

Dairy Ultra UF Series

FACT SHEET

Ultrafiltration – Superior Flux

Exclusively used for food related processes requiring stringent sanitary procedures, the typical applications include whey and milk fractionation where the Dairy Ultra UF membrane displays exceptional process flux and protein retention due to a specific durable membrane structure while being easily cleanable.

The Dairy Ultra UF membrane features a 10,000 Da molecular weight cut-off and has great performance in acid and sweet whey applications.

The element feature a patented Durasan* Cage outer wrap, polysulfone parts and standard feed spacers.

The Dairy Ultra elements comply with:

- Halal & Kosher certification

Table 1: Element Specification

Membrane	Polyethersulfone
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Model	Spacer mil (mm)	Active area ft ² (m ²)	Part number
DAIRY ULTRA UF3838C30	30 (0.76)	69 (6.4)	1268732
DAIRY ULTRA UF3838C50	50 (1.27)	55 (5.1)	1268736
DAIRY ULTRA UF6338C30	30 (0.76)	217 (20.2)	1268738
DAIRY ULTRA UF6338C50	50 (1.27)	168 (15.6)	1268739
DAIRY ULTRA UF6338C30 TAIL (1)	30 (0.76)	217 (20.2)	3050567
DAIRY ULTRA UF6338C50 TAIL (1)	50 (1.27)	168 (15.6)	3057993
DAIRY ULTRA UF8038C30	30 (0.76)	345 (32.0)	1268740
DAIRY ULTRA UF8038C50	50(1.27)	263 (24.4)	3048906

(1) Extra caging material included that can be cut to length to retrofit a 6.4" diameter element.

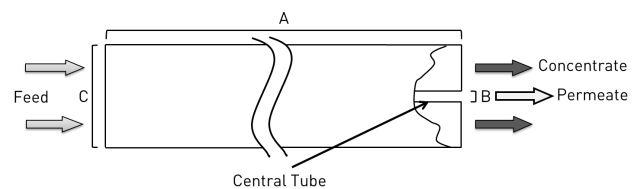


Figure 1: Element Dimensions Diagram

Table 2: Dimensions and Weight

Model	Dimensions, inches (cm)			Boxed Weight lbs (kg)
	A	B	C	
DAIRY ULTRA UF3838C	38.00 (96.5)	0.833 (2.12)	3.79 (9.6)	10 (4.5)
DAIRY ULTRA UF6338C	38.00 (96.5)	1.138 (2.89)	6.34 (16.1)	18 (8.2)
DAIRY ULTRA UF8038C	38.00 (96.5)	1.125 (2.86)	7.91 (20.1)	35 (15.9)

Table 3: Operating Parameters

Typical Operating Pressure	80 - 135psi (555 – 931kPa)
Typical Operating Flux	5-20 GFD (8–34 LMH)
Clean Water Flux (CWF) (1)	45-55 GFD (76 - 93 LMH) @ 20 psi & 50°C
Maximum Operating Pressure	150 psi (1,034 kPa)
Maximum Temperature	122°F (50°C)
pH range	2.0-10.0
Maximum Pressure Drop	Over an element: 15psi (103kPa) Per housing: 60psi (414kPa)
Chlorine Tolerance	5,000+ ppm-days

(1) Clean water flux (CWF) is the rate of water permeability through the membrane after cleaning (CIP) at reproducible temperature and pressure. It is important to monitor CWF after each cleaning cycle to determine if the system is being cleaned effectively. CWF can vary ±25%.

Table 4: CIP and Disinfection Parameters

Temperature	pH minimum	pH maximum
< 50°C (122°F)	1.5	11.5
< 45°C (113°F)	1.5	11.5
< 35°C (95°F)	1	11.5
< 25°C (77°F)	1	12

Recommended chlorine concentration and contact time at a maximum temperature of 50°C (120°F) is 180 ppm for 20 min MAXIMUM during chlorine caustic cycle.

pH must be stabilized at 10.5 - 11.0 before chlorine addition.

Membrane element surface must be free of catalyzer presence as iron or other metals. With oxidizers as chlorine or hydrogen peroxide, they accelerate membrane degradation.