

## DELEMIL HPO-01 DTRO MEMBRANE ELEMENTS

### Performance Characteristics

DTRO is short for disc tube reverse osmosis membrane technology, which is the membrane element specially designed for treating high difficulty waste water. The flow channels of DTRO is wider than that of spiral-wound membranes. The surface of the hydraulic disc of the membrane element is designed as convex points, to make the liquid flow turbulently during the flowing process and enhance anti-fouling ability of membrane elements.

Independent filtering membrane element design can reduce consumable costs of the system. When the membrane sheet is contaminated, some DTRO membrane sheets and hydraulic discs can be replaced according to the actual situations.

### Membrane Specifications

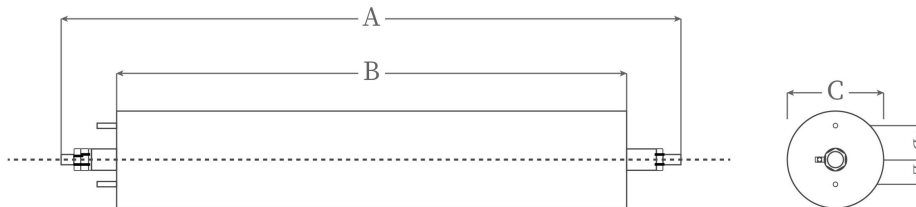
#### Parameters of Membrane Element

Item	Unit	Membrane Elements HPO-01
Inlet Flow Range	l/h	250-1600
Inlet Flow During Operation	l/h	500-1200
Total Membrane Area	m <sup>2</sup>	7.6
Numbers of Disc	u	170
Numbers of Membrane	u	169
Outside Diameter of Pressure Vessel	mm	238
Total Length	mm	1200
Test Pressure	bar	170
Maximum Operating Pressure	bar	160

**Note:** The average desalination rate will be measured after 24 hours operation; Flow fluctuation range of single membrane could be ±25%.

**Test conditions:** 800 l / h NaCl liquor with a salt content of 30,000 mg / L, temperature of 25 °C with operating pressure of 52 bar.

## ➤ Schematic Diagram and Dimensions



Specification	Diameter (mm)				
	A	B	C	D	E
DO-01	1200	950	216	80	56
MO-01	1200	950	220	80	56
DO-02	1400	1150	216	80	56
MO-02	1400	1150	220	80	56

## ➤ Operating Conditions

Normal Operating Pressure	40-160bar
Maximum Operating Temperature	40°C
Maximum Cleaning Temperature	45°C
Operating PH	5-9
Cleaning PH	3-12
Free Chlorine	<0.1ppm

## ➤ Storage Conditions

- All membrane elements must be stored in the original packaging before first use.
- The membrane elements are best placed in the original package and unsealed before the water treatment system is used.
- The best storage temperature of membrane elements is 5~10°C with avoiding direct sunlight, and the storage temperature should not exceed 35°C.
- As freezing will cause the physical damage of the membrane elements, the storage place of the membrane elements shall be required to take some insulation measures.
- Ensure that the carton remains dry when stacking the membrane elements.

## ↳ General Information

- ☑ Once the membrane element is wet, it must be kept wet at all times.
- ☑ Due to the actual problems caused by the user's failure to strictly comply with the operating restrictions and guidelines set in this specification, the limited warranty we have promised will be invalid.
- ☑ Due to the system has been shut down for a long time, we suggest that the membrane elements should be placed in the protective liquid to prevent the growth of microorganisms.
- ☑ If there is improper impact on the original caused by the users using incompatible chemicals and lubricants , they shall assume the corresponding responsibility.
- ☑ Backpressure on the water side of the product should be avoided at all times to avoid causing undesirable problems.