

# Data Sheet



Brackish Water  
Reverse Osmosis (RO) Membranes

**LG BW 4021 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.

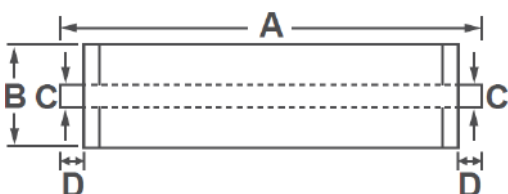
LG BW UES membranes offer high permeability at ultra-low feed pressure, significantly reducing operating costs: suitable for low salinity brackish water applications.

## Product Specifications

Active Membrane Area, ft <sup>2</sup> (m <sup>2</sup> )	Permeate Flow Rate, GPD (m <sup>3</sup> /d)	Stabilized Salt Rejection, %	Minimum Salt Rejection, %	Feed Spacer, mil
34 (3.2)	1,000 (3.8)	99.0	98.0	28

Test Conditions : 500 ppm NaCl at 25°C (77°F), 100 psi (6.9 bar), pH 7, Recovery 8%.

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



A, mm (in.)	B, mm (in.)	C, mm (in.)	D, mm (in.)	Weight kg (lbs.)
533 (21)	100 (3.9)	19 (0.75)	29 (1.1)	2.3 (5.1)

All dimensional information is indicative and for reference purpose only. Please contact LG Chem for detailed technical specification.

## Operating Specifications

For more information and operating guidelines, visit [www.lgwatersolutions.com](http://www.lgwatersolutions.com)

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](http://www.lgwatersolutions.com).

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