VONTRON **SW11-2521 Membrane Element**

Brief Introduction

SW series of sea water aromatic polyamide RO element developed by VONTRON for seawater desalination. This series of elements have the characteristics of low operating pressure, low equipment investment, good desalination performance and stability.

SW series membrane elements are generally suitable for the treatment of seawater and brackish water with high concentration. It can be used for seawater desalination, desalination of brackish water with high concentration, boiler replenishment water in power plants, wastewater reuse, concentration and recovery of high value-added substances such as food and pharmaceuticals, etc.

Model	**Active Membrane Area** $ft^2(m^2)$	**Average Permeate** GPD(m^3/d)	**Stable Rejection Rate** %	**Spacer Thickness** mil
SW11-2521	12（1.1）	270（1.0）	99.5	28
Testing Conditions	Operating pressure 800 psi (5.52Mpa) Temperature at 25℃ Tested at 32000mg/L NaCl solution pH 8 Recovery rate at4%			
Operation Limits & Conditions	Maximum operating pressure	1200psi（8.28Mpa）		
	Maximum feedwater flow	6gpm（1.4 m^3/h）		
	Maximum feedwater temperature	45℃		
	Maximum feedwater flow SDI_{15}	5		
	Allowed pH range for feedwater in operation	2～11		
	Allowed pH range for chemical cleaning	1～13		
	Maximum concentration of free chlorine	＜0.1ppm		
	Maximum pressure drop per element	15psi（0.1Mpa）		

Size of Membrane Element： 1.0 inch = 25.4 mm

Specification	A/mm (inch)	B/mm (inch)	C/mm (inch)	D/mm (inch)
2521	533.4 (21)	61 (2.4)	19.1 (0.75)	30.2 (1.19)

Notice:

1. All data and information provided in this manual have been obtained from long-term experiment by Vontron We confirm the effective and accuracy of the data. assumes no liability for any aftermath caused by user's failure in abiding by the conditions specified in this manual in use or maintenance of membrane products. It is strongly recommended that the user shall strictly abide the designed use and maintenance requirements and keep relevant records.
2. The permeate value listed in the table is the average value. The permeate flow of single membrane element is tolerance not exceeding ±20% of the nominal value.
3. All wet-type membrane elements have been strictly tested before leaving the factory, and have been treated with 1.0% sodium hydrogen sulfite (10% glycerin antifreeze required in winter) for storage purpose, then sealed with plastic bag in vacuum, and further packed in carton boxes.
4. The membrane used should remain wet after being used; In long term suspension, to prevent the breeding of microbes, soak the membrane elements with protective solution is highly recommended, the solution (prepared with RO filtered water) containing 1.0% sodium hydrogen sulfite (foodstuff-purpose).
5. Operate low pressure flushing for 15-25 minutes of first use, high pressure flushing for 60-90 minutes when first use (Permeate volume no less than 50% of designed volume). Discard all the permeate and condensed water produced during the first one hour after system start-up.
6. During storage time and operation period, it is strictly prohibited to added any chemical medicament that may be harmful to membrane elements. In case of any violation in adding chemical medicament, Vontron assumes no liability for any damages incurred.
7. Along with technical development and product renovation, all information will be subject to modification without prior notification. Please keep notice the website of Vontron for any updates of the product.