

# RD20-440 BRACKISH WATER REVERSE OSMOSIS MEMBRANE ELEMENT

## Performance Characteristics

RD20-440 brackish water reverse osmosis membrane is a top-level reverse osmosis membrane with high salt rejection rate and large water yield, which is suitable for the highly challenging raw water conditions and can be operated accessibly at the low cost. It has the remarkable inlet water channel of 34mil, which can reduce the negative effects of the fouling to the pressure drop of pressure vessels, as to effectively improve the cleaning effects of membrane elements. Such membrane element has low operating pressure, which increases the economical efficiency of system operation.

## Membrane Specifications

### Parameters of Membrane Element

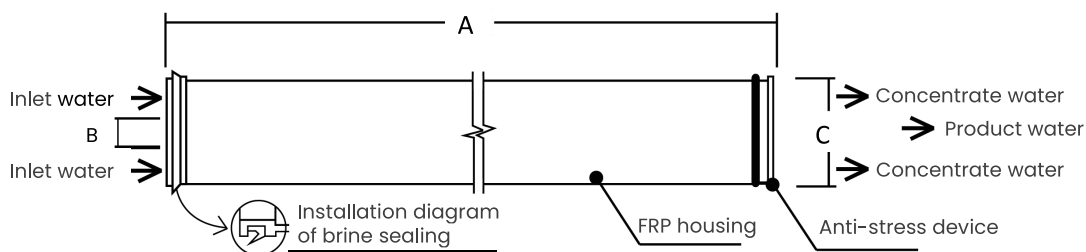
Model	Average Flow Rate gpd(m <sup>3</sup> /d)	Average Salt Rejection %	Test Conditions
RD20-440	11500 (43.2)	99.4%	1

**Notes:** Average salt rejection is tested after 24 hours operation. Fluctuation range of single membrane flow rate could be ±25%.

**Test condition 1:** 2,000ppm NaCl solution, 225psi operating pressure, 25°C temperature, pH7, 15% recovery rate.

## Schematic Diagram and Dimensions

Figure 1



Product model	Connector	Diameter, inch (cm)			Weight (KG)
		A	B	C	
8040	Flat connector	40.00 (101.6)	1.125 (2.85)	7.9 (20.1)	16

## Operating Conditions

Product model	RD20-440
Max. operating pressure	600psi
Typical operating pressure	225psi
Pressure drop of single membrane element	<12psi
Recovery rate	15%
Max. operating temperature	50°C
Max. cleaning temperature	50°C
Continuous working PH range	4.0-11.0
Cleaning PH range	2.0-11.5
Max. allowable residual chlorine	500ppm-h
Inlet water	NTU<1, SDI<5

## Storage Conditions

- Before the first use, all membrane elements must be stored under the original packaging conditions.
- The transport temperature below 0°C may cause irreversible membrane damage, on the contrary, above 30°C may cause membrane degradation and deterioration of the protection solution.
- Store in a cool, dry condition and the place where is not directly exposed to sunlight. Storage temperature is kept between 0°C to 30°C, and the longest storage time is 6 months.

## General Information

- Once wetted, the membrane element must always be wet.
- The limited warranty we promised will expire due to the fact that the user does not strictly follow the operational restrictions and guidelines set forth in this Code.
- If the system is in a shut down state for a long time, the membrane element is advised to be placed in the protective solution to prevent the growth of microorganisms.
- If the user uses incompatible chemicals and lubricants to cause improper influence on the membrane elements, the user shall bear the corresponding responsibilities.
- The maximum allowable pressure drop of single pressure vessel is 60 psi (4.1bar).
- At no time can the back pressure be produced on the side of producing water to avoid the occurrence of bad problems.