

Data Sheet



Brackish Water
Reverse Osmosis (RO) Membranes

LG BW 400 ES L

Energy saving membrane equipped with fouling tolerant low dP spacer technology.

Overview

LG Chem's NanoH₂O™ brackish water RO membranes serve various municipal, industrial and commercial applications. Incorporating LG Chem's proprietary Thin Film Nanocomposite (TFN) technology, all LG BWRO membranes deliver reliable and superior performance with intrinsic anti-fouling properties.

LG BW 400 ES L is highly permeable at low feed pressure and incorporates a unique proprietary feed spacer technology for reducing differential pressure. The results are excellent anti-fouling properties and lower cleaning frequency, chemical use, energy consumption, and total cost of plant ownership. Ideal applications include feed water sources with low to medium salinity brackish water.

Product Specifications

| Active Membrane Area, ft ² (m ²) | Permeate Flow Rate, GPD (m ³ /d) | Stabilized Salt Rejection, % | Minimum Salt Rejection, % | Feed Spacer, mil |
|---|---|------------------------------|---------------------------|------------------|
| 400 (37) | 10,500 (39.7) | 99.6 | 99.5 | 34, low dP |

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, kg (lbs.) |
|------------|-----------|--------------|-------------------|
| mm (in.) | mm (in.) | mm (in.) | |
| 7,016 (40) | 200 (7.9) | 28.6 (1.125) | 16 (35) |

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

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|--|-------------------------------|
| 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 [Technical Service Bulletins \("TSB"\)](#) and [Technical Applications Bulletins \("TAB"\)](#) and may be viewed and downloaded at www.lgwatersolutions.com.

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