Dairy Ultra UF Series
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 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.

Element features include:

- High protein rejection
- High process flux
- Durable membrane
- Patented Durasan* Cage outer wrap
- Polysulfone parts and standard feed spacers

The Dairy Ultra UF elements comply with:

- FDA Regulations relevant sections of 21CFR
- EU Framework 1935/2004/EC

Table 1: Element Specification

<table>
<thead>
<tr>
<th>Model</th>
<th>Membrane</th>
<th>Polyethersulfone</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAIRY ULTRA UF3838C30</td>
<td>30 (0.76)</td>
<td>69 (6.4)</td>
</tr>
<tr>
<td>DAIRY ULTRA UF3838C50</td>
<td>50 (1.27)</td>
<td>55 (5.1)</td>
</tr>
<tr>
<td>DAIRY ULTRA UF6338C30</td>
<td>30 (0.76)</td>
<td>217 (20.2)</td>
</tr>
<tr>
<td>DAIRY ULTRA UF6338C50</td>
<td>50 (1.27)</td>
<td>168 (15.6)</td>
</tr>
<tr>
<td>DAIRY ULTRA UF6338C30 TAIL</td>
<td>30 (0.76)</td>
<td>217 (20.2)</td>
</tr>
<tr>
<td>DAIRY ULTRA UF6338C50 TAIL</td>
<td>50 (1.27)</td>
<td>168 (15.6)</td>
</tr>
<tr>
<td>DAIRY ULTRA UF8038C30</td>
<td>30 (0.76)</td>
<td>345 (32.0)</td>
</tr>
<tr>
<td>DAIRY ULTRA UF8038C50</td>
<td>50 (1.27)</td>
<td>263 (24.4)</td>
</tr>
</tbody>
</table>

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

Table 2: Dimensions and Weight

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions, inches (cm)</th>
<th>Weight lbs (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B²</td>
</tr>
<tr>
<td>DAIRY ULTRA UF3838C</td>
<td>38.00 (96.5)</td>
<td>0.833 (2.12)</td>
</tr>
<tr>
<td>DAIRY ULTRA UF6338C</td>
<td>38.00 (96.5)</td>
<td>1.138 (2.89)</td>
</tr>
<tr>
<td>DAIRY ULTRA UF8038C</td>
<td>38.00 (96.5)</td>
<td>1.125 (2.86)</td>
</tr>
</tbody>
</table>

1 These elements are bagged dry before shipping.
2 Internal diameter.

Table 3: Operating and CIP parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical Operating Pressure</td>
<td>80 - 135psi (555 – 931kPa)</td>
</tr>
<tr>
<td>Typical Operating Flux</td>
<td>5-20 GFD (8-34 LMH)</td>
</tr>
<tr>
<td>Clean Water Flux (CWF)²</td>
<td>45-55 GFD (76 - 93 LMH) @ 20 psi and 50°C</td>
</tr>
<tr>
<td>Maximum Operating Pressure</td>
<td>150 psi (1,034 kPa)</td>
</tr>
<tr>
<td>Maximum Temperature</td>
<td>122°F (50°C)</td>
</tr>
<tr>
<td>pH range</td>
<td>Continuous Operation: 2.0-10.0 Clean-In-Place (CIP): 2.0-11.5</td>
</tr>
<tr>
<td>Maximum Pressure Drop</td>
<td>Over an element: 15ps (103kPa) Per housing: 60ps (414kPa)</td>
</tr>
<tr>
<td>Chlorine Tolerance</td>
<td>5,000+ ppm-days 180 ppm for 20 min MAXIMUM chlorine caustic cycle</td>
</tr>
</tbody>
</table>

² 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%.