

### ALPHA WATER & POWER

# Data Sheet



**Brackish Water** Reverse Osmosis (RO) Membranes

#### **LG BW 4040 UES**

Ultra Low Energy

#### Overview

LG Chem's NanoH<sub>2</sub>O™ brackish water RO membranes serve various municipal and industrial applications and have been operating in the major utilities around the world. Incorporating innovative Thin Film Nanocomposite (TFN) technology, all LG BWRO membranes provide superior performance along with intrinsic anti-fouling property and are suitable for applications where consistent and reliable performance is a must.

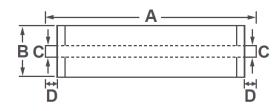
LG BW UES membranes offer high permeability at ultra-low feed pressure, significantly reducing operating costs: suitable for low salinity brackish water applications.

## **Product Specifications**

Active Membrane	Permeate Flow	Stabilized Salt	Minimum Salt	Feed Spacer,
Area, ft <sup>2</sup> (m <sup>2</sup> )	Rate, GPD (m³/d)	Rejection, %	Rejection, %	mil
85 (7.9)	2,700 (10.2)	99.0	98.0	28

Test Conditions: 500 ppm NaCl at 25°C (77°F), 100 psi (6.9 bar), pH 7, Recovery 15%.

Permeate flows for individual elements will vary with no less than 85% of the specified datasheet flow.



A,	B,	C,	D,	Weight
mm (in.)	mm (in.)	mm (in.)	mm (in.)	kg (lbs.)
1,016	100	19	29	4.0
(40)	(3.9)	(0.75)	(1.1)	(8.8)

# **Operating Specifications**

Max. Applied pressure	600 psi (41 bar)	
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	16 gpm (3.6 m <sup>3</sup> /h)	
Max. Pressure drop (ΔP) for each element	15 psi (1.0 bar)	

The Membrane Elements performance is expressly conditioned on Buyer's storing, installing, operating, and maintaining Product in accordance with industry-accepted good practices and Seller's written instructions provided in the Seller's Technical Manual, which consists of LG Chem, Ltd Technical Service Bulletins ("TSB") and Technical Applications Bulletins ("TAB") and may be viewed and downloaded at www.lgwatersolutions.com.

The information and data contained herein are deemed to be accurate and reliable and are offered in good faith, but without guarantee of performance. LG Chem assumes no liability for results obtained or damages incurred through the application of the information contained herein. Customer is responsible for determining whether the products and information presented herein are appropriate for the customer's use and for ensuring that customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Specifications subject to change without notice. NanoH<sub>2</sub>O is the Trademark of The LG Water Solutions or an affiliated company of LG Chem. All rights reserved. © LG Chem, Ltd.







