



## UFM200 Series

### 8" PVDF Hollow Fiber Ultrafiltration Membrane Module

#### Description

Hongtek UFM200 Series 8" PVDF Ultrafiltration Membrane Module is made of high quality anti-pollution PVDF(Polyvinylidene Fluoride) membrane material, with high chemical stability, oxidation resistance and acid and alkali resistance. PVDF ultrafiltration membrane is permanently hydrophilic for high throughput. PVDF hollow fiber UF membrane fiber pore size distribution is uniform, ensuring stable water good quality. PVDF hollow fiber ultrafiltration membrane has good mechanical strength, larger surface filtration area, easy to backwash, so PVDF membrane module is long service life.



#### Specification

Module	UFM200
Element size	Ø200×1710mm
Membrane material	PVDF
Active membrane area	47m <sup>2</sup>
ID/OD of hollow fiber	0.8mm/1.3mm
MWCO	200000 Dalton
Filtration rating	0.1 micron
Material of end seal	Epoxy resins
Material of housing	UPVC
Inlet pipe	DN50 OD 56mm PVC pipe
Produced water outlet pipe	DN50 OD 56mm PVC pipe
Concentrated water outlet pipe	DN50 OD 56mm PVC pipe

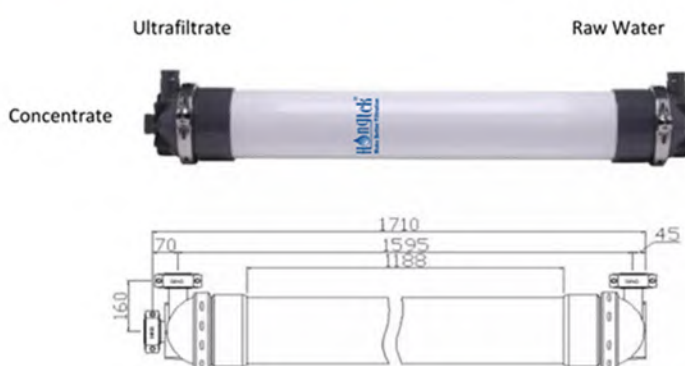
#### Application

- Sea water desalination
- Reclaimed water reuse
- Reverse osmosis prefiltration
- Power plant wastewater treatment
- Electroplating wastewater treatment
- Industrial wastewater deep treatment reuse

#### Feature

- PVDF ultrafiltration membrane is Permanent hydrophilic
- PVDF UF membrane module has larger filtration area and longer service life
- PVDF hollow fiber ultrafiltration membrane is strong oxidation resistance, acid and alkali resistance
- PVDF hollow fiber UF membrane has good mechanical strength and uniform micropore distribution
- PVDF membrane module use international standard size clamps for quick installation and easy replacement

#### Sizes of UF Membrane Module



#### Performance

Membrane water flow mode	Outside to inside
Operation mode	Cross-flow filtration or dead end filtration
Pure water flow	9,400L/H (0.15MPa, 25℃)
Designed water flow	40-120L/m <sup>2</sup> .hr (0.15MPa, 25℃)
Maximum operating pressure	0.2Mpa
Maximum transmembrane pressure	0.15Mpa
Operating temperature range	5-45℃
Influent water turbidity	<25NTU
Produced water turbidity	<1NTU
Produced water SS	≤1mg/L
Produced water SDI	≤3
Operation PH Range	2-12
Bacterial virus removal rate	>4log

#### Work Principle of PVC UF Membrane



- PVDF UF membrane water flow mode is from outside to inside
- PVDF ultrafiltration membrane fiber pore size distribution is uniform and larger filtration area
- PVDF ultrafiltration has strong anti-staining ability, resistant to acid and alkali & long working life
- The filtration rating of PVDF UF membrane is 0.1 micron, particles are trapped by the membrane wall
- Water, small molecules and ions pass through the membrane walls under pressure to form ultrafiltrate
- Outside to inside flow mode of PVDF hollow fiber UF ensure the stability good quality of produced water

#### Tech Support

##### Project Case of 8" PVDF Ultrafiltration Membrane Module



Mineral water ultrafiltration equipment 40m<sup>3</sup>/h

Process: Groundwater - Quartz sand filter - Activated carbon filter - Security filter - PVDF Ultrafiltration membrane - Ozone mixing tower - Finished water tank - Filling line

Equipment parameters: UFM200 Series 8" PVDF ultrafiltration membrane module, 20 pieces, design operating flux 75L/m<sup>2</sup>.h

