

NE4040-ARM HP1

Acid Resistant and High Pressure NF Membrane

CSM[®]

- Enhanced durability under acid conditions
- Safe operate up to 50bar



Industrial



Water Reuse

SPECIFICATIONS

General Features

Permeate Flow Rate	1,100 GPD (4.2 m ³ /day)
MgSO ₄ Rejection	99.0% (Minimum 98.0%)
Effective Membrane Area	75 ft ² (7.0 m ²)
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%.

Dimensions and Weight

Model Name	A	B	C	D/E	Part Number	
					Inter-Connector	Brine Seal
NE4040-ARM HP1	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.

Toray Advanced Materials Korea Inc.

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Product Specification Sheet / Model NE4040-ARM HP1

V.2.0 (26)

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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	800 psi (5.52 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 – 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

Please contact your technical expert for pressure limits at elevated temperatures.

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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