# Low-Pressure Brackish Water (BW) RO Membrane element NTBW-4040

# **Product features:**

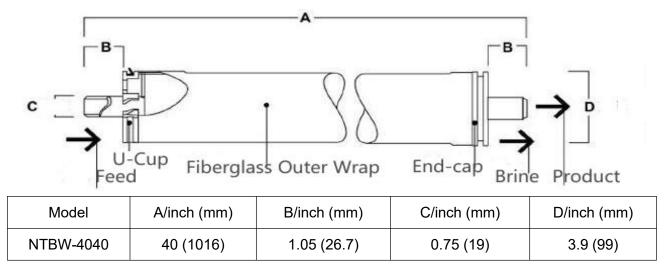
Low-pressure brackish water RO elements (BW) are used for separating salts from water and are produced with an automated fabrication process that ensures precision, consistency, and reliability. They are ideal for use in medium-sized water treatment system (TDS:2000mg/L-10000mg/L). Our RO membranes take a leadership role in the thin-film composite membrane industry and meet the challenges of higher rejection in lower-pressure operations.

## **Product Parameter:**

Model	Active	Feed spacer	Permeated Flow GPD(m³/d)	Stable	Min. Salt Rejection(%)
	membrane area	Thickness		rejection rate	
	$ft^2 (m^2)$	(mil)		(%)	
NTBW-4040	78 (7.2)	28	2400 (9.0)	99.5	99.3

Test Conditions: Feed water pressure 225 psi (1.55 MPa); Feed water temperature  $25^{\circ}$ C; Feed water concentration 2000 mg/L as NaCl; Recovery rate 15%; Feed water pH 7.0-8.0; Each membrane element may have ± 15% variation of permeate flow.

# **Dimension:**



1/2



### **Operation conditions and limits:**

Maximum operating pressure	600psi (4.14MPa)	
Maximum water temperature	<b>45</b> °C	
Maximum feedwater flow	3.6 m³/h	
Maximum feedwater flow SDI (15	5	
Maximum concentration of free chlorine	< 0.1ppm	
Maximum pressure drop per element	15psi	
Allowed pH range for feedwater in operation	3-10	
Allowed pH range for chemical cleaning	1-12	

## **Preservation of Membrane Elements:**

#### •New Membrane Elements

Membrane elements are shipped from the factory with appropriate protective measures. Do not install new membrane elements in the pressure vessel. Only start installing membrane elements if the system is started up. Store the membrane elements under the following conditions:

① Keep the membrane element in a cool, dry place, protected from sunlight, for no longer than 90 days, otherwise microorganisms may grow.

② Keep the temperature of the storage place within 5-45°C. If the ambient temperature is lower than 5°C, keep the membrane element in a cool and dry place. If the ambient temperature is lower than 5°C, cover the box with heat-insulating material or raise the temperature of the storage

room.

If the ambient temperature is lower than 5°C, use heat-insulating material to cover the packing box or raise the temperature of the storage room. ③ Do not damage the membrane element's factory protection during storage.

#### • Used Membrane Elements

① If the membrane element is removed from the pressure vessel for storage, the membrane element should be stored in a 0.5 to 1% sodium bisulfite protective solution.

If the membrane element is removed from the pressure vessel, it should be stored in a 0.5 to 1% sodium bisulfite protective solution.

② It is recommended that the protective solution be prepared using RO water. If there are no conditions, soft water, water without residual chlorine, can also be used to prepare the protective solution.

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③ After the membrane element has been immersed in the protective solution for about 1 hour, take out the membrane element and put it into an oxygen-insulating bag and evacuate it.

After soaking in the protective solution for about 1 hour, take out the membrane element and put it into the oxygen-insulating packaging bag with vacuum treatment. The membrane element is then stored in the same way as a new membrane element.

④When a used membrane element is to be returned to the factory, contact the manufacturer or agent before removing the membrane element.