# 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 m<sup>3</sup>/day)

MgSO<sub>4</sub> Rejection 99.0% (Minimum 98.0%)

NaCl Rejection 20 – 40%

Effective Membrane Area 85 ft<sup>2</sup> (7.9 m<sup>2</sup>)

Membrane Type Thin-Film Composite

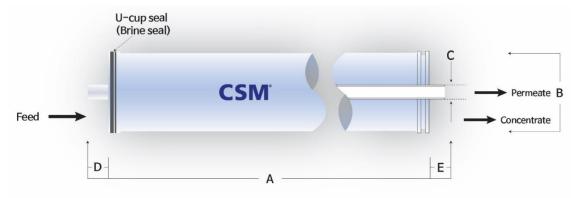
Membrane Material Polyamide (PA)

**Element Configuration** Spiral-Wound, FRP Wrapping

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

### **Dimensions and Weight**

Model Name	Α	В	С	D/E	Part Number	
					Inter-Connector	Brine Seal
NE4040-40	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.

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### **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		

### **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.

