

# Energy Savings

## Brackish Water Reverse Osmosis (RO) Element

### LG BW 440 ES



### Overview

LG Chem's NanoH<sub>2</sub>O™ brackish water RO membranes lower water treatment costs by improving energy efficiency and productivity. These thin-film nanocomposite (TFN) 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.

- Superior flux and high salt rejection
- Ideal for low energy applications
- Easy to retrofit existing RO plants

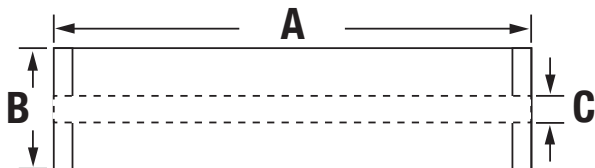


### Product Specifications

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

Product Number	Permeate flow rate m <sup>3</sup> /d (gpd)	Minimum NaCl Rejection %	Stabilized NaCl Rejection %	Active Membrane Area m <sup>2</sup> (ft <sup>2</sup> )	Feed Spacer mil
LG BW 440 ES	43.7 (11,550)	99.5	99.6	41 (440)	28

Note: The above values are normalized to the following conditions: 2,000 ppm NaCl, 10.3 bar (150 psi), 25°C (77°F), pH 8, 15% 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 BW 440 ES	1016 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. Operating Pressure:	41 bar (600 psig)
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:	19 m <sup>3</sup> /h (85 GPM)
Max. Pressure Drop:	1.0 bar (15 psig)

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