

# FFM-R2521GBT

Heat sterilized reverse osmosis membrane

## PRODUCT DESCRIPTION

The heat sterilization type reverse osmosis membrane element can withstand the disinfection treatment of hot water. The membrane material is polyamide composite membrane

## Specification Parameter

Membrane Area	Water yield	Stable desalination rate	Minimum desalination
ft <sup>2</sup> (m <sup>2</sup> )	gpd (m <sup>3</sup> /d)	CL%	CL%
14(1.3)	250(0.95)	99.5	99.3

The water yield and desalination rate are based on the test conditions: 2000ppm NaCl, pressure of 10.5Bar, 25 °C, The recovery rate of 2540 / 4040 / 8040 film is 15%, and that of 2521 / 4021 film is 8%. The water yield of a single membrane element will fluctuate within 20%.

## OPERATION PARAMETERS

Maximum operating pressure:	600psi (41.0bar)
Maximum operating temperature:	114° F (45°C)
Maximum heat sterilization temperature::	85°C (1.75bar, 25psi)
Compliance voltage:	15 psi (1.0 bar)
PH range of continuous operation:	2.0-11.0
PH range of online cleaning:	1.0-12

## Important information

**Hot water shall be used for heat stabilization before the first use.**

1. Wash with proper purified water under low pressure and low flow;
2. Use hot water for circulation treatment under very low pressure, the water temperature is less than or equal to 45 °C, the maximum pressure is 45psi (3bar), and the pressure difference on both sides of the membrane must be less than 25psi (1.7bar).
3. Input hot water into the system until the temperature reaches 80 °C
4. When using warm water or hot water with water temperature of 45 °C or higher, the pressure difference on both sides of the membrane must be less than 25psi (1.7bar).
5. Heat preservation for 60-90 minutes.
6. Let the system temperature drop below 45 °C.
7. Wash with proper purified water under very low pressure. At a high pressure of 45psi (3bar), the pressure difference on both sides of the membrane is less than 25psi (1.7bar).

**In the process of start-up, shutdown and cleaning, we recommend to gradually change from static state to running state to avoid sudden pressure or cross flow flow change.**

1. The feed water pressure should gradually rise within the time range of 30-60 seconds.
2. Rise to the design cross flow velocity value should gradually reach within 15-20 seconds.
3. The product water in the first hour should be discharged.

