Product Data Sheet
FilmTec™ Nanofiltration Membranes

od 1994 roku
ORIONTEC®
ODPOWIEDZIALNE UZDATNIANIE WODY

DUPONT™

FilmTec™ SWBR-150i

Seawater Low Energy Ion Selective Nanofiltration Membrane Element featuring iLEC™ for Low Maintenance Operation

Key Features

- Selective divalent ion rejection allows to recover high-value solutes, such as divalent ions like magnesium, from seawater rich brines.
- Optimized combination of water production and permeate quality.
- Enables the production of high purity sodium chloride (NaCl) nanofiltration permeate and helps maximize the recovery and lifespan in seawater reverse osmosis desalination plants downstream.
- Reliable prevention of scaling when concentrating seawater brines.
- Excellent durability resulting in stable long-term performance.
- Includes iLEC™ interlocking end caps, reducing system operating costs and the risk of o-ring leaks that can cause poor water quality.

Key Applications

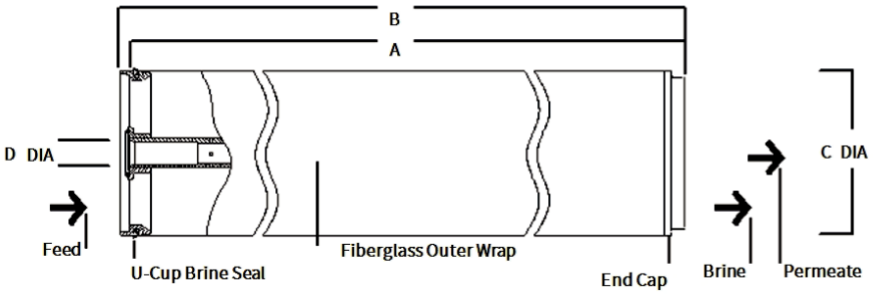
- Seawater brine recovery.
- Used to recover high-value solutes from seawater.
- Seawater desalination for industrial installations.
- Suitable for medium and high feed water salinity.

Typical Properties

FilmTec™ Element	Active Area ft^2 (m^2)	Feed Spacer Thickness (mil)	Permeate Flow Rate gpd (m^3/d)	Typical $MgSO_4$ Rejection (%)
SWBR-150i	440 (41)	28	10,500 (39.7)	99.62

1. The above benchmark values are based on the following test conditions: 2,000 ppm $MgSO_4$, 70 psi (0.5 MPa), 77°F (25°C), 15 % recovery.
2. Permeate flows for individual elements may vary ± 20%.
3. Sales specifications may vary as design revisions take place.

Element Dimensions



FilmTec™ SWBR-150i Dimensions – inches (mm)	
A	40.0 (1,016)
B	40.5 (1,029)
C	7.9 (201)
D	1.125 ID (29 ID)

ID - Inner Diameter
DIA - Diameter

1. For element weight information refer to What is the weight of FilmTec™ elements as delivered?
2. For element packaging and shipping information refer to How are FilmTec™ elements packaged and shipped?
3. Individual elements with iLEC™ Interlocking Endcaps measure 40.5 inches (1,029 mm) in length (B). The net length (A) of the elements when connected is 40.0 inches (1,016 mm).

Form No. 45-D04560-en, Rev. 1
December 2023

Operating and Cleaning Limits [1]

General	Details	
Membrane Type	Thin film composite	
Maximum Operating Temperature [2]	113°F	45°C
Maximum Operating Pressure	600 psig	41 bar
Maximum Pressure Drop		
Per Element	15 psig	1.0 bar
Per Pressure Vessel (Minimum 4 Elements)	50 psig	3.5 bar
pH Range		
Continuous Operation	5 - 9	
Short-Term Cleaning [3]	2.5 < pH <11.0	
Maximum Feed Silt Density Index	SDI 5	
Free Chlorine Tolerance [4]	Non-Detectable	

1. For recommended feed and permeate flow rates, flux, and recovery for various feed sources, refer to FilmTec™ Design Guidelines for multiple-element systems of 8-inch elements (Form No. 45 D01695 en).
2. Consult your DuPont representative for advice on applications above 95°F (35°C).
3. Refer to Cleaning Procedures for FilmTec™ SWBR-100i elements (Form No. 45 D04369 en).
4. Oxidation damage is not covered under warranty, DuPont recommends removing residual free chlorine by pretreatment prior to membrane exposure. Please refer to Dechlorinating Feedwater (Form No. 45 D01569 en) for more information.

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 FilmTec™ Reverse Osmosis / Nanofiltration Three-Year Prorated Limited Warranty Element(s) (Form No. 45 D00903 en) will be null and void.
- To prevent biological growth during prolonged system shutdowns, it is recommended that membrane elements be immersed in a preservative solution. Refer to Storage, Handling and Preservation for FilmTec™ SWBR-100i Nanofiltration Membranes (form No. 45-D04368-en).
- The customer is fully responsible for the effects of incompatible chemicals and lubricants on elements.
- Avoid static permeate-side pressure 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 FilmTec™ SWBR-100i elements to assure damage free operation:

1. Loading of Pressure Vessels - Preparation & Element Loading (Form No. 45-D01602-en)
2. System Operation, including plant Start-Up Sequence (Form No. 45-D01609-en) and RO & NF Systems Shutdown (Form No. 45-D01613-en)
3. Storage, Handling and Preservation for FilmTec™ SWBR-100i Nanofiltration Membranes (Form No. 45 D04368 en)

Full information of plant design, system operation, and troubleshooting is given in the FilmTec™ Reverse Osmosis Membranes Technical Manual (Form No. 45-D01504-en).

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Have a question? Contact us at:
dupont.com/water/contact-us

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