## RE 16040-FE <sup>n</sup>

**CSM**°

LENNTECH

info@lenntech.com Tel. +31-152-610-900 www.lenntech.com Fax. +31-152-616-289

Enhanced fouling resistant RO element with extended area for brackish water and wastewater reuse

## SPECIFICATIONS

General Features

Permeate flow rate: 41,000 GPD (155 m<sup>3</sup>/day)

Nominal salt rejection: 99.7%

Effective membrane area: 1,600 ft<sup>2</sup> (148.6 m<sup>2</sup>)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

• 2,000 mg/L NaCl solution at 225 psig (1.5 MPa) applied pressure

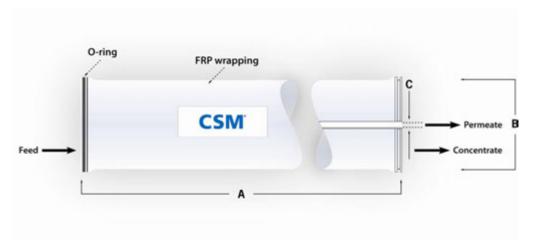
- 15% recovery
- 77 ∘F (25 ∘Ć)
- pH 6.5 -7.0
- 2. Minimum salt rejection is 99.4%.
- 3. Permeate flow rate for each element may vary but will be no more than 15%.
- 4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Mem brane type: Thin-Film Composite
Membrane material: Polyamide(PA)

Element configuration: Spiral-Wound, FRP W rapping

Dimensions and Weight

Model Name	A	В	С	Weight	Part Number	
					Inter - connector	O -ring
RE16 040-FE <sup>n</sup>	40.0 inch (1,016 mm)	16.0 inch (402 mm)	3.0 inch (77 mm)	60 kg	40000219	40000220



- 1. Each membrane elementupplied with one interconnector (coupler) and five o-rings.
- 2. All RE16040 elements fit nominal 16.0 inch (402 mm) I.D. pressure vessels.

The information provided in this document is soely for informative purposes It is the user's responsibility to ensure the appropriate usage of this productWoongjin Chemical assumes no obligation, liability or damages incurred for the misuse of the product or for the information provided in this document. This document does not express or implies any warranty as to the merchantability or fitness of the product.

## RE 16040-FE <sup>n</sup>



Enhanced f ouling resistant RO element with extended area for brackish water and wastewater reuse

V DDI	ICATION DATA	
APPI	ICALICIN DAIA	

**Water Sources** 

Ope rating Limits	<ul> <li>Max. Pressure Drop / Element</li> </ul>	15 psi (0.1 MPa)
	<ul> <li>Max. Pressure Drop / 240" Vessel</li> </ul>	60 psi (0.41 Mpa)

Max. O peratingPressure
 Max. Feed Flow Rate
 Min. C oncentrate Flow Rate
 Max. O peratingTemperature
 Operating PH Range
 CIP pH Range
 Max. Turbidity
 Max. O Note (4.14 MPa)
 64 gpm (14.5 m³/hr)
 113 °F (45 °C)
 2.0-11.0
 1.0-13.0
 Max. Turbidity
 Most (4.14 MPa)
 113 °F (45 °C)
 113 °F (45 °C)
 113 °F (45 °C)
 114 °F (45 °C)
 115 °F (45 °C)
 115 °F (45 °C)
 116 °F (45 °C)
 117 °F (45 °C)
 118 °F (45 °C)
 119 °F (45 °C)
 110 °F (45 °C)
 11

Max.SDI (15 min)Max.Chlorine Concentration5.00.1 mg/L

Design Guidelines for Various · Wast ewater Conventional (SDI < 5)

Wast ewater Conventional (SDI < 5)</li>
Waste water Pretreated by UF/MF (SDI < 3)</li>
Seawater, O pen Intake (SDI < 5)</li>
Seawater, Beach Well (SDI < 3)</li>
SurfaceW ater (SDI < 5)</li>
SurfaceW ater (SDI < 3)</li>
Well water (SDI < 3)</li>
Well water (SDI < 3)</li>

• RO permeate (SDI < 1) 21–30 gfd

Saturation Limits
(Using Antiscalants)

+ Langlier Saturation Index(LSI) <+1.5

Stiff and Davis Saturation Index(SDSI) <+0.5

CaSO 4
 SrSO 4
 BaSO 4
 SiO 2
 230% saturation
 800% saturation
 6,000% saturation
 100% saturation

<sup>†</sup>The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

## 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. If the polyethylene bag is damaged a new preservative solution (sodium bisulfite) must be added and airtight seabd to prevent drying and biological growth.

Permeate from the first hour of operation should be discarded to flush out the preservative solution.

Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.

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.

LENNTECH

info@lenntech.com Tel. +31-152-610-900 www.lenntech.com Fax. +31-152-616-289