FFM-N3839-200

FFM Nanofiltration Membranes precision ion separation for dairy demineralization (lactose/whey processing) and beverage polishing. With multiple feed channels, high divalent ion rejection, low-energy operation, and scaling resistance-ensuring sustainable performance in heat-sensitive food applications.

Performance Parameters

Membrane Material:	PES
Structure:	Sanitary Spiral-Wound Mesh Design
Effective Retention Accuracy:	200 Dalton
Mesh Support:	Fixed and Adjustable

Item	31 mil	46 mil
Salt rejection ($MgSO_4$)	99.0%	99.0%
Maximum Permeate Flow	1200 gpd (4.5 m^3/d)	980 gpd (3.7 m^3/d)
Standard Permeate Flow	900 gpd (3.4 m^3/d)	720 gpd (2.7 m^3/d)
Minimum Permeate Flow	600 gpd (2.3 m^3/d)	480 gpd (1.8 m^3/d)

Test conditions: 5000 mg/L $MgSO_4$ Solution
77 F(25℃) Operating Temperature
95 psi (0.655Mpa) Applied Pressure
15% Permeate Recovery
7.5 pH Range

*Single-element water outlet tolerance: ±20% (standard conditions).

Product Specifications

Dimensions-inches(mm)		
L	L1	L2
38.0(965)	0.83(21.1)	3.8(96)

Active Membrane Area-ft^2(m^2)		
28 mil	31 mil	46 mil
/	76(7.1)	61(5.7)

Operation Parameters

Recommended Operating Temperature:	41-122°F (5-50°C)
Maximum Operating Pressure:	650 psi (4.48 Mpa)
Recommended Operating Pressure:	200-450psi (1.38-3.10 Mpa)
Cleaning Operating Temperature:	95-122°F (35-50°C)
pH Range,Continuous Operation:	4.0-10.0(25°C)
pH Range, Ceb:	1.8-11.0(25°C)
Design Pressure Drop per Membrane Element:	6-10 psi (0.04-0.07 Mpa)
Design Pressure Drop per Membrane Housing (5 Elements in Series):	6-10 psi (0.04-0.07 Mpa)

*For specialized applications or customized solutions, please contact FFM Inc. directly.