.	16 (35)
40 (1,016)	200 (7.9)	1.125 (28.6)	

## Operating Specifications

Item	Unit	Value
Maximum Applied Pressure	psi (bar)	1,200 (82.7)
Maximum Chlorine Concentration	ppm	< 0.1
Maximum Operating Temperature	°C (°F)	45 (113)
pH Range, Continuous Operation		2–11
pH Range, Cleaning		2–13
Maximum Feed Water Turbidity	NTU	1.0
Maximum Feed Water SDI <sub>15</sub>		5.0
Maximum Feed Flow	gpm (m³/h)	75 (17)
Maximum Pressure Drop (ΔP) for Each Element	psi (bar)	15 (1.0)



This product is certified to NSF/ANSI/CAN Standard 61 for drinking water systems

As the exclusive producer of the breakthrough Thin-Film Nanocomposite (TFN) technology, LG Chem's NanoH<sub>2</sub>O™ seawater and brackish water RO membranes leverage this proprietary innovation to enhance membrane performance



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