

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

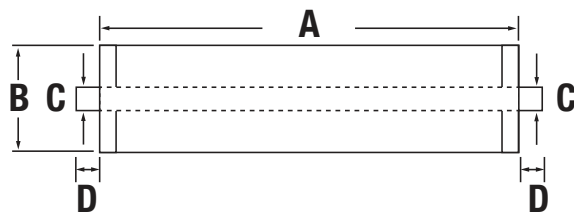
- Superior flux and high salt rejection
- Ideal for low energy applications
- Easy to retrofit existing RO plants

## Product Specifications

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

Part 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 4040 ES	9.5 (2,500)	99.2	99.5	7.9 (85)	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 6.5 - 7.0, 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](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:	3.6 m <sup>3</sup> /h (16 GPM)

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