

PUR1TE
FIRST FOR PURE WATER

**ELITE^{PLUS} High Performance
Reverse Osmosis Units**



3500 ND - 16500 ND

ELITE^{PLUS} Reverse Osmosis Units 3500 ND - 16500 ND

UNIT DESIGN

Stainless steel base frame with plastic front panel to house the instruments and controls.

Special inlet filter, stainless steel, with 5 µm filter cartridge and 2 pressure gauges.

High pressure pump, low-noise, multi-stage centrifugal type.

Low energy wound modules with energy saving PA/PS composite membranes in GRP pressure vessels with PP inliner.

Valves and instruments including feedwater sampling valve, solenoid/diaphragm inlet valve, feedwater pressure switch, permeate, concentrate and concentrate recirculation flow meters, vibration-resistant pressure gauges for pump and concentrate pressure, stainless steel adjustment valves for permeate, concentrate and concentrate recirculation flow.

Puritron 2000 microprocessor control system for fully automated monitoring and control of the reverse osmosis unit with LCD (16 characters per line).

Operating data: permeate conductivity (temperature corrected), permeate temperature, operating hours, feed water conductivity, percentage salt rejection.

Alarm signals: low pressure, hard water, motor overload, high conductivity pre-alarm, high conductivity fault, concentrate fault.

Status signals: permeate discard, permeate recycling, concentrate displacement, concentrate rinse, intermittent rinse during shut-down, shut-down by external signal (forced stop, regeneration).

LEDs for operation, alarms, regeneration, discard, disinfection, full tank, rinse.

Input (low voltage) for level control with 1 or 2 float switches, hardness monitoring unit. The Puritron 2000 control system includes control functions for the hardness monitoring unit. Freely programmable universal input with LCD, additional conductivity measuring unit (e.g. for feedwater). Shut-downs by external signal (forced stop, regeneration).

Outputs for 2 solenoid valves for concentrate flushing, permeate discard and recycling, second high pressure pump, analogue signal (e.g. 4-20 mA) and DDC (freely programmable universal output with LCD, conductivity alarm contact and collective alarm signal, each on floating changeover contact).

3500 ND

4000 ND

5000 ND

6500 ND

Technical Data

		3500 ND	4000 ND	5000 ND	6500 ND
PERMEATE FLOW RATE	l/h	3324	4155	4987	6649
MIN. SALT REJECTION	%	97	97	97	97
MAX. RECOVERY	%	75	75	75	75
VOLTAGE	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50
MOTOR POWER	kW	5.5	5.5	5.5	11
FEEDWATER CONNECTION	DN	40	40	40	50
PERMEATE/CONCENTRATE CONNECTION	DN	32	32	40	40
MIN./MAX. FEEDWATER PRESSURE	bar	2/6	2/6	2/6	2/6
MIN./MAX. FEEDWATER TEMPERATURE	°C	5/35	5/35	5/35	5/35
HEIGHT	mm	2000	2000	2000	2000
WIDTH	mm	2800	2800	3800	4800
DEPTH	mm	750	750	750	750
WEIGHT (APPROX.)	kg	400	500	600	800

8500 ND

10000 ND

12500 ND

15000 ND

16500 ND

Technical Data

		8500 ND	10000 ND	12500 ND	15000 ND	16500 ND
PERMEATE FLOW RATE	l/h	8311	9975	12466	14960	16622
MIN. SALT REJECTION	%	97	97	97	97	97
MAX. RECOVERY	%	75	75	75	75	75
VOLTAGE	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
MOTOR POWER	kW	11	11	11	15	15
FEEDWATER CONNECTION	DN	50	65	65	65	80
PERMEATE/CONCENTRATE CONNECTION	DN	50	50	65	65	65
MIN./MAX. FEEDWATER PRESSURE	bar	2/6	2/6	2/6	2/6	2/6
MIN./MAX. FEEDWATER TEMPERATURE	°C	5/35	5/35	5/35	5/35	5/35
HEIGHT	mm	2000	2000	2000	2000	2000
WIDTH	mm	4000	5000	6000	6000	5000
DEPTH	mm	1000	1000	1000	1000	1000
WEIGHT (APPROX.)	kg	1000	1200	1500	1800	2000

The units are designed for a maximum TDS of 1000 mg/l, sized on a water temperature of 10 °C and a maximum colloidal index of 3. Under these conditions, the units still reach design permeate flow after three years of operation. With new units the working pressure is about 15% lower. The permeate recovery depends on the raw water quality and the type of pretreatment.

Errors and omissions excluded. Purite reserves the right to change specification without notice.



INVESTOR IN PEOPLE

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