

## VONTRON PURO-FRLE Membrane Element

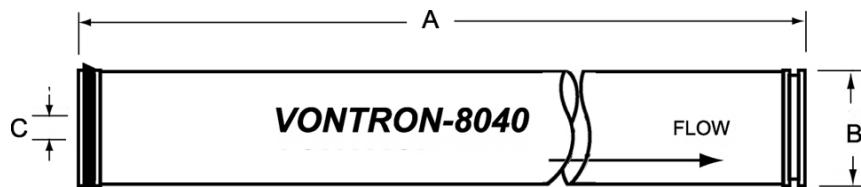
### Brief Introduction

PURO-FRLE, an ultra-low pressure RO Membrane, has the features of fouling resistance and low energy consumption, and is applicable to the treatment of industrial sewage with low salinity, such as electronic sewage and surface water.

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 Area ft <sup>2</sup> (m <sup>2</sup> )	Permeate flow GPD(m <sup>3</sup> /d)	Stable Rejection Rate %	Feed Spacer Thickness mil
PURO-FRLE	400 (37.2)	10500 (39.7)	99.6	34-LD
Operating pressure at 150 psi (1.03Mpa)				
Temperature at 25°C				
Tested in 2000 mg/L NaCL solution				
Position pH 7.0 ± 0.5				
Recovery rate at 15%				
Maximum operating pressure 600psi (4.14MPa)				
Maximum feedwater flow 75gpm (17 m <sup>3</sup> /h)				
Operating Maximum feedwater temperature 45°C				
Limit & Maximum feedwater flow SDI <sub>15</sub> 5				
Conditions 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 Membrane Technology Co., Ltd. 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  $\pm 15\%$  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 (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 Membrane Technology Co., Ltd. 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 Membrane Technology Co., Ltd. for any updates of the product.