



DELEMIL-AR-S SERIES

Acid Resistance NF Membrane

The NF membrane of AR-S series (Acid Resistance) can concentrate 20% or less sulfuric acid and 30% or less phosphoric acid in the acid solution. It can also be used for the purification of acid solution. The membrane can maintain high flow and stable operation in a strong acid condition for more than 12 months.

Membrane Parameters

Product Models	Average Flow Rate GPD (m ³ /d)	Average Rejection Rate %
AR-S 01	4300 (16.3)	98%
AR-S 02	3400 (12.9)	98%
AR-S 03	4800 (18.2)	96%
AR-S 04	3800 (14.4)	96%
AR-S 10	18200 (68.9)	98%
AR-S 20	14200 (53.7)	98%
AR-S 30	20400 (77.2)	96%
AR-S 40	16000 (60.6)	96%

Note: The average desalination rate is tested after 24 hours operation.

Flow fluctuation range of single membrane could be +25%.

Test Condition: 2000mg/L MgSO₄ solution, 580 psi operating pressure, 25°C temperature, pH=7, and 15% recovery rate.

Parameters of Membrane Operating and Cleaning

Product Models	Max Operating Pressure	Pressure Drop of Single Membrane	Recovery Rate	Max Operating Temperature
AR-S Series	1200psi	<8psi	15%	80°C
Max Cleaning Temperature	PH Range of Continuous Working	PH Range of Cleaning	Allowable Max Contents of Residual Chlorine	Inlet Water
80°C	0-12	0-13	500ppm-h	NTU <1 SDI < 5

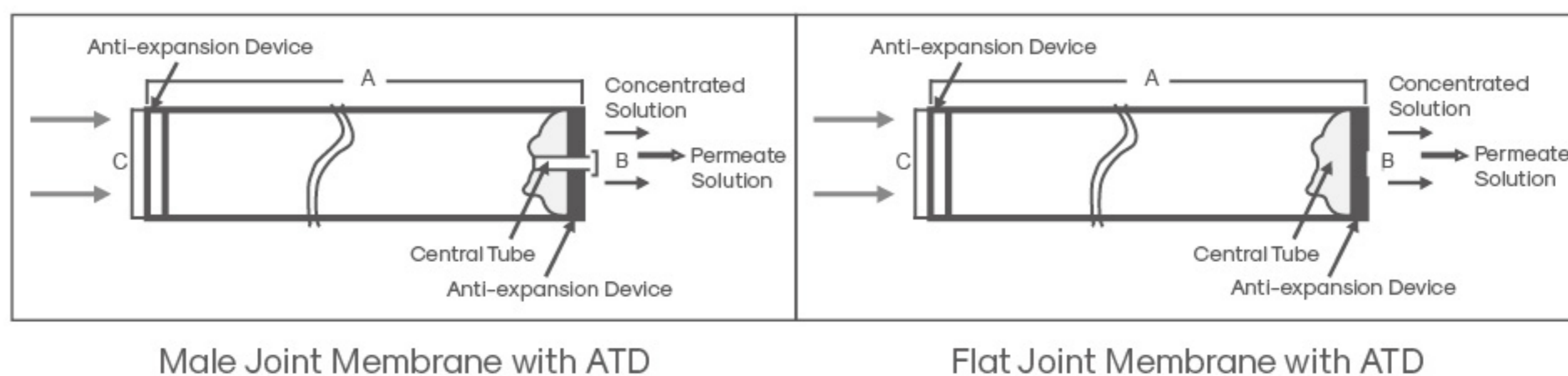
Typical Application

- Purify acid solution, remove metal ions
- Acid recovery from leachate
- Decolorization treatment of inorganic acid
- Dissolved chemicals recovery
- Concentration and recovery of divalent ions in acid solution
- Some regular applications that require corrosive acid cleaning

Typical Acid Solution

- 20% H₂SO₄
- 30% H₃PO₄
- 4% HNO₃
- 30%-40% Organic Acid

Membrane Schematics



Specifications and Parameters

Specifications	Joint	Diameter Inch (cm)			Package Weight (kg)
		A	B	C	
2540	Male Joint	40.00 (101.6)	0.75 (1.9)	2.4 (6.1)	3
4040	Male Joint	40.00 (101.6)	0.75 (1.9)	3.9 (9.9)	4
8040	Flat Joint	40.00 (101.6)	1.125 (2.85)	7.9 (20.1)	16

Special Notes:

- All membrane components are packed under the dry/semi-dry conditions;
- Each membrane element is equipped with an accessory kit, fitted with a connector and 4 O-rings.

Storage Conditions

- Before the first use, all membrane elements must be stored under the original packaging conditions.
- The membrane is best placed in the original packaging and opened before the using of water treatment system.
- The transport temperature below 0°C may cause irreversible membrane damage, and the transport temperature 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 or artificial lighting. Storage temperature stays at 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.
- It is the user's responsibility if use an incompatible chemical and lubricant, and cause undue influence on the original.
- The maximum allowable pressure drop of single pressure vessel is 60 psi (4.1bar).
- At no time can the backpressure be produced on the side of producing water to avoid the occurrence of harmful problems.