

TRN10-50C HIGH TEMPERATURE HOT WATER SANITIZATION SPIRAL-WOUND NANOFILTRATION MEMBRANE ELEMENTS

Performance Characteristics

TRN10-50C High Temperature Resistance Nanofiltration Membrane Elements is specially designed for the system that uses hot water sanitization instead of chemicals disinfection, to improve product quality or meet the industrial compliance standards. The membrane can bear the highest temperature of 90°C (194°F). Such membrane elements are suitable for material separation systems of low cross-flow environment, no suspended solids, maximum operating temperature of 50 °C (122 °F). It has stable removal rate of divalent salts, which is suitable for purification and concentration of small molecular materials. The material flow is better due to its wider flow channel. It is the sanitary grade membrane elements and suitable for customers in pharmaceutical, food, cosmetics and other industries, and all components are in line with FDA standards.

Membrane Specifications

Parameters of Membrane Element

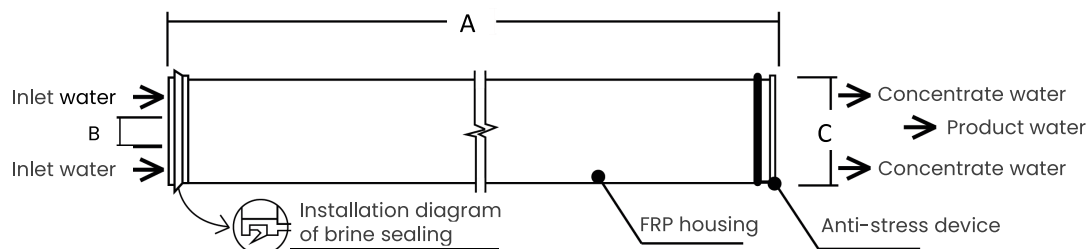
Model	Average Flow Rate gpd (m ³ /d)	Average Salt Rejection %	Test Conditions
TRN10-50C	6800 (25.4)	98.0%	1

Notes: Average desalination rate will be measured after 24 hours operation. Flow fluctuation range of single membrane could be ±25%.

Test condition 1: 2000ppm of MgSO₄ solution, 110psi of operating pressure, 25 °C of temperature, pH=7, 15% recovery rate.

Schematic Diagram and Dimensions

Figure 1



Product model	Connector	Diameter, inch (cm)			Weight (KG)
		A	B	C	
8040	Flat connector	40.00 (101.6)	1.125 (2.85)	7.9 (20.1)	16

➤ Operating Conditions

Product Models	TRN10-50C
Max Operating Pressure	600psi
Typical Operating Pressure	110psi
Pressure Drop Of Single Membrane	<12psi
Recovery Rate	15%
Max Operating Temperature	50°C
Max Cleaning Temperature	50°C
Max Hot Water Sanitization Temperature	90°C
Continuous Working PH Range	3.0-9.0
Cleaning PH Range	2.0-11.5
Max Allowable Residual Chlorine	500ppm-h
Inlet Water	NTU<1, SDI<5

➤ Storage Conditions

- ☑ Before the first use, all membrane elements must be stored under the original packaging conditions.
- ☑ The transport temperature below 0°C may cause irreversible membrane damage, on the contrary, above 30°C may cause membrane degradation and deterioration of the protection solution.
- ☑ Store in a cool, dry condition and the place where is not directly exposed to sunlight. Storage temperature is kept between 0°C to 30°C, and the longest storage time is 6 months.

➤ General Information

- ☑ Once wetted, the membrane element must always be wet.
- ☑ The limited warranty we promised will expire due to the fact that the user does not strictly follow the operational restrictions and guidelines set forth in this Code.
- ☑ If the system is in a shut down state for a long time, the membrane element is advised to be placed in the protective solution to prevent the growth of microorganisms.
- ☑ If the user uses incompatible chemicals and lubricants to cause improper influence on the membrane elements, the user shall bear the corresponding responsibilities.
- ☑ The maximum allowable pressure drop of single pressure vessel is 60 psi (4.1bar).
- ☑ At no time can the back pressure be produced on the side of producing water to avoid the occurrence of bad problems.