

## Hollow Fiber Nanofiltration Membrane

### NÜF® N80-6040 NF element

#### Feature

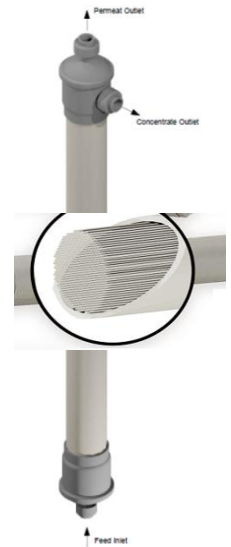
With breakthroughs in membrane materials and element structure, Ochemate Advanced Material Technologies Co. Offers NÜF® N80-6040 nanofiltration membrane elements with hollow fiber structure for industrial and municipal application. NÜF® N80-6040 has super-high permeability under extremely low pressure and provides unique comprehensive advantages for industrial and municipal users.

- High hardness removal, high efficient toxic metals removal such as copper, cadmium, chromium, lead, mercury, antimony and arsenic.
- High removal rate of organic matter, efficient removal for small molecular organic matter (such as antibiotics, endocrine disruptor, etc.) and reduce COD in water.
- Under 3.0 bar operating pressure, the membrane flux can exceed 30 LMH. Compared with the competitors, N80-6040 has 35% lower operation pressure under the same flux.
- Outside-in structure of NÜF® N80-6040 makes elements high anti-fouling and easy to clean.

Hollow fiber nanofiltration membrane NÜF® N80-6040 NF element can efficiently remove hardness and achieve partial desalination for industrial applications. For municipal application, NÜF® N80-6040 NF element can efficiently remove hardness, sulfate, fluoride, heavy metals, small organic molecule and PPCPs to ensure the safety of water supply. Compare with competitors, NÜF® N80-6040 NF element has higher flux, lower energy consumption, high fouling resistance and is easy to clean.

NÜF® N80-6040 NF element has the typical characteristics of all NÜF® product series:

- Unique hollow fiber structure.
- Low operating pressure, high permeate flux.



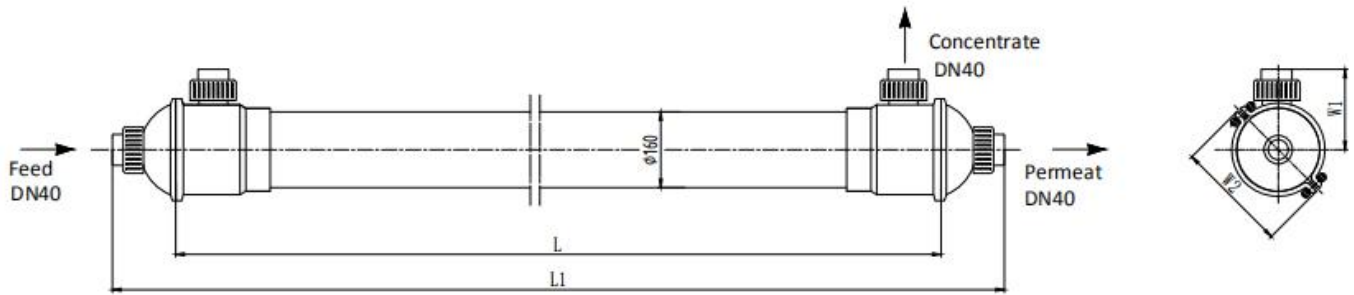
**Product Types** TFPF integrated film forming technology & modified polyamide as base material.

**Product Specifications**

Product	Active area (m <sup>2</sup> )	Applied pressure		Permeate flow rate		Stabilized salt rejection (%)
		(psig)	(MPa)	(gpd)	(L/min)	
N80-6040	40	45	0.31	6350~8000	24~30	MgSO <sub>4</sub> ≥ 90% CaCl <sub>2</sub> ≥ 60% NaCl ≤ 25%

- Test Standard of Permeate flow rate and salt rejection rate:  
 45psi (0.31MPa), 2000ppm MgSO<sub>4</sub>, 15% recovery rate, 25°C.  
 45psi (0.31MPa), 250ppm CaCl<sub>2</sub>, 15% recovery rate, 25°C.  
 45psi (0.31MPa), 250ppm NaCl, 15% recovery rate, 25°C.
- Permeate flow of single element may be different and vary +/-20%.
- The above specification values are nominal test values. When operating, please follow the design guidelines of NÜF® membrane system.

**Element Dimensions**



Dimensions (mm)	L	L1	D	W1	W2
N80-6040	1150	1418	$\phi 160$	170	260

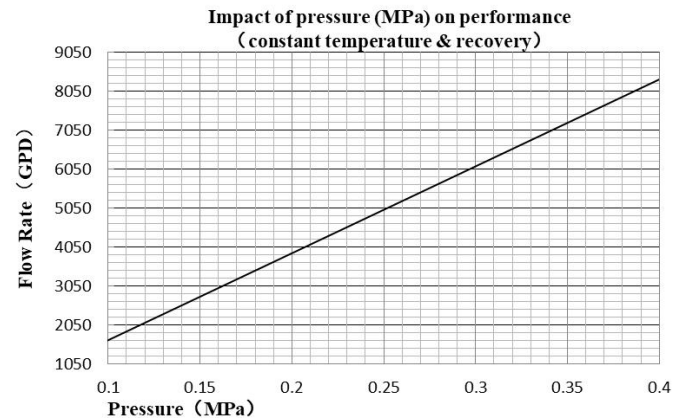
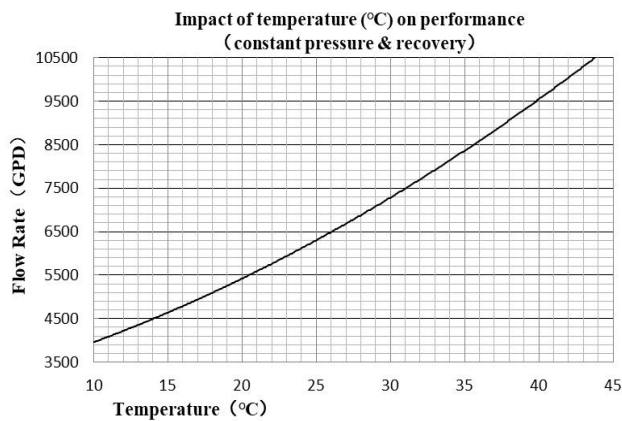
Commercial NÜF® N80-6040 NF elements can be used without pressure vessels.

**Guidelines**

Recommended operating temperature	5°C ~ 45°C (113°F)
Recommended operating pressure	0.1 ~ 0.4 MPa (58 psi)
Recommended operating pH range	4 ~ 10
Feed water SDI <sub>15</sub>	<5
Recommended feed water residual chlorine	<0.1 ppm

\* Note: The tolerance range of pH is a parameter at 25 °C.  
 When the temperature increase, the tolerance range will narrow.

## Other Information



\* Note: High operating flux can be obtained at very low operating pressure.

## General Information

- At the first use, it is suggested that rinse the protective agent from NÜF® membrane through connecting water for one hour. Please discharge the permeate water from this one hour.
- Membrane elements should always be kept moist after initial use.
- Membrane elements have a short-term resistance to free chlorine and other oxidants. Long-term contact may lead to damage of membrane fibers. Continuous exposure of membrane components to free chlorine or other oxidants should be avoided.
- Back pressure on the permeate side should be avoided at all times.

## Operation Guidelines

- In order to ensure the normal use of NÜF® membranes and avoid damage, the regulations on packaging, transportation and storage of NÜF® membranes should be strictly observed. Sudden pressure changes should be avoided during start-up, shutdown, cleaning and other processes to prevent damage to the membrane.
- Before starting the system, the membrane pretreatment, membrane module installation, piping, valves, instrumentation and other systems should be checked.
- The system with NÜF® elements should be started correctly, and the correct start-up procedure should be followed. NÜF® membrane system should be flushed before start-up to remove transportation protective agent.
- The automatic operation, cleaning and shutdown of the NÜF® membrane system should comply with the corresponding procedures and operating specifications.
- For more details, please refer to the product technical manual.

**Important Notes**

Limited warranty of products will be invalid if the operation requirements in this specification and product technical manual are not strictly observed.

**Please contact your Ochemate Representative for more information, and to discuss any other options that may benefit or be required for your NÜF® application.**

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