

Product Data Sheet
PURELINE Ultrafiltration Modules
 Model PUF - 60, PUF - 80

Features

PURELINE Ultrafiltration (UF) modules are made from high mechanical strength, PVDF hollow fiber membranes. The modules provide excellent performance and industry leading membrane area. These modules have the following properties and characteristics:

- 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 and chemical resistance providing long membrane life and reliable operation.
- Hydrophilic PVDF fibers for easy cleaning and wettability that help maintain long term performance
- 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 U-PVC housing, helping to eliminate the need for costly pressure vessels



The 60 which is shorter in length is recommended for smaller systems and where building height is of concern. The 80 has higher membrane area for the same footprint offering a more economical design.

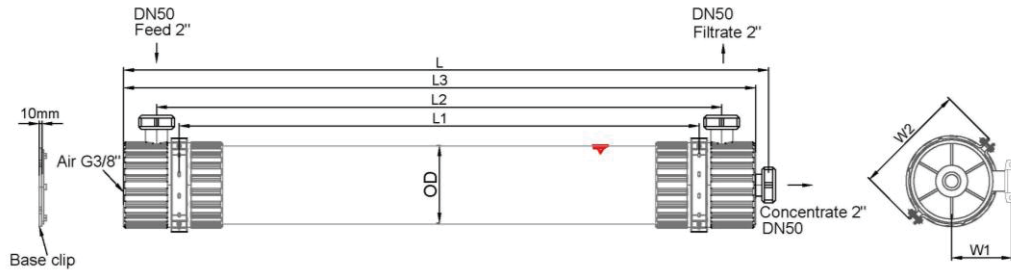
PURELINE Ultrafiltration Modules can be used for a wide variety of treatment applications such as surface water, seawater, and industrial and municipal wastewaters.

Product Specifications

Product	Type	Membrane Area		Hold-Up Volume		Weight (empty/water filled)	
		m ²	ft ²	liters	gallons	kg	lbs
PUF- 60	Industrial	51	549	35	9.3	48/83	106/183
PUF- 80	Industrial	77	829	39	10.3	61/100	135/220

PUF - 60 and PUF - 80 (8-inch diameter)

Figure 1



Product	Units	Length				Diameter	Width	
		L	L1	L2	L3	D	W1	W2
PUF - 60	SI (mm)	1860±3	1500	1630±3	1820±3	225	180	342
	US (inch)	73.2±0.1	59.1	64.2±0.1	71.7±0.1	8.9	7.1	13.5
PUF - 80	SI (mm)	2360±3	2000	2130±3	2320±3	225	180	342
	US (inch)	92.9±0.1	78.7	83.9±0.1	91.3±0.1	8.9	7.1	13.5

Operating Limits

	SI Units	US Units
Filtrate Flux (25°C)	40 – 90 l/m ² hr	24 – 53gfd
Flow Range Per Module ¹	2.0 – 6.9m ³ hr	8.8 – 30.4gpm
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	305 psi
Maximum Operating Air Scour Flow	12 nm ³ 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 μ	
Flow Configuration	Outside in, dead end flow	
Expected Filtrate Turbidity	≤ 0.1 NTU	
Expected Filtrate SDI	≤ 2.5	

Important Information

- ¹ Flow range represents PURELINE Ultrafiltration PUF - 60 and PUF - 80 Modules for filtrate flux range shown

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.