NF1A-PHT DATA SHEET

Product Description

Membrane material	TFC polyamide
MWCO	150 - 200 Da
Outer wrap	Net
Permeate Tube/ATD	PS
Application	Gelatin Concentration
Feature	High resistance to pH and temperature

Membrane Characteristics

Product	Water Flux(LMH)	Salt Rejection($MgSO_4$)	Salt Rejection(NaCl)
NF1A-PHT	30	≥99%	/

Test Condition: 1) 2,000 ppm $MgSO_4$, 110 psi(7.6 bar), 77°F (25°C), 15% recovery.

2) The flux of one element may vary in the range of ± 25%.

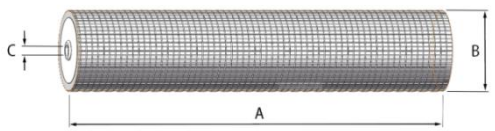
Product Specifications

Model	Membrane area (ft^2/m^2)	
	Spacer 30 mil	Spacer 45 mil
8340	425(39.5)	330(30.7)
8338	425(39.5)	330(30.7)
8038	382(35.5)	314(29.2)
6438	226(21.0)	185(17.2)
6338	226(21.0)	185(17.2)
4338	95(8.8)	79(7.3)
3840	75(7.0)	59(5.5)
3838	75(7.0)	59(5.5)
2538	28(2.6)	20(1.9)

Operating and Design Information

Typical Operating Pressure	70-200 psi (4.8-13.8 bar)
Maximum Operating Pressure	600 psi (41.4 bar)
Maximum Temperature	Continuous Operation: 60°C (140°F) Clean-In-Place (CIP): 50°C (122°F)
Allowable pH	Continuous Operation: 4-10 Clean-In-Place (CIP): 2-11
Maximum Pressure Drop	15 psi (1.0 bar) Per Element

Nominal Dimensions



Products	Dimensions-(in/mm)		
	A	B	C
NF1A-PHT-8340-30/45-C-1125	40(1016)	8.3(210.8)	1.125(28.58)
NF1A-PHT-8338-30/45-C-1125	38(965)	8.3(210.8)	1.125(28.58)
NF1A-PHT-8038-30/45-C-1125	38(965)	7.9(200.7)	1.125(28.58)
NF1A-PHT-6438-30/45-C-1139	38(965)	6.4(162.6)	1.139(28.93)
NF1A-PHT-6338-30/45-C-1139	38(965)	6.3(160.0)	1.139(28.93)
NF1A-PHT-4338-30/45-C-0830	38(965)	4.3(109.2)	0.830(21.08)
NF1A-PHT-3840-30/45-C-0830	38.8(984)	3.8(96.5)	0.830(21.08)
NF1A-PHT-3838-30/45-C-0830	38(965)	3.8(96.5)	0.830(21.08)
NF1A-PHT-2538-30/45-C-0830	38(965)	2.4(61.0)	0.830(21.08)

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NF1A-PHT	30	≥99%	/

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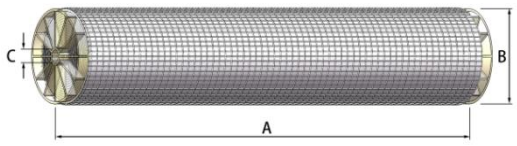
Product Specifications

Model	Membrane area (ft^2/m^2)	
	Spacer 30 mil	Spacer 45 mil
8040	382(35.5)	307(28.5)
4040	75(7.0)	67(6.2)
2540	28(2.6)	23(2.1)
1812	4(0.35)	3(0.28)

Operating and Design Information

Typical Operating Pressure	70-200 psi (4.8-13.8 bar)
Maximum Operating Pressure	600 psi (41.4 bar)
Maximum Temperature	Continuous Operation: 60°C (140°F) Clean-In-Place (CIP): 50°C (122°F)
Allowable pH	Continuous Operation: 4-10 Clean-In-Place (CIP): 2-11
Maximum Pressure Drop	15 psi (1.0 bar) Per Element

Nominal Dimensions



Products	Dimensions-(in/mm)		
	A	B	C
NF1A-PHT-8040-30/45-C-1125	40(1016)	7.9(200.7)	1.125(28.58)
NF1A-PHT-4040-30/45-C-0750/0625	40(1016)	3.9(99.1)	0.750(19.05)/0.625(15.88)
NF1A-PHT-2540-30/45-C-0750	40(1016)	2.4(61.0)	0.750(19.05)
NF1A-PHT-1812-30/45-C-0620	12(305)	1.75(44.5)	0.620(15.75)

Important information

• New spiral membranes must be cleaned prior to first use. The cleaning procedure should be in accordance with the instructions provided in the HMCT cleaning description for the spiral membrane concerned.

• The customer is fully responsible for the effects that any incompatible chemicals may have on the spiral membranes.

• After initial wetting, the spiral membranes must be kept moist at all times.

• If the operating specifications provided in this product description are not strictly followed, the limited warranty will be null and void.

•To prevent biological growth during system shutdowns, HMCT recommends that spiral membranes should be immersed in a protective solution.

• Avoid permeate-side back pressure at all times.

• HMCT recommends using a rigid stainless steel ATD end device at the housing outlet end.

• HMCT recommends that the inner diameter of the housing should be approx. 2 mm (0.08”) bigger than the outer diameter of the spiral membrane.

• For storage conditions, please see Storage document.

• For warranties, please see spiral membrane warranty document.

Operating guidelines

HMCT recommends the following start-up procedure from standstill to operating condition:

• The unpressurized plant should be refilled with water.

• Feed pressure should be gradually increased over a 30–60 second time scale.

• Before initiating cross-flow at high permeate flux condition (start-up with high-temperature water) the set feed pressure should be maintained for 5–10 minutes.

• Cross-flow velocity at the set operating point should be gradually achieved over a period of 15–20 seconds.

• Temperature variations should be implemented gradually over a period of 3–5 minutes.

• Avoid any abrupt pressure or cross-flow variations on the membranes during start-up, shutdown, cleaning or other sequences in order to prevent possible damage.

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