# **() LG Chem** Data Sheet

# LG Water Solutions



Brackish Water Reverse Osmosis (RO) Membranes



LG BW 400 ES

#### Overview

LG Chem's NanoH<sub>2</sub>O<sup>™</sup> brackish water RO membranes serve various municipal and industrial applications and have been operating in the major utilities around the world. LG BWRO membranes, all incorporated with innovative Thin Film Nanocomposite (TFN) technology, are offered in industry standard configurations and can easily fit into existing and new RO plants.

LG BW ES (Energy Saving) 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 rate, GPD (m <sup>3</sup> /d) | Stabilized Salt | Minimum Salt | Feed Spacer, |
|---|---|-----------------|--------------|--------------|
| Area, ft <sup>2</sup> (m <sup>2</sup> ) |   | Rejection, %    | Rejection, % | mil          |
| 400 (37)                                | 10,500 (39.7)                               | 99.6            | 99.5         | 34           |

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 [O.D.] | C [I.D.] | Weight    |
|-----------------|----------|----------|----------|-----------|
|                 | mm (in.) | mm (in.) | mm (in.) | kg (lbs.) |
| <u><u> </u></u> | 1,016    | 200      | 28.6     | 16        |
|                 | (40)     | (7.9)    | (1.125)  | (35)      |

## **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 <sup>3</sup> /h) |
| Max. Pressure drop ( $\Delta P$ ) for each element | 15 psi (1.0 bar)              |

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