

## Model UF-8060-PP

### Features

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

- 0.03-0.15  $\mu\text{m}$  nominal pore diameter for removal of Bacteria, viruses and particulates including colloids to protect downstream processes such as RO.
- PP polymeric hollow fibers for high strength and chemical resistance allow long membrane life.
- Outside In flow configuration for high tolerance to feed solids that help to have more flexible pretreatment process or reduce the need for pretreatment process.
- During the cross-flow and filtration, the higher flow rate can increase the filtration and resist the fouling of the membrane.
- During the chemical washing, you can submerge the membrane in the chemicals or circulated the chemicals in the module for hours.
- U-PVC housing, helping to eliminate the need for costly pressure vessels.

### 1. Hollow Fiber membrane Specifications

Fiber material	Geometry	Inner Diameter ( $\mu\text{m}$ )	Outer Diameter ( $\mu\text{m}$ )	Pore size (nm)	Thickness ( $\mu\text{m}$ )	X- axis Strength (MPa)
Polypropylene	Hollow Fiber	250-300	350-400	30-150	40-50	120

### 2. Module Specifications

Module Type	Flow Range	Max. Inlet Module Pressure	Temperature	pH	Membrane Area	Housing	Potting
UF-8060-PP	2.5 -7.5 $\text{m}^3/\text{hr}$	4 bar	4-40 $^{\circ}\text{C}$	2-12	70 $\text{m}^2$	U-PVC	PU

### 3. Inlet Flow Specifications

Temperature	Inlet pH	Oil & Grease	TSS	Particle Size	Turbidity	Inlet COD	Continuous $\text{Cl}_2$
4-40 $^{\circ}\text{C}$	2-12	< 2 $\text{mg}/\text{l}$	< 100 $\text{mg}/\text{l}$	< 300 $\mu\text{m}$	< 300 NTU	< 60 ppm	100 ppm

### 4. Filtrate Flow

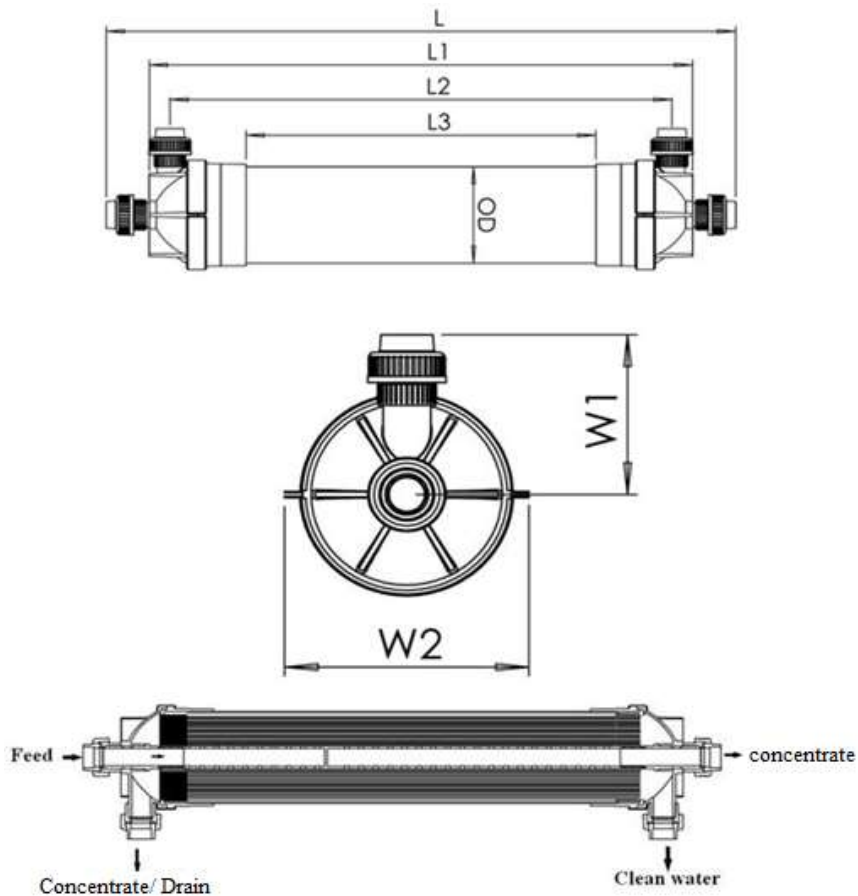
SDI of Filtrate	Output Pathogens	Bacteria & Microbe Removal	Turbidity of Filtrate
< 3	Four Log Reduction	> 99.99%	< 0.1NTU

### 5. Operating Parameters

Filtration Type	Outside to Inside	Filtration Mode	Cross Flow/ Dead End
Max. TMP	2 bar	Max. Work Pressure	4 bar
Max. Temperature	40 °C	Pre-Filtration	<50 µm Micro-Filtration
Backwash Pressure	Max. 3 bar	Flushing Mode	Water/Air -Water/Chemical Material
H <sub>2</sub> O <sub>2</sub> Disinfection	2000 ppm for short time	Cl <sub>2</sub> Disinfection	200 ppm for short time

## 6. Module Weight and Dimensions

Module type	L(mm)	L1(mm)	L2(mm)	L3(mm)	W1(mm)	W2(mm)	Weight (Kg)
UF-8060-PP	1845	1665	1585	1285	175	260	25



## 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

## **AquArya Ultrafiltration Module**



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.

### **Operation Guideline**

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.

### **General Information**

If operating limits and guidelines given in this bulletin are not strictly followed, the limited warranty will be null and void.

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

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