

VONTRON LP (Low Pressure) series

1 . Brief Introduction

LP (Low Pressure) series are the aromatic composite membrane elements developed by Vontron Enviro-Tech Co., Ltd. applicable to brackish water desalination. It enjoys the properties of low-pressure operation, high permeate flow and excellent desalination. Furthermore, it enjoys the high properties of eliminating the soluble salt, TOC and SiO₂, and is especially applicable to the manufacture of high-purity water for electronic industry and electric power industry.



Being suitable for the desalination treatment of those water resources with salt concentration lower than 8000 ppm, such as surface water, underground water and municipal water, etc., LP series membrane elements are mainly applicable to various industrial water, such as industry-purpose pure water, boiler water replenishment in power plant, and can also be applied to such brackish water applications as treatment of high-concentration salty wastewater and production of beverage-purpose water.

2. Specifications and Main Properties of Membrane Elements

LP Series Membrane Elements: 4040

Part No.		LP21-4040		
Capability	Average Salt Rejection Rate %	99.5		
	Average Permeate flow GPD (m ³ /d)	2200(8.3)		
	Active Membrane Area ft ² (m ²)	80(7.4)		
Testing Conditions	Testing Pressure	225psi (1.55Mpa)		
	Temperature of Testing Solution	25°C		
	Concentration of Testing Solution (NaCl)	2000ppm		
	PH Value of Testing Solution	7.5		
	Recovery Rate of Single Membrane Element	15%		
Extreme operation Conditions	Max. Operating Pressure	600psi(4.14Mpa)		
	Max. Feedwater Flow	16gpm(3.6m ³ /h)		
	Max. Temperature of Feedwater	45°C		
	Max. SDI of Feedwater	5		
	Free Chlorine Concentration of Feedwater	< 0.1ppm		
	PH Value Range of Feedwater as Continuous Operation	3~10		
	PH Value Range of Feedwater as Chemical Cleaning	2~11		
Max. Pressure Difference of Single Membrane Element	15psi(0.1Mpa)			

LP Series Membrane Elements: 8040

Part No.		LP21-8040		
Capability	Average Salt Rejection Rate %	99.5		
	Average Permeate flow GPD (m3/d)	9600(36.3)		
	Active Membrane Area ft2(m2)	365(33.9)		
Testing Conditions	Testing Pressure	225psi (1.55Mpa)		
	Temperature of Testing Solution	25°C		
	Concentration of Testing Solution (NaCl)	2000ppm		
	PH Value of Testing Solution	7.5		
	Recovery Rate of Single Membrane Element	15%		
Extreme operation Conditions	Max. Operating Pressure	600psi(4.14Mpa)		
	Max. Feedwater Flow	75gpm(17m ³ /h)		
	Max. Temperature of Feedwater	45°C		
	Max. SDI of Feedwater	5		
	Free Chlorine Concentration of Feedwater	< 0.1ppm		
	PH Value Range of Feedwater as Continuous Operation	3~10		
	PH Value Range of Feedwater as Chemical Cleaning	2~11		
	Max. Pressure Difference of Single Membrane Element	15psi(0.1Mpa)		

LP Series Membrane Elements: 8040 High Permeate

Part No.		LP22-8040		
Capability	Average Salt Rejection Rate %	99.5		
	Average Permeate flow GPD (m3/d)	10500(39.7)		
	Active Membrane Area ft2(m2)	400(37)		
Testing Conditions	Testing Pressure	225psi (1.55Mpa)		
	Temperature of Testing Solution	25°C		
	Concentration of Testing Solution (NaCl)	2000ppm		
	PH Value of Testing Solution	7.5		
	Recovery Rate of Single Membrane Element	15%		
Extreme operation Conditions	Max. Operating Pressure	600psi(4.14Mpa)		
	Max. Feedwater Flow	75gpm(17m ³ /h)		
	Max. Temperature of Feedwater	45°C		
	Max. SDI of Feedwater	5		
	Free Chlorine Concentration of Feedwater	< 0.1ppm		
	PH Value Range of Feedwater as Continuous Operation	3~10		
	PH Value Range of Feedwater as Chemical Cleaning	2~11		
	Max. Pressure Difference of Single Membrane Element	15psi(0.1Mpa)		