

Acid Resistant NF Membrane



### • Enhanced Durability under Acid Conditions



# SPECIFICATIONS •General FeaturesPermeate Flow Rate1,100 GPD (4.2 m³/day)MgSO4 Rejection99.0% (Minimum 98.0%)Effective Membrane Area75 ft² (7.0 m²)Membrane TypeThin-Film CompositeMembrane MaterialPolyamide (PA)Element ConfigurationSpiral-Wound, FRP Wrapping

**Test Conditions:** 2,000 mg/L MgSO<sub>4</sub> 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**

Model Name	Α	В	С	D/E	Part Number	
					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
Feed	U-cup seal (Brine seal)	CSI	M		1	Permeate B

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.

**Toray Advanced Materials Korea Inc.** 

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# **NE4040-ARM**

CSM°

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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	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	

# 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.
- 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.

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