Specialty Microfiltration

Sanitary TMF

<table>
<thead>
<tr>
<th>Model</th>
<th>Application</th>
<th>Feed Spacer Thickness in. (mm)</th>
<th>Nominal Membrane Area ft² (m²)</th>
<th>Dimensions, in. (mm)</th>
<th>Max Pressure Drop per Element psi (bar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMF 3838 D1N2</td>
<td>De-fatting of Whey</td>
<td>0.046 (1.17)</td>
<td>60 (5.6)</td>
<td>A 38 (965) B 3.6 (97) C 0.83 (21)</td>
<td>20 (1.3)</td>
</tr>
<tr>
<td>TMF 6338 D1N1</td>
<td>USDA Accepted 3A / FDA Compliant</td>
<td>0.031 (0.79)</td>
<td>232 (21.6)</td>
<td>A 38 (965) B 6.4 (160) C 1.138 (28.9)</td>
<td>20 (1.3)</td>
</tr>
<tr>
<td>TMF 6338 D1N2</td>
<td></td>
<td>0.046 (1.17)</td>
<td>188 (17.5)</td>
<td>A 38 (965) B 6.4 (160) C 1.138 (28.9)</td>
<td>20 (1.3)</td>
</tr>
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<td>TMF 6438 D1N2</td>
<td></td>
<td>0.046 (1.17)</td>
<td>188 (17.5)</td>
<td>A 38 (965) B 6.4 (161) C 1.138 (28.9)</td>
<td>20 (1.3)</td>
</tr>
<tr>
<td>TMF 7838 D1N1</td>
<td></td>
<td>0.031 (0.79)</td>
<td>389 (36)</td>
<td>A 38 (965) B 7.73 (196) C 1.125 (28.6)</td>
<td>20 (1.3)</td>
</tr>
<tr>
<td>TMF 7838 D1N2</td>
<td></td>
<td>0.046 (1.17)</td>
<td>258 (24)</td>
<td>A 38 (965) B 7.73 (196) C 1.125 (28.6)</td>
<td>20 (1.3)</td>
</tr>
<tr>
<td>TMF 8038 D1N1</td>
<td></td>
<td>0.031 (0.79)</td>
<td>392 (36.4)</td>
<td>A 38 (965) B 7.9 (201) C 1.125 (28.6)</td>
<td>20 (1.3)</td>
</tr>
<tr>
<td>TMF 8038 D1N2</td>
<td></td>
<td>0.046 (1.17)</td>
<td>310 (28.7)</td>
<td>A 38 (965) B 7.9 (201) C 1.125 (28.6)</td>
<td>20 (1.3)</td>
</tr>
</tbody>
</table>

Nominal Molecular Weight Cut-off: 500,000 - 1,000,000 Daltons

Product Type: Net-wrapped (no tail), Spiral Wound Element with Polyvinylidenefluoride (PVDF) Asymmetric Membrane
Developed specifically for removing residual fat from whey/WPC and maximizing whey protein transmission

Materials Specifications:
- Feed Spacers and Element Outer-Wrap: Polypropylene
- Permeate Carrier: Proprietary
- Adhesives: Proprietary

Operating Limits:
- Maximum Operating Pressure, psi (bar): 120 (8.3)
- Maximum Operating Temperature, °F (°C): 131 (55)
- Maximum Cleaning Temperature, °F (°C): 122 (50)
- Acceptable pH Range (operating): 2.5-10.0
- Acceptable pH Range (short-term cleaning): 1.7-11.5
- Maximum Chlorine Tolerance (short-term cleaning at pH 11), ppm: 180
- Maximum Pressure Drop per Vessel, psi (bar): 60 (4.0)

(Consult Toray for pressure limits when operating above ambient temperature)

Dimensions:

Notice:
1. Elements are preserved in sodium meta-bisulfite. Appropriate personal protective equipment should be worn when handling.
2. Toray accepts no responsibility for results obtained by the application of this information or the safety or suitability of Toray’s products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product combination for their own purposes.
3. All data may change without prior notice, due to technical modifications or production changes.
4. Consult Toray for element sizes not shown.