NE8040-LXM

Lithium Extraction NF Membrane

- Effective for lithium extraction
- Enhanced Durability under Acid Conditions

Industrial

Water Reuse

SPECIFICATIONS

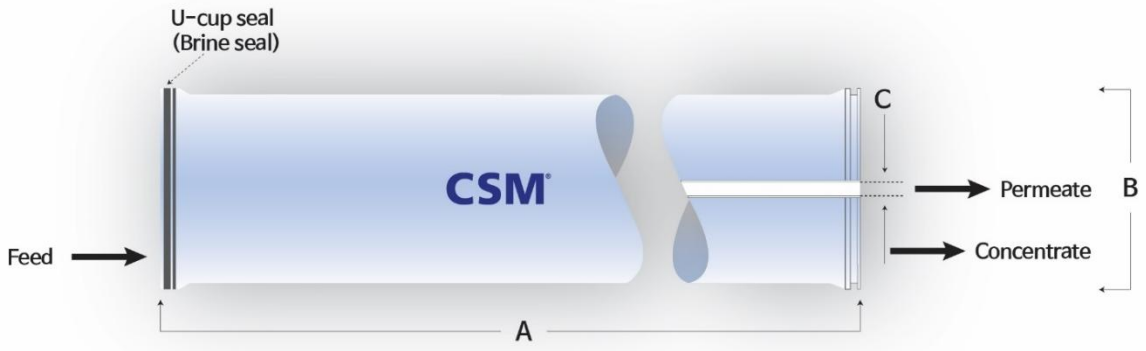
General Features

Permeate Flow Rate	12,000 GPD (45.4 m^3/day)
$MgSO_4$ Rejection	99.3% (Minimum 98.3%)
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 $MgSO_4$ 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	Weight	Part Number	
					Inter-Connector	Brine Seal
NE8040-LXM	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.

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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	1200 psi (8.27 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	1.0 – 10.0
CIP pH Range	0.5 – 12.0
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. Please refer to the user manual for further details.
- During initial operation, it is necessary to operate continuously for a minimum of 1 hour at the designed permeate flow rate, and the permeate 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.