

VONTRON FR12-8040 RO Element

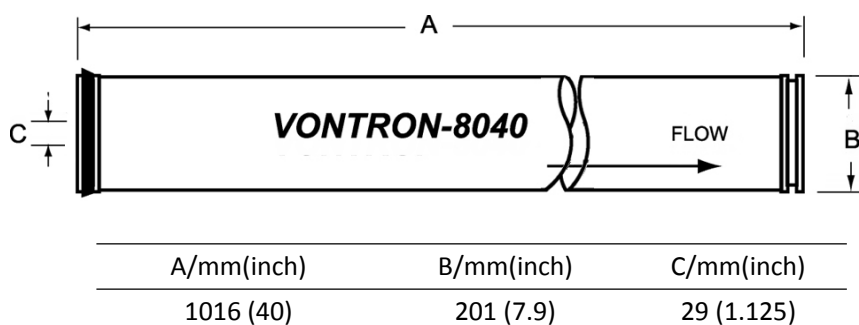
Brief Introduction

FR series of fouling resistant aromatic polyamide composite membrane element is developed by VONTRON for complex water quality. FR series element with special membrane preparation process, it improved the hydrophilicity, charge characteristic and roughness, can effectively reduce the breeding of biofouling and adsorption of pollutants in the membrane surface. The element is applied a special 34 mil spacer design, which effectively reduced fouling and pressure drop, with more durable on cleaning can extent the service life.

FR series and PURO Series of fouling resistant membranes normally suitable for treatment of complex water source with TDS less than 10000 ppm. It is mainly used for purification of surface water, mining waste water, municipal reclaimed water, industrial waste water, RO brackish water, etc.

Model	Active Membrane	Average Permeate	Stable Rejection	Min. Rejection
	Area ft ² (m ²)	GPD(m ³ /d)	Rate %	Rate %
FR12-8040	400 (37.2)	10500 (39.7)	99.5	99.3
Testing Conditions	Testing Pressure		225 psi (1.55Mpa)	
	Testing Solution Temperature		25 °C	
	Concentration of Testing Solution (NaCl)		2000ppm	
	pH value of Testing Solution		7.0±0.5	
	Recovery Rate of Single Element		15%	
Operation	Max. Working Pressure		600psi (4.14Mpa)	
	Max. Volume of Feed water		75gpm (17 m ³ /h)	
	Max. Temperature of Feed water		45°C	
	Max. Feed water SDI ₁₅		5	
Limits & Conditions	pH Range of Feed water during Continuous Operation		2~11	
	pH Range of Feed Water during Chemical Cleaning		1~13	
	Residual Chlorine Concentration of Feed Water		<0.1ppm	
	Max. Pressure Drop of Single Membrane Element		15psi (0.1Mpa)	

Size of Membrane Element: 1.0 inch =25.4 mm



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 $\pm 15\%$ 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.