



## Stand Units UO 2000 - 3500 ND

### Unit design

- Stainless steel main frame
- Control cabinet with lockable main switch
- Electrical switchgear for control of high pressure pump
- Inlet filter with 5 micron cartridge
- High pressure pump, multi-stage centrifugal type
- Low energy spiral-wound elements (TFC - PA)
- GRP Housing with in-liner

### Valves and instrumentation

- Sampling valves for feedwater and permeate for each pressure vessel
- Inlet solenoid valve
- Pressure gauges for pressure drop on cartridge filter
- Feed water pressure switch
- Permeate, concentrate and concentrate recirculation flow meter
- Vibration resistant pressure gauge for pump, operating and concentrate pressure
- Stainless steel valve for adjustment of permeate, concentrate flow rate and concentrate recirculation
- Permeate conductivity measurement, temperature compensated

### Options

- Hardness monitoring unit Limitron
- Permeate recirculation
- Concentrate flushing
- Connection set for manual cleaning unit
- Manual cleaning unit

### RO 1000 Microprocessor

- Two line next display (16 characters per line)
- Language German / English / French / Italian
- Password protected programming of the operating sequences
- For regular process information :
  - ◆ Permeate conductivity (Temperature compensated)
  - ◆ Permeate temperature
  - ◆ Operating hours
- For malfunction signal :
  - ◆ Low pressure
  - ◆ Hard Water
  - ◆ Motor Overload
  - ◆ High conductivity pre-alarm / fault
  - ◆ Power supply malfunction
- For status signals
  - ◆ Permeate discard
  - ◆ Permeate recycling
  - ◆ Concentrate displacement
  - ◆ Concentrate rinse
  - ◆ Intermittent rinse during shutdown
  - ◆ Shut down by external signal (regeneration, forced stop)
- LEDs
  - ◆ operation
  - ◆ regeneration
  - ◆ disinfection
  - ◆ malfunction
  - ◆ discard
  - ◆ full tank
- Inputs (low voltage)
  - ◆ Level control with one or two float switches
  - ◆ Hardness monitoring unit (Limitron)
  - ◆ Shutdown by external signal (forced stop, regeneration)
- Outputs
  - ◆ Softening unit (230V - 50 Hz)
  - ◆ 2 solenoid valves for concentrate rinse, permeate discard and recycling
  - ◆ DDC (Collective malfunction signal on floating changeover contact)



Specifications

Model		2000ND	2500ND	3000ND	3500ND
P/N		5110010650	5110010651	5110010652	5110010653
<b>Options</b>					
• Hardness monitoring unit Limitron		4804000641	4804000641	4804000641	4804000641
• Permeate recirculation PR		5213010687	5213010687	5213010688	5213010688
• Concentrate flushing KSE		5213020693	5213020693	5213020693	5213020693
• Connection set for manual cleaning unit		5213040700	5213040700	5213040700	5213040700
• Manual cleaning unit		5213030697	5213030697	5213030697	5213030697
<b>Flow specifications*</b>					
Permeate Flow	l/h	2000	2500	3000	3500
Min. Salt rejection	%	97	97	97	97
Recovery	%	75	75	75	75
<b>Operating parameters</b>					
Operating Pressure	bar	14	14	14	14
Membrane / Number		4040/6	4040/8	4040/9	4040/11
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
Max ambient temperature	°C	40	40	40	40
pH		3-11	3-11	3-11	3-11
Conductivity range (permeate)	µS.cm-1	2-200	2-200	2-200	2-200

\*Systems are designed for a maximum TDS of 1000ppm, a temperature of 15°C and a maximum fouling index of 3. Under these conditions, the units still reach design permeate flow after 3 years. Permeate recovery depends on raw water quality and flow rate



No liability assumed for dimensions and weight given

Model		2000ND	2500ND	3000ND	3500ND
<b>Installation and Utility Requirements</b>					
Voltage / Frequency	V/Hz	3x400/50	3x400/50	3x400/50	3x400/50
Motor power	kW	3	3	4	4
Protection IP		IP54			
Connecting Cable		3 meter long with 16A-6 h CEE 5 pole plug			
<b>Dimensions and weight</b>					
Height (H)	cm	165	165	165	165
Width (W)	cm	245	245	345	345
Depth (D)	cm	70	70	70	70
Weight approx	kg	240	320	340	380

Photographs are for illustration purposes only. Specifications may change without prior notice.