RE4021-BLN



Low pressure grade RO element for brackish water

• Low-Energy Consumption







SPECIFICATIONS •

General Features

Permeate Flow Rate 1,200 GPD (4.5 m³/day)

Nominal Salt Rejection 99.2% (Minimum 99.0%)

Effective Membrane Area 35ft² (3.3 m²)

Membrane Type Thin-Film Composite

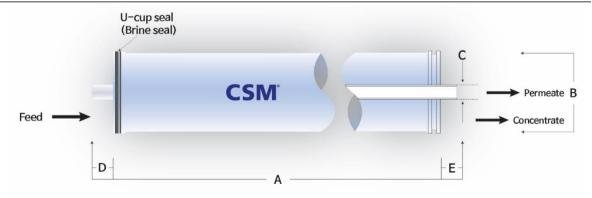
Membrane Material Polyamide (PA)

Element Configuration Spiral-Wound, FRP Wrapping

Test Conditions: 1,500 mg/L NaCl solution at 150 psig (1.03 MPa) applied pressure; 15% recovery; $77^{\circ}F(25^{\circ}C)$; pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -25%.

Dimensions and Weight

| Model Name | Α | В | С | D/E | Part Number | |
|------------|-------------------------|---------------------|------------------------|-----------------------|-----------------|------------|
| | | | | | Inter-Connector | Brine Seal |
| RE4021-BLN | 21.0 inch (533.4 mm) | 3.9 inch (99 mm) | 0.75 inch (19.1 mm) | 1.1 inch (28.0 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.

RE4021-BLN



Low pressure grade RO element for low TDS water

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 m³/hr) | | |
| Min. Concentrate Flow Rate | 4 gpm (0.91 m³/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 | < 0.05 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.