

## MODEL TMG20-400

Membrane Type                      Cross Linked Fully Aromatic Polyamide Composite  
 Membrane Surface Area          400 ft<sup>2</sup> (37 m<sup>2</sup>)

### Performance Specification

#### NaCl Solution

**Salt Rejection**

**99.5 %**

**Product Flow Rate**

**10,200 gpd (39 m<sup>3</sup>/day)**

#### Notes :

1. Test Conditions

|                          |          |            |
|--------------------------|----------|------------|
| Feed Water Pressure      | 110 psi  | (0.75 MPa) |
| Feed Water Temperature   | 77 °F    | (25 °C)    |
| Feed Water Concentration | 500 mg/ℓ | as NaCl    |
| Recovery Rate            | 15 %     |            |
| Feed Water pH            | 7        |            |

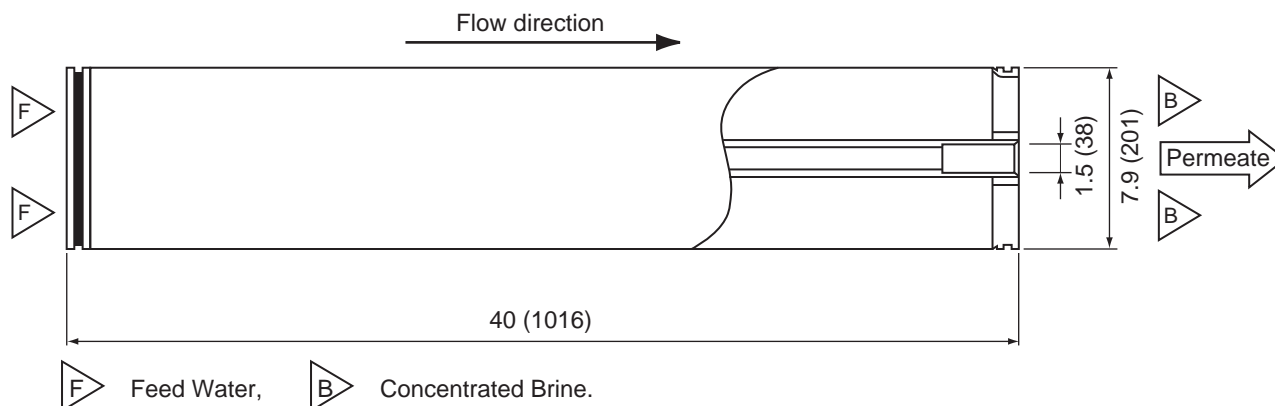
2. Minimum Salt Rejection          99.0 %

3. Minimum Product Flow Rate      8,200 gpd (31 m<sup>3</sup>/day)

4. The membrane area stated is a nominal value and is not a guaranteed specification.

### Dimensions

All dimensions shown in inches (millimeters).



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**Operating Limits:**

|   |                          |
|---|--------------------------|
| Maximum Operating Pressure                          | <b>365 psi</b> (2.5 MPa) |
| Maximum Feed Water Temperature                      | <b>104 °F</b> (40 °C)    |
| Maximum Feed Water Silt Density Index <sub>15</sub> | <b>5</b>                 |
| Feed Water Chlorine Concentration                   | <b>Not Detectable</b>    |
| Feed Water pH Range, Continuous Operation           | <b>2 - 11</b>            |
| Feed Water pH Range, Chemical Cleaning              | <b>1 - 12</b>            |
| Maximum Pressure Drop per Element                   | <b>20 psi</b> (0.14 MPa) |
| Maximum Pressure Drop per Vessel                    | <b>60 psi</b> (0.4 MPa)  |

**Operating Information:**

1. For the recommended design range, please consult the latest Toray technical bulletin, design guidelines, computer design program, and/or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
2. All elements are wet tested, treated with a 1% by weight percent sodium bisulfite storage solution, and then vacuum bagged in oxygen barrier bags. To prevent biological growth during short term storage, shipment, or system shutdown, it is recommended that Toray elements be immersed in a protective solution containing 500 - 1,000 ppm of sodium bisulfite (food grade) dissolved in permeate.
3. Permeate from the first hour of operation should be discarded.
4. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.

**Notice:**

1. Toray accepts no responsibility for results obtained by the application of this information or the safety or suitability of Toray's products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product combination for their own purposes.
2. All data may change without prior notice, due to technical modifications or production changes.