

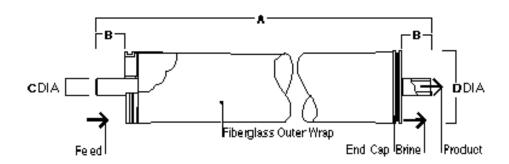
DOW FILMTEC™ Membranes

DOW FILMTEC SW30-6040 Seawater Reverse Osmosis Elements

Product Specifications

	Permeate Flow Rate	Minimum Salt	Minimal Recovery
Product	gpd (m³/d)	Rejectin (%)	Rate (%)
SW30-6040	2,100 (7.9)	99.0	8

- 1. The above benchmark values are based on the following test conditions: 32,000 ppm NaCl, 800 psi (5.5 MPa), 77°F (25°C), pH 8 and 10% recovery.
- 2. Permeate flows for individual elements may vary +/-15%.
- 3. Product specifications may vary slightly as improvements are implemented.
- 4. Active area guaranteed +/-5%. Active area as stated by DOW FILMTEC Corporation is not comparable to the nominal membrane area figure often stated by some element suppliers. Measurement method described in Form No. 609-00434.



Dimensions – Inches (mm)

Product	A	В	С	D
SW30-6040	40.0 (1016)	1.27 (32.3)	1.50 (38.1)	5.97 (151.6)

^{1.} Refer to DOW FILMTEC Design Guidelines for multiple-element systems.

1 inch = 25.4 mm

2. Element to fit 6.00-inch I.D. pressure vessel.

Operating Limits

 Membrane Type 	Thin-Film Composite
 Maximum Operating Temperature 	113°F (45°C)
 Maximum Feed Flow 	28 gpm (106 lpm)
 Maximum Feed Turbidity 	1 NTU
 pH Range, Continuous Operation 	2 - 11
 pH Range, Short-Term Cleaning 	1 - 13
 Maximum Feed Silt Density Index 	SDI 5
 Free Chlorine Tolerance 	<0.1 ppm

Element will withstand 1,000 psi operation without degradation in flow, salt rejection and physical appearance.

Important Information

Proper start-up of reverse osmosis water treatment systems is essential to prepare the membranes for operating service and to prevent membrane damage due to overfeeding or hydraulic shock. Following the proper start-up sequence also helps ensure that system operating parameters conform to design specifications so that system water quality and productivity goals can be achieved.

Before initiating system start-up procedures, membrane pretreatment, loading of the membrane elements, instrument calibration and other system checks should be completed.

Please refer to the application information literature entitled "Start-Up Sequence" (Form No. 609-02077) for more information.

Operation Guidelines

Avoid any abrupt pressure or cross-flow variations on the spiral elements during start-up, shutdown, cleaning or other sequences to prevent possible membrane damage. During start-up, a gradual change from a standstill to operating state is recommended as follows:

- Feed pressure should be increased gradually over a 30-60 second time frame.
- Cross-flow velocity at set operating point should be achieved gradually over 15-20 seconds.
- Permeate obtained from first hour of operation should be discarded.

General Information

- Keep elements moist at all times after initial wetting.
- If operating limits and guidelines given in this bulletin are not strictly followed, the limited warranty will be null and void. Refer to DOW FILMTEC™ Reverse Osmosis and Nanofiltration Element Three-Year Prorated Limited Warranty (Form No. 609-35010)
- 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.
- Maximum pressure drop across an entire pressure vessel (housing) is 50 psi (3.4 bar).
- Avoid static permeate-side backpressure at all times.

DOW FILMTEC™ Membranes For more information about DOW FILMTEC membranes, call the Dow Water & Process Solutions business:

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Notice: 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.

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