

## **DairyRO-Polisher Membrane Series**

# **Product Description**

Membrane material: PA

**MWCO:** 100D

Outer wrap: Net

Application: Recovery of evaporator concentrate and

RO/NF permeate

Spacer: 31 mil

Feature: Conform to Sanitary Standard

# **Membrane Characteristics**

Product	duct Water Flux LMH		Salt Rejection /NaCl	
DairyRO-Polisher	35	/	>99.5%	

Test Conditions: 2000 mg/L NaCl,225 psi(1.55Mpa),77°F (25°C),pH 8,15% recovery.

#### **Product Specifications**

Model	Spacer (mil)	Membrane area	Outer wrap
2540	31	16 (1.5)	Net
4040	31	75 (7.0)	Net
8040	31	310 (32.5)	Net

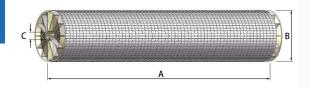
## **CIP Operation Conditions**

Temperature	Minimum PH	Maximum PH
50°C (122°F)	2.0	11.5
45°C (113°F)	1.5	11.5
35°C (95°F)	1.5	11.5
25°C (77°F)	1.0	12.0

### **Operating and Design Information**

<b>Typical Operating Pressure</b>	200-500PSI		
Maximum Operating Pressure	600PSI		
Maximum Temperature	Operation: 50°C		
	Cleaning: 85°C		
Maximum Pressure Drop	<15psi		
Chlorine Tolerance	1000ppm/h,dechlor is recommended		
Maximum Feed Turbidity	<1NTU		
Maximum Feed SDI (15 minutes)	<5		

### **Nominal Dimensions**



Products	Dimensions-(in/mm)			
Froducts	A	В	C	D
DairyRO-Polisher- 2540-31-C-0750	40 (1016)	36.5 (927)	2.4 (61)	0.75 (19.05)
DairyRO-Polisher - 4040-31/46-C-0625	40 (1016)	38.5 (978)	3.9 (99)	0.625 (15.8)
DairyRO-Polisher-8040-31/34/46-C-1125	40 (1016)	38 (965)	7.9 (200.1)	1.125 (28.6)

#### 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.

