## **RE4040-BE**



High productivity RO element for brackish water

• High Permeate Flow and High Rejection





## **SPECIFICATIONS** •

#### **General Features**

Permeate Flow Rate 2,400 GPD (9.1 m<sup>3</sup>/day)

Nominal Salt Rejection 99.7% (Minimum 99.4%)

Effective Membrane Area 85 ft<sup>2</sup> (7.9 m<sup>2</sup>)

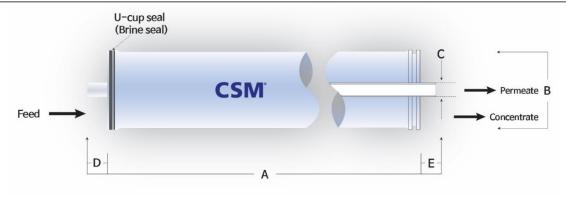
Membrane Type Thin-Film Composite

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; 15% recovery;  $77^{\circ}F(25^{\circ}C)$ ; pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -15%.

NA salah Nassa	<b>A</b>	Б	•	D/F	Part Num	ber
Model Name	Α	В	C	D/E	Inter-Connector	Brine Seal
RE4040-BE	40.0 inch (1,016 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 RE4040 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

# **RE4040-BE**



High productivity RO element for brackish 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	< 0.1 mg/L

- 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.





High productivity RO element for brackish water

• High Permeate Flow and High Rejection





## **SPECIFICATIONS** •-

#### **General Features**

Permeate Flow Rate 11,000 GPD (41.6 m<sup>3</sup>/day)

Nominal Salt Rejection 99.7% (Minimum 99.5%)

Effective Membrane Area 400 ft<sup>2</sup> (37.2 m<sup>2</sup>)

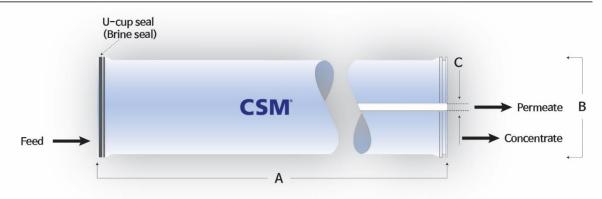
Membrane Type Thin-Film Composite

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; 15% recovery;  $77^{\circ}F(25^{\circ}C)$ ; pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -15%.

Nandal Name		D C Weigh	A B C Wai-	14/a:-b+	Part Num	ber
Model Name	Α	В	C	Weight	Inter-Connector	Brine Seal
RE8040-BE	40.0 inch (1,016 mm)	7.9 inch (200 mm)	1.125 inch (28.6 mm)	15kg	SWA01049	SWA01043



- 1. Each membrane element supplied with one interconnector (coupler) and four O-rings.
- 2. All RE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.



High productivity RO element for brackish 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	75 gpm (17.0 m³/hr)
Min. Concentrate Flow Rate	16 gpm (3.6 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	< 0.1 mg/L

- 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.





High productivity RO element for brackish water

- High Permeate Flow and High Rejection
- 34mil Thick Feed Spacer





## **SPECIFICATIONS** •-

#### **General Features**

Permeate Flow Rate 11,000 GPD (41.6 m<sup>3</sup>/day)

Nominal Salt Rejection 99.7% (Minimum 99.5%)

Effective Membrane Area 400 ft<sup>2</sup> (37.2 m<sup>2</sup>)

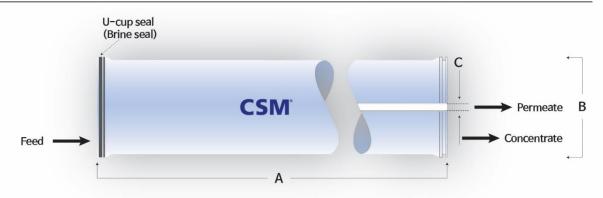
Membrane Type Thin-Film Composite

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; 15% recovery;  $77^{\circ}F(25^{\circ}C)$ ; pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -15%.

Madal Nama	•	D	6	14/a:ab4	Part Num	ber
Model Name	Α	В	C	Weight	Inter-Connector	Brine Seal
RE8040-BE34	40.0 inch (1,016 mm)	7.9 inch (200 mm)	1.125 inch (28.6 mm)	15kg	SWA01049	SWA01043



- 1. Each membrane element supplied with one interconnector (coupler) and four O-rings.
- 2. All RE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.



High productivity RO element for brackish water

## **APPLICATION DATA** •

### **Operating Limits**

<u> </u>	
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	75 gpm (17.0 m³/hr)
Min. Concentrate Flow Rate	16 gpm (3.6 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

- 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.





High productivity RO element with extended area for brackish water

- High Permeate Flow and High Rejection
- Extended effective membrane area





## **SPECIFICATIONS** •-

#### **General Features**

Permeate Flow Rate 12,000 GPD (45.4 m<sup>3</sup>/day)

Nominal Salt Rejection 99.7% (Minimum 99.5%)

Effective Membrane Area 440 ft<sup>2</sup> (40.9 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; 15% recovery;  $77^{\circ}F(25^{\circ}C)$ ; pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -15%.

NA a dal Nama	A B 6 1	Maiaht.	Part Number			
Model Name	Α	В	C	Weight	Inter-Connector	Brine Seal
RE8040-BE440	40.0 inch (1,016 mm)	7.9 inch (200 mm)	1.125 inch (28.6 mm)	15kg	SWA01049	SWA01043



- 1. Each membrane element supplied with one interconnector (coupler) and four O-rings.
- 2. All RE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.



High productivity RO element with extended area for brackish 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	75 gpm (17.0 m³/hr)
Min. Concentrate Flow Rate	16 gpm (3.6 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	< 0.1 mg/L

- 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.



# **RE2540-BE**



High productivity RO element for brackish water

• High Permeate Flow and High Rejection





## **SPECIFICATIONS** •

#### **General Features**

Permeate Flow Rate 1,000 GPD (3.8 m<sup>3</sup>/day)

Nominal Salt Rejection 99.5% (Minimum 99.0%)

Effective Membrane Area 27 ft<sup>2</sup> (2.5 m<sup>2</sup>)

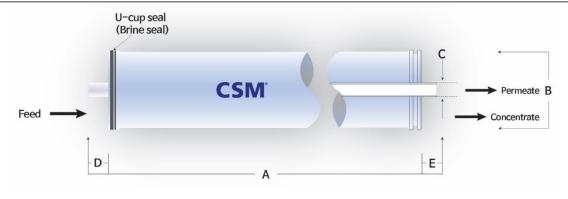
Membrane Type Thin-Film Composite

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; 15% recovery;  $77^{\circ}F(25^{\circ}C)$ ; pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -25%.

No del Nesse		ъ	C D/F		Part Num	nber
Model Name	Α	В	C	D/E	Inter-Connector	Brine Seal
RE2540-BE	40.0 inch (1,016 mm)	2.4 inch (60.8 mm)	0.75 inch (19.1 mm)	1.05 inch (26.7 mm)	SWA01050	SWA01047



- 1. Each membrane element supplied with one interconnector (coupler) and four O-rings.
- 2. All RE2540 elements fit nominal 2.5 inch (63.5 mm) I.D. pressure vessels.

# **RE2540-BE**



High productivity RO element for brackish water

## **APPLICATION DATA**

### **Operating Limits**

15 psi (0.10 MPa)
60 psi (0.41 MPa)
600 psi (4.14 MPa)
6 gpm (1.36 m³/hr)
1 gpm (0.23 m <sup>3</sup> /hr)
113°F (45°C)
2.0 – 11.0
1.0 – 13.0
1.0 NTU
5.0
< 0.1 mg/L

- 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.

# **RE4021-BE**



High productivity RO element for brackish water

• High Permeate Flow and High Rejection



## **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>)

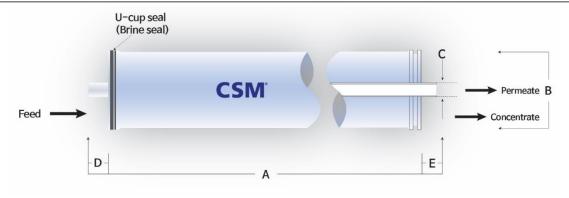
Membrane Type Thin-Film Composite

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;  $77^{\circ}F(25^{\circ}C)$ ; pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -25%.

Na dal Nama		ь	C D/E		Part Num	nber
Model Name	A	В	C	D/E	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.

# **RE4021-BE**



High productivity RO element for brackish 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	< 0.1 mg/L

- 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.