RE2540-SHF



High productivity RO element for seawater and high salinity well water

SPECIFICATIONS:

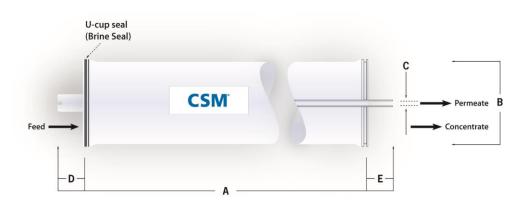
General	Permeate flow rate:	560 GPD (2.1 m³/day)
Features	Nominal salt rejection:	99.4%
	Effective membrane area:	24 ft ² (2.5 m ²)

- 1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 32,000 mg/L NaCl solution at 800 psig (5.5 MPa) applied pressure
 - 8% recovery
 - 77 °F (25 °Ć)
 - pH 6.5-7.0
- 2. Minimum salt rejection is 99.0%.
- 3. Permeate flow rate for each element may vary but will be no more than 20%.
- 4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite		
Membrane material:	Polyamide (PA)		
Element configuration:	Spiral-Wound, FRP Wrapping		

Dimensions

					E	Part Number	
Model Name	A	В	С	D		Inter- connector	Brine Seal
RE2540-SHF	40.0 inch (1,016 mm)	2.5 inch (64 mm)	0.75 inch (19.1 mm)	1.1 inch (28 mm)	1.1 inch (28 mm)	40000305	40000223



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings. 2. All RE2540 elements fit nominal 2.5 inch (64 mm) I.D. pressure vessels.

The information provided in this document is solely for informative purposes. It is the user's responsibility to ensure the appropriate usage of this product. Toray Chemical Korea Inc. 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.

Toray Chemical Korea Inc.

For more information on our products, company and regional contacts, please visit our website at www.csmfilter.com. Product Specification Sheet / Model RE 2540-SHF Page 1 of 2

RE2540-SHF

High productivity RO element for seawater and high salinity well water



APPLICATION DATA:

Operating Limits	· Max. Pressure Drop / Element			
	 Max. Pressure Drop / Zeonenic Max. Pressure Drop / 240" Vessel 	15 psi (0.1 MPa) 60 psi (0.41 Mpa) 1,200 psi (8.27 MPa)		
	·			
	 Max. Operating Pressure Max. Feed Flow Rate 			
		6 gpm (1.36 m ³ /hr)		
	Min. Concentrate Flow Rate	l gpm (0.23 m ³ /hr)		
	• Max. Operating Temperature	II3 ∘F (45 ∘C)		
	• Operating pH Range	2.0-11.0		
	· CIP pH Range	1.0–13.0		
	• Max.Turbidity	I.0 NTU		
	• Max. SDI (15 min)	5.0		
	• Max. Chlorine Concentration	< 0.1 mg/L		
Design Guidelines for Various	· Wastewater Conventional (SDI < 5)	8–12 gfd		
Water Sources	• Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd		
	· Seawater, Open Intake (SDI < 5)	7–10 gfd		
	Seawater, Beach Well (SDI < 3)	8–12 gfd		
	• Surface Water (SDI < 5)	12–16 gfd		
	· Surface Water (SDI < 3)	13–17 gfd		
	• Well water (SDI < 3)	13–17 gfd		
	· RO permeate (SDI < I)	21–30 gfd		
Saturation Limits	· Langlier Saturation Index (LSI)	<+1.5		
(Using Antiscalants) [†]	 Stiff and Davis Saturation Index (SDSI) 	<+0.5		
	· CaSO4	230% saturation		
	· SrSO4	800% saturation		
	· BaSO4	6.000% saturation		
	· SiO ₂	100% saturation		
	[†] 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 air-tight sealed 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.

Toray Chemical Korea Inc.

For more information on our products, company and regional contacts, please visit our website at <u>www.csmfilter.com</u>. Product Specification Sheet / Model RE 2540-SHF Page 2 of 2