

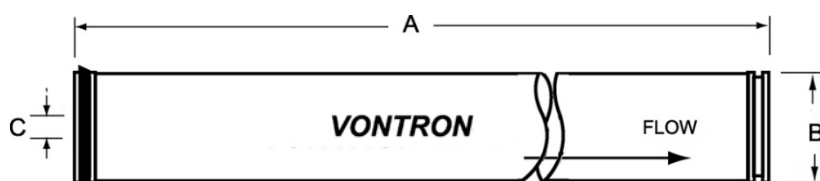
VONTRON MASE-SL 80 Membrane Element

Brief Introduction

MASE 80 Series high-pressure nanofiltration membrane element is applicable to the purification, separation and concentration of hi-concentrated brine, and can work under pressure as high as 80 bar.

| Model | Active Membrane Area ft ² (m ²) | Permeate Flow GPD(m ³ /d) | Stable Rejection % |
|-----------------------------------|---|---|------------------------------|
| MASE-SL 80 | 370 (34.5) | 8200 (31.0) | 98 |
| Testing Conditions | Operating pressure 100 psi (0.69Mpa) | | |
| | Temperature at 25°C | | |
| | Tested in 2000 mg/L MgSO ₄ solution | | |
| | pH 7.0 ± 0.5 | | |
| Operation | Recovery rate at 15% | | |
| | Maximum operating pressure | | 1200psi (8.28Mpa) |
| | Maximum feedwater flow | | 75gpm (17 m ³ /h) |
| | Maximum feedwater temperature | | 45°C |
| Limits & Conditions | Maximum feedwater flow SDI ₁₅ | | 5 |
| | Allowed pH range for feedwater in operation | | 3~10 |
| | Allowed pH range for chemical cleaning | | 2~12 |
| | 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. Vontron 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 $\pm 20\%$ 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 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 for any updates of the product.