# LG Water Solutions Energy-Saving





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



### **Overview**

LG Chem's NanoH₂O<sup>™</sup> 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**

\* 4-inch spiral wound membrane

Flow rate	Minimum NaCl	NaCl	Active	Feed
m³/d (GPD)	rejection (%)	rejection (%)	area m² (ft²)	spacer (mil)
9.5 (2,500)	99.2	99.5	<b>7.9</b> (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%.



+ c	Length A	Element O.D B	Core tube I.D C	Core tube Extension D	<b>Weight</b> kg (lbs.)
	<b>1,016 mm</b>	<b>100 mm</b>	<b>19 mm</b>	<b>27 mm</b>	<b>3.6</b>
	(40 in.)	(3.9 in.)	(0.75 in.)	(1.05 in.)	(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 m <sup>3</sup> /h (16 GPM)	

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