

# RE4021-BE

High productivity RO element for brackish water

# CSM<sup>®</sup>

- High Permeate Flow and High Rejection



Industrial



Municipal

## SPECIFICATIONS

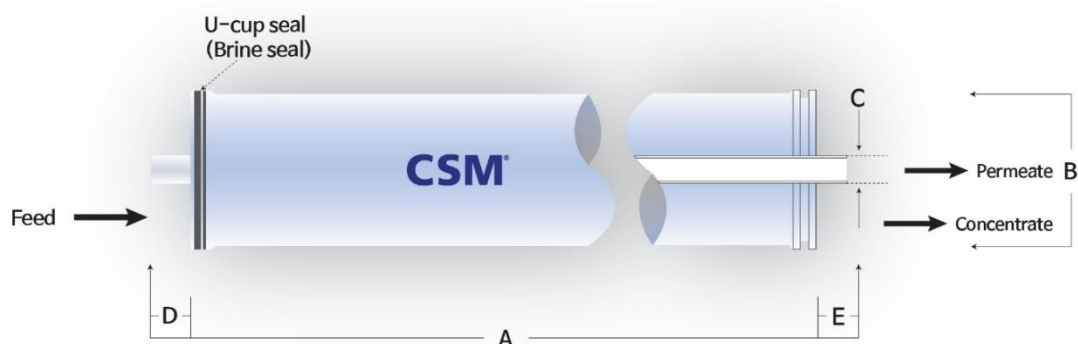
### General Features

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

**Toray Advanced Materials Korea Inc.**

For more information on our products, company and regional contacts, please visit our website at [www.csmfilter.com](http://www.csmfilter.com).

Product Specification Sheet / Model RE4021-BE

V.2.4 (23)

# RE4021-BE

High productivity RO element for brackish water

# CSM<sup>®</sup>

## APPLICATION DATA

### Operating Limits

Max. Pressure Drop / Element	15 psi (0.10 MPa)
Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
Max. Operating Pressure	600 psi (4.14 MPa)
Max. Feed Flow Rate	18 gpm (4.09 m <sup>3</sup> /hr)
Min. Concentrate Flow Rate	4 gpm (0.91 m <sup>3</sup> /hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
CIP pH Range	1.0 – 13.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	5.0
Max. Chlorine Concentration	< 0.1 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.
- Salt rejection would be stabilized within 48 hours of continuous operation depending on feedwater and operating conditions, but may take over a week for dry elements.
- 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.

**Toray Advanced Materials Korea Inc.**

For more information on our products, company and regional contacts, please visit our website at [www.csmfilter.com](http://www.csmfilter.com).  
Product Specification Sheet / Model RE4021-BE

V.2.4 (23)