

# TRO10-50C HIGH TEMPERATURE HOT WATER SANITIZATION SPIRAL-WOUND RO MEMBRANE ELEMENT

## Performance Characteristics

TRO10-50C high temperature resistance RO membrane element 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. It can bear the highest temperature of 90 °C (194 °F). Such membrane element is suitable for water purification and separation systems of low cross-flow environment, no suspended solids, operating temperature less than 50 °C (122 °F). It has the largest water yield among all the hot water sanitization membrane elements with wider flow channel to make a better fluidity of high temperature materials. It is the sanitary grade membrane element 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

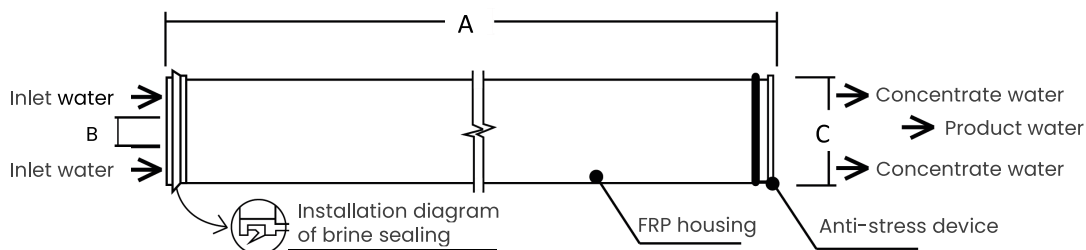
Model	Average Flow Rate gpd(m <sup>3</sup> /d)	Average Salt Rejection %	Test Conditions
TRO10-50C	11500 (43.5)	99.0%	1

**Notes:** Average salt rejection is tested after 24 hours operation. Fluctuation range of single membrane flow rate could be ±25%.

**Test condition 1:** 2,000 ppm NaCl solution, 225 psi operating pressure, 25 °C temperature, pH7, 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

<b>Product model</b>	TRO10-50C
<b>Max. operating pressure</b>	600psi
<b>Typical operating pressure</b>	225psi/115psi
<b>Pressure drop of single membrane element</b>	<12psi
<b>Recovery rate</b>	15%
<b>Max. operating temperature</b>	50°C
<b>Max. cleaning temperature</b>	50°C
<b>Max.hot water sanitization temperature</b>	90°C
<b>Continuous working PH range</b>	4.0-11.0
<b>Cleaning PH range</b>	2.0-11.5
<b>Max. allowable residual chlorine</b>	500ppm-h
<b>Inlet water</b>	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.