

**DOW™ Ultrafiltration Modules****Model SFP-2880 and SFD-2880****Features**

The DOW™ Ultrafiltration (UF) modules are made from high strength, hollow fiber membranes that have excellent features and benefits:

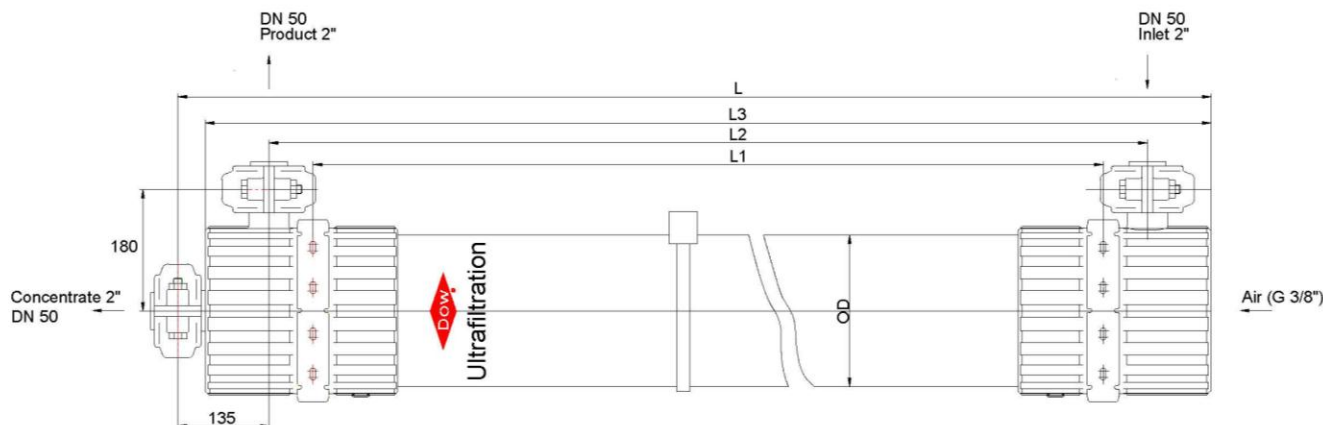
- 0.03  $\mu\text{m}$  nominal pore diameter for removal of bacteria, viruses, and particulates including colloids to protect downstream processes such as RO
- PVDF polymeric hollow fibers for high strength and chemical resistance allows long membrane life
- Hydrophilic PVDF fibers for easy cleaning and wettability that help maintain long term performance
- Outside In flow configuration for high tolerance to feed solids that help reduce the need for pretreatment processes
- U-PVC housing, helping to eliminate the need for costly pressure vessels

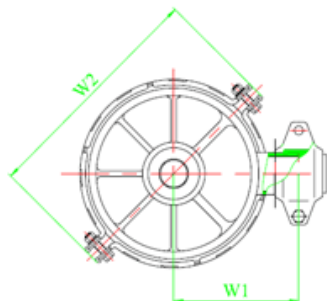
This module is an ideal choice for systems with capacities greater than 50  $\text{m}^3/\text{hr}$  (220 gpm). Larger and longer, 8 inch diameter and 80 inch in length, together with an increase in packing density of 10,000 fibers, this module offers the highest effective membrane area of the DOW™ Ultrafiltration modules. The 2880 contributes to a more economical membrane system design.

DOW™ Ultrafiltration Modules can be used for a wide variety of treatment applications such as surface water, seawater, industrial wastewaters, and secondary effluent wastewater.

**Product Specifications**

| Model    | Type                          | Part # | Membrane area |               | Module volume |         | Weight<br>(empty/ water filled) |         |
|----------|-------------------------------|--------|---------------|---------------|---------------|---------|---------------------------------|---------|
|          |                               |        | $\text{m}^2$  | $\text{ft}^2$ | Liters        | Gallons | Kg                              | lbs     |
| SFP-2880 | Pretreatment                  | 280934 | 77            | 829           | 39            | 10.3    | 61/100                          | 135/220 |
| SFD-2880 | NSF/ANSI 61<br>Drinking water | 324169 | 77            | 829           | 39            | 10.3    | 61/100                          | 135/220 |

**Figure 1:** SFP and SFD 2880 (8-inch diameter)

**Figure 2**

| Properties | Length |      |      |      | Diameter | Width |      |
|------------|--------|------|------|------|----------|-------|------|
| Units      | L      | L1   | L2   | L3   | D        | W1    | W2   |
| SI (mm)    | 2360   | 2000 | 2130 | 2320 | 225      | 180   | 342  |
| US (inch)  | 92.9   | 78.7 | 83.9 | 91.3 | 8.9      | 7.1   | 13.5 |

### Operating Parameters

|                                     | SI units                     | US units        |
|-------------------------------------|------------------------------|-----------------|
| Filtrate Flux @ 25°C                | 40-120 l/m <sup>2</sup> / hr | 24-70 gfd       |
| Flow range                          | 3.1-9.3 m <sup>3</sup> /hr   | 13.6 – 40.9 gpm |
| Temperature                         | 1-40°C                       | 34-104°F        |
| Max. inlet module pressure (@ 20°C) | 6.25 bar                     | 93.75 psi       |
| Max. operating TMP                  | 2.1 bar                      | 30 psi          |
| Max operating air scour flow        | 12 nm <sup>3</sup> /hr       | 7.1 scfm        |
| Max backwash pressure               | 2.5 bar                      | 36 psi          |
| Operating pH                        | 2- 11                        |                 |
| NaOCl (max.)                        | 2,000 mg/L                   |                 |
| TSS (max.)                          | 100 mg/L                     |                 |
| Turbidity (max.)                    | 300 ntu                      |                 |
| Particle size (max.)                | 300 μ                        |                 |
| Flow configuration                  | Outside in, dead end flow    |                 |
| Expected filtrate turbidity         | ≤0.1 NTU                     |                 |
| Expected filtrate SDI               | ≤2.5                         |                 |

### Important information

Proper start-up of a UF 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 product technical manual.

### Operation guidelines

Avoid any abrupt pressure variations during start-up, shutdown, cleaning or other sequences to prevent possible membrane damage. Flush the UF system to remove shipping solution prior to start up. Remove residual air from the system prior to start up. Manually start the equipment. Target a permeate flow of 60% of design during initial operations. Depending on the application, permeate obtained from initial operations should be discarded. Please refer to the product technical manual.



## **General information**

If operating limits and guidelines given in this bulletin are not strictly followed, the limited warranty (Form No. 795-00027) will be null and void.

To prevent biological growth during system shutdowns, it is recommended that preservative solution be injected into the membrane modules.

## **Regulatory note**

NSF/ANSI 61 certified drinking water modules require specific conditioning procedures prior to producing potable water. Please refer to the product technical manual 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 sale.

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