



CX-S Series (Chemical Selection) Selective Separation Membrane Element utilizes a selective composite membrane with high selectivity and the higher penetration rate of monovalent ions, as well as the higher rejection rate of divalent ions and COD. It's helpful to separate the high-purity salt solution while reducing the concentrated wastewater. The utilization of high penetrability membrane chemistry technology improves water recovery rate and reduces operating energy consumption, which is stable and could be used for a long-term.

CX-S Series is designed to convert most of the RO concentrated water into the salt solution that is pure and easy to be crystallized, so as to minimize the cost of downstream thermal process.

#### **Membrane Parameters**

Product Models	Average Flow Rate GPD (m³/d)	Average Rejection Rate %	
CX-S1-C	520 (2.0)	98.5%	
CX-S 2-C	400 (1.5)	98.5%	
CX-S 01	1950 (7.4)	98.5%	
CX-S 02	1450 (5.5)	98.5%	
CX-S 10	8200 (31.0)	98.5%	
CX-S 20	6600 (25.0)	98.5%	

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

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

Test Condition: 2000mg/LMgSO₄ solution, 580 psi operating pressure, 25°C temperature, pH=7, and 15% recovery rate.

#### Parameters of Membrane Operating and Cleaning

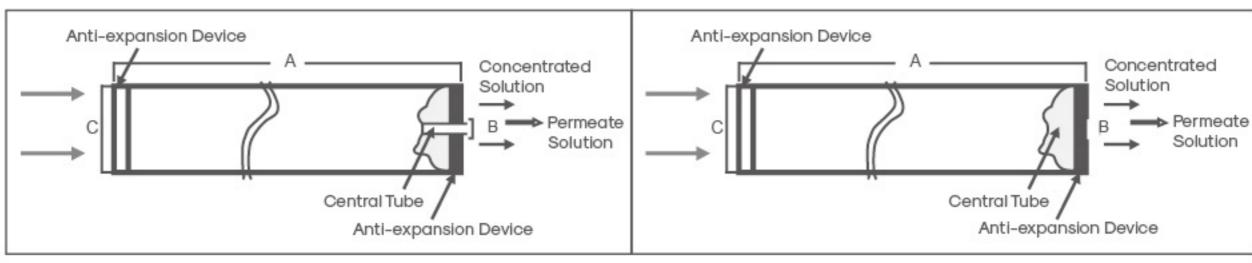
Product Models	Max Operating Pressure	Pressure Drop of Single Membrane	Recovery Rate	Max Operating Temperature
CX-S Series	1200psi	<8psi 15%		60°C
Max Cleaning Temperature	PH Range of Continuous Working	PH Range of Cleaning	Allowable Max Contents of Residual Chlorine	Inlet Water
60°C	2-12	1-12	500ppm-h	NTU <1 SDI < 5

#### Typical Application

- Acid electroplating wastewater recycling
- Heavy metal removal
- Glauber's concentration
- BOD/COD removal
- Desalination of whey protein
- Glucose purification, polysaccharide desalination, sugar concentration and grading
- Concentration of plant peptides and animal peptides
- Separation of organic phosphorus from sodium chloride



# Membrane Schematics



Male Joint Membrane with ATD

Flat Joint Membrane with ATD



## Specifications and Parameters

Specifications	Joint	Diameter Inch (cm)			Package Weight
Specifications		Α	В	С	(kg)
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;

temperature stays at 0°C to 30°C, and the longest storage time is 6 months.

• 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



## 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.