

## Hollow Fiber Membrane

Jiuwu hollow fiber membranes are prepared using high-grade PVDF resin as raw material, based on advanced production processes and hydrophilic modification technology, with a nominal pore size of 30nm. We have developed two modules, Ultrafiltration and MBR, with excellent performance. The product has been widely used in fields such as river purification, reclaimed water reuse, industrial wastewater pretreatment, municipal wastewater treatment, drinking water, and seawater desalination.

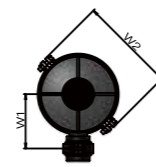
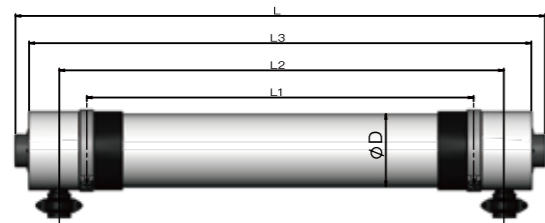


### Hollow Fiber Membrane—Specification parameters of curtain membrane element

| Model | Total Membrane area (m <sup>2</sup> ) | Number of Elements | Material                                                          | Size (L*W*H, mm) | Outlet/inlet size | Water treatment capacity (m <sup>3</sup> /d) |
|-------|---------------------------------------|--------------------|-------------------------------------------------------------------|------------------|-------------------|----------------------------------------------|
| M960  | 960                                   | 48                 | Top: 304 stainless steel, ABS resin<br>Frame: 304 stainless steel | 2600×1400×2410   | DN65              | 190~770                                      |
| M720  | 720                                   | 36                 |                                                                   | 2000×1400×2410   |                   | 140~580                                      |
| E480  | 480                                   | 24                 |                                                                   | 1400×1400×2410   |                   | 95~380                                       |
| E240  | 240                                   | 12                 |                                                                   | 1300×1400×2410   | 45~190            |                                              |
| E180  | 180                                   | 12                 |                                                                   | 1300×700×1910    | DN40              | 35~145                                       |

### Hollow Fiber Membrane—Specification parameters of cylindrical membrane element

| Model         | Total Membrane area (m <sup>2</sup> ) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | D (mm) | W1 (mm) | W2 (mm) |
|---------------|---------------------------------------|--------|---------|---------|---------|--------|---------|---------|
| JW™-PVDF-2660 | 33                                    | 1860   | 1500    | 1610    | 1710    | 165    | 125     | 250     |
| JW™-PVDF-2860 | 51                                    | 1860   | 1500    | 1630    | 1820    | 225    | 180     | 342     |
| JW™-PVDF-2880 | 77                                    | 2360   | 2000    | 2130    | 2320    | 225    | 180     | 342     |



◀ Hollow fiber column membrane module

### Technical advantages

- Small membrane pore size and high porosity;
- Excellent pollution resistance;
- Excellent mechanical properties;
- Strong chemical resistance and stability;
- Advanced Packaging Technology;
- Customizable services.

## Organic Tubular Membrane

Jiuwu organic tubular membrane is categorized into two types: sintered tubular membrane and non-woven tubular membrane, involving materials such as PVDF, PES, etc. The separation accuracy of the membrane layer covers 10kD~0.2 μm. The inner diameter of membrane tubes, of which non-woven tubular membranes are available in 6mm, 8mm and 10mm, and sintered tubular membranes are available in 8mm, 12.7mm and 25.4mm. The size of the modules are 4-inch, 6-inch and 8-inch, in addition, non-standard membrane module with different materials and specifications can also be customized. The products have been used in processes such as hardness removal of softening, powder cleaning, acidic and alkaline liquid reuse, as well as in applications such as Landfill leachate, reinjection water for oilfield, and plant extraction process.

### Advantages of Non-woven Tubular Membrane

- Double-layer non-woven body to withstand higher operating pressure;
- Uniform ultra-thin separation layer, uniform pore size, high separation accuracy;
- Open flow channel, free of dead corner, strong pollution resistance;
- The flow channel is wide, and the concentration of activated sludge in the influent water can reach 15~30g/L.



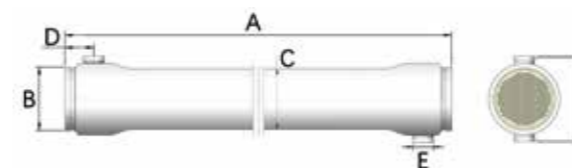
### Advantages of Sintered Tubular Membrane

- Special membrane mosaic structure, given excellent wear resistance;
- Strong anti-pollution, can be backwashed, more stable operation flux;
- Open flow channel for high viscosity, high solids systems;
- Excellent chemical resistance for a wide range of applications, easy to clean.

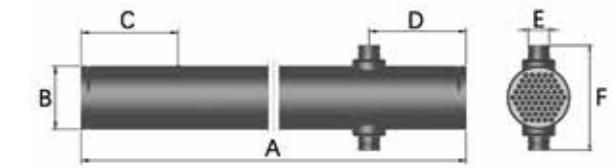


### Typical Tubular Membrane Module Specifications

|                                      | Model number    | Membrane area (m <sup>2</sup> ) | Membrane tube inner diameter (mm) | Number of Membrane Tubes | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) |
|--------------------------------------|-----------------|---------------------------------|-----------------------------------|--------------------------|--------|--------|--------|--------|--------|--------|
| Non-woven Tubular Membranes          | JW-TU-F-8630-F  | 15.2                            | 8                                 | 201                      | 3000   | 168.3  | 160    | 90     | 60     | 250    |
|                                      | JW-TU-F-8830-F  | 27.2                            | 8                                 | 365                      | 3000   | 219.1  | 210    | 90     | 73     | 330    |
| Sintered Tubular Membrane Advantages | JW-TU-F-12618-P | 2.59                            | 12.7                              | 37                       | 1828.8 | 168.3  | 337    | 337    | 73     | 282    |
|                                      | JW-TU-F-12818-P | 4.25                            | 12.7                              | 61                       | 1828.8 | 219.1  | 337    | 337    | 73     | 363    |



▲ Non-woven tubular membrane



▲ Sintered tubular membrane