

# Bi-Osmeo Eco 4"

200 à 600 L/h



## MEMBRANE SEPARATION PROCESS

### REVERSE OSMOSIS

#### BI-OSMEO ECO 4"

Fruit of many years from experience, the **Bi-Osmeo Eco** range allows you to produce 200 to 600l/h of water by Bi-osmosis (the water is reversed twice).

Equipped with 4" low energy reverse osmosis membranes, the **Bi-Osmeo Eco** reverse osmosis units are controlled by a box with a microprocessor and LCD screen managing system safety and automatic filling of the permeate tank.

**Bi-Osmeo Eco** systems make it possible to achieve very low conductivities, the permeate of the first osmosis stage being again osmosis by the second stage mounted

range. Only one HP pump is necessary to ensure pressure sufficient for the proper operation in series of the 2 stages. Combining simplicity and compactness, the **Bi-Osmeo Eco**

makes it possible to optimize the quality of water produced for demanding applications when a simple reverse osmosis is not enough.



## APPLICATIONS

The Osmeo range is designed to supply reverse osmosis water for the following applications :

- vapor sterilizer water supply,
- low pressure boilers,
- professional laundries,
- laboratories, cosmetics,
- food-processing industry applications,
- any application requiring RO water.

## SPECIFICATIONS

- Isolation valve
- 1µm prefiltration with isolation valve and upstream/downstream
- Inlet solenoid valve
- Adjustable low inlet pressure switch
- 1 vertical multistage HP pump
- Working pressure adjustment valve with pressure gauge
- Fiberglass pressure tubes
- Low energy 4" Membranes
- Conductivity probe
- Scaled flow control valve for the recirculation of the concentrate
- Ludion recirculation flow meter stage 1
- Ludion permeate flow meter stage 2
- Ludion concentrate flow meter stage 2
- Ludion flow meter recirculation stage 2 to stage 1
- Quality 3-way motorized purge valve
- Sampling on permeate
- OsmeoTouch V350
- 400V+T protection box
- Connection for cleaning (CIP)

# Bi-Osmeo Eco 4"



## OPERATING PARAMETERS

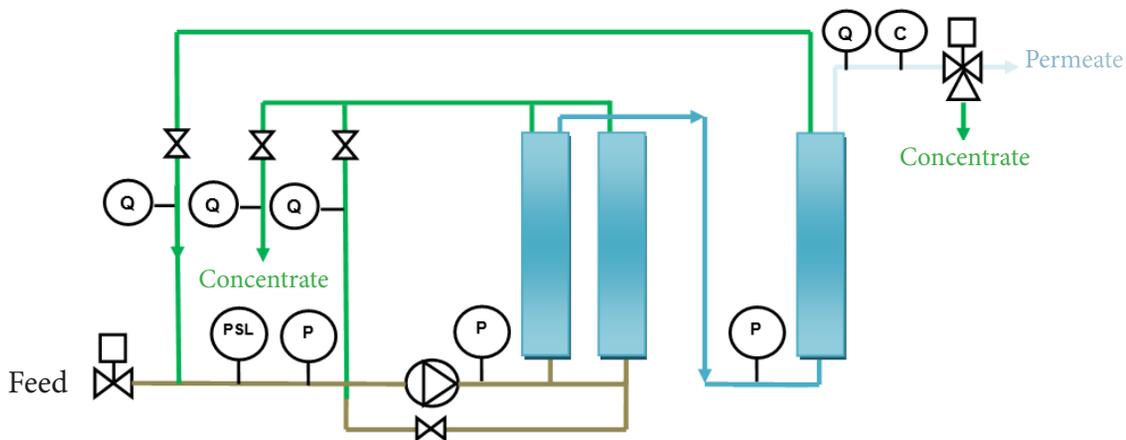
Feed pressure min/max	3 / 5 bars
Maximum temperature	37°C
TDS Max	< 1000 ppm
Iron + Manganese concentration	< 0.1 ppm
SDI <sub>15</sub> (fouling index)	< 3
Organic matter	< 3 ppm
Free chlorine	< 0.1 ppm
Minimum rejection	99.1 %

## TECHNICAL DATA

Model	Bi-Osmeo4-Eco-200	Bi-Osmeo4-Eco-400	Bi-Osmeo4-Eco-600
Permeate flow rate at 15°C for 500 ppm (L/h)*	200	400	600
Concentrate flow rate (L/h)	120	230	340
Feed flow rate (L/h)	360	780	1140
Recovery	68%	68%	68%
Number of membranes (1 <sup>er</sup> floor/2 <sup>ème</sup> floor)	<b>2+1</b>	<b>3+2</b>	<b>4+3</b>
Service pressure (bar)	10	11	12
Permeate counter pressure (bar)	0.5	0.5	0.5
Power (kW)	1.1	1.1	2.2
Electrical supply	3x400V + Ground		
<b>Dimensions (mm)</b>			
Length	850	1 300	1 300
Depth	560	560	560
Height	1 800	1 800	1 800

\* The permeate flow rate varies with the water temperature, approximately 3% per °C

## TECHNICAL DRAWING



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