

**DOW™ Ultrafiltration Modules****Model SFP-2660 and SFD-2660****Features**

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

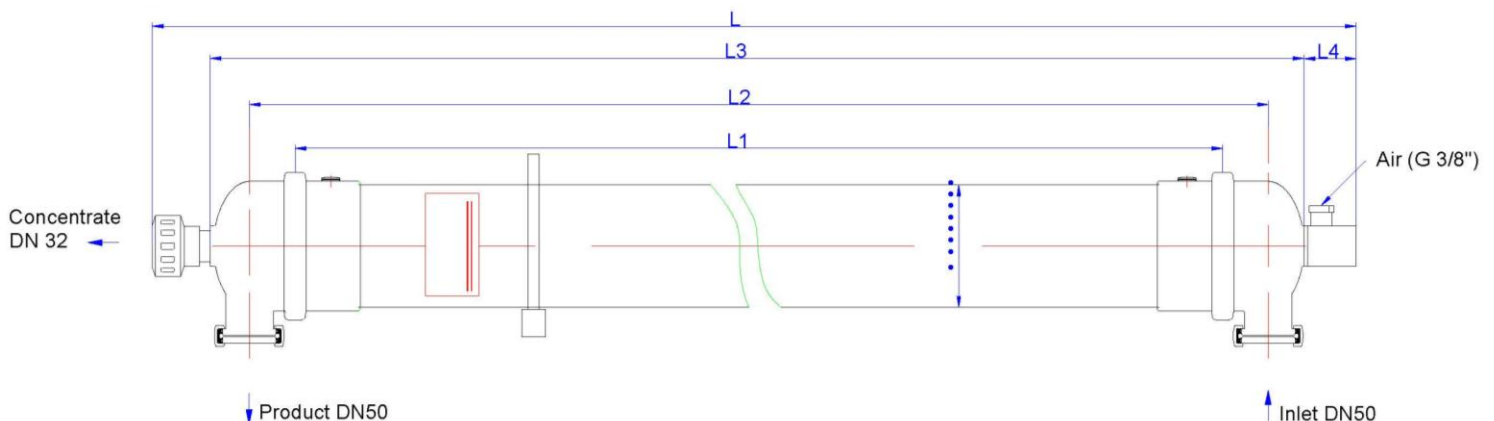
- 0.03  $\mu\text{m}$  nominal pore diameter for removal of bacteria, viruses, and particulates including colloids to protect downstream processes such as RO
- PVDF polymeric hollow fibers for high strength and chemical resistance allows longer membrane life
- Hydrophilic PVDF fibers for easy cleaning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

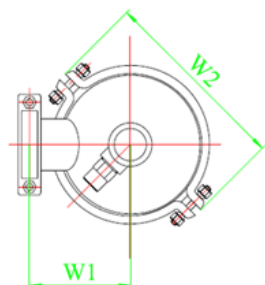
This module is an ideal choice for systems capacities of 50 m<sup>3</sup>/hr (220 gpm) or less. The shorter, 60 inch length module offers higher efficiencies over a wider range of feed water conditions compared to longer length modules. The smaller, 6 inch diameter module allows a more compact design for space constrained installations.

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 (empty/ water filled)	
			m <sup>2</sup>	ft <sup>2</sup>	Liters	Gallons	Kg	lbs
SFP-2660	Pretreatment	280931	33	355	16	4.2	25/41	55/90
SFD-2660	NSF/ANSI 61 Drinking water	324166	33	355	16	4.2	25/41	55/90

**Figure 1:** SFP and SFD 2660 (6-inch diameter)

**Figure 2**

Properties	Length				Diameter	Width	
Units	L	L1	L2	L3	D	W1	W2
SI (mm)	1860	1500	1610	1710	165	125	250
US (inch)	73.2	59.1	63.4	67.3	6.5	4.9	9.8

### Operating Parameters

	SI units	US units
Filtrate Flux @ 25°C	40-120 l/m <sup>2</sup> / hr	24-70 gfd
Flow range	1.3 – 4.0 m <sup>3</sup> /hr	5.9 – 17.3 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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NOTICE: The use of this product 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.

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