() LG Chem Data Sheet



Brackish Water Reverse Osmosis (RO) Membranes

LG BW 440 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 (m³/d) | Rejection, % | Rejection, % | mil |
| 440 (41) | 11,550 (43.7) | 99.6 | 99.5 | 28 |

Test Conditions : 2,000 ppm NaCl at 25°C (77°F), 150 psi (10.3 bar), pH 7, Recovery 15%. Permeate flows for individual elements may vary +/-15%.

| | A, | B, | C, | Weight, |
|----------|----------|----------|----------|-----------|
| | mm (in.) | mm (in.) | mm (in.) | kg (lbs.) |
| <u>↓</u> | 1,016 | 200 | 28.6 | 16 |
| | (40) | (7.9) | (1.125) | (35) |

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 | 75 gpm (17 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 Service Bulletins ("TSB"</u>) and <u>Technical Applications Bulletins ("TAB"</u>) and may be viewed and downloaded at www.lgwatersolutions.com.

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