



# DELEMIL-TRNF-S SERIES

## High Temperature Resistance NF Membrane

In order to improve product quality or meet industry regulatory standards, TRNF-S (Temperature Resistance Nanofiltration) Series Membrane elements are specially designed for systems that utilize hot water sterilization to avoid the use of chemical disinfection methods, for its highest resistance of temperature is 90°C (194°F). It is suitable for water purification separation system with low cross-flow condition, no suspended solids, and working temperature up to 50°C (122°F). It is the sanitary grade membrane elements and suitable for customers in pharmaceutical, food, cosmetics and other industries.

### Membrane Parameter

Product Models	Average Flow Rate GPD (m <sup>3</sup> /d)	Average Rejection Rate %
TRNF-S 01	2450 (9.3)	96%
TRNF-S 10	10300 (39.0)	96%

Note: The average desalination rate is tested after 24 hours operation.

Flow fluctuation range of single membrane could be +25%.

Test Condition: 2000mg/LMgSO<sub>4</sub> solution, 110 psi operating pressure, 25°C temperature, 15% recovery rate.

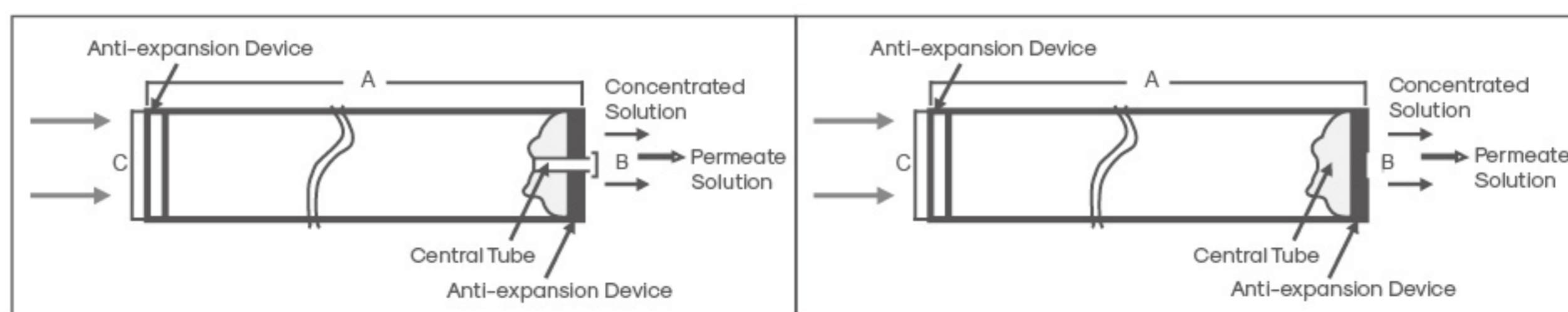
### Parameters of Membrane Operating and Cleaning

Product Models	Max Operating Pressure	Pressure Drop of Single Membrane	Recovery Rate	Max Operating Temperature
TRNF-S Series	1200psi	<12psi	15%	50°C
Max Cleaning Temperature	PH Range of Continuous Working	PH Range of Cleaning	Allowable Max Contents of Residual Chlorine	Inlet Water
50°C	4.0-11.0	2.0-11.5	500ppm-h	NTU <1 SDI < 5

### Typical Application

- Waste concentrated water recovery in sugar decolorizing
- Sulfate removal in the chlor-alkali industry
- Separation of monosaccharide and disaccharide
- Sugar fractionation
- Concentration of peptides and proteins in cooking liquor such as sea cucumber
- Desalination of whey protein
- Juice concentration
- Concentration of antibiotics

### Membrane Schematics



Male Joint Membrane with ATD

Flat Joint Membrane with ATD

### Specifications and Parameters

Specifications	Joint	Diameter Inch (cm)			Package Weight (kg)
		A	B	C	
2540	Male Joint	40.00 (101.6)	0.75 (1.9)	2.4 (6.1)	3
4040	Male Joint	40.00 (101.6)	0.75 (1.9)	3.9 (9.9)	4
8040	Flat Joint	40.00 (101.6)	1.125 (2.85)	7.9 (20.1)	16

Special Notes:

- All membrane components are packed under the dry/semi-dry conditions;
- Each membrane element is equipped with an accessory kit, fitted with a connector and 4 O-rings.

### Storage Conditions

- Before the first use, all membrane elements must be stored under the original packaging conditions.
- The membrane is best placed in the original packaging and opened before the using of water treatment system.
- The transport temperature below 0°C may cause irreversible membrane damage, and the transport temperature 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 or artificial lighting. Storage temperature stays at 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.
- It is the user's responsibility if use an incompatible chemical and lubricant, and cause undue influence on the original.
- The maximum allowable pressure drop of single pressure vessel is 60 psi (4.1bar).
- At no time can the backpressure be produced on the side of producing water to avoid the occurrence of harmful problems.