

FFM-N3839-800

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: | 800 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°C) 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.