Water Tech

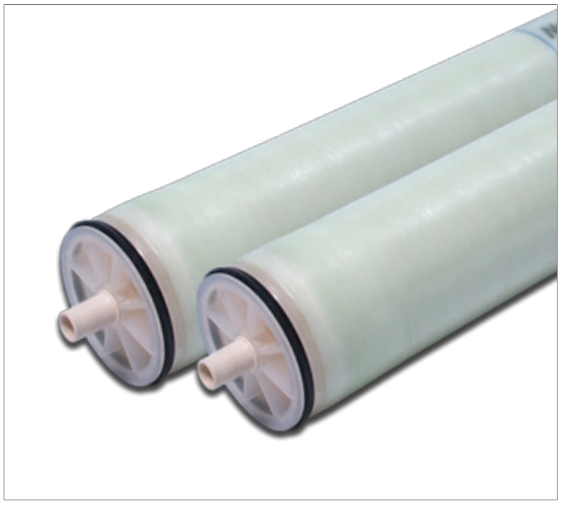
Energy-Saving
Brackish Water Reverse Osmosis (RO) Element
LG BW 4040 ES

LG Chem

Overview

LG Chem's NanoH$_2$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

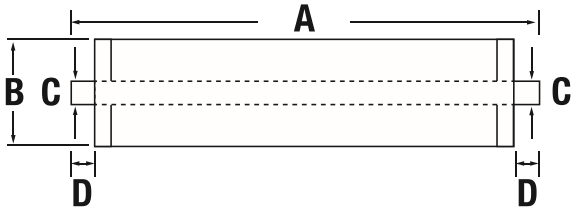


Product Specifications

Configuration: 4-inch spiral wound
Membrane Polymer: Thin-film nanocomposite (TFN) polyamide

Part Number	Permeate flow rate m³/d (gpd)	Minimum NaCl Rejection %	Stabilized NaCl Rejection %	Feed Spacer mil
LG BW 4040 ES	9.5 (2,500)	99.2	99.5	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 +/- 20%.



Part Number	Length A	Element O.D. B	Core Tube I.D. C	Core Tube Extension D	Weight kg (lbs.)
LG BW 4040 ES	1016 mm (40 in.)	100 mm (3.9 in.)	19 mm (0.75 in.)	27 mm (1.05 in.)	3.6 (8.0)

Operating Specifications

For more information and operating guidelines, visit **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:	3.6 m³/h (16 GPM)

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NanoH$_2$O

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