## RE8040 -SH A

**CSM**°

seawater and high salinity well water

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High productivity RO element for

### SPECIFICATIONS :

General Features

Permeate flow rate: 6,750 GPD (25.5 m<sup>3</sup>/day)

Nominal salt rejection: 99.75%

Effective membrane area: 370 ft<sup>2</sup> (34.4 m<sup>2</sup>)

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

• 32,000 mg/L NaCl solution at 800 psig (5.5 MPa) applied pressure

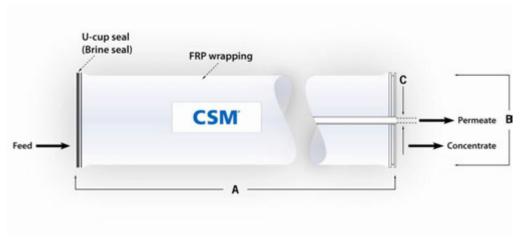
- 8% recovery
- 77 ∘F (25 ∘C)
- pH 6.5 -7.0
- 2. Boron rejection is 92.0% at pH 8.0 and 5 mg/L boron feed with the same test conditions as above.
- 3. Minimum salt rejection is 99.6%.
- 4. Permeate flow rate for each element may vary but will be no more than 5%
- 5. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodiubisulfite) solution and individually packaged in a cardboard box.

Membrane 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	
					In ter - connector	Brine Seal
RE 8040-SHA	40.0 inch (1,016 mm)	8.0 inch (201 mm)	1.12 inch (28 mm)	15 kg	40000308	40000309



- 1. Each membrane elementupplied with one brine seal, one interconnector (coupler) and four o-rings.
- 2. All RE8040 elementsfit nominal 80 inch (201 mm) I.D. pressure vessels.

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

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· Max.SDI (15 min)



#### APPLICATION DATA

Operating Limits	· Max. Pressure Drop / Element

15 psi (0.1 MPa) · Max. Pressure Drop / 240" Vessel 60 psi (0.41 Mpa) · Max. Operating Pressure 1,200 psi (8.27 MPa) 75 gpm (17.0 m<sup>3</sup>/hr) · Max. Feed Flow Rate Min.Concentrate Flow Rate 16 gpm (3.6 m³/hr) Max. O perating Temperature 113 °F (45 °C) · Operating pH Range 2.0-11.0 · CIP pH Range 1.0 - 13.0· Max.Turbidity 1.0 NTU

• Max. Chlorine Concentration < 0.1 mg/L

# Design Guidelines for Various Water Sources

 Wastewater Conventional (SDI < 5)</li> 8-12 gfd Wastewater Pretreated by UF/MF (SDI < 3)</li> 10-14 afd 7-10 gfd Seawater, Open Intake (SDI < 5)</li> · Seawater, Beach Well (SDI < 3) 8-12 gfd SurfaceW ater (SDI < 5)</li> 12-16 qfd SurfaceWater (SDI < 3)</li> 13-17 gfd 13-17 gfd Well water (SDI < 3)</li> RO permeate (SDI < 1)</li> 21-30 gfd

## Saturation Limits (Using Antiscalants)

Langlier Saturation Index(LSI)
 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 ensue 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 HAN DLING 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 shutdownto 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 forpreventing biological growth.

Keep elements moist at all times after initial wetting.

5.0

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.

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