

## JX-SW-4040

SW series of sea water aromatic polyamide RO element developed by JX for seawater desalination. This series of elements have the characteristics of low operating pressure, low equipment investment, good desalination performance and stability. Among them, the JX-SW-4040 have the highest desalination rate of 99.8%, which ensure that drinking water can be produced from seawater through one pass RO system.

SW series membrane elements are generally suitable for the treatment of seawater and brackish water with high concentration. It can be used for seawater desalination, desalination of brackish water with high concentration, boiler replenishment water in power plants, wastewater reuse, concentration and recovery of high value-added substances such as food and pharmaceuticals, etc.

| Module     | Active Membrane Area<br>ft <sup>2</sup> (m <sup>2</sup> ) | Average Permeate<br>GPD (m <sup>3</sup> /d) | Stable rejection<br>Rate (%) | Min rejection<br>Rate (%) | B rejection<br>Rate (%) |
|------------|---|---|------------------------------|---------------------------|-------------------------|
| JX-SW-4040 | 85 (7.9)  | 1700 (6.44)                                 | 99.8                         | 99.6                      | 92                      |

**Test conditions:**

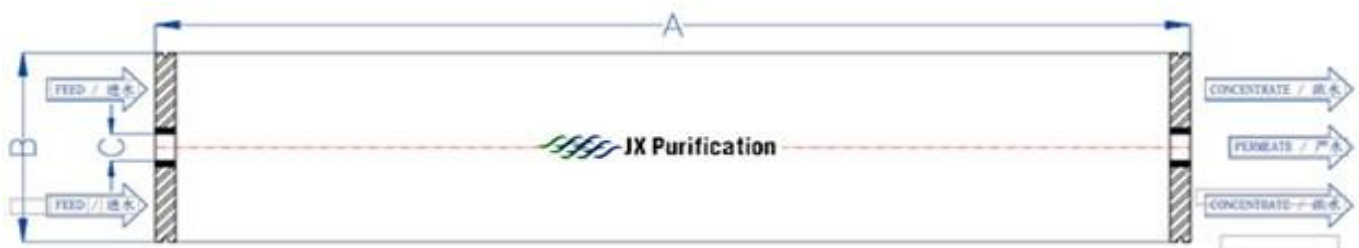
|                                   |                        |
|-----------------------------------|------------------------|
| Testing pressure                  | 800Psi (5.5Mpa)        |
| Testing solution temperature      | 25°C                   |
| Concentration of testing solution | 32000ppm NaCl, 5ppm B. |
| pH value of testing solution      | 8.0                    |
| Recovery rate of Single element   | 8%                     |
| Feed spacer:                      | 28mil                  |

**Operation limits & conditions:**

|  |                   |
|--|-------------------|
| Max. Working Pressure  | 1200psi (8.27Mpa) |
| Max. Temperature of Feed water                                 | 45°C              |
| Max. Feed water SDI <sub>15</sub>                              | 5.0               |
| Max. Feed water Turbidity                                      | 1.0NTU            |
| 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)    |
| Max. Pressure Drop of Single Pressure Vessel with Six elements | 50psi (0.34Mpa)   |

Size of Membrane Element: 1.0 inch = 25.4

mm



| A/mm(inch) | B/mm(inch) | C/mm(inch) |
|------------|------------|------------|
| 1016(40)   | 99(3.9)    | 19(0.75)   |

**Notice:**

1. All data and information provided in this manual have been obtained from long-term experiment by JX. 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 ±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, JX 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 JX for any updates of the product.