

## Fouling resistant (FR) RO membrane elements

### NTFR-8040

#### Product features

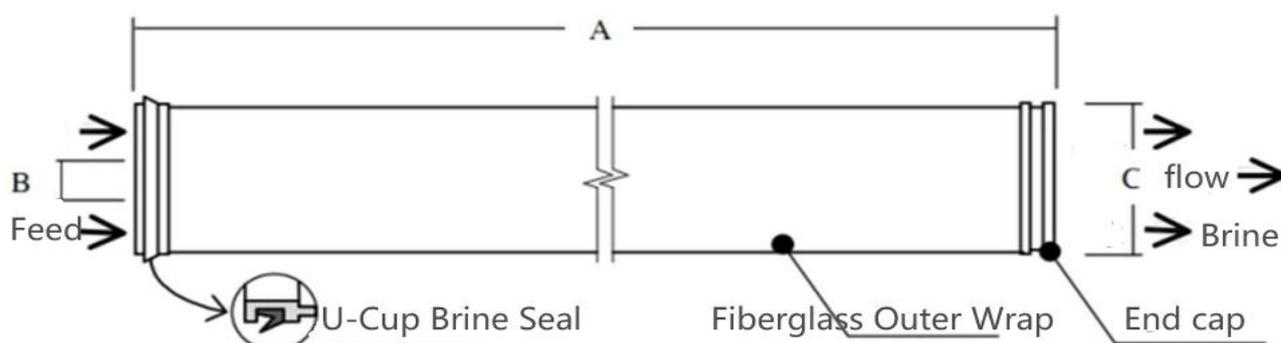
Fouling-resistant RO Membrane Elements (FR) utilize specialized manufacture technique that can improve the hydrophilicity, electric charge and roughness of membrane surface, thus reducing the adhesion and adsorption of pollutants or microbes on membrane surface. FR are widely used in printing and dyeing, municipal sewage, reclaimed water reuse, coal chemical industry and many other fields.

#### Product Parameter

Model	Active membrane area ft <sup>2</sup> (m <sup>2</sup> )	Feed spacer Thickness (mil)	Permeated Flow GPD (m <sup>3</sup> /d)	Stable rejection rate (%)	Min. Salt Rejection(%)
<b>NTFR-8040</b>	400 (37.2)	34	10500 (39.8)	99.5	99.3

Test Conditions: Feed water pressure 225 psi (1.55 MPa); Feed water temperature 25°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



Model	A/inch (mm)	B/inch (mm)	C/inch (mm)
<b>NTFR-8040</b>	40(1016)	1.125(29)	7.9(201)

## Operation conditions and limits

Maximum operating pressure	600psi (4.14MPa)
Maximum water temperature	45°C
Maximum feedwater flow	17.0 m <sup>3</sup> /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	2-11
Allowed pH range for chemical cleaning	1-13

## 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.

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