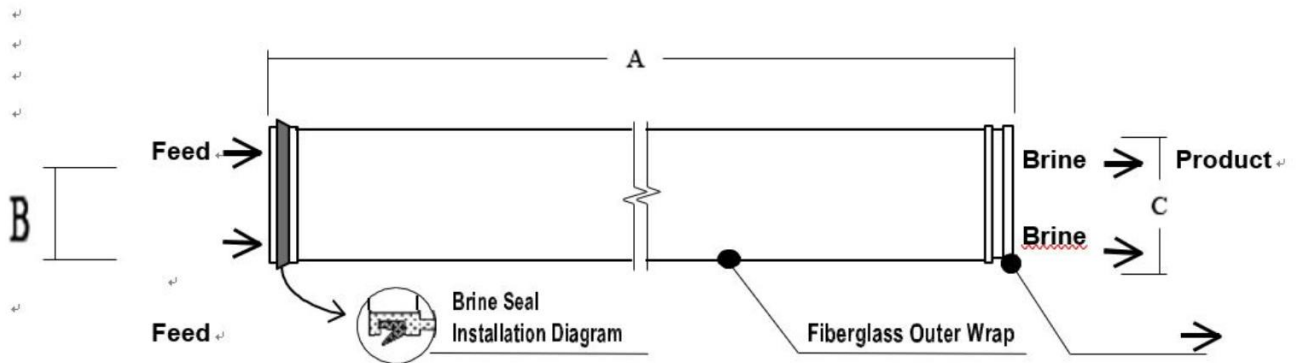


## Description of NF 8040 Membrane Elements



### Element Dimension:

Unit: Inch (mm)  
1 inch= 25.4 mm

| 型号         | A             | B          | C         |
|------------|---------------|------------|-----------|
| CM-NF-8040 | 1016.0 (40.0) | 29.0 (1.1) | 201 (7.9) |

### Specifications:

| Model   | Permeate Flow<br>GPD(m <sup>3</sup> /day) | Active Membrane<br>Area ft <sup>2</sup> (m <sup>2</sup> ) | Stabilized<br>Salt Rejection<br>NaCl/CaCl <sub>2</sub> | Operating pressure<br>(psi/Mpa) |
|---------|---|---|--|---------------------------------|
| NF-8040 | 12000(45.5)                               | 400(37.2)   | 40-60/>96  | 100(0.5)                        |

### Operating Limits for Design:

|   |                |
|---|----------------|
| Maximum Operating Temperature.....          | 45°C(113°F)    |
| Maximum Operating Pressure.....             | 600psi(4.2Mpa) |
| Maximum Pressure Drop (single element)..... | 15psi(1.0bar)  |
| pH Range for Continuous Operation.....      | 3-10 ↕         |
| pH Range for Cleaning.....                  | 2-11           |
| Free Chlorine Concentration(mg/l).....      | <0.1ppm        |
| Maximum Feed SDI.....                       | 5 ↕            |

## Types and properties of membrane sheet:

**DF30**

**DF90**

### properties

| 70Psi      Recovery rate 15%      PH7.5-8      25°C |                      |                           |                      |   |
|---|----------------------|---------------------------|----------------------|---|
| Solution  | DF30 Removal rate(%) | Solution                  | DF90 Removal rate(%) | Notes                                       |
| 2000ppm MgSO <sub>4</sub>                           | 95                   | 2000ppm MgSO <sub>4</sub> | 97                   | Above-mentioned properties data are minimum |
| 500ppm NaCl   | 30-50                | 2000ppm NaCl              | 85-95                |   |
| 500ppm CaCl <sub>2</sub>                            | 30-50                |                           |                      |   |

DF30 usually used for the organic compound removal from water;  
 DF90 for the removal of heavy metals is more than 99 %, and is mainly used for treatment of MBR waste water.

### Important features:

1. molecular weight cutoffs: 200 ~ 2000Da , the value is between ro membrane and Uf membrane.
2. Organic phase on the surface of membrane : Is usually charged , have Donna effect to different valences of ions, separating property have Ion selectivity.

### Notice :

1. The box used for storage the membranes, should be stored in ordinary temperature and avoid sunlight. If polythene bags are damaged, new protective fluid (Sodium Bisulfite) should be added

to the bag, then sealed to avoid air drying and prevent biological growth.

2. The water need to be discharged one hour before the membrane work.
3. When storage, transportation and systems outage, the membrane element should soak in protective fluid, avoid biology multiplies and getfrozen. Standard storage liquid contains 1% weight Sodium Bisulfite and partial Sodium Bisulfite (food grade). If stored for a short period of time (within a week or a week), a 1% weight Sodium Bisulfite will prevent biological growth.
4. In winter, 10% of propylene glycol antifreeze is added to storage.
5. When the film get wet, it should always be moist.
6. The operating pressure must be equal to or less than the inflow / concentrated water pressure. Back pressure damage does not belong to protective range.