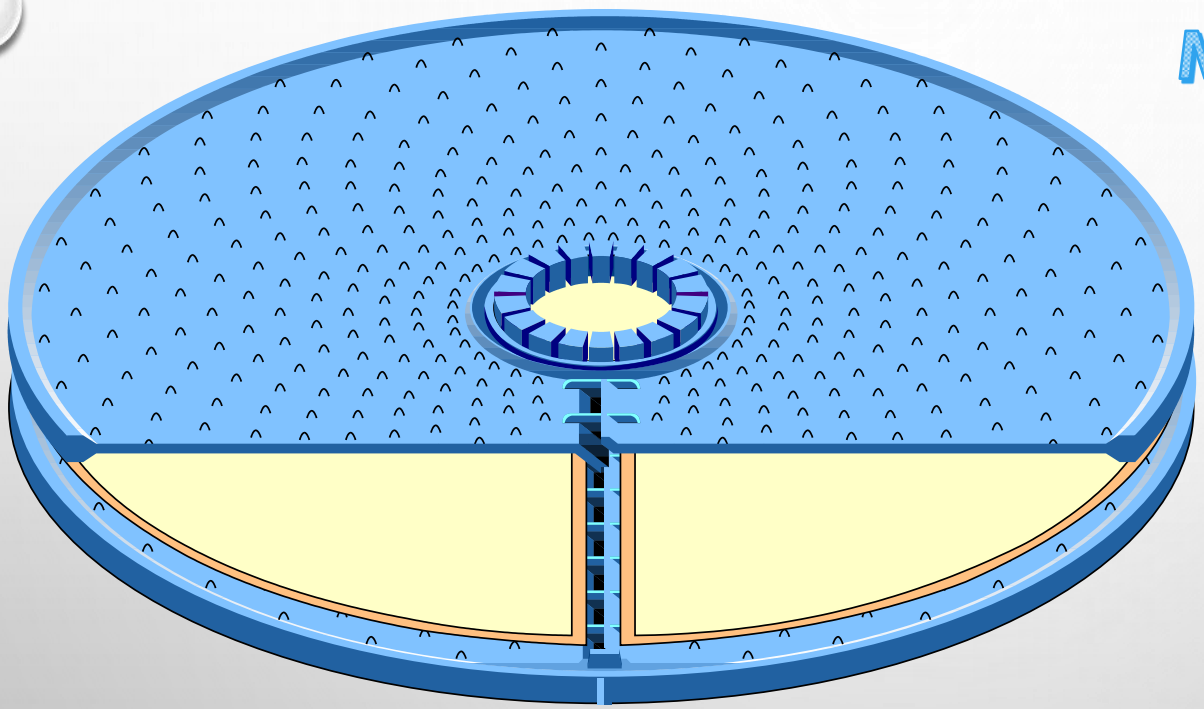
Circular Disc Membrane Module

CD 9 - Module



Circular Disc Membrane Module

CD 9 – module is a further development of the disk module technology.

The patented flow design of the module offers several advantages:

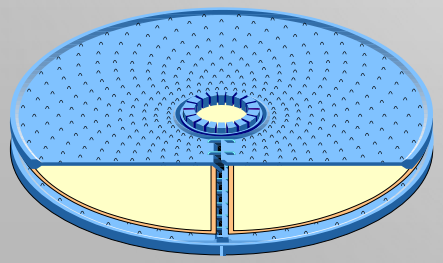
- *optimised fluid characteristics and hydraulics*
- *low pressure loss over the module*
- *excellent cleaning behaviour*
- *wide range of application*

<u>Membrane Filtration</u>

1. Nanofiltration
2. Reverse Osmosis

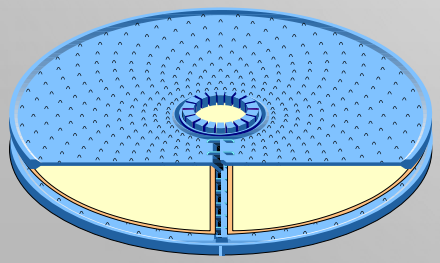
<u>for the Applications</u>

1. Sea- and brackish water desalination
2. Process water recycling
3. Waste water treatment
4. Water reuse



Circular Disc Membrane Module

- *LOW PRESSURE VERSION PN 25*
- *HIGH PRESSURE VERSION PN 80*
- *HIGH PRESSURE VERSION PN 140*



Circular Disc Membrane Module

Technical Specifications of the CD-Module 9 m²

Diameter:	*10“ ≅ 254 mm*
End flanges:	*280 mm*
Height Pressure Vessel:	*915 mm*
Height total:	*1090 mm*
Membrane Surface:	*9 m²*
No.Membrane Cushions:	*120*

Circular Disc Membrane Module

Technical Specifications of the CD-Module 9 m²

Weigth:	*140/158kg unfilled/filled*
Connecting Lines:	*Flow Rates:*
Rawwater:	*R1/2“*
Concentrate:	*R1/2”*
Permeate::	*R1/4”*
Nominal:	*750 - 850 l/h*
Minimal:	*500 l/h*
Maximum:	*1000 l/h*

Circular Disc Membrane Module

Membrane Material:

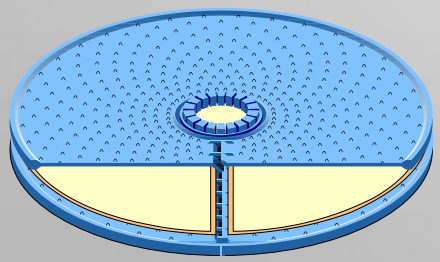
It is possible to use any standard dry membrane material provided it can be thermally welded.

Connecting Sets (scope of delivery):

- Two Pressure Connecting Tubes; 800mm length; PN 80 / 140
- Permeate Tube; 800 mm length; PN 10 (max. 145 PSI)

Spare Membrane Cushion:

The membrane cushions can easily be exchanged, spare membrane cushions are available single or as a complete set.



Circular Disc Membrane Module

The support plate supports the membrane cushion and creates an open channel to the membrane cushion. The surface of the support plate consists of flow segments producing a turbulence in the waste water on one side and on the other side providing through their geometrical arrangement for an uniform fluid across the full area of the membrane cushion. O-rings insulate the permeate against the raw water.

The 121 support plates and the 120 membrane cushions are stacked alternately into a packet. The stack is put into the pressure vessel, which is connected to the manifolds for raw water, reject and permeate by hoses.