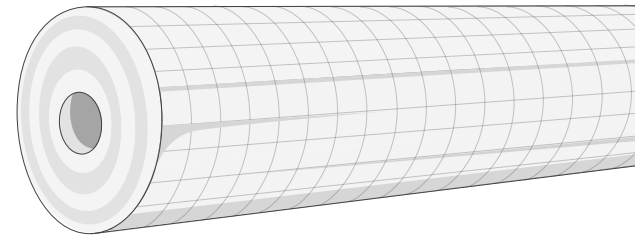




Evolution

SF Membrane



Productivity Gains from Shorter Cleaning

ZwitterCo Evolution SF sanitary anti-fouling membranes are powered by zwitterions, using proprietary zwitterionic chemistry that creates an extremely hydrophilic surface to repel organic foulants and prevent the adhesion of proteins, fats, carbohydrates, and other organic compounds. Superfiltration membranes combine the best features of ultrafiltration and nanofiltration membranes, offering excellent performance in high-solids applications with the ability to fully restore performance with faster, easier cleaning.

Main Benefits

Reduce cleaning time by 1 hour or more per day

Higher operating flux at high-solids operation

Reduce cleaning costs by over 50%

Ideal Applications

High-solids protein concentration

Feed stream with high fat content

NF replacement for protein concentration

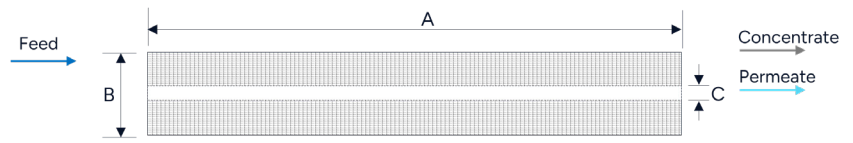
Regulatory Status

FDA compliant for whey and milk processing. Contact ZwitterCo regarding other applications.

Product Specifications

Element Size	Membrane Area			
	30 mil spacer ft ² (m ²)	46 mil spacer ft ² (m ²)	65 mil spacer ft ² (m ²)	80 mil spacer ft ² (m ²)
8038	370 (34.3)	290 (26.9)	225 (20.9)	190 (17.7)
7838	350 (32.5)	275 (25.5)	220 (20.4)	180 (16.7)
6438	240 (22.3)	190 (17.6)	140 (13)	115 (10.7)
6338	240 (22.3)	190 (17.6)	140 (13)	115 (10.7)
3838	75 (6.9)	59 (5.4)	47 (4.3)	n/a

Contact ZwitterCo if your application requires a different configuration not listed.



Dimensions in. (mm)

Size	8038	7838	6438	6338	3838
A Element Length in (mm)	38 (965)	38 (965)	38 (965)	38 (965)	38 (965)
B Element Diameter in (mm)	7.9 (201)	7.7. (197)	6.4 (161)	6.3 (159)	3.8 (96)
C Permeate Tube Diameter in (mm)	1.138 (28.9)	1.138 (28.9)	1.138 (28.9)	1.138 (28.9)	0.83 (21.1)

Operating Specifications

Max Operating Pressure - psi (bar)	580 (40)
Typical Operating Pressure - psi (bar)	72 –145 (5 – 10)
Max Pressure Drop (per element) – psi (bar)	15 (1)
Max Pressure Drop (per vessel) – psi (bar)	60 (4)
Max Operating Temp - °C (°F)	55 (131)
Max Cleaning Temp - °C (°F)	50 (122)
pH Range: Continuous Operation	2-11
pH Range: Cleaning	1-12
Typical Chlorine During Cleaning at pH 10.8-11.2 and <122°F (50°C)	150 - 180 ppm

Operating Information

- ZwitterCo Evolution SF elements are shipped wet, preserved with 1% food-grade sodium metabisulfite, and vacuum-sealed in oxygen-minimizing bags. Each element is boxed individually. Elements must be stored in original packaging in a cool, shaded environment (23°F to 95°F / -5°C to 35°C). Freezing during transit does not damage the elements, but they must be fully thawed before use.
- Operational guidelines and chemical compatibility must be followed as specified in ZwitterCo SF technical manual. For optimal performance and system design, refer to the latest technical resources, design tools, or consult a ZwitterCo application specialist. Deviation from stated conditions or use of incompatible chemicals may impact membrane performance and may void the Limited Warranty.