

## Technical Specification of Reverse Osmosis Membrane Element

### Introduction

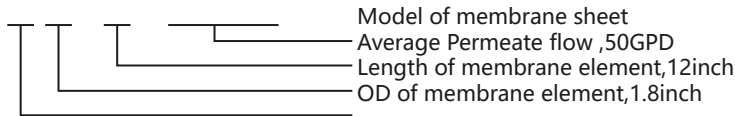
Canature residential RO membrane elements have the characteristics of reliable, consistent and strong anti-pollution and highest quality and suitable for household water purifier, commercial water purifier and hospital and laboratory water purification device.

The tech specification specifies the basic structure, type model, performance, package, transportation, storage and attentions

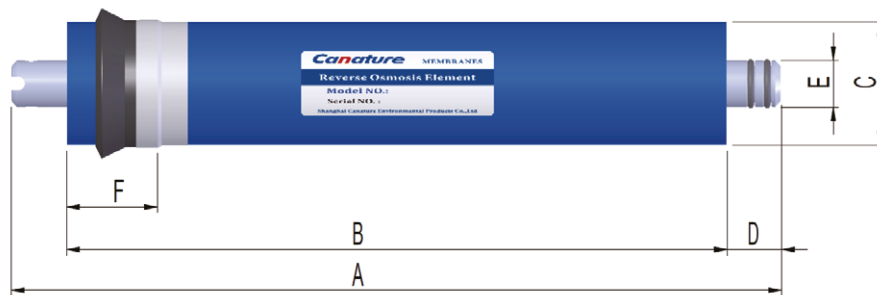
### Product specifications

Example of product type model specification: 1812-50-NPI

18 12 - 50 - NPI or NPD



### Membrane Element Figure



### Membrane Elements Dimensions, mm

Type model	A	B	C	D	E	F	Protective tape	Small tape
1812-50-NPI	298±0.42	256±1	φ42±1	21±1	φ17±0.19	35±1	Blue	White
1809-50-NPI	225.5±0.5	205.5±1	φ45.5±0.5	20±0.5	—	—	Blue	—
1812-75-NPI	298±0.42	256±1	φ45±1	21±1	φ17±0.19	35±1	Blue	White
2012-100-NPI	298±0.42	256±1	φ48.5±1	21±1	φ17±0.19	35±1	Blue	White
2812-200-NPI	298±0.42	256±1	φ67±1	21±1	φ17±0.19	35±1	Blue	White
2812-300-NPI	298±0.42	256±1	φ68±1	21±1	φ17±0.19	35±1	Blue	White
3012-400-NPI	298±0.42	256±1	φ73.5±1	21±1	φ17±0.19	35±1	Blue	White
3012-500-NPI	298±0.42	256±1	φ74±1	21±1	φ17±0.19	35±1	Blue	White
3013-400-NPI	334±0.46	292±1	φ68±1	21±1	φ17±0.19	35±1	Blue	White
1812-50-NPD	298±0.42	256±1	φ42±1	21±1	φ17±0.19	35±1	Blue	White
1812-75-NPD	298±0.42	256±1	φ45±1	21±1	φ17±0.19	35±1	Blue	White
2012-100-NPD	298±0.42	256±1	φ48.5±1	21±1	φ17±0.19	35±1	Blue	White
2812-200-NPD	298±0.42	256±1	φ67±1	21±1	φ17±0.19	35±1	Blue	White
2812-300-NPD	298±0.42	256±1	φ68±1	21±1	φ17±0.19	35±1	Blue	White
3012-400-NPD	298±0.42	256±1	φ73.5±1	21±1	φ17±0.19	35±1	Blue	White
3012-500-NPD	298±0.42	256±1	φ74±1	21±1	φ17±0.19	35±1	Blue	White
3013-400-NPD	334±0.46	292±1	φ68±1	21±1	φ17±0.19	35±1	Blue	White

### Feature of Membrane Sheet

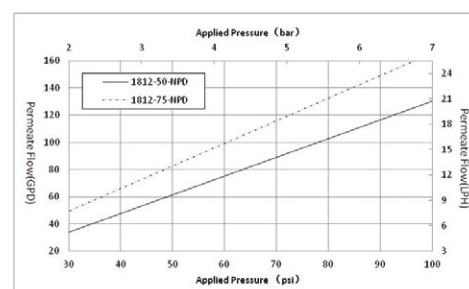
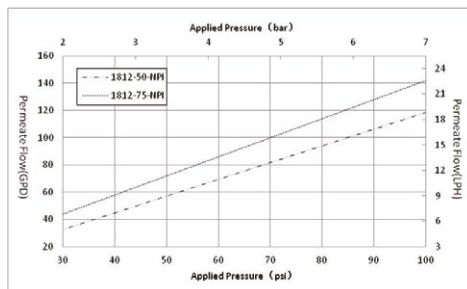
Membrane	Wet membrane /Dry Membrane
Composite membrane	Dry membrane

## Typical Product Performance

Type model	Average Permeate Flow (GPD)	Stabilized Salt Rejection (%)	250ppm,NaCl , prepared with pure water	pH of testing solution	Applied pressure (psi)	Temperature (°C)	Recovery (%)
1812-50-NPI	50	96	250	7	60	25	15
1809-50-NPI	50	96	250	7	60	25	15
1812-75-NPI	75	96	250	7	60	25	15
2012-100-NPI	100	96	250	7	60	25	15
2812-200-NPI	200	96	500	7	100	25	15
2812-300-NPI	300	96	500	7	100	25	15
3012-400-NPI	400	96	500	7	100	25	15
3012-500-NPI	500	96	500	7	100	25	15
3013-400-NPI	400	96	500	7	100	25	15
1812-50-NPD	50	96	250	7	60	25	15
1812-75-NPD	75	96	250	7	60	25	15
2012-100-NPD	100	96	250	7	60	25	15
2812-200-NPD	200	96	500	7	100	25	15
2812-300-NPD	300	96	500	7	100	25	15
3012-400-NPD	400	96	500	7	100	25	15
3012-500-NPD	500	96	500	7	100	25	15
3013-400-NPD	400	96	500	7	100	25	15

Note: Permeate flow for warranty evaluation may vary  $\pm 15\%$ .

## Influence of Pressure on Permeate Flow



## Operating Limits

Maximum Operating pressure ..... 300psi  
 Maximum Operating pressure ..... 45 °C  
 Maximum Inflow SDI<sub>15</sub> ..... 5  
 Free Chlorine Tolerance .....  $\leq 0.1$ ppm  
 pH range, Continuous operating ..... 4-11  
 pH range, Chemical cleaning ..... 2-11.5

## Product Package

RO membrane elements are vacuum packaging with polyethylene bag and have corresponding mark. RO membrane elements and accessories are packaged with fixed number and the packaging box should be marked with product name, type model, quantity, manufacture name, batch number and should be anti-collision.

## Product Transportation and Storage

The effective cushioning material should be used to prevent the membrane element from mechanical damage. The temperature can not be too low or too high during transportation. Strictly prohibit throwing the package during transportation. Membrane elements storage place must be cool and dry, and without direct sunlight. The temperature range of the storage place must be 0-45°C.

## Attentions

Ensure the package seal is in good condition before usage. Keep the membrane elements moist at all times after initial wetting. Rinse the elements for 1hour prior to first use and the first full tank of permeate must be discarded. Do not use this initial permeate for drinking water or food preparation. User is responsible for the impact of the use of incompatible chemicals and lubricants on the membrane elements. If operating limits and guidelines given in this specifications are not strictly followed, the Limited warranty will be null and void.