

Seawater Desalination Element – SW Series



Testing Conditions

Testing Pressure.....	800psi (5.5Mpa)
Testing Solution Temperature.....	25°C
Testing Solution Concentration (NaCl)	32800ppm
pH Value of Testing Solution.....	7.5
Single Element Recovery.....	8%(8040/4040/2540) 4%(4021/2521)

VONTRON

Product Introduction

SW series of aromatic polyamide compound membrane element developed by Vontron Technology Co., Ltd. is applicable to desalination of seawater. By optimizing the structure of membrane element, the SW series increases the permeate flow, and requires fewer elements for same permeate flow. It is characterized by low operating pressure, low investment in equipment, excellent rejection rate and reliable performance, and its high salt rejection can ensure producing the drinking water from seawater simply through one-pass RO design.

Applicable to treatment of seawater and high-concentration brackish water, the SW series of membrane element is designed for various industrial water treatment, such as seawater desalination, high-concentration brackish water desalting, boiler water replenishment for power plant, etc., and is also applicable to various fields such as recycling of wastewater, concentration and reclamation of such substances with high additional value as foodstuff, pharmaceuticals, etc.

Specifications and Major Properties

Model	Active Membrane Area ft ² (m ²)	Average Permeated Flow GPD(m ³ /d)	Stable Rejection Rate (%)	Minimum Rejection Rate (%)
SW21-8040	330(30.6)	5000(18.9)	99.7	99.5
SW22-8040	380(35.2)	6000(22.7)	99.7	99.5
SW21-4040	85(7.9)	1400(5.3)	99.5	99.2
SW11-4021	33(3.1)	750(2.8)	99.2	99.0
SW11-2521	12(1.1)	200(0.76)	99.2	99.0
SW11-2540	28(2.6)	500(1.89)	99.2	99.0





Product Catalog

Catalog of Industrial Membrane Elements

Type	Model	Stable Rejection(%)	Average Permeate GPD (m ³ /d)	Working Pressure & Application Fields	Testing Conditions		
					Testing Pressure psi(MPa)	Testing Solution Concentration NaCl (ppm)	Recovery (%)
General-purpose Industrial Membranes	LP21-8040	99.5	9600 (36.3)	Working under low pressure. Applicable to regular or high content brackish water.	225 (1.55)	2000	15
	LP22-8040	99.5	10500 (39.7)				
	LP21-4040	99.5	2400 (9.1)				
	XLP11-4040	98.0	2000 (7.6)	Working under extremely low pressure. Applicable to feedwater with low salinity that requires low rejection rate.	100 (0.69)	500	15
	ULP21-8040	99.0	11000 (41.6)	Working under ultra low pressure. Applicable to feedwater with fairly low salinity.	150 (1.03)	1500	15
	ULP12-8040	98.0	13200 (49.9)				
	ULP22-8040	99.0	12100 (45.7)				
	ULP32-8040	99.5	10500 (39.7)				
	ULP11-4040	98.0	2700 (10.2)				
	ULP21-4040	99.0	2400 (9.1)				
	ULP31-4040	99.4	1900 (7.2)				
	ULP11-4021	98.0	1000 (3.78)	Working under ultra low pressure. Applicable to commercial water purifier, and water purifying devices for hospital and laboratory.	150 (1.03)	1500	8
	ULP21-4021	99.0	950 (3.6)				
	ULP31-4021	99.4	850 (3.2)				
ULP21-2521	99.0	300 (1.13)					
ULP21-2540	99.0	750 (2.84)				15	
Seawater Desalination Membranes	SW21-8040	99.7	5000 (18.9)	Working under high pressure. Applicable to seawater or quasi seawater.	800 (5.5)	32800	8
	SW22-8040	99.7	6000 (22.7)				
	SW21-4040	99.5	1400 (5.3)				
	SW11-2540	99.2	500 (1.89)	Working under high pressure. Applicable to small-sized system in military ship, marine ship, laboratory, etc. for desalination of seawater or high-content brackish water.			4
	SW11-4021	99.2	750 (2.8)				
SW11-2521	99.2	200 (0.76)					
Fouling Resistant Membranes	FR11-8040	99.5	9600 (36.3)	Working under low pressure. Applicable to feedwater with small content of contaminants (organic substances, colloids).	225 (1.55)	2000	15
	FR11-4040	99.5	2200 (8.3)				
High Oxidation Resistant Membranes	HOR21-8040	99.2	9000	Applicable to feedwater with oxidative substances or serious microbial contamination.	225 (1.55)	2000	15
	HOR21-4040	99.2	2200				