

MANFORDA[®] M-AFFLUX[®] PD90 UF

Open Module Design

Product Technical Characteristics

The PD series' proprietary PVDF hollow fiber membrane filaments are multiple Resistance technology:

- Optimized anti-pollution and anti-chlorine capabilities
- The filtration performance is stable
- It has a high removal rate of colloidal particles, bacteria and viruses
- Easy to clean and restore performance
- Open design, easy installation, low maintenance cost, and can be matched with the existing racks at the customer's site
- It has high tolerance to air flushing and a long service life

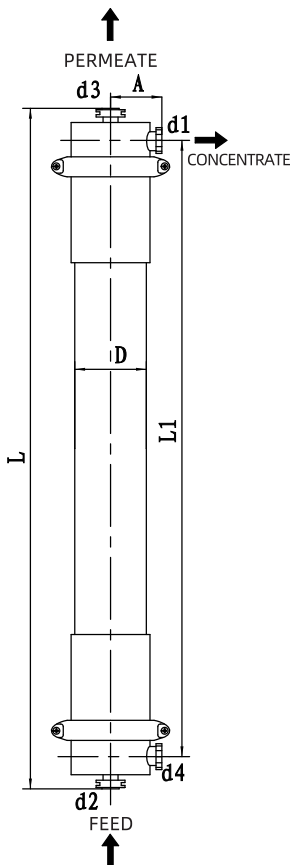
Main Application Fields

- Industrial process water treatment
- Reuse of industrial wastewater
- Municipal sewage treatment
- Pretreatment of reverse osmosis
- Boiler water treatment
- Cooling water treatment
- Wastewater treatment
- Reclaimed water reuse
- Zero discharge of liquid
- Desalination of seawater
- High-salt wastewater



Technical Specifications Of Membrane Modules

Filtering Method	Outside-In	
Membrane Type	Hollow Fiber	
Membrane Material	PVDF	
Nominal Membrane Pore Size	0.03um	
Membrane Module Operation Mode	Full-Flow / Cross-Flow	
Other Wetting Module Components	PU, uPVC, EPDM, ABS	
Effective Membrane Area	90m ²	969ft ²
Total Length(L1)	2,160+3.0mm	85.0+0.1inch
Length(L2)	1724+1.5mm	68.0+0.1inch
Length(L3)	216mm	8.5inch
Membrane Module Diameter(D)	175mm	7.0inch
Width(A)	340mm	13.5inch
Width(C)	89mm	3.5inch
Feed/Filtrate Interface	76.5mm	3.0inch
Empty Weight	61kg	134lbs.
Full Water Weight	105kg	232lbs.
Water Filling Volume	39L	10.3gal



Operating Technical Conditions

Parameters	Numerical Value	
Operating Temperature Range	1-40°C	34-104°F
Run pH	2-11	
Cleaning pH	2-12	
RUN TMP	0.4 -1.5 bar	5.8 -21.8 psi
BW TMP	0.6 -2.0 bar	8.7-29.0 psi
BW Method	Wash W.V. Water Bw	
BW Flux	100 L/(m ² h)	58.8 gfd
BW Flow	9.0 m ³ /h	40.0 gpm
Rate Temperature Change	0.5 bar/sec	7.3 psi/sec
Max. Inlet Water	6.25 bar (at 20 °C)	90.7 psi
Max Filter TMP	2.1 bar	30.5 psi
BW FlowTMP	2.5 bar	36 psi
Max. Flux	110 L/(m ² h)	64.5 gfd
Max. Fluw	9.9 m ³ /h	44gpm
Max. BW Flux	120 L/(m ² h)	70.6 gfd
Max. SIZE	300 µm	
Max. NaOCL	≤1,500,000 ppm xh	
Max. NaOCL CO	2,000 ppm	

General Information

- Once the membrane element is wetted, it should always remain moist
- If the user does not strictly follow the operation limits and guidelines set in this specification, the limited warranty will become invalid
- When the system is shut down for a long time, to prevent the growth of microorganisms, it is recommended to immerse the membrane elements in a protective solution
- Users shall be fully responsible for the impact on components caused by the use of incompatible chemicals and lubricants At all times, water shock/air hammer should be avoided during the storage of membrane elements
- For more information or if you have any questions, please contact MANFORDA

Membrane Element Storage

- The new membrane modules can be stored either as supplied or in their original packaging.
- The membrane module contains a water preservation solution of glycerol (20wt%) and sodium sulfite (lwt%) to prevent dehydration and control bacterial growth. The membrane module is packaged in a vacuum-sealed plastic bag to maintain the moisture inside the module. Components should be stored in a dry, well-ventilated place, away from fire sources and direct sunlight. The storage temperature should be between 0 and 40°C. At all times, comply with MANFORDA's instructions on transportation and storage, and can be provided upon request. It is recommended to install the membrane module into use as soon as possible.
- The storage period of the membrane is up to 48 months, calculated from the date when the component is announced to be ready for delivery to the MANFORDA warehouse. All guarantee letters are invalid after the expiration of the shelf life.
- For detailed information, please refer to the MANFORDA warranty document.