



Reverse Osmosis Units Series UO 120 - 500

for desalination of softened drinking water according to German drinking water regulations (free chlorine not detectable). With controller RO 524.

Compact system with a small footprint suitable for wall mounting or fixation on the floor.

Reverse Osmosis Units with controller RO 524

Series UO 120 - 500

Unit design

Panel made of powder coated steel.

Special inlet filter with 5 µm-filter cartridge with two pressure gauges filled with glycerin,
high pressure pump rotary-vane type,
high performance wound module(s) with PA/PS composite membranes in stainless steel pressure vessel.

Valves such as sampling valves for feed water and permeate, inlet solenoid valve, valves to regulate the flow rate of permeate and concentrate.

Pressure switch for pump feed pressure, pressure gauge for operating pressure.

Flow meters for permeate and concentrate.

Conductivity measurement of permeate.

Screw connection for a manual cleaning unit.

Connecting cable (3 m) with 16 A - 6 h CEE three-pole plug.

Unit completely wired and pre-assembled and ready for installation. Electrical equipment in accordance with VDE 0100 part 600, VDE 113 part 1.

RO 524 microprocessor controller for fully automated monitoring and control of the reverse osmosis unit with **two-digit alphanumeric display** of permeate conductivity, forced stop and full tank.

Malfunction signals: low pressure, hard water and high conductivity, automatic restart of operation after progressive rest period.

LEDs for operation and disinfection status. Automatic concentrate flushing after each operating cycle, forced flushing after 24 h standby.

Inputs (low voltage) for level control with 1 or 2 float switches, hardness monitoring unit limitron (the RO 524 controller includes control functions for the limitron hardness monitoring unit), shut-downs by external signal (forced stop, regeneration).

Outputs for softening unit (230 V/50 Hz), for 2 solenoid valves and for DDC (collective malfunction signal on floating change-over contact).

The units are designed for a maximum TDS of 1,000 mg/l, a water temperature of 15 °C, a max. colloidal index of 3 and free permeate outlet. Under these conditions, the unit still reaches design permeate flow after 3 years of operation. The permeate recovery depends on the raw water quality and the type of pre-treatment.

Technical data		UO 120	UO 300	UO 500
Permeate flow rate	l/h	120	300	500
Min. salt rejection	%	97		
Recovery	%	75-80		
Operating pressure approx.	bar	15		
Membrane element / number		4021 / 1	4040 / 1	4040 / 2
Voltage	V / Hz	230 / 50		
Motor power	kW	0,55		
Height	mm	1,240		
Width	mm	400		
Depth	mm	380		
Weight approx.	kg	45	55	70
Item no.		381 921	381 922	381 923
Pre-fusing 16 A, feed water connection DN 20, permeate/concentrate connection DN 10, conductivity range 1 - 99 µS/cm, feed water pressure min./max. 2/6 bar, feed water temperature min./max. 5/35 °C, ambient temperature max. 40 °C, pH-value 3 - 11				