Chem Data Sheet



Brackish Water Reverse Osmosis (RO) Membranes

LG BW 2521 ES Energy Saving

Overview

LG Chem's NanoH₂O[™] 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 ES membranes offer high permeability at low feed pressure, significantly reducing operating costs: suitable for low to medium salinity brackish water applications.

Product Specifications

| Active Membrane | Permeate Flow | Stabilized Salt | Minimum Salt | Feed Spacer, | |
|-----------------|-------------------------------|-----------------|--------------|--------------|--|
| Area, ft² (m²) | Rate, GPD (m ³ /d) | Rejection, % | Rejection, % | mil | |
| 9 (0.9) | 345 (1.3) | 99.5 | 99.2 | 28 | |

Test Conditions : 2,000 ppm NaCl at 25°C (77°F), 150 psi (10.3 bar), pH 7, Recovery 8%. Permeate flows for individual elements may vary +/-20%.

| A, | B, | C, | D, | Weight |
|----------|----------|----------|----------|-----------|
| mm (in.) | mm (in.) | mm (in.) | mm (in.) | kg (lbs.) |
| 533 | 60 | 19 | 32 | 1.0 |
| (21) | (2.4) | (0.75) | (1.3) | (2.2) |

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

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 | 6 gpm (1.4 m ³ /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 <u>Technical</u> <u>Service Bulletins ("TSB")</u> and <u>Technical Applications Bulletins ("TAB")</u> 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. NanoH₂O is the Trademark of The LG Water Solutions or an affiliated company of LG Chem. All rights reserved. © LG Chem, Ltd.