

# RE4021-BE

High productivity RO element for brackish water



- High Permeate Flow and High Rejection



Industrial



Municipal

## SPECIFICATIONS

### General Features

<b>Permeate Flow Rate</b>	1,200 GPD (4.5 m <sup>3</sup> /day)
<b>Nominal Salt Rejection</b>	99.5% (Minimum 99.%)
<b>Effective Membrane Area</b>	35 ft <sup>2</sup> (3.3 m <sup>2</sup> )
<b>Membrane Type</b>	Thin-Film Composite
<b>Membrane Material</b>	Polyamide (PA)
<b>Element Configuration</b>	Spiral-Wound, FRP Wrapping

**Test Conditions:** 2,000 mg/L NaCl solution at 225 psig (1.55 MPa) applied pressure; 8% recovery; 77°F(25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -25%.

### Dimensions and Weight

Model Name	A	B	C	D/E	Part Number	
					Inter-Connector	Brine Seal
RE4021-BE	21.0 inch (533.4 mm)	3.9 inch (99.0 mm)	0.75 inch (19.1 mm)	1.05 inch (26.7 mm)	SWA01050	SWA01046



1. Each membrane element supplied with one interconnector (coupler) and four O-rings.
2. All RE4021 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

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Product Specification Sheet / Model RE4021-BE

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## APPLICATION DATA

### Operating Limits

<b>Max. Pressure Drop / Element</b>	15 psi (0.10 MPa)
<b>Max. Pressure Drop / 240" Vessel</b>	60 psi (0.41 MPa)
<b>Max. Operating Pressure</b>	600 psi (4.14 MPa)
<b>Max. Feed Flow Rate</b>	18 gpm (4.09 m <sup>3</sup> /hr)
<b>Min. Concentrate Flow Rate</b>	4 gpm (0.91 m <sup>3</sup> /hr)
<b>Max. Operating Temperature</b>	113°F (45°C)
<b>Operating pH Range</b>	2.0 – 11.0
<b>CIP pH Range</b>	1.0 – 13.0
<b>Max. Turbidity</b>	1.0 NTU
<b>Max. SDI (15 min)</b>	5.0
<b>Max. Chlorine Concentration</b>	< 0.05 mg/L

## GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

The element shell is FRP(Fiber Reinforced Plastic). Be aware of glass fiber strands and use safety equipment.

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