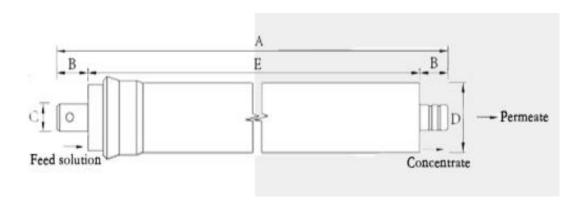
# **Description of NF 4040 Membrane Elements**

### **Element Dimension:**

Unit: Inch (mm) 1 inch= 25.4 mm



型号	А	В	С	D
4040	1016.0 (40.0)	26.7 (1.05)	19.1 (0.75)	100.1 (3.94)

### Specifications:

Model ₽	Permeate Flow GPD(m ³/day) ₽	Active Membrane Area ft²(m²)	Stabilized Salt Rejection Nacl/CaCl2	Operating pressure <i>₽</i> (psi/ <mark>Mpa</mark> ) <i>₽</i>
NF-4040	2400(9.1)	80(7.4)	40-60/>96	70(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	5.4

#### Types and properties of membrane sheet:

**DF30** 

**DF90** 

#### properties

70Psi Recovery rate 15% PH7.5-8 25 $^{\circ}$ C							
Solution	DF30 Removal rate(%)	Solution	DF90 Removal rate(%)	Notes			
2000ppm Mgso <sub>4</sub>	95	2000ppm Mgso <sub>4</sub>	97	Above-ment ioned			
500ppm Nacl	30-50	2000ppm Nacl	85-95	properties			
500ppm Cacl <sub>2</sub>	30-50			data are minimum			

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  $\sim$  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.