VONTRON **LP22-8040-440 Membrane Element**

Brief Introduction

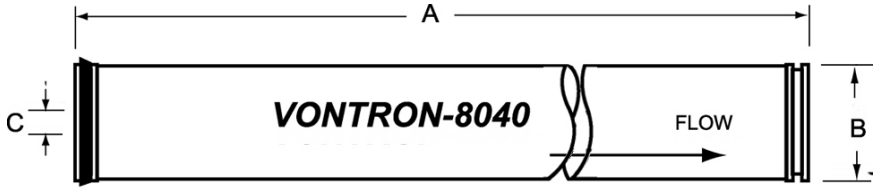
LP series (low pressure) aromatic polyamide RO element is developed by VONTRON for treatment of brackish water. It has the characteristics of low-pressure in operation, high permeate flow and excellent rejection performance in removing of solvable salts, TOC, SiO_2, etc. It is especially suitable for the preparation of high purity water in electronics and power industry.

LP series is normally suitable for treatment of brackish water, surface water, underground water and municipal water with TDS is less than 10000 ppm. It is mainly used for producing various scales of bottle water, drinking water, industrial used pure water, high purity water, boiler replenishment water, also for wastewater reuse, material concentration, purification and refining purposes.

Model	**Active Membrane Area** $ft^2(m^2)$	**Permeate Flow** GPD(m^3/d)	**Stable Rejection Rate** %	**Feed Spacer Thickness** mil
LP22-8040-440	440（40.9）	11500（43.5）	99.7	28

Testing Conditions	Operating pressure 225 psi (1.55Mpa) Temperature at 25℃ Tested at 2000mg/L NaCl solution pH 7.0 ± 0.5 Recovery rate at 15%	
Operation Limits & Conditions	Maximum operating pressure	600psi（4.14Mpa）
	Maximum feedwater flow	75gpm（17 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



A/mm(inch)	B/mm(inch)	C/mm(inch)
1016 (40)	201 (7.9)	29 (1.125)

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. We assume no liability for any consequences of user's failure in abiding 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 ±15% 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 (food grade).
5. Operate low pressure flushing for 15-25 minutes of first use, high pressure flushing for 60-90 minutes when first use (Permeate flow no less than 50% of designed flow). Discard all the permeate and concentrated water produced during the first one hour after system start-up.
6. During storage and operation period, it is strictly prohibited to add any chemicals that may be harmful to membrane elements. In case of any violation in adding chemicals, Vontron assumes no liabilities 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 of our website for any updates of the product.