



Product Data Sheet

2ndLife RO Membranes



Second Life
Regenerated
Membranes

2L-SW8040-T

**Regenerated Reverse Osmosis Membranes
for Seawater - Highest Rejection - The Sustainable Solution**



Overview

2L-SW8040-T Membranes are regenerated Reverse Osmosis Elements that gain an 'Extra Service Life' in less stringent, secondary applications through a unique refurbishment process. These seawater RO membranes serve various municipal and industrial applications and have been operating in the major utilities around the world.

Key Features

- First in-class regenerated RO membrane to increase the sustainability of water treatment processes and avoid landfill disposals
- Permits lowest system capital cost by using regenerated RO membranes

Key Applications

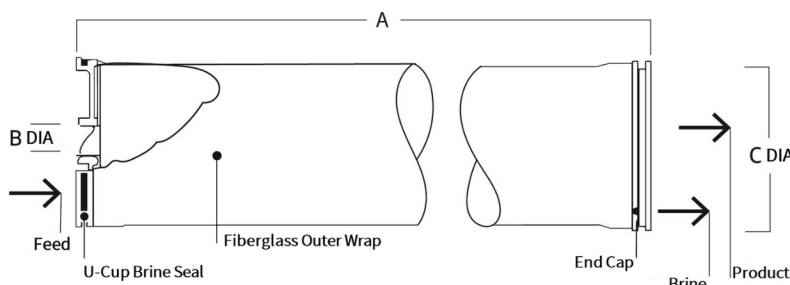
- Seawater treatment for municipal wastewater, agricultural, industrial, mining as well as pulp & paper applications

Typical Membrane Specifications

Permeate Flow Rate, GPD (m ³ /d)	Minimum Salt Rejection, %	Feed Spacer, mil
>5,145 (>19)	>99,0	28

1. The Specified Performance is based on data taken after approximately 30 minutes of operation. Actual testing of elements may be done at conditions which vary from these exact values; in which case, the performance is normalized back to these standard conditions
2. The above benchmark values are based on the following test conditions: 2,000 ppm NaCl, 225 psi (15.5 bar g), 77°F (25°C), pH 8, 15% recovery.
3. Permeate flows for individual elements may vary $\pm$ 15%.
4. Note that each regenerated element undergoes rigorous performance testing and quality checks to ensure operational fitness, but may exhibit visual marks of use and slight imperfections in the shell, spacer, or end caps.
5. Sales specifications may vary as design revisions take place.

Membrane Dimensions



1. For element weight information, refer to [What is the weight of 2ndLife RO elements as delivered?](#)
2. For element packing and shipping information, refer to [How are 2ndLife RO elements packaged and shipped?](#)
3. All membrane elements are supplied with a brine seal, interconnector, and O-rings.
4. Packaged elements are enclosed in a sealed polyethylene bag containing less than 1.0% sodium meta-bisulfite solution, and then packaged in a cardboard box.

Dimensions, inches (mm)

A	40.0 (1,016)
B	1.125 ID (28.6 ID)
C	7.89 (200)

ID - Inner Diameter
DIA - Diameter

Suggested Operating Conditions

Membrane Type	Polyamide Thin-FilmComposite
Maximum Operating Temperature	113°F (45°C)
Maximum Operating Pressure	600 psig (41 bar)
Maximum Element Pressure Drop - Per element - Per pressure vessel (minimum 4 elements)	15 psig (1.0 bar) 50 psig (3.5 bar)
pH Range - Continuous Operation 2 - Short-term Cleaning (30 min) 4	2 – 11 1 – 13
Maximum Feed Silt Density Index (SDI)	SDI 5
Free Chlorine Tolerance	< 0.1 ppm

1. For recommended feed and permeate flow rates, flux, and recovery for various feed sources, contact the 2ndLife representative.
2. Maximum temperature for continuous operation above pH 10 is 95°F (35°C).
3. Consult your 2ndLife representative for advice on applications above 95°F (35°C).
4. Refer to 2ndLife Cleaning Guidelines (Form No. 30-D0001-en).
5. Oxidation damage is not covered under warranty, 2ndLife recommends removing residual free chlorine by pretreatment prior to membrane exposure.

Regulatory Note

This product may not be used for drinking water applications or any food or beverage intended for human consumption; please verify the application status before use and sale.

General Information

- Keep elements moist at all times after initial wetting.
- To prevent biological growth during prolonged system shutdowns, it is recommended that membrane elements be immersed in a preservative solution.
- The customer is fully responsible for the effects of incompatible chemicals and lubricants on elements.
- Avoid static permeate-side backpressure at all times.
- Permeate obtained from the first hour of operation should be discarded.
- The use of this product in and of itself does not necessarily guarantee the removal of cysts and pathogens from water.
- Effective cyst and pathogen reduction is dependent on the complete system design and on the operation and maintenance of the system.

Important Information

Please consider good operating practices for the optimal performance of the Reverse Osmosis membrane elements to assure damage free operation:

1. Loading of Pressure Vessels - Preparation & Element Loading (Form No. 30-D0002-en)
2. System Operation, including plant Start-Up Sequence (Form No. 30-D0003-en) and RO Systems Shutdown (Form No. 30-D0004-en)
3. Handling, Preservation, and Storage (Form No. 30-D0005-en)

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