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

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

NaCl Rejection 30 – 70%

Effective Membrane Area 400 ft<sup>2</sup> (37.2 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                      | Weight - | Part Number     |            |
|------------|-------------------------|----------------------|------------------------|----------|-----------------|------------|
|            |                         |                      |                        |          | Inter-Connector | Brine Seal |
| NE8040-70  | 40.0 inch<br>(1,016 mm) | 7.9 inch<br>(200 mm) | 1.12 inch<br>(28.5 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          | 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 – 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.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- 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.

