

## Energy efficient reverse osmosis system



### Reliable and maintenance-friendly

The system series supplies high quality permeate for boilers, closed/open cold water cycles in climate systems and cooling towers, closed hot water systems and other process water for industrial applications, where a low conductivity ( $< 20 \mu\text{S/cm}$ ) is required.

Membranes and pumps are selected with a focus on the latest technology, efficiency and quality. This ensures a reliable and efficient system.

Compared to the system's high capacity, the design is compact, maintenance-friendly and allows for easy access to components, as well as simple installation even in sparse spaces.

### Features:

- Robust and compact system mounted on a stainless steel skid
- PLC control system with touch-screen as standard
- The control unit provides information on the system's operation via the LCD touch screen with graphic display
- Alarm for operation interruptions with external output
- Time and quality flush - for better water quality and it protects the membranes
- Effective BWT- high-quality membrane technology
- Energy efficient pump
- Low noise

### Benefits:

- High-performance membranes
- Low energy consumption
- Operation via PLC with touch screen
- Possible to extract historical data to Excel
- Time and quality flush, ensuring improved water quality and protection of the membranes
- Can have a conductivity meter fitted
- The combination with a mixed-bed system can provide an even lower conductivity ( $< 0.5 \mu\text{S/cm}$ )
- Installation kit for quick and easy connection
- All mounted on a stainless steel skid

### Intuitive, user-friendly and flexible

PLC control unit with LCD touch screen and graphic display provides easy viewing of important measurements and detailed status information for service and operations personnel. It has the option to install a USB function for simple and easy transfer of data and operating history to Excel format.

The options include, among others, expanded operational status information and membrane cleaning systems that prolong the membrane's service life.

### The flexible design allows for expansion with:

- Preparing for Clean-In-Place - used for the mobile CIP unit
- Clean-In-Place unit - effective cleaning of the membranes
- Antiscaling dosing - increases the utilisation of the raw water up to 80-85%
- Additional conductivity control - more monitoring points in the installation
- Frequency-controlled high pressure pump - ensures reliable operation in areas with fluctuating water pressures and temperatures
- GSM option (2-way) - communication via TEXT
- Flow transmitter for permeate
- Flow transmitter for concentrate
- Temperature and pressure transmitter with log function
- Analogue input level transmitter (depending on temperature/pressure transmitter)

### BWT HOH A/S

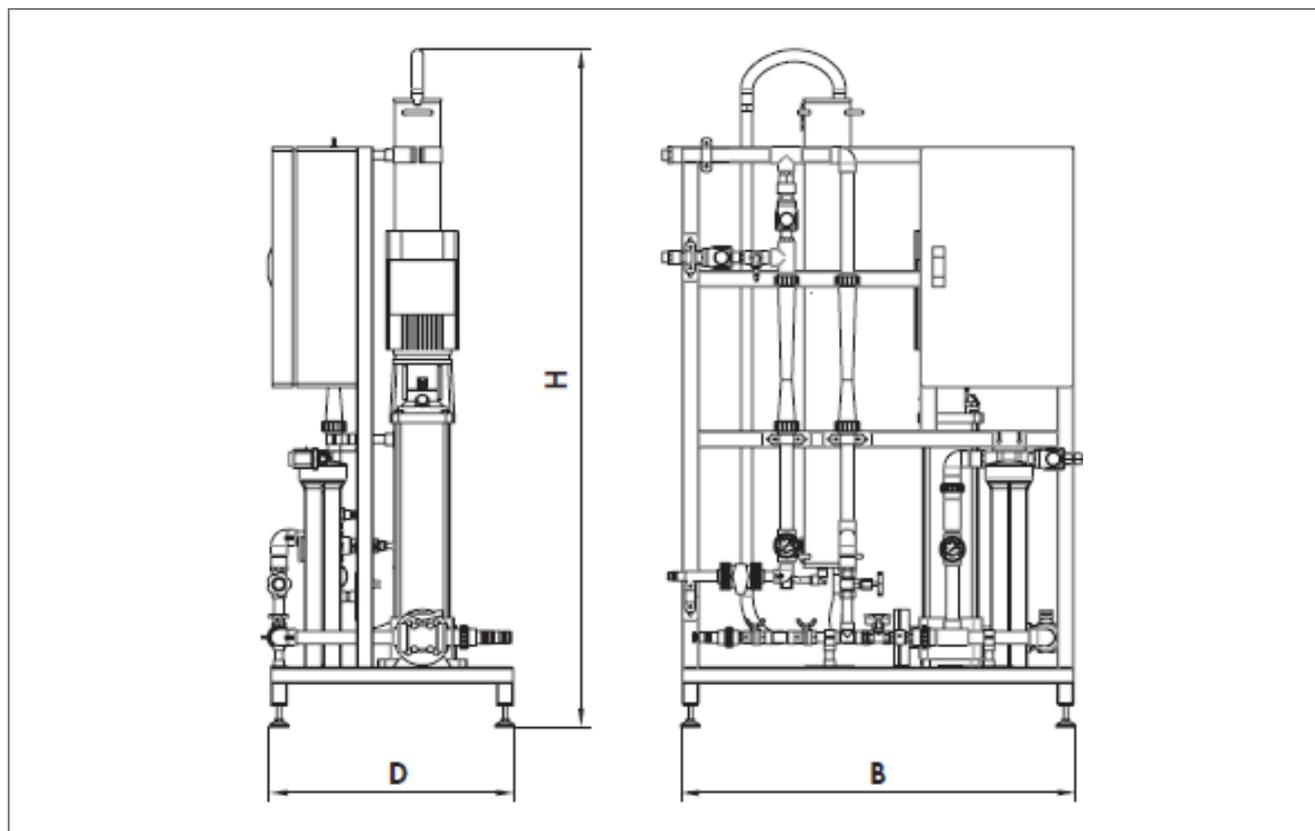
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## Technical data:

BWT PERMAQ® Pro 2100	Unit	2110	2120	2130	2140
Nominal permeate performance *	l/h	600	1200	1700	2300
Salt reduction	%	>98			
Water utilisation WCF (max) **	%	75			
Inlet pressure (min/max)	bar	3/7			
Electrical connection	V / Hz	3 x 400 / 50			
Fuse	A	16			
Pump motor size	kW	3		4	
Protection class	IP	54			
Raw water temperature	°C	5 – 25			
Ambient temperature	°C	5 – 35			
Inlet	"	¾			
Outlet	"	¾			
Drain	"	¾			
Width	mm	970			
Depth	mm	620			
Height	mm	1675			
Weight (dry), approx.	kg	170	190	210	240
Product number		421072115	421072125	421072135	421072145

\* For water quality of: 10°C, 3 bar, TDS ≤ 500 mg/l ± 15%, SDI ≤ 3.0, oxidants ≤ 0.05 mg/l.

\*\* Based on a water quality of TDS ≤ 500 mg/l, with softening as a pre-treatment.



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For You and Planet Blue.

