

UFM160 Series

6" PVDF Hollow Fiber Ultrafiltration Membrane Module

Description

Hongtek UFM160 Series 6" PVDF Hollow Fiber Ultrafiltration Membrane Module are made of high quality modified PVDF hollow fiber ultrafiltration membrane, which has higher chemical stability, oxidation resistance, acid and alkali resistance, and long service life. After special hydrophilic treatment, the PVDF ultrafiltration membrane has permanent hydrophilic properties, which can ensure a high water production flux even at a lower transmembrane pressure. PVDF hollow fiber ultrafiltration membrane uniform void distribution can well overcome the blockage of particles and ensure the stability good quality of produced water. PVDF UF membrane has a high breaking strength and elongation ability, which can effectively reduce the probability of breaking film filaments.



Specification

Module	UFM160
Element size	Ø160×1810mm
Membrane material	PVDF
Active membrane area	40m²
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	DN40 OD 40mm PVC pipe
Produced water outlet pipe	DN40 OD 40mm PVC pipe
Concentrated water outlet pipe	DN40 OD 40mm PVC pipe

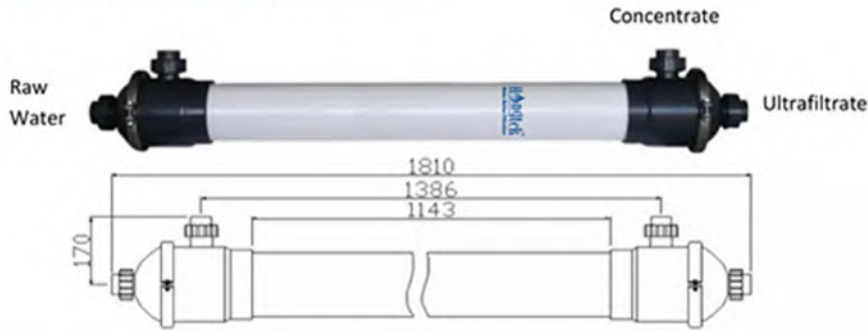
Application

- Surface water treatment
- RO system pretreatment
- Mineral water production line
- Drinking water treatment of tap water
- Industrial wastewater deep treatment reuse
- Residential and commercial water treatment
- Municipal sewage advanced treatment and recycling

Feature

- PVDF hollow fiber UF is antioxidant, stain resistant, easy to clean
- PVDF hollow fiber UF has large membrane flux, stable water output and long service life
- PVDF UF membrane can be cleaned by air and water, high membrane flux recovery rate
- Small footprint, easy replacement, low voltage operation, saving electricity and labor costs
- The quality of the produced water is good, the water recovery rate is high, which effectively saves water resources

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	8,000L/H (0.15MPa, 25℃)
Designed water flow	40-120L/m².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	Working: 4-10; Washing: 2-12
Bacterial virus removal rate	>4log
Air Washing Volume	0.1-0.15N m³/m².hr
Air Washing Pressure	≤0.1MPa

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 6" PVDF Ultrafiltration Membrane Module

