

## DairyNF1 Membrane Series

### Product Description

**Membrane material:** PA

**MWCO:** 150-300D

**Outer wrap:** Net

**Application:** Whey desalination

**Spacer:** 31mil or 46 mil

**Feature:** Conform to 3A Standard

### Membrane Characteristics

Product	Water Flux LMH	Salt Rejection /MgSO4	Salt Rejection /NaCl
Dairy NF1	35	>98%	/

Test Condition: 2000 mg/L MgSO4,110 psi(0.76Mpa),77°F (25°C),pH 8,15% recovery.

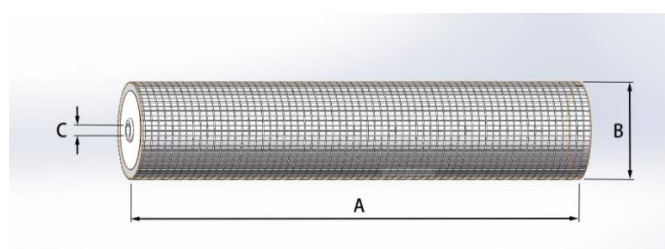
### Product Specifications

Model	Spacer (mil)	Membrane area (ft2/m2)	Outer wrap
3838	31	75 (7.0)	Net
3840	31	77 (7.2)	Net
	46	60 (5.6)	
8038	31	310 (32.5)	Net
	46	260 (24.2)	
8040	31	310 (32.5)	Net
	46	260(24.2)	

# Operating and Design Information

<b>Maximum Pressure Drop</b>	70-400PSI
<b>Chlorine Tolerance</b>	600PSI
<b>Maximum Feed Turbidity</b>	Operation: 50°C
	Cleaning: 85°C
<b>Maximum Feed SDI (15 minutes)</b>	Continuous Operation: 3-9
	Chemical Cleaning: 2-10.5
<b>Maximum Pressure Drop</b>	<15psi
<b>Chlorine Tolerance</b>	500ppm/h,dechlor is recommended
<b>Maximum Feed Turbidity</b>	<1NTU
<b>Maximum Feed SDI (15 minutes)</b>	<5

## Nominal Dimensions



Products	Dimensions-(in/mm)		
	A	B	C
Dairy NF1-3838-31-C-0830	38 (965)	3.8 (97)	0.83 (21)
Dairy NF1-3840-31/46-C-0830	38.75 (984)	3.8 (97)	0.83 (21)
Dairy NF1-8038-31/46-C-1139	38 (965)	7.9 (200)	1.125 (28.6)
Dairy NF1-8040-31-C-1125	40 (1016)	7.9 (200)	1.125 (28.6)

## DairyNF2 Membrane Series

### Product Description

**Membrane material:** PA

**MWCO:** 150-300D

**Outer wrap:** Net

**Application:** Lactose desalination

**Spacer:** 31mil or 46 mil

**Feature:** Conform to 3A Standard

### Membrane Characteristics

Product	Water Flux LMH	Salt Rejection /MgSO4	Salt Rejection /NaCl
Dairy NF2	45	>96%	/

Test Condition: 2000 mg/L MgSO4, 110 psi (0.76Mpa), 77°F (25°C), pH 8, 15% recovery.

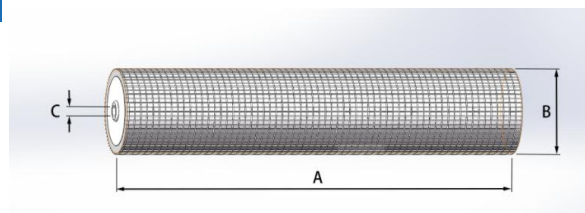
### Product Specifications

Model	Spacer (mil)	Membrane area (ft <sup>2</sup> /m <sup>2</sup> )	Outer wrap
3838	31	75 (7.0)	Net
3840	31	77 (7.2)	Net
	46	60 (5.6)	
8038	31	310 (32.5)	Net
	46	260 (24.2)	
8040	31	310 (32.5)	Net
	46	260(24.2)	

# Operating and Design Information

<b>Typical Operating Pressure</b>	70-400PSI
<b>Maximum Operating Pressure</b>	600PSI
<b>Maximum Temperature</b>	Operation: 50°C
	Cleaning: 85°C
<b>Allowable pH</b>	Continuous Operation: 3-9
	Chemical Cleaning: 2-10.5
<b>Maximum Pressure Drop</b>	<15psi
<b>Chlorine Tolerance</b>	500ppm/h, dechlor is recommended
<b>Maximum Feed Turbidity</b>	<1NTU
<b>Maximum Feed SDI (15 minutes)</b>	<5

# Nominal Dimensions



型号	尺寸-(in/mm)		
	A	B	C
Dairy NF2-3838-31-C-0830	38 (965)	3.8 (97)	0.83 (21)
DairyNF2 -3840-31/46-C-0830	38.75 (984)	3.8 (97)	0.83 (21)
Dairy NF2-8038-31/46-C-1139	38 (965)	7.9 (200)	1.125 (28.6)
DairyNF2-8040-31-C-1125	40 (1016)	7.9 (200)	1.125 (28.6)

## Important information

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- 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.
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## Operating guidelines

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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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