NE4040-ARM



Acid Resistant NF Membrane

• Enhanced Durability under Acid Conditions





SPECIFICATIONS •

General Features

Permeate Flow Rate 1,100 GPD (4.2 m³/day)

MgSO₄ Rejection 99.0% (Minimum 98.0%)

Effective Membrane Area 75 ft² (7.0 m²)

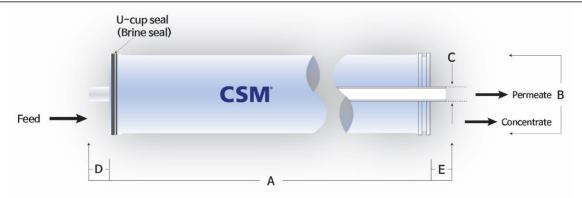
Membrane Type Thin-Film Composite

Membrane Material Polyamide (PA)

Element Configuration Spiral-Wound, FRP Wrapping

Test Conditions: 2,000 mg/L MgSO₄ solution at 75 psig (0.52 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	•	D 6	•	D/F	Part Num	Part Number	
Model Name	А	В	C	D/E	Inter-Connector	Brine Seal	
NE4040-ARM	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 NE4040 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

NE4040-ARM



Acid Resistant NF Membrane

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 – 10.0
CIP pH Range	1.0 – 11.5
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.
- Permeate from the first hour of operation should be discarded.
- Keep elements moist at all times after initial wetting.
- 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.

- 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.

NE4040-SRM



Special NF element to remove sulfate ions in seawater

- High Sulfate Rejection
- Moderate Rejection of Hardness







SPECIFICATIONS •-

General Features

Permeate Flow Rate 1,800 GPD (6.8 m³/day)

MgSO₄ Rejection 99.5% (Minimum 99.0%)

Effective Membrane Area 85 ft² (7.9 m²)

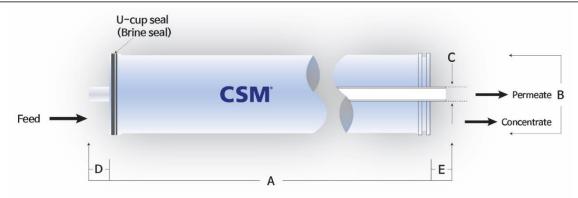
Membrane Type Thin-Film Composite

Membrane Material Polyamide (PA)

Element Configuration Spiral-Wound, FRP Wrapping

Test Conditions: 2,000 mg/L MgSO₄ solution at 75 psig (0.52 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%.

Madel News	•	ъ	6	D/F	Part Number	
Model Name	А	В	C	D/E	Inter-Connector	Brine Seal
NE4040-SRM	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 NE4040 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

NE4040-SRM



Special NF element to remove sulfate ions in seawater

APPLICATION DATA •

Operating Limits

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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	3.0 – 10.0
CIP pH Range	2.0 – 11.0
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.
- Permeate from the first hour of operation should be discarded.
- Keep elements moist at all times after initial wetting.
- 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.

- 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 NF element with low monovalent ion rejection

- High Mono/Multivalent Ion Selectivity
- High Hardness Rejection
- Low Energy Consumption







SPECIFICATIONS •

General Features

Permeate Flow Rate 12,000 GPD (45.4 m³/day)

MgSO₄ Rejection 99.0% (Minimum 98.0%)

NaCl Rejection 20 – 40%

Effective Membrane Area 400 ft² (37.2 m²)

Membrane Type Thin-Film Composite

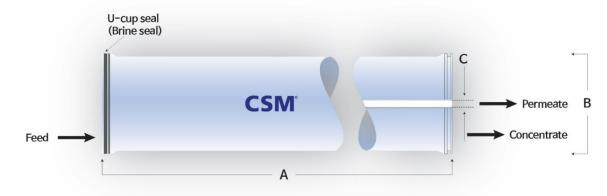
Membrane Material Polyamide (PA)

Element Configuration Spiral-Wound, FRP Wrapping

Test Conditions: 2,000 mg/L MgSO₄ or NaCl solution at 75 psig (0.52 MPa) applied pressure; 15% recovery; 77°F(25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -25%.

Dimensions and Weight

NA a dal Nama		14/a:abt	Part Number			
Model Name	Α	В	C	Weight	Inter-Connector	Brine Seal
NE8040-40	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 NE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.

Toray Advanced Materials Korea Inc.



High productivity NF element with low monovalent ion rejection

APPLICATION DATA

Operating Limits

A4. David of David Islamid	45 (0.40 MD.)
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 ³ /hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	3.0 – 10.0
CIP pH Range	2.0 – 11.0
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.
- Permeate from the first hour of operation should be discarded.
- Keep elements moist at all times after initial wetting.
- 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.

- 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.



NE8040-70 NF element with medium monovalent ion rejection



- High COD Rejection
- Moderate Rejection of Monovalent Ion







SPECIFICATIONS •

General Features

Permeate Flow Rate 9,000 GPD (34.1 m³/day)

MgSO₄ Rejection 99.0% (Minimum 98.0%)

NaCl Rejection 30 – 70%

Effective Membrane Area 400 ft² (37.2 m²)

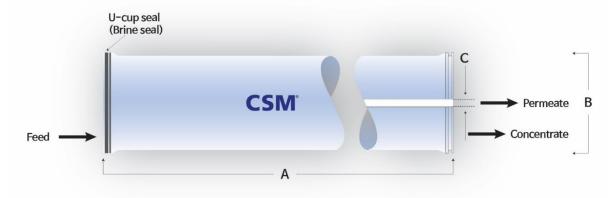
Membrane Type Thin-Film Composite

Membrane Material Polyamide (PA)

Element Configuration Spiral-Wound, FRP Wrapping

Test Conditions: 2,000 mg/L MgSO₄ or NaCl solution at 75 psig (0.52 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%.

Model Name	Name A B C Weight	Maiaht .	Part Number			
woder Name		Б	C	weight	Inter-Connector Brine S	Brine Seal
NE8040-70	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 NE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.



NF element with medium monovalent ion rejection

APPLICATION DATA

Operating Limits

Max. Pressure Drop / Element15 psi (0.10 MPa)Max. Pressure Drop / 240" Vessel60 psi (0.41 MPa)Max. Operating Pressure600 psi (4.14 MPa)Max. Feed Flow Rate75 gpm (17.0 m³/hr)Min. Concentrate Flow Rate16 gpm (3.6 m³/hr)Max. Operating Temperature113°F (45°C)Operating pH Range3.0 – 10.0CIP pH Range2.0 – 11.0Max. Turbidity1.0 NTUMax. SDI (15 min)5.0Max. Chlorine Concentration< 0.1 mg/L		
Max. Operating Pressure600 psi (4.14 MPa)Max. Feed Flow Rate75 gpm (17.0 m³/hr)Min. Concentrate Flow Rate16 gpm (3.6 m³/hr)Max. Operating Temperature113°F (45°C)Operating pH Range3.0 – 10.0CIP pH Range2.0 – 11.0Max. Turbidity1.0 NTUMax. SDI (15 min)5.0	Max. Pressure Drop / Element	15 psi (0.10 MPa)
Max. Feed Flow Rate75 gpm (17.0 m³/hr)Min. Concentrate Flow Rate16 gpm (3.6 m³/hr)Max. Operating Temperature113°F (45°C)Operating pH Range3.0 – 10.0CIP pH Range2.0 – 11.0Max. Turbidity1.0 NTUMax. SDI (15 min)5.0	Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
Min. Concentrate Flow Rate16 gpm (3.6 m³/hr)Max. Operating Temperature113°F (45°C)Operating pH Range3.0 – 10.0CIP pH Range2.0 – 11.0Max. Turbidity1.0 NTUMax. SDI (15 min)5.0	Max. Operating Pressure	600 psi (4.14 MPa)
Max. Operating Temperature113°F (45°C)Operating pH Range3.0 – 10.0CIP pH Range2.0 – 11.0Max. Turbidity1.0 NTUMax. SDI (15 min)5.0	Max. Feed Flow Rate	75 gpm (17.0 m³/hr)
Operating pH Range 3.0 – 10.0 CIP pH Range 2.0 – 11.0 Max. Turbidity 1.0 NTU Max. SDI (15 min) 5.0	Min. Concentrate Flow Rate	16 gpm (3.6 m³/hr)
CIP pH Range 2.0 – 11.0 Max. Turbidity 1.0 NTU Max. SDI (15 min) 5.0	Max. Operating Temperature	113°F (45°C)
Max. Turbidity 1.0 NTU Max. SDI (15 min) 5.0	Operating pH Range	3.0 – 10.0
Max. SDI (15 min) 5.0	CIP pH Range	2.0 – 11.0
	Max. Turbidity	1.0 NTU
Max. Chlorine Concentration < 0.1 mg/L	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.
- Permeate from the first hour of operation should be discarded.
- Keep elements moist at all times after initial wetting.
- 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.

- 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.



NE8040-90 NF element with high monovalent ion rejection



- High Removal of TOC, nitrate
- Low Energy Consumption
- Wide pH Tolerance Range of 1-12







SPECIFICATIONS •-

General Features

Permeate Flow Rate 8,000 GPD (30.3 m³/day)

NaCl Rejection 90 - 97%

Effective Membrane Area 400 ft² (37.2 m²)

Membrane Type Thin-Film Composite

Membrane Material Polyamide (PA)

Element Configuration Spiral-Wound, FRP Wrapping

Test Conditions: 2,000 mg/L NaCl solution at 75 psig (0.52 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%.

Madal Nama	A B	D	В С	Weight	Part Number	
Model Name		В			Inter-Connector	Brine Seal
NE8040-90	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 NE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.



NF element with high monovalent ion rejection

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	3.0 – 10.0
CIP pH Range	1.0 – 12.0
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.



NE8040-ARM



Acid Resistant NF Membrane

• Enhanced Durability under Acid Conditions





SPECIFICATIONS •-

General Features

Permeate Flow Rate 5,400 GPD (20.4 m³/day)

MgSO₄ Rejection 99.0% (Minimum 98.0%)

Effective Membrane Area 370 ft² (34.4 m²)

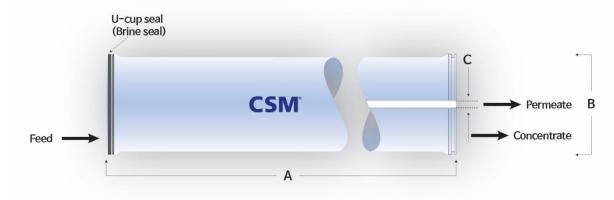
Membrane Type Thin-Film Composite

Membrane Material Polyamide (PA)

Element Configuration Spiral-Wound, FRP Wrapping

Test Conditions: 2,000 mg/L MgSO₄ solution at 75 psig (0.52 MPa) applied pressure; 15% recovery; 77 °F (25 °C); pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -25%.

Madel News		\A/a:ab+	Part Number			
Model Name	Α	В	C	Weight	Inter-Connector	Brine Seal
NE8040-ARM	40.0 inch (1,016 mm)	7.9 inch (200 mm)	1.125 inch (28.6 mm)	15kg	SWA01049	SWA01043



- ${\bf 1.} \ {\bf Each \ membrane \ element \ supplied \ with \ one \ interconnector \ (coupler) \ and \ four \ O-rings.}$
- 2. All NE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.

NE8040-ARM



Acid Resistant NF Membrane

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 – 10.0
CIP pH Range	1.0 – 11.5
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.
- Permeate from the first hour of operation should be discarded.
- Keep elements moist at all times after initial wetting.
- 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.

- 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.

NE8040-SRM



Special NF element to remove sulfate ions in seawater

- High Sulfate Rejection
- Moderate Rejection of Hardness







SPECIFICATIONS •-

General Features

Permeate Flow Rate 8,500 GPD (32.2 m³/day)

MgSO₄ Rejection 99.5% (Minimum 99.0%)

Effective Membrane Area 400 ft² (37.2 m²)

Membrane Type Thin-Film Composite

Membrane Material Polyamide (PA)

Element Configuration Spiral-Wound, FRP Wrapping

Test Conditions: 2,000 mg/L MgSO₄ solution at 75 psig (0.52 MPa) applied pressure; 15% recovery; 77 °F (25 °C); pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -25%.

Madal Nama	Δ.	D	•	Weight -	Part Number	
Model Name	А	В	С		Inter-Connector	Brine Seal
NE8040-SRM	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 NE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.

NE8040-SRM



Special NF element to remove sulfate ions in seawater

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 m ³ /hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	3.0 – 10.0
CIP pH Range	2.0 – 11.0
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.
- Permeate from the first hour of operation should be discarded.
- Keep elements moist at all times after initial wetting.
- 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.

- 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.

NE4040-40 High productivity NF element with low monovalent ion rejection



- High Mono/Multivalent Ion Selectivity
- High Hardness Rejection
- Low Energy Consumption







SPECIFICATIONS •

General Features

Permeate Flow Rate 2,500 GPD (9.5 m³/day)

MgSO₄ Rejection 99.0% (Minimum 98.0%)

NaCl Rejection 20 – 40%

Effective Membrane Area 85 ft² (7.9 m²)

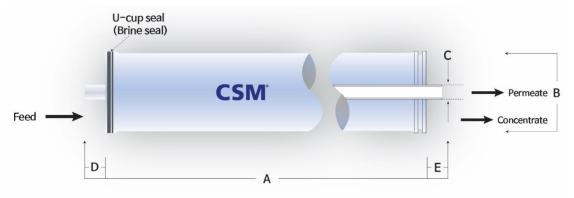
Membrane Type Thin-Film Composite

Membrane Material Polyamide (PA)

Element Configuration Spiral-Wound, FRP Wrapping

Test Conditions: 2,000 mg/L MgSO₄ or NaCl solution at 75 psig (0.52 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	•	ь.	•	D/F	Part Num	ber
Model Name	А	В	C	D/E	Inter-Connector Brine Sea	Brine Seal
NE4040-40	40.0 inch	3.9 inch	0.75 inch	1.05 inch	SWA01050	SWA01046
NE4040-40	(1,016 mm)	(99.0 mm)	(19.1 mm)	(26.7 mm)	200AU1030 30	3WAU1046



- 1. Each membrane element supplied with one interconnector (coupler) and four O-rings.
- 2. All NE4040 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

NE4040-40



High productivity NF element with low monovalent ion rejection

APPLICATION DATA

Operating Limits

Operating Entites	
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	3.0 – 10.0
CIP pH Range	2.0 – 11.0
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.
- Permeate from the first hour of operation should be discarded.
- Keep elements moist at all times after initial wetting.
- 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.

- 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.



NE4040-70 NF element with medium monovalent ion rejection



- High COD Rejection
- Moderate Rejection of Monovalent Ion







SPECIFICATIONS •-

General Features

Permeate Flow Rate 1,900 GPD (7.2 m³/day)

MgSO₄ Rejection 99.0% (Minimum 98.0%)

NaCl Rejection 30 – 70%

Effective Membrane Area 85 ft² (7.9 m²)

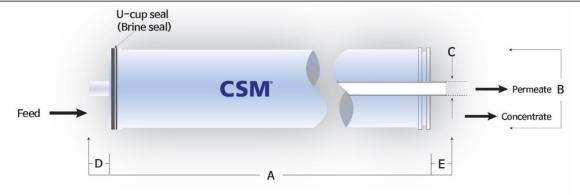
Membrane Type Thin-Film Composite

Membrane Material Polyamide (PA)

Element Configuration Spiral-Wound, FRP Wrapping

Test Conditions: 2,000 mg/L MgSO₄ or NaCl solution at 75 psig (0.52 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%.

Nodel News	Δ.	В	•	D/F	Part Num	ber
Model Name	A	В	ь	D/E	Inter-Connector	Brine Seal
NE4040-70	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 NE4040 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

NE4040-70



NF element with medium monovalent ion rejection

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	3.0 – 10.0
CIP pH Range	2.0 – 11.0
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.
- Permeate from the first hour of operation should be discarded.
- Keep elements moist at all times after initial wetting.
- 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.

- 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.



NE4040-90 NF element with high monovalent ion rejection



- High Removal of TOC, nitrate
- Low Energy Consumption
- Wide pH Tolerance Range of 1-12







SPECIFICATIONS •

General Features

Permeate Flow Rate 1,700 GPD (6.4 m³/day)

NaCl Rejection 90 – 97%

Effective Membrane Area 85 ft² (7.9 m²)

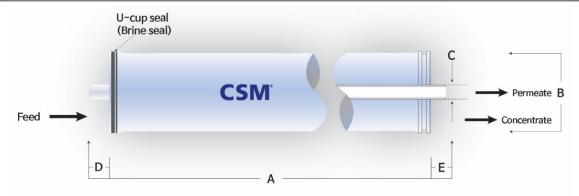
Membrane Type Thin-Film Composite

Membrane Material Polyamide (PA)

Element Configuration Spiral-Wound, FRP Wrapping

Test Conditions: 2,000 mg/L NaCl solution at 75 psig (0.52 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%.

NA o del Novo			•	D/E	Part Number	
Model Nam	ie A	Б	C	D/E	Inter-Connector	Brine Seal
NE4040-90	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 NE4040 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

NE4040-90



NF element with high monovalent ion rejection

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	3.0 – 10.0
CIP pH Range	1.0 – 12.0
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.
- Permeate from the first hour of operation should be discarded.
- Keep elements moist at all times after initial wetting.
- 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.

- 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.

