

# NE4040-40

High productivity NF element with low monovalent ion rejection

# CSM<sup>®</sup>

- High Mono/Multivalent Ion Selectivity
- High Hardness Rejection
- Low Energy Consumption



Food



Municipal



Water Reuse

## SPECIFICATIONS

### General Features

|                                   |  |
|-----------------------------------|--|
| <b>Permeate Flow Rate</b>         | 2,500 GPD (9.5 m <sup>3</sup> /day)      |
| <b>MgSO<sub>4</sub> Rejection</b> | 99.0% (Minimum 98.0%)                    |
| <b>NaCl Rejection</b>             | 20 – 40%                                 |
| <b>Effective Membrane Area</b>    | 85 ft <sup>2</sup> (7.9 m <sup>2</sup> ) |
| <b>Membrane Type</b>              | Thin-Film Composite                      |
| <b>Membrane Material</b>          | Polyamide (PA)                           |
| <b>Element Configuration</b>      | 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°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 |
| NE4040-40  | 40.0 inch<br>(1,016 mm) | 3.9 inch<br>(99.0 mm) | 0.75 inch<br>(19.1 mm) | 1.05 inch<br>(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.**

For more information on our products, company and regional contacts, please visit our website at [www.csmfilter.com](http://www.csmfilter.com).  
Product Specification Sheet / Model NE4040-40

V.2.4 (23)

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## APPLICATION DATA

### Operating Limits

|   |                                  |
|---|----------------------------------|
| <b>Max. Pressure Drop / Element</b>     | 15 psi (0.10 MPa)                |
| <b>Max. Pressure Drop / 240" Vessel</b> | 60 psi (0.41 MPa)                |
| <b>Max. Operating Pressure</b>          | 600 psi (4.14 MPa)               |
| <b>Max. Feed Flow Rate</b>              | 18 gpm (4.09 m <sup>3</sup> /hr) |
| <b>Min. Concentrate Flow Rate</b>       | 4 gpm (0.91 m <sup>3</sup> /hr)  |
| <b>Max. Operating Temperature</b>       | 113°F (45°C)                     |
| <b>Operating pH Range</b>               | 3.0 – 10.0                       |
| <b>CIP pH Range</b>                     | 2.0 – 11.0                       |
| <b>Max. Turbidity</b>                   | 1.0 NTU                          |
| <b>Max. SDI (15 min)</b>                | 5.0                              |
| <b>Max. Chlorine Concentration</b>      | < 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.



Certified to  
NSF/ANSI/CAN 61

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