



# AR04-50 ACID-STABLE SPECIAL SEPARATION SPIRAL-WOUND MEMBRANE ELEMENT

#### > Performance Characteristics

AR04-50 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

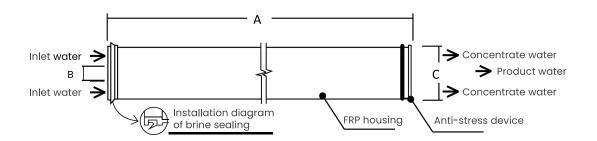
Model	Average Flow Rate gpd(m³/d)	Average Salt Rejection %	Test Conditions	
AR04-50	3300 (12.5)	80.0%	1	

**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 $_4$  solution, 580psi operating pressure, 25  $^\circ$ C temperature, PH 7, 15% recovery rate

# ≥ Schematic Diagram and Dimensions

Figure 1



	Product model	Connector	Diameter, inch (cm)			Woight (VC)
			Α	В	С	Weight (KG)
	4040	Male connector	40.00 (101.6)	0.75 (1.9)	3.9 (9.9)	6





### **№** Operating Conditions

Product model	AR04-50		
Max. operating pressure	1200psi		
Pressure drop of single membrane element	<8psi		
Recovery rate	15%		
Max. operating temperature	80℃		
Max. cleaning temperature	80℃		
Continuous working PH range	0.0-12.0		
Cleaning PH range	0.0-13.0		
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.