



Shanghai Morui Technology Group Co., Ltd.

CATALOG

UF MEMBRANE



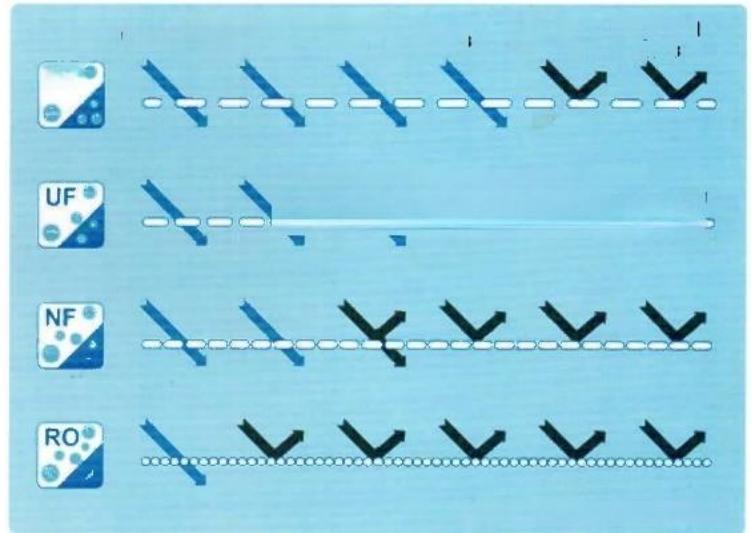
Shanghai Morui Technology Group Co., LTD.

Company Profile

Morui company is a 20-year-experience professional manufacturer for PVDF MBR membranes, Hollow fiber UF membranes, Spiral Wound UF membranes, Reverse Osmosis membranes, Sea water membranes and Nanofiltration membranes as well as integral solution provider in drinking water and wastewater treatment. Supreme materials, complete set of advanced equipment, skilled workers, special leading formula technique and 3 inspection lines ensure us provide a full range of professional products in high and stable quality and supporting technology solutions to the customers. Morui has already enjoyed a high reputation at home and abroad since its series of membrane products are sold to more than 60 countries and districts with good feedback and repeated orders. We can also provide OEM services under customers' requirements. Now, the membrane products have been widely used in drinking water, municipal water, boiler make-up water, industrial ultra pure water, food and beverage, etc. Morui company devotes to the world water security and environmental protection and win-win cooperation with customers by providing high-quality products and excellent technical services. With us, you can find what you need.



MEMBRANE FILTRATION & SEPARATION



According to the membrane pore size, membrane filtration and separation can be divided into microfiltration(MF), ultrafiltration(UF),nanofiltration (NF) and reverse osmosis (RO);

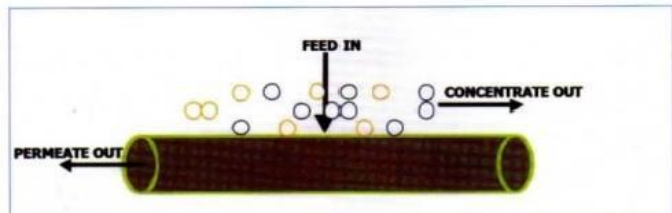
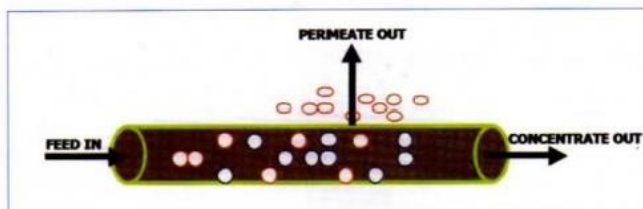
FILTRATION METHOD

Inside-out (Internal pressure)

Feed liquid enters the center of hollow fiber,the colloid,Suspended solids,bacterium and other macromolecule substances are intercepted by fiber inner wall and turn into concentrate,while water

Outside-in (External pressure)

Feed liquid pass through hollow fiber outside into inside,the colloid,Suspended solids,bacterium and other macromolecule substances are intercepted by fiber outer wall and turn into concentrate,while water molecule and ion



Filtration method	Inside-out	Outside-in
Feed water quality requirement	High	LoW
Dirt holding capacity	Weak	Strong
Water flow dead corner	Without	With
Cleaning effect	Easy	Difficult
Back-flush cleaning method	Water back wash	Air&Water mixture back wash
Main application field	Pure water treatment,reclaimed water reuse with perfect pretreatment	Waste,sewage water,reclaimed water reuse

Features of MR series ultrafiltration membranes:

MR series ultrafiltration membrane components are molecularly bonded under special conditions. The inner diameter of the composite modified membrane fiber is 1.0~1.2mm, the outer diameter is 1.6~2.0mm, and the molecular weight cutoff is 6000~100000Dalton. The ends of the membrane modules are encapsulated by epoxy resin casting. The modified MR ultrafiltration membrane module has the following characteristics:

- Unique flow channel design reduces water outlet resistance;
- Hydrophilic modification to improve pollution resistance;
- During backwashing, water distribution on the membrane surface is synchronized for more thorough cleaning;
- Three-phase continuous asymmetric design improves the strength of the membrane filament;
- The membrane wire is fixed in partitions, and the probability of wire breakage is the lowest during long-term operation;
- Reduces channel contamination in the hole, making it easier to restore flux during backwashing;
- Dry storage form, storage and transportation conditions $-20^{\circ}\text{C} \sim +45^{\circ}\text{C}$;



MINIPORE UF VARIETY AND ADVANTAGE

PAN :Inside-out filtration design,natural hydrophilic,low trans-membrane pressure,large permeate flux,easy to clean;Good performance of resistance to chloride and solvent,dry membrane made by unique technology,easy for storage,transportation and maintenance;Material cost is lower,widely applied to surface water and non-polluted water treatment;

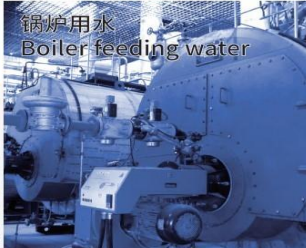
PS(PES) :Inside-out filtration design,the hydrophilic modification,uniform pore size distribution,with a wide range of MWCO&pore size for options,high flow and pollution resistance,high temperature resistance (<95°C),good hardness and high strength,acid &alkali resistant,high health &safety,biocompatibility,can be used in food service industry & pharmaceuticals industry for purification,separation and concentration;

PP: Outside-in filtration design,the hydrophilic modification,food grade raw material,extremely strong tensile strength, high pressure resistance,fiber not easy to break up;Extremely slim hollow fiber and outside-in filtration design,more large membrane area,large permeate flux,high dirt holding ability,acid &alkali resistant,anti-pollution,material cost is lower, widely applied to pretreatment of RO system,beverage purification &concentration,waste water treatment,electrophoresis paint recovery;

PVDF :Outside-in filtration design,the hydrophilic modification,pollution resistance,perfect antioxidation &antibiosis performance,unique outer cortex &spongy micro-structure,extreme low pressure application,high tenacity,food grade raw material,extremely strong tensile strength,mainly applied in municipal sewage treatment,industrial

MR series ultrafiltration membrane application fields

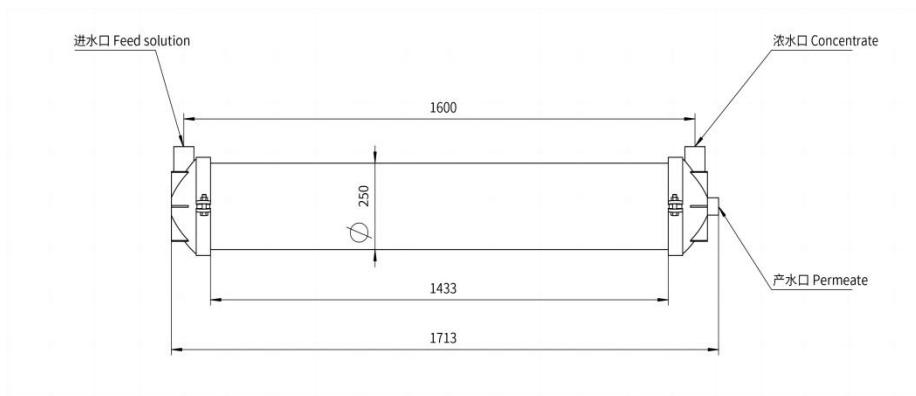
1. RO pre-processing and post-processing;
 2. Municipal water, urban and rural drinking water treatment;
 3. Condensed water and gray water reuse;
 4. Water treatment for food and beverage processing;
 5. Removing heat sources from pharmaceutical water;
 6. Wastewater recycling;
 7. Removing turbidity from white wine, fruit wine, wine and rice wine;
 8. Used for concentration processing in food, fermentation, and dairy industries;
 9. Various dialysis, blood filtration, etc. in the field of medical treatment;
 10. Oilfield water injection and oil-water separation;
 11. High purity water for electronics industry;
 12. Power plants, chemical industry,
- electrophoresis and other manufacturing industries.



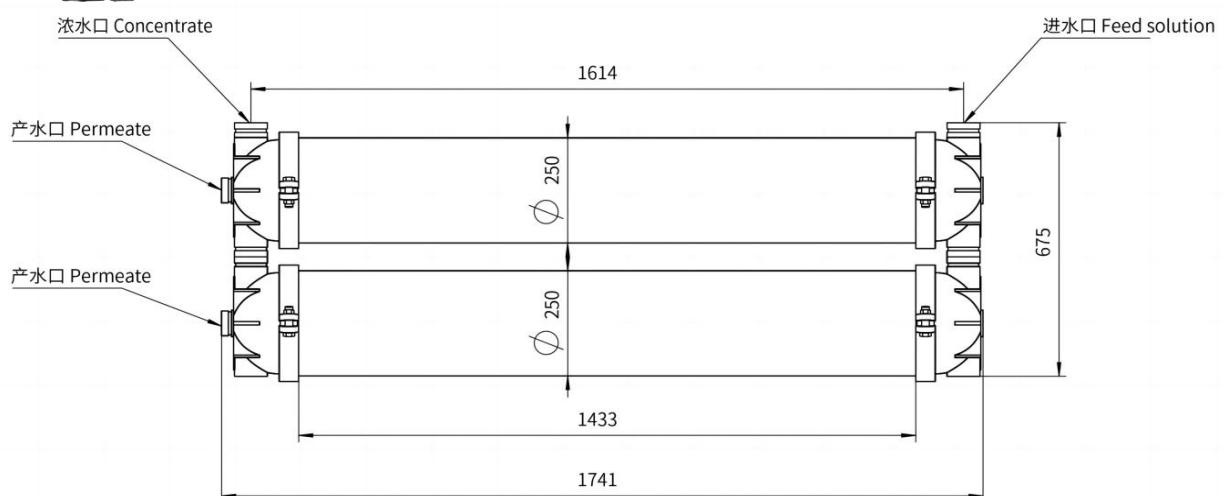
UF membrane Parameter (inside-out)

Page 6	MR1060-50	MR8060A	MR4046	MR1060-50*2	MR4040	MR8060
Design flux(L/m ² /h)	40-120					
Permeate turbidity(NTU)	<0.1					
Membrane material and type	PES,PS,PVC,PAN inside-out					
Shell and seal materials	PVC,epoxy resins					
Molecular weight cutoff	100000 dalton					
Fiber inner/ outer diameter	1.0/1.6 mm					
Effective membrane area	50 m ²	25 m ²	4.5 m ²	100m ²	4m ²	25m ²
Working Temp.(°C)	40 °C					
pH range	PES/PS 2-12, PVC/PAN 3-9					
Backwash pressure	<0.2 Mpa					
Backwash flow(L/m ² /h)	100-200					

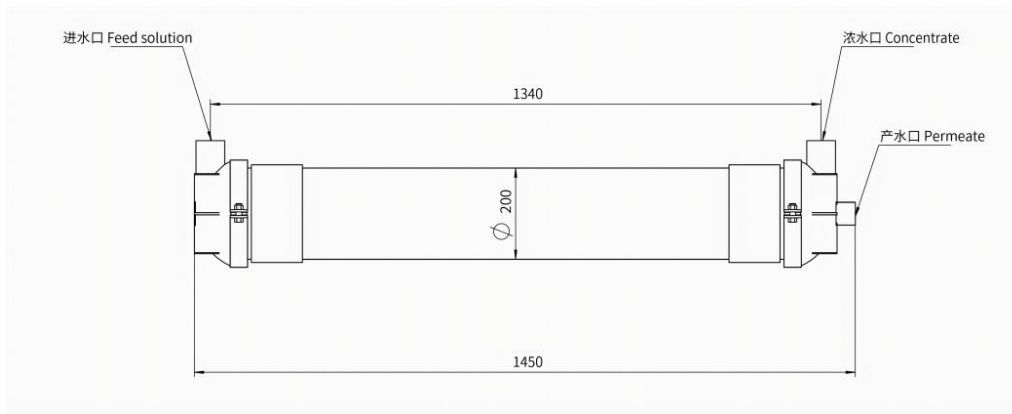
MR1060-50 Ultrafiltration membrane Dimensions



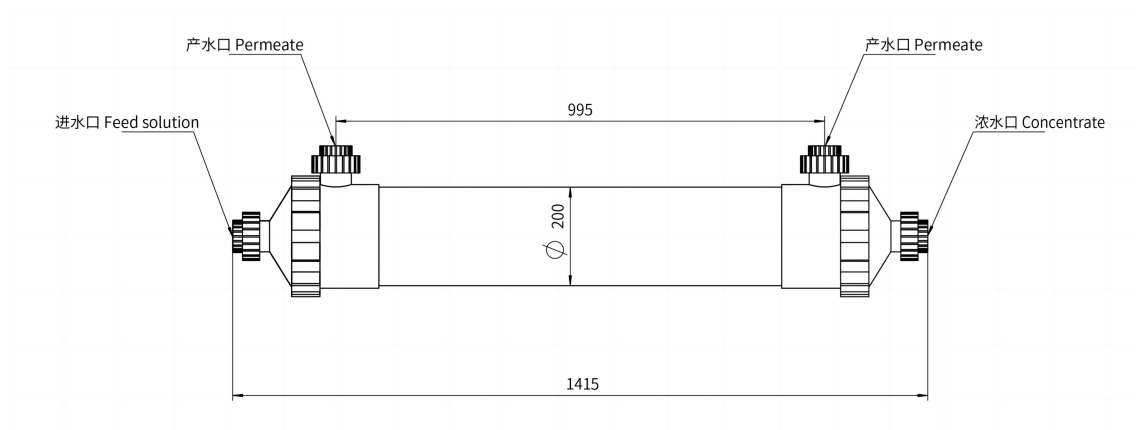
MR1060-50*2 Ultrafiltration membrane Dimensions



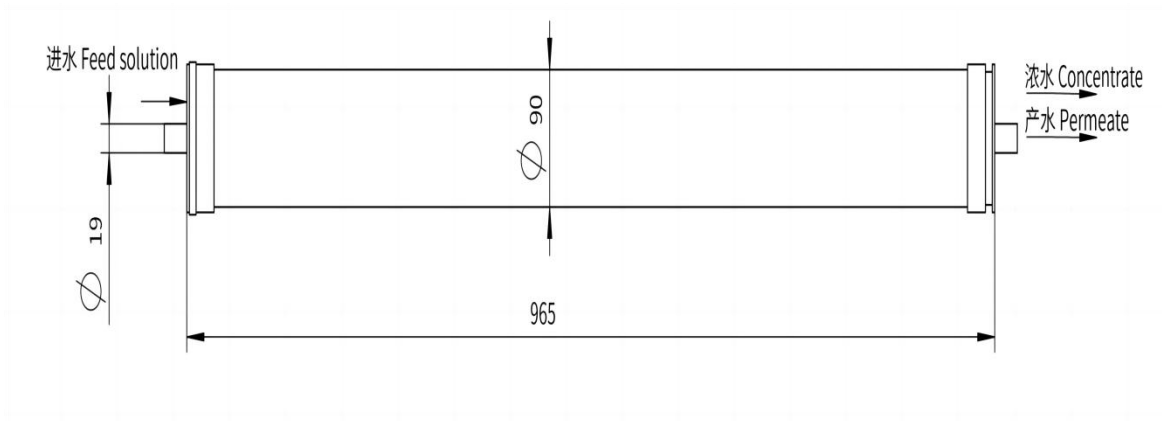
MR8060A Ultrafiltration membrane Dimensions



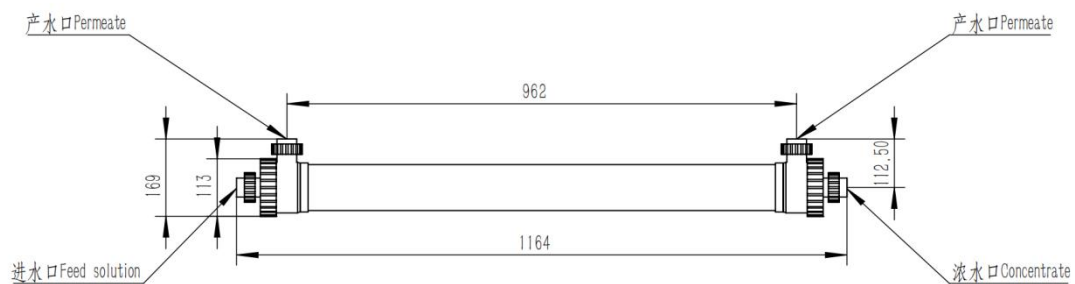
MR8060 Ultrafiltration membrane Dimensions



MR4040 Ultrafiltration membrane Dimensions



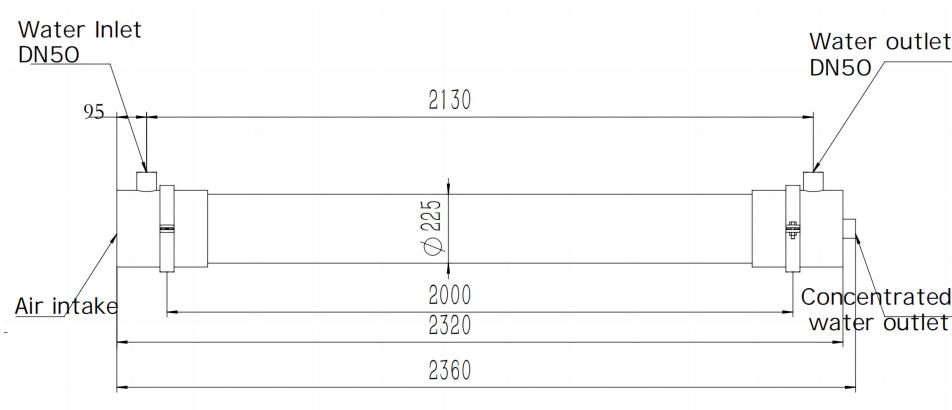
MR4046 Ultrafiltration membrane Dimensions



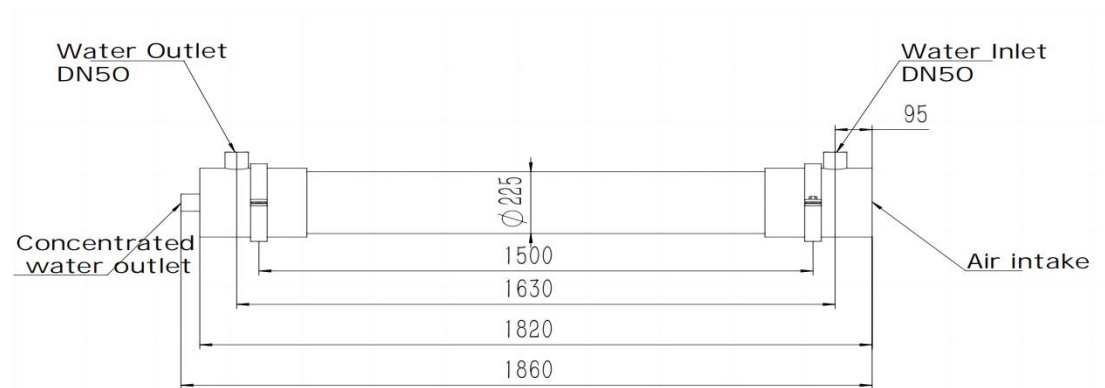
UF membrane Parameter table(Outside-in)

Model	MRW0880	MRW0860	MRW1060	MRW0440
Design flux(m ³ /h)	3.08-6.16	2.04-4.08	3-6	0.3-1.0
Permeate turbidity(NTU)	<0.1			
Membrane material and type	PVDF outside-in			
Shell and seal materials	UPVC/ABS, epoxy resins/PU			
Molecular weight cutoff	6000-150000 dalton			
Fiber inner/ outer diameter	0.8/1.4 mm, 0.7/1.3 mm			
Effective membrane area	77 m ²	51 m ²	75 m ²	6.5 m ²
Working Temp.(°C)	45 °C			
pH range	2-13			
Backwash pressure	0.25 Mpa			
Backwash flow(L/m ² /h)	2 to 3 times of produced water flux			

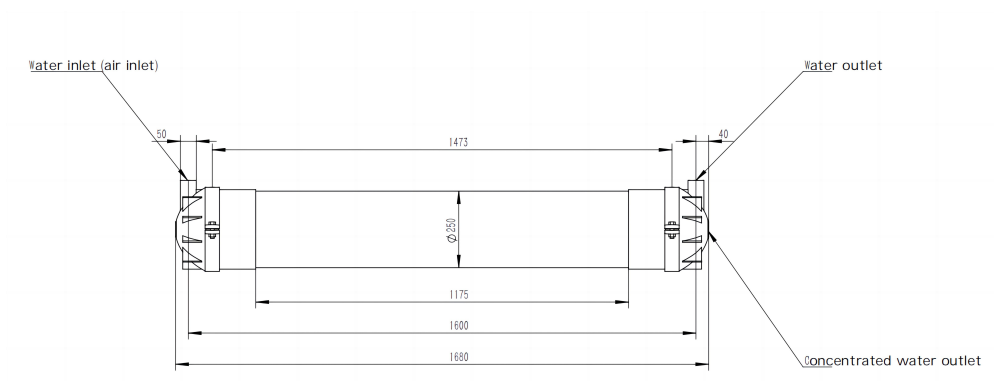
MRW0880 Ultrafiltration membrane Dimensions



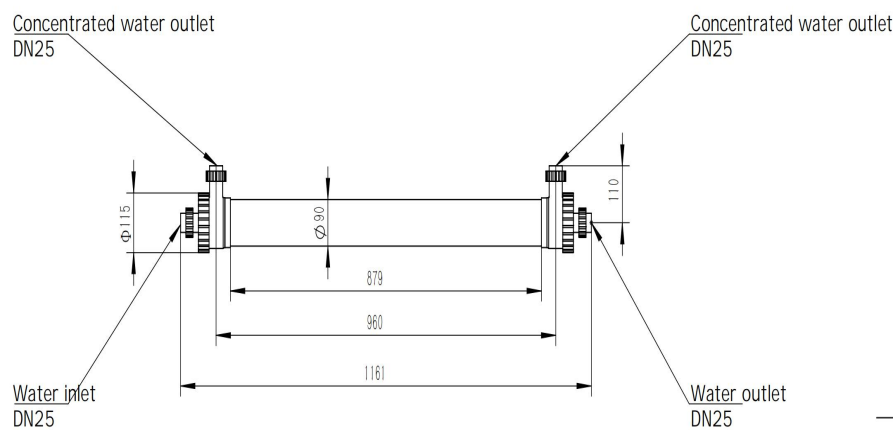
MRW0860 Ultrafiltration membrane Dimensions



MRW1060 Ultrafiltration membrane Dimensions



MRW0440 Ultrafiltration membrane Dimensions



Spiral UF Membrane Partamater Table

Model	MR-UFS-2521	MR-UFS-2540	MR-UFS-4014	MR-UFS-4021	MR-UFS-4040	MR-UFS-8040
Effective membrane area ft2(m2)	12(1.1)	30(2.8)	24(2.2)	33(3.1)	85(7.9)	400(37)
Produced water pollution index(SDI15)	<3					
Permeate turbidity(NTU)	<0.1					
Filter type	cross-flow filtration					
Membrane materials	PVDF、PSU、PSF					
Grid	031					
Molecular weight cutoff (dalton)	6000-150000					
Optimal operate pressure(Mpa)	0.05-0.6					
Max. inflow pressure (MPa)	0.8					
Max. operating temperature(℃)	45					
PH range	2~11					

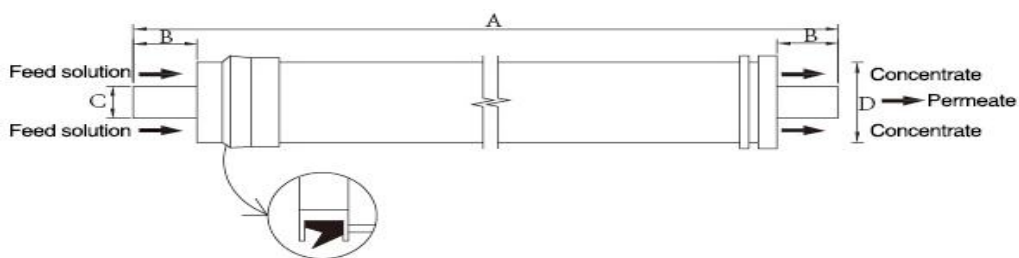
Spiral UF Membrane Dimensions and Specifications



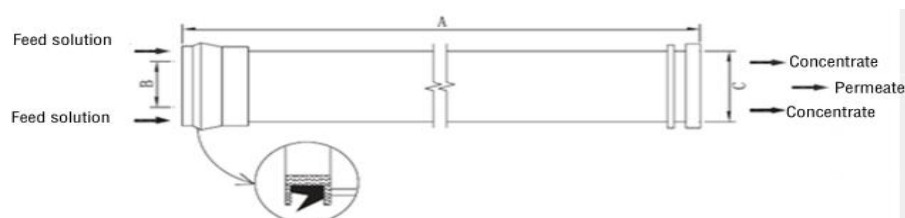
Unit: Inch(mm)

Model No.	A	B	C	D
UFS-2521	21(533.4)	1.05(26.7)	0.75(19.1)	2.4(61)
UFS-2540	40(1,016)	1.05(26.7)	0.75(19.1)	2.4(61)
UFS-4014	14(356)	1.05(26.7)	0.75(19.1)	3.9(99.9)
UFS-4021	21(533.4)	1.05(26.7)	0.75(19.1)	3.9(99.9)
UFS-4040	40(1,016)	1.05(26.7)	0.75(19.1)	3.9(99.9)
UFS-8040	40(1,016)	1.10(29)	7.90(201)	–

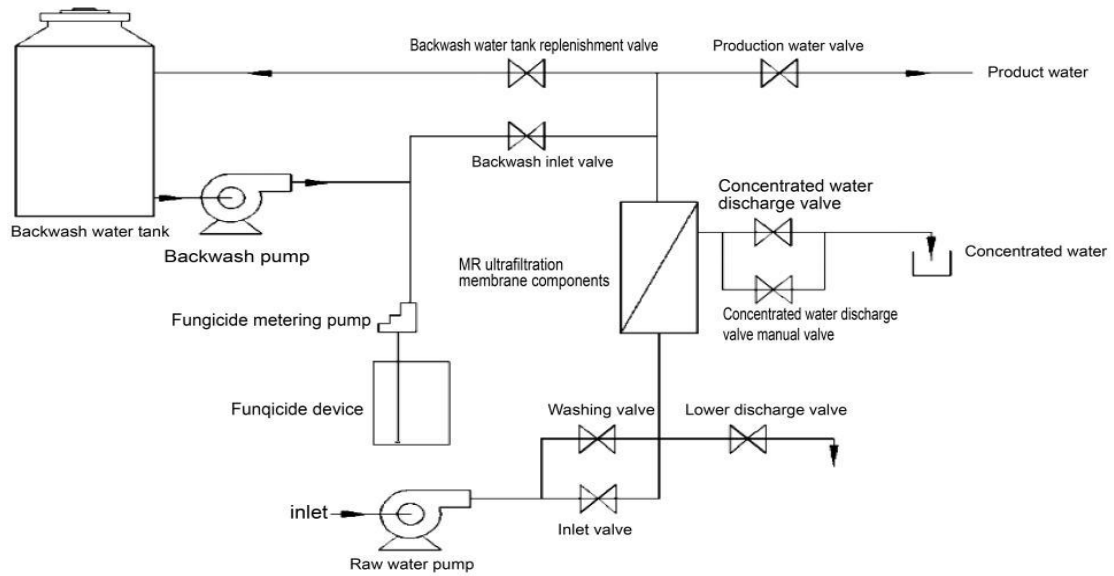
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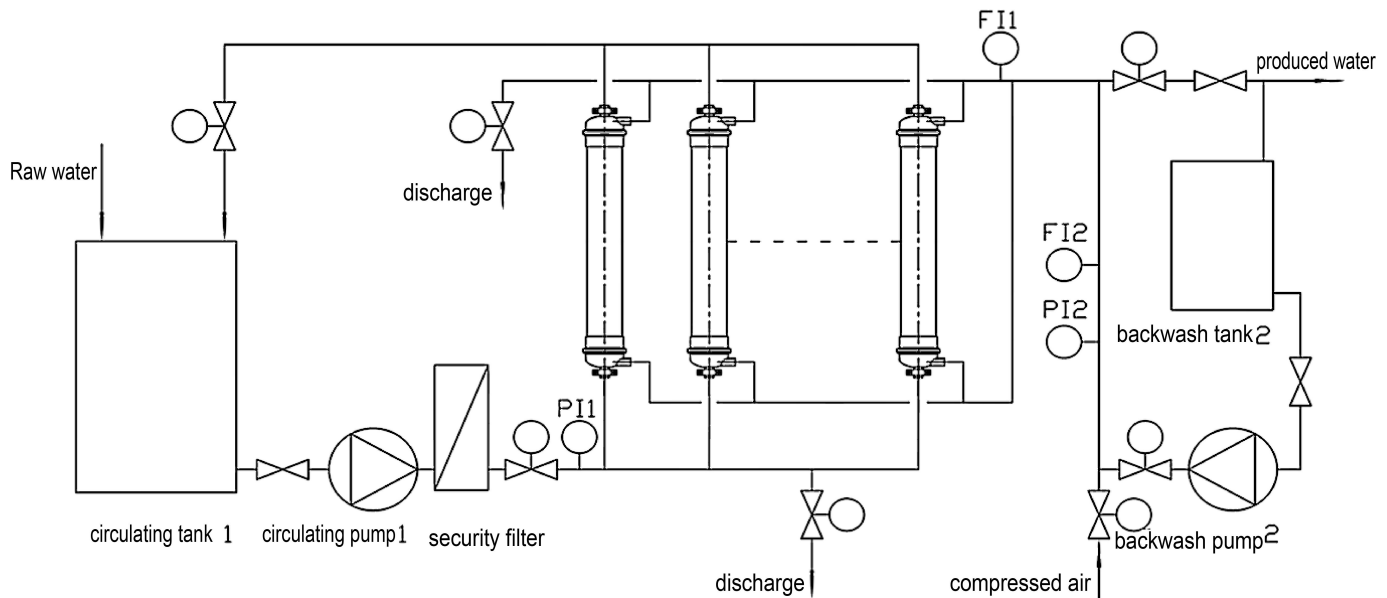
8040:



Ultrafiltration backwash flow chart



Outside-in Ultrafiltration cross-flow filtration flow chart



Project cases

Ultrafiltration equipment treats industrial wastewater engineering, the volume of treated water is 378m³/h.



50T/hour ultrafiltration water treatment equipment



Product Show





Welcome to consult our ultrafiltration membrane at any time, our MR overseas sales have been waiting for your arrival.

High quality products, best service, welcome your orders.

Thank for your watching