

# AR40-50 ACID-STABLE SPECIAL SEPARATION SPIRAL-WOUND MEMBRANE ELEMENT

## Performance Characteristics

AR40-50 acid-stable special separation spiral-wound membrane element can achieve metal concentration in acidic solutions such as the sulfuric acid with concentration less than 20% and phosphoric acid with concentration less than 30%, which can be used in acidic liquid purification. Such membrane elements can keep high flux in the strong acid conditions and operate stably for over 12 months.

## Membrane Specifications

### Parameters of Membrane Element

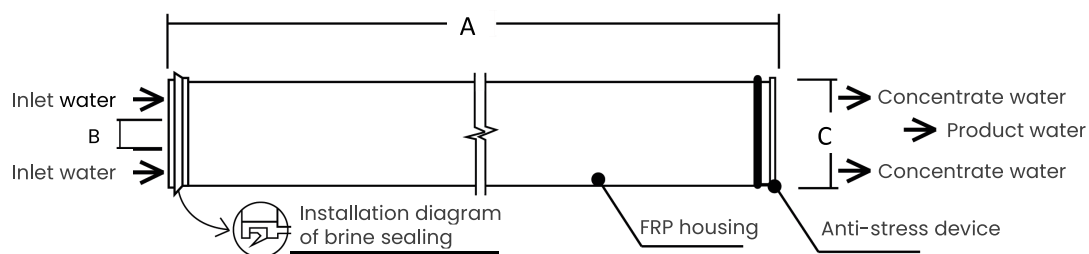
Model	Average Flow Rate gpd(m <sup>3</sup> /d)	Average Salt Rejection %	Test Conditions
AR40-50	15200 (57.5)	80.0%	1

**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 MgSO<sub>4</sub> solution, 580psi operating pressure, 25°C temperature, PH 7, 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

<b>Product model</b>	AR40-50
<b>Max. operating pressure</b>	1200psi
<b>Pressure drop of single membrane element</b>	<8psi
<b>Recovery rate</b>	15%
<b>Max. operating temperature</b>	80°C
<b>Max. cleaning temperature</b>	80°C
<b>Continuous working PH range</b>	0.0-12.0
<b>Cleaning PH range</b>	0.0-13.0
<b>Max. allowable residual chlorine</b>	500ppm-h
<b>Inlet water</b>	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.