

# TAPU4040-HS

Nanofiltration membrane elements for municipal water application - Tapurim Series

## Product Presentation

Organics, microbes, viruses and most of metal ions with two or higher valence can be filtered by Tapurim Series NF element, while part of sodium, potassium, calcium, magnesium ions, etc. can be retained in the permeated water.

TAPU-HS Element has a rejection rate at 80-95% for chlorides, applicable to the rejection of organic and inorganic matters in mid and high-salinity raw water.

## Application

© The production of drinking water, such as: municipal waterworks, rural area drinking water projects, etc.

## Product Performance

| Model       | Stable Rejection Rate(%) | Permeate Flow GPD(m <sup>3</sup> /d) | Active Membrane Area ft <sup>2</sup> (m <sup>2</sup> ) | Feed Spacer Thickness mil |
|-------------|--------------------------|--------------------------------------|--|---------------------------|
| TAPU4040-HS | 95                       | 1700(6.4)                            | 85(7.9)  | 34-LD                     |

1. Operating pressure 70 psi (0.48 MPa) Tested in mixed solution of NaCl, MgSO<sub>4</sub> and CaCl<sub>2</sub> Temperature at 25°C pH 7.0 ± 0.5 Recovery rate at 15%
2. Each membrane element may have ±20% variation of permeate flow.
3. TOC removal rate is more than 90 %.

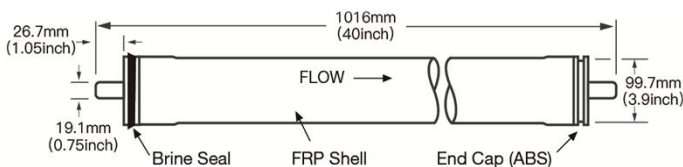
## Operating Conditions & Limits

|   |           |
|---|-----------|
| Maximum operating pressure psi(MPa)         | 600(4.14) |
| Maximum feedwater temperature °C            | 45        |
| Maximum inlet flow rate m <sup>3</sup> /h   | 3.6       |
| Maximum concentration of free chlorine mg/L | 0.1       |
| Maximum pressure drop per element psi(MPa)  | 15(0.1)   |
| Allowed pH range for feedwater in operation | 3-10      |
| Allowed pH range for chemical cleaning      | 2-12      |
| Maximum feedwater flow SDI15                | 5         |

## Important information

- Before the membrane element leaves the factory, The dry membrane element has no preservation solution, The wet membrane element has 1.0% sodium bisulfite (in winter, add 10% of propylene glycol antifreeze) as the preservation solution for storage treatment and use vacuum packaging.
- Dry membrane elements should always be maintained wet after Soaking; when wet membrane elements are not used for a long time, preservation solution is needed to soak the elements.
- When the membrane element is used for the first time, it is recommended to flush it first for 15-25 minutes at low pressure (not suitable for soaking or soaking overnight), and then flush it for 60-90 minutes at high pressure (the water flow should not be less than 50% of the system design water flow).
- The permeate water and concentrated water within the first hour of the initial operation of the membrane element should all be discharged.
- The operating limits and operational guidelines given in this technical information are part of the limitations of the three-year warranty on the membrane element.
- The addition of any chemicals that may affect the membrane element during storage and operation is prohibited, and Vontron Technology will not be liable for any consequences arising from the use of such chemicals.
- Please refer to the Product Manual for details on installation, commissioning, storage, and transportation of membrane elements.

## Dimensions and Packaging



Packing carton:(L:W:H)  
1079×117×127mm

Connector material number:  
3.02.09.0003



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