IntegraFlux™ Ultrafiltration Modules
Model SFP-2860XP, SFD-2860XP, SFP-2880XP and SFD-2880XP

Description

IntegraFlux™ Ultrafiltration (UF) modules with XP fiber are made from high permeability, high mechanical strength, hollow fiber PVDF membranes. The modules provide excellent performance, industry leading membrane area with low energy and chemical consumption. IntegraFlux™ modules have the following general properties and characteristics:

- Up to 35% higher permeability than previous generation modules helping to improve operating efficiencies and productivity
- 0.03 µm nominal pore diameter for removal of bacteria, viruses, and particulates including colloids to protect downstream processes such as RO
- PVDF polymeric hollow fibers for high mechanical strength with excellent chemical resistance providing long membrane life and reliable operation
- Outside-In flow configuration allowing a wide range of solids in the feed water minimizing the need for pretreatment processes and reducing the backwash volume compared to Inside-Out configurations

These modules are an excellent choice for systems with capacities greater than 50 m³/hr (220 gpm). The shorter SFP-2860XP or SFD-2860XP modules are well suited for installations with limited height. Larger and longer, 8 inch diameter and 80 inch in length, the SFP-2880XP or SFD-2880XP modules offer a high effective membrane area combined with high permeability that provides the most economical and efficient membrane system design.

IntegraFlux™ Ultrafiltration Modules can be used for a wide variety of treatment applications such as industrial and municipal wastewaters, surface water, and seawater.

Typical Properties

<table>
<thead>
<tr>
<th>Product</th>
<th>Type</th>
<th>Membrane Area</th>
<th>Volume</th>
<th>Weight (empty/water filled)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>m²</td>
<td>ft²</td>
<td>liters</td>
</tr>
<tr>
<td>SFP-2860XP</td>
<td>Industrial</td>
<td>51</td>
<td>549</td>
<td>35</td>
</tr>
<tr>
<td>SFD-2860XP</td>
<td>NSF/ANSI 61 and 419</td>
<td>51</td>
<td>549</td>
<td>35</td>
</tr>
<tr>
<td>SFP-2880XP</td>
<td>Industrial</td>
<td>77</td>
<td>829</td>
<td>39</td>
</tr>
<tr>
<td>SFD-2880XP</td>
<td>NSF/ANSI 61 and 419</td>
<td>77</td>
<td>829</td>
<td>39</td>
</tr>
</tbody>
</table>
### Dimensions

SFP-2860XP, SFD-2860XP, SFP-2880XP, and SFD-2880XP (8-inch diameter)

<table>
<thead>
<tr>
<th>Product</th>
<th>Units</th>
<th>Length</th>
<th>Diameter</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>L</td>
<td>L1</td>
<td>L2</td>
</tr>
<tr>
<td>SFP-2860XP and SFD-2860XP</td>
<td>SI (mm)</td>
<td>1860±3</td>
<td>1500</td>
<td>1630±3</td>
</tr>
<tr>
<td></td>
<td>US (inch)</td>
<td>73.2±0.1</td>
<td>59.1</td>
<td>64.2±0.1</td>
</tr>
<tr>
<td>SFP-2880XP and SFD-2880XP</td>
<td>SI (mm)</td>
<td>2360±3</td>
<td>2000</td>
<td>2130±3</td>
</tr>
<tr>
<td></td>
<td>US (inch)</td>
<td>92.9±0.1</td>
<td>78.7</td>
<td>83.9±0.1</td>
</tr>
</tbody>
</table>

### Suggested Operating Conditions

- **Filtrate Flux (25°C)**: 40 – 110 l/m²/hr (24 – 65 gfd)
- **Flow Range Per Module**: 2.0 – 8.5 m³/hr (8.8 – 37.4 gpm)
- **Temperature**: 1 – 40°C (34 – 104°F)
- **Maximum Inlet Module Pressure (20°C)**: 6.25 bar (90.65 psi)
- **Maximum Inlet Module Pressure (40°C)**: 4.75 bar (68.89 psi)
- **Maximum Operating TMP**: 2.1 bar (30.5 psi)
- **Maximum Operating Air Scour Flow**: 12 Nm³/hr (7.1 scfm)
- **Maximum Backwash Pressure**: 2.5 bar (36 psi)
- **Operating pH**: 2 – 11
- **Maximum NaOCl**: 2,000 mg/L
- **Maximum Particle Size**: 300 µm
- **Flow Configuration**: Outside in, dead end flow
- **Expected Filtrate Turbidity**: ≤ 0.1 NTU
- **Expected Filtrate SDI**: ≤ 2.5

1 Flow range represents DUPONT™ Ultrafiltration SFP-2860XP, SFD-2860XP, SFP-2880XP, and SFP-2880XP Modules for filtrate flux range shown

### Important Information

Proper start-up of an ultrafiltration system is essential to prepare the membranes for operating service and to prevent membrane damage. Following the proper start-up sequence also helps ensure that system operating parameters conform to design specifications so that system water quality and productivity goals can be achieved.

Before initiating system start-up procedures, membrane pretreatment, installation of the membrane modules, instrument calibration and other system checks should be completed.

Please refer to the Ultrafiltration Technical Manual (Form No. 45-D00874-en).
**Operation Guidelines**

Avoid any abrupt pressure variations during start-up, shutdown, cleaning or other sequences to prevent possible membrane damage. Flush the ultrafiltration system to remove shipping solution prior to start-up. Remove residual air from the system prior to start-up. Manually start the equipment. Depending on the application, filtrate obtained from initial operations should be discarded.

Please refer to the Ultrafiltration Technical Manual (Form No. 45-D00874-en).

**General Information**

- If operating limits and guidelines given in this bulletin are not strictly followed, the limited warranty will be null and void.
- To control biological growth during extended system shutdowns, it is recommended that storage solution be injected into the membrane modules.

Please refer to the Ultrafiltration Technical Manual (Form No. 45-D00874-en) and Technical Service Bulletins.

**Product Stewardship**

DuPont has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with DuPont products—from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

**Customer Notice**

DuPont strongly encourages its customers to review both their manufacturing processes and their applications of DuPont products from the standpoint of human health and environmental quality to ensure that DuPont products are not used in ways for which they are not intended or tested. DuPont personnel are available to answer your questions and to provide reasonable technical support. DuPont product literature, including safety data sheets, should be consulted prior to use of DuPont products. Current safety data sheets are available from DuPont.

Please be aware of the following:
- The use of this product in and of itself does not necessarily guarantee the removal of cysts and pathogens from water. Effective cyst and pathogen reduction is dependent on the complete system design and on the operation and maintenance of the system.

**Regulatory Note**

NSF/ANSI 61 and 419 certified drinking water modules require specific conditioning procedures prior to producing potable water. Please refer to the Ultrafiltration Technical Manual (Form No. 45-D00874-en) flushing section for specific procedures. Drinking water modules may be subjected to additional regulatory restrictions in some countries. Please check local regulatory guidelines and application status before use and sales.