

RE4040-FLR



Fouling resistant RO element with low pressure for brackish water and wastewater reuse

- Fouling resistant
- Low Energy Consumption
- High Permeate Flow and High Rejection



Industrial



Municipal



Water Reuse

SPECIFICATIONS

General Features

Permeate Flow Rate	2,100 GPD (7.9 m ³ /day)
Nominal Salt Rejection	99.6% (Minimum 99.5%)
Effective Membrane Area	85ft ² (7.9 m ²)
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°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary but will be no more than -5 %.

Dimensions and Weight

Model Name	A	B	C	D/E	Part Number	
					Inter-Connector	Brine Seal
RE4040-FLR	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.

Toray Advanced Materials Korea Inc.

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Product Specification Sheet / Model RE4040-FLR

V.2.4 (23)

RE4040-FLR



Fouling resistant RO element with low pressure for brackish water and wastewater reuse

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 ³ /hr)
Min. Concentrate Flow Rate	4 gpm (0.91 m ³ /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.

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Product Specification Sheet / Model RE4040-FLR

V.2.4 (23)

RE8040-FEn



Enhanced fouling resistant RO element for brackish water and wastewater reuse

- Fouling resistant
- High Permeate Flow and High Rejection
- Robustness and High Durability in a wide pH



Industrial



Municipal



Water Reuse

SPECIFICATIONS

General Features

Permeate Flow Rate	11,000 GPD (41.6 m ³ /day)
Nominal Salt Rejection	99.7% (Minimum 99.5%)
Effective Membrane Area	400 ft ² (37.2 m ²)
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°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -15%.

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-Connector	Brine Seal
RE8040-FEn	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.

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Product Specification Sheet / Model RE8040-FEn

V.2.4 (23)

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 m ³ /hr)
Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /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.



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RE8040-FEn34

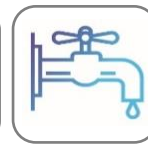


Enhanced fouling resistant RO element for brackish water and wastewater reuse

- Fouling resistant
- High Permeate Flow and High Rejection
- Robustness and High Durability in a wide pH
- 34mil Feed spacer



Industrial



Municipal



Water Reuse

SPECIFICATIONS

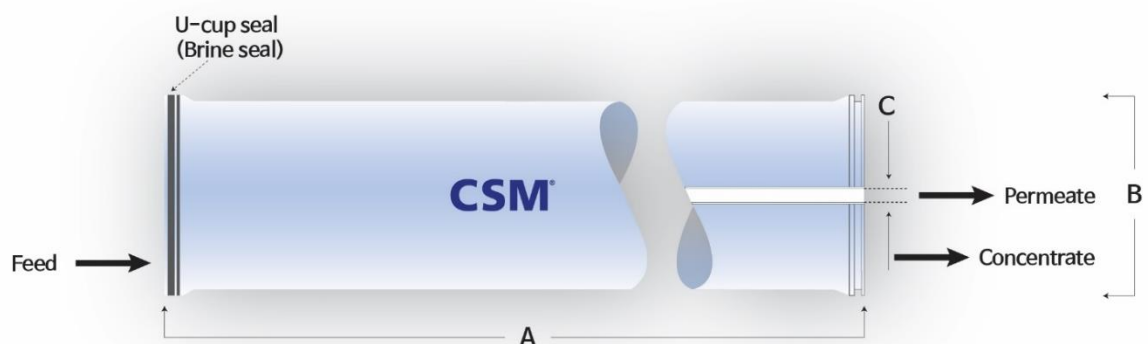
General Features

Permeate Flow Rate	11,000 GPD (41.6 m ³ /day)
Nominal Salt Rejection	99.7% (Minimum 99.5%)
Effective Membrane Area	400 ft ² (37.2 m ²)
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°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -15%.

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-Connector	Brine Seal
RE8040-FEn34	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.

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Product Specification Sheet / Model RE8040-FEn34

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RE8040-FEn34



Enhanced fouling resistant RO element for brackish water and wastewater reuse

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 m ³ /hr)
Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /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.



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RE8040-FEn440



Enhanced fouling resistant RO element for brackish water and wastewater reuse

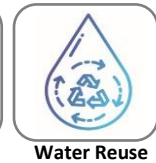
- Fouling resistant
- High Permeate Flow and High Rejection
- Robustness and High Durability in a wide pH
- Extended effective membrane area



Industrial



Municipal



Water Reuse

SPECIFICATIONS

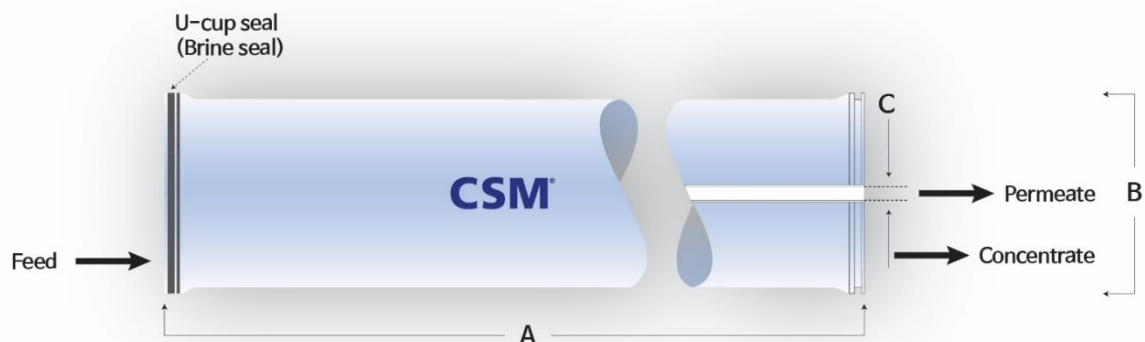
General Features

Permeate Flow Rate	12,000 GPD (45.4 m ³ /day)
Nominal Salt Rejection	99.7% (Minimum 99.5%)
Effective Membrane Area	440 ft ² (40.9 m ²)
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°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -15%.

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-Connector	Brine Seal
RE8040-FEn440	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.

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RE8040-FEn440



Enhanced fouling resistant RO element for brackish water and wastewater reuse

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 m ³ /hr)
Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /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.



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RE8040-FLF

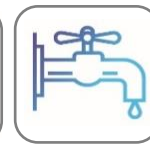


Ultra Fouling resistant RO element with low pressure for brackish water and wastewater reuse

- Fouling resistant
- Energy Saving
- High Permeate Flow and High Rejection



Industrial



Municipal



Water Reuse

SPECIFICATIONS

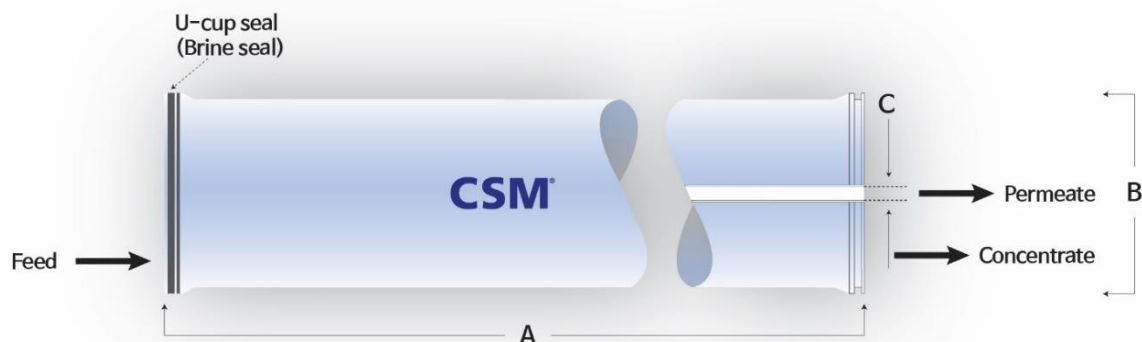
General Features

Permeate Flow Rate	12,000 GPD (45.4 m ³ /day)
Nominal Salt Rejection	99.6% (Minimum 99.5%)
Effective Membrane Area	400 ft ² (37.2 m ²)
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°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -15%.

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-Connector	Brine Seal
RE8040-FLF	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.

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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 m ³ /hr)
Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /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.



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RE8040-FLF34



Ultra Fouling resistant RO element with low pressure for brackish water and wastewater reuse

- Fouling resistant
- Energy Saving
- High Permeate Flow and High Rejection
- 34mil Feed Spacer



SPECIFICATIONS

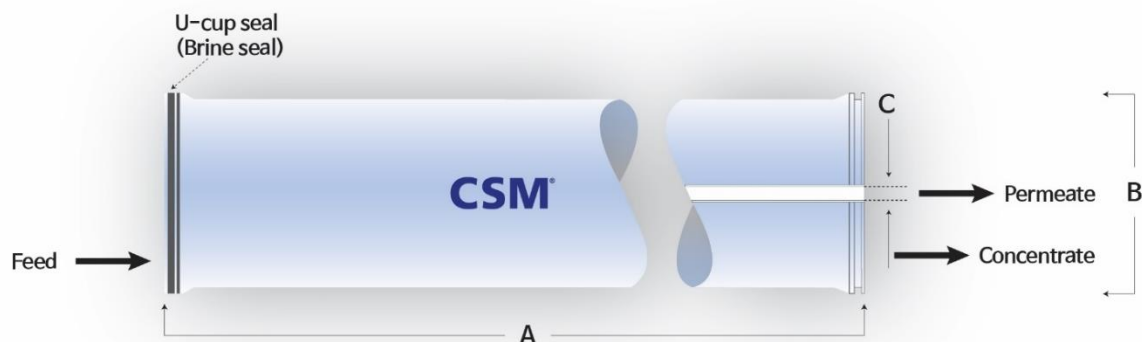
General Features

Permeate Flow Rate	12,000 GPD (45.4 m ³ /day)
Nominal Salt Rejection	99.6% (Minimum 99.5%)
Effective Membrane Area	400 ft ² (37.2 m ²)
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°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -15%.

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-Connector	Brine Seal
RE8040-FLF34	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.

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Product Specification Sheet / Model RE8040-FLF34

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RE8040-FLF34



Ultra Fouling resistant RO element with low pressure for brackish water and wastewater reuse

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 m ³ /hr)
Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /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.



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Product Specification Sheet / Model RE8040-FLF34

V.2.4 (23)

RE8040-FLF440

CSM[®]

Ultra Fouling resistant RO element with low pressure for brackish water and wastewater reuse

- Fouling resistant
- Energy Saving
- High Permeate Flow and High Rejection
- Extended effective membrane area



SPECIFICATIONS

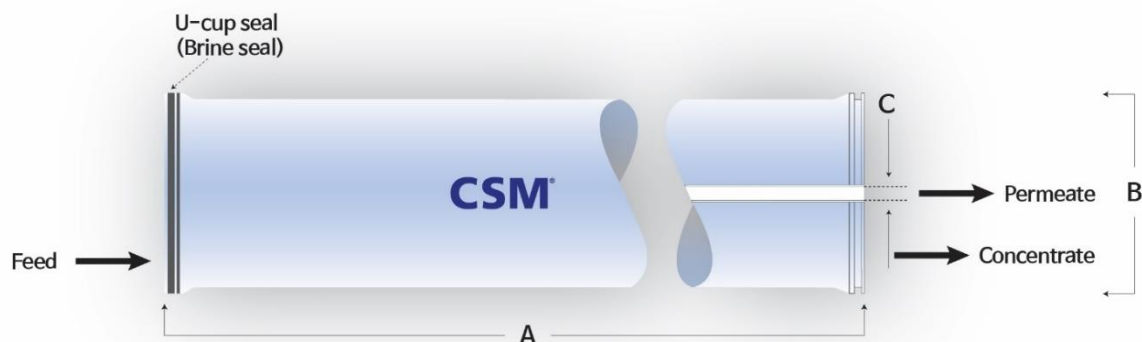
General Features

Permeate Flow Rate	13,000 GPD (49.2 m ³ /day)
Nominal Salt Rejection	99.6% (Minimum 99.5%)
Effective Membrane Area	440 ft ² (40.9 m ²)
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°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -15%.

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-Connector	Brine Seal
RE8040-FLF440	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.

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RE8040-FLF440



Ultra Fouling resistant RO element with low pressure for brackish water and wastewater reuse

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 m ³ /hr)
Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /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.



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V.2.4 (23)

RE8040-FLR



Fouling resistant RO element with low pressure for brackish water and wastewater reuse

- Fouling resistant
- Low Energy Consumption
- High Permeate Flow and High Rejection



SPECIFICATIONS

General Features

Permeate Flow Rate	10,000 GPD (37.9 m ³ /day)
Nominal Salt Rejection	99.6% (Minimum 99.5%)
Effective Membrane Area	400 ft ² (37.2 m ²)
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°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary but will be no more than -5%.

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-Connector	Brine Seal
RE8040-FLR	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.

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RE8040-FLR



Fouling resistant RO element with low pressure for brackish water and wastewater reuse

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 m ³ /hr)
Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /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.



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Product Specification Sheet / Model RE8040-FLR

V.2.4 (23)

RE8040-FLR34



Fouling resistant RO element with low pressure for brackish water and wastewater reuse

- Fouling resistant
- Low Energy Consumption
- High Permeate Flow and High Rejection
- 34mil thick Feed spacer



SPECIFICATIONS

General Features

Permeate Flow Rate	10,000 GPD (37.9 m ³ /day)
Nominal Salt Rejection	99.6% (Minimum 99.5%)
Effective Membrane Area	400 ft ² (37.2 m ²)
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°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary but will be no more than -5%.

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-Connector	Brine Seal
RE8040-FLR34	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.

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Product Specification Sheet / Model RE8040-FLR34

V.2.4 (23)

RE8040-FLR34



Fouling resistant RO element with low pressure for brackish water and wastewater reuse

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 m ³ /hr)
Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /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.



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Product Specification Sheet / Model RE8040-FLR34

V.2.4 (23)

RE8040-FLR440

CSM[®]

Fouling resistant RO element with low pressure for brackish water and wastewater reuse

- Fouling resistant
- Low Energy Consumption
- High Permeate Flow and High Rejection
- Extended effective membrane area



SPECIFICATIONS

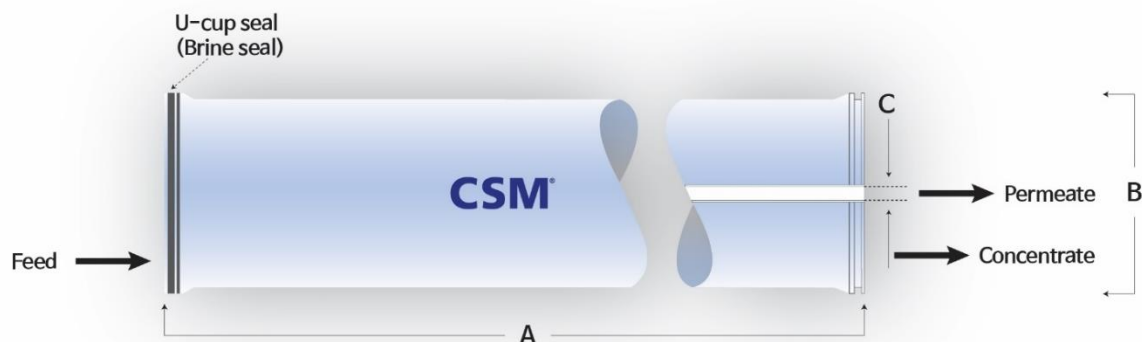
General Features

Permeate Flow Rate	11,000 GPD (41.6 m ³ /day)
Nominal Salt Rejection	99.6% (Minimum 99.5%)
Effective Membrane Area	440 ft ² (40.9 m ²)
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°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary but will be no more than -5%.

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-Connector	Brine Seal
RE8040-FLR440	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.

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Product Specification Sheet / Model RE8040-FLR440

V.2.4 (23)

RE8040-FLR440



Fouling resistant RO element with low pressure for brackish water and wastewater reuse

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 m ³ /hr)
Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /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.



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Product Specification Sheet / Model RE8040-FLR440

V.2.4 (23)

RE2540-FEn



Enhanced fouling resistant RO element for brackish water and wastewater reuse

- Fouling resistant
- High Permeate Flow and High Rejection
- Robustness and High Durability in a wide pH



SPECIFICATIONS

General Features

Permeate Flow Rate	1,000 GPD (3.8 m ³ /day)
Nominal Salt Rejection	99.5% (Minimum 99.0%)
Effective Membrane Area	27ft ² (2.5 m ²)
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°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary but will be no more than +25 / -25%.

Dimensions and Weight

Model Name	A	B	C	D/E	Part Number	
					Inter-Connector	Brine Seal
RE2540-FEn	40.0 inch (1,016 mm)	2.4 inch (60.8 mm)	0.75 inch (19.1mm)	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.

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Product Specification Sheet / Model RE2540-FEn

V.2.4 (23)

RE2540-FEn



Enhanced fouling resistant RO element for brackish water and wastewater reuse

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	6 gpm (1.36 m ³ /hr)
Min. Concentrate Flow Rate	1 gpm (0.23 m ³ /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.

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Product Specification Sheet / Model RE2540-FEn

V.2.4 (23)

RE4040-FEn



Enhanced fouling resistant RO element for brackish water and wastewater reuse

- Fouling resistant
- High Permeate Flow and High Rejection
- Robustness and High Durability in a wide pH



Industrial



Municipal



Water Reuse

SPECIFICATIONS

General Features

Permeate Flow Rate	2,400 GPD (9.1 m ³ /day)
Nominal Salt Rejection	99.7% (Minimum 99.4%)
Effective Membrane Area	85ft ² (7.9 m ²)
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°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary but will be no more than +25 / -15%.

Dimensions and Weight

Model Name	A	B	C	D/E	Part Number	
					Inter-Connector	Brine Seal
RE4040-FEn	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.

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Product Specification Sheet / Model RE4040-FEn

V.2.4 (23)

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 ³ /hr)
Min. Concentrate Flow Rate	4 gpm (0.91 m ³ /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.