

# MEMFILL

## Ultra Filtration

### PVDF



We are expert in membrane manufacturing technologies and producing composite hollow fiber membranes for water, wastewater and water reuse applications covering various Industries.

Our extensive R&D activities have resulted in indigenously producing a range of high quality and durable hollow fiber (HF) membranes. Further, we offer our innovative process know-how, tailor-made turnkey solutions to markedly reducing the operating expense.

Memfill's Memflow Ultra-Filtration (UF) polyvinylidene fluoride (PVDF) Hollow fiber membrane has developed for high total suspended solids (TSS) and turbidity removal from various industries. Our proprietary PVDF membranes are extremely high chemical resistant, durable and strength with a nominal pore size is  $0.01\ \mu\text{m}$ .

The asymmetric structure of the Memflow hollow fiber allows more efficient cleaning and smooth filtrate flow at low transmembrane pressure, which in turn effectively enhance overall performance and flux rates thus reducing operating costs.



## Product Name: Memflow UF PVDF Series



Hollow Fibers. Smarter Solutions.

### Features

- Asymmetric pore size of 0.01µm
- PVDF membrane with easy wetting performance
- High tolerance to varying influent water qualities
- Reduced pre-treatment requirements due to outside-in flow
- Energy saving due to low operating pressure

### Applications

- Textile waste water
- Pre-treatment system
- Municipal wastewater treatment
- Industrial wastewater treatment
- Wastewater recycle Surface and groundwater treatment
- Purification and filtration of reagents and chemical raw materials

Product Model	Memflow UF F31	Memflow UF F40	Memflow UF F45	Memflow UF F50	Memflow UF F60
Membrane Material	Proprietary PVDF				
Shell and Seal Material	PVC / UPVC & Epoxy Resin				
Diameter X Length (mm)	200 x 1700	200 x 1700	200 x 1700	200 x 1700	200x2020
Effective Membrane Area	~31 m <sup>2</sup>	~40 m <sup>2</sup>	~45 m <sup>2</sup>	~50 m <sup>2</sup>	~60 m <sup>2</sup>
Design Flux	~ 40 - 80 L/m <sup>2</sup> /h (Output flux may vary depending of feed water quality)				
Nominal Pore Size	0.01 Micron				
Molecular Weight Cut Off	100,000 Dalton				
Bacteria Removal Rate	> 4 log				
Flow Type	Out-in / In-out				
Operating Temperature	5 - 40°C				
pH Range	2 - 10				
Max. Operating Pressure	~ 1 - 1.5 bar				
Suggested Operating Pressure	≤ 1 bar				
Max. Transmembrane Pressure	<2 bar				
Backward Pressure	2 - 3 bar				
Permeate Turbidity	< 0.1 NTU				

#### Note :

Based on the source / quality / fluctuation of feed water the duration of backwash frequency may change.

Chlorine tolerance for an hour: ~200000 ppm / chemical for cleaning: NaOCL, NaOH, HCL

Although our membrane is made durable, customers are responsible for the use of incompatible chemicals which may affect the performance so failure. For guidelines and clarifications please contact our technical staff.

