

RO 524
Controller



picture: UO 500 WSE with options

Reverse Osmosis Units Series UO 120 - 500 WSE

For desalination of softened drinking water according to German drinking water regulations (free chlorine not detectable).

With controller RO 524.

Drinking water can also be desalinated without pre-treatment, with a reduced permeate recovery rate, and depending on the raw water analysis.

Compact unit suitable for wall mounting or fixation on the floor.

Reverse Osmosis Units Series UO 120 - 500 WSE

Unit design

Stainless steel base frame with plastic front panel.

Special inlet filter with 5 µm-filter cartridge and pressure gauge,

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, solenoid inlet valve, valves to regulate the flow rate of permeate and concentrate.

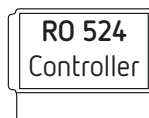
Pressure switch for pump feed pressure, pressure gauge for operating pressure.

Flow meters for permeate and concentrate.

Conductivity measurement permeate.

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 0113 part 1.



RO 524 microprocessor control system

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 (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 WSE	UO 250 WSE	UO 300 WSE	UO 400 WSE	UO 500 WSE
Permeate flow rate	l/h	120	250	300	400	500
Min. salt rejection	%	97	97	97	97	97
Recovery	%	75	75	75	75	75
Operating pressure	bar	14	12	12	10	10
Membrane element/number		4021/1	4040/1	4040/1	4040/2	4040/2
Voltage	V/Hz	230/50	230/50	230/50	230/50	230/50
Motor power	kW	0.55	0.55	0.55	0.55	0.55
Height	mm	1,300	1,500	1,500	1,580	1,580
Width	mm	520	520	520	520	520
Depth	mm	350	350	350	350	350
Weight approx.	kg	46	56	56	71	73
Item no.		381 940	381 941	381 942	381 943	381 944
Pre-fusing 16A, Feed water connection DN ¾" IG, 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 3 – 11						