

# High Rejection

## Brackish Water Reverse Osmosis (RO) Element

### LG BW 400 R



#### Overview

LG Chem's NanoH<sub>2</sub>O™ brackish water RO membranes lower the cost of desalination by improving energy efficiency and productivity. These thin-film nanocomposite (TFN) membranes feature benign nanomaterials incorporated into the thin-film polyamide layer of a composite membrane. This innovative patented and patent-pending technology significantly increases membrane permeability while offering superior salt rejection.

- Matches industry-standard flux and rejection
- Easy to retrofit existing systems
- Well suited for low quality feed water or varying operating conditions

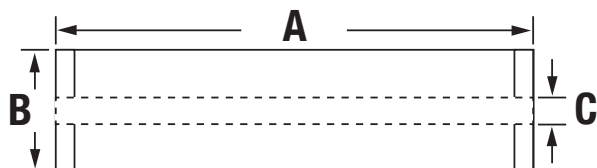


#### Product Specifications

Configuration: 8-inch spiral wound  
Membrane Polymer: Thin-film nanocomposite (TFN) polyamide

| Product Number | Permeate flow rate<br>m <sup>3</sup> /d (gpd) | Minimum NaCl Rejection<br>% | Stabilized NaCl Rejection<br>% | Active Membrane Area<br>m <sup>2</sup> (ft <sup>2</sup> ) | Feed Spacer<br>mil |
|----------------|-----------------------------------------------|-----------------------------|--------------------------------|-----------------------------------------------------------|--------------------|
| LG BW 400 R    | 39.7 (10,500)                                 | 99.5                        | 99.6                           | 37 (400)                                                  | 34                 |

Note: The above values are normalized to the following conditions: 2,000 ppm NaCl, 15.5 bar (225 psi), 25°C (77°F), pH 8, 15% recovery. Permeate flows for individual elements may vary +/- 15%.



| Part Number | Length<br>A         | Element<br>O.D.<br>B | Perm Tube<br>I.D.<br>C | Weight<br>kg (lbs.) |
|-------------|---------------------|----------------------|------------------------|---------------------|
| LG BW 400 R | 1016 mm<br>(40 in.) | 200 mm<br>(7.9 in.)  | 28.6 mm<br>(1.125 in.) | 16.4<br>(36)        |

#### Operating Specifications

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

|                                  |                               |
|----------------------------------|-------------------------------|
| Max. Operating Pressure:         | 41 bar (600 psig)             |
| 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:                  | 19 m <sup>3</sup> /h (85 GPM) |
| Max. Pressure Drop:              | 1.0 bar (15 psig)             |

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