Dairy MF-PES DATA SHEET

Product Description

Membrane material	PES
MWCO	0.1/0.2 μm
Outer wrap	Net
Application	Remove fat, Brine clarification, Remove microbes
Feature	Conform to 3-A, FDA, and USDA sanitary standards

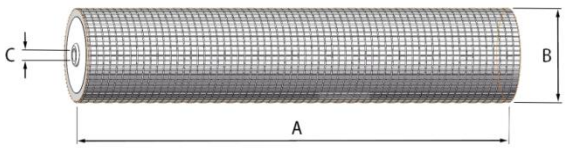
Product Specifications

Model	**Membrane area (ft^2/m^2)**		
	Spacer 30 mil	**Spacer 45 mil**	**Spacer 65 mil**
8340	425(39.5)	330(30.7)	252(23.4)
8338	425(39.5)	330(30.7)	252(23.4)
8038	339(31.5)	276(25.6)	221(20.5)
6438	216(20.1)	177(16.4)	132(12.3)
6338	216(20.1)	177(16.4)	132(12.3)
4338	95(8.8)	79(7.3)	48(4.5)
3840	75(7.0)	59(5.5)	42(3.9)
3838	75(7.0)	59(5.5)	42(3.9)
2538	27(2.5)	19(1.8)	N/A

Operating and Design Information

Typical Operating Pressure	15-45 psi(1.0-3.1 bar)
Maximum Operating Pressure	116 psi(8.0 bar)
Maximum Temperature	Continuous Operation: 55℃(131℉) Clean-In-Place(CIP): 50℃(122℉)
Allowable pH	Continuous Operation: 2-10(<35℃), 3-9(<55℃) Chemical Cleaning: 2-11
Maximum Pressure Drop	15 psi (1.0 bar) Per Element 60 psi (4.1 bar) Per Vessel (4 in series)

Nominal Dimensions



Products	**Dimensions-(in/mm)**		
	A	**B**	**C**
Dairy MF-PES-8340-30/45/65-C-1139	40(1016)	8.3(210.8)	1.139(28.93)
Dairy MF-PES-8338-30/45/65-C-1139	38(965)	8.3(210.8)	1.139(28.93)
Dairy MF-PES-8038-30/45/65-C-1139	38(965)	7.9(200.7)	1.139(28.93)
Dairy MF-PES-6438-30/45/65-C-1139	38(965)	6.4(165.6)	1.139(28.93)
Dairy MF-PES-6338-30/45/65-C-1139	38(965)	6.3(160.0)	1.139(28.93)
Dairy MF-PES-4338-30/45/65-C-0830	38(965)	4.3(109.2)	0.830(21.08)
Dairy MF-PES-3840-30/45/65-C-0830	38.8(984)	3.8(96.5)	0.830(21.08)
Dairy MF-PES-3838-30/45/65-C-0830	38(965)	3.8(96.5)	0.830(21.08)
Dairy MF-PES-2538-30/45-C-0830	38(965)	2.4(61.0)	0.830(21.08)

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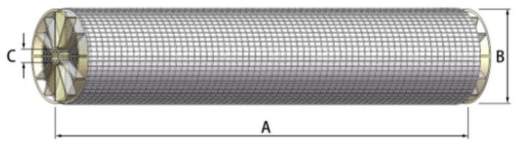
Product Specifications

Model	Membrane area (ft^2/m^2)		
	Spacer 30 mil	**Spacer 45 mil**	**Spacer 65 mil**
8040	349(32.4)	283(26.3)	216(20.1)
4040	75(7.0)	67(6.2)	46(4.3)
2540	27(2.5)	20(1.9)	N/A
1812	3.2(0.3)	2.7(0.25)	N/A

Operating and Design Information

Typical Operating Pressure	15-45 psi(1.0-3.1 bar)
Maximum Operating Pressure	116 psi(8.0 bar)
Maximum Temperature	Continuous Operation: 55°C(131°F) Clean-In-Place(CIP): 50°C(122°F)
Allowable pH	Continuous Operation: 2-10(<35°C), 3-9(<55°C) Chemical Cleaning: 2-11
Maximum Pressure Drop	15 psi (1.0 bar) Per Element 60 psi (4.1 bar) Per Vessel (4 in series)

Nominal Dimensions



Products	Dimensions-(in/mm)		
	A	**B**	**C**
Dairy MF-PES-8040-30/45/65-C-1125	40(1016)	7.9(200.7)	1.125(28.58)
Dairy MF-PES-4040-30/45/65-C-0750/0625	40(1016)	3.9(99.1)	0.750(19.05)/0.625(15.88)
Dairy MF-PES-2540-30/45-C-0750	40(1016)	2.4(61.0)	0.750(19.05)
Dairy MF-PES-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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