

Controller RO 524

Fast Track



picture: UO Budget 130

## Reverse Osmosis Units Series UO Budget 80 and 130

**Undersink unit** 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. However, in this case the recovery rate is reduced. The decisive factor is the water analysis.

# Reverse Osmosis Units with controller RO 524

## Series UO Budget

### Unit design

**Stainless steel plate** used as installation panel.

**Special inlet filter** with 5 µm activated carbon filter element,

**high pressure pump** as peripheral impeller pump,  
**high performance spirally wound module** with PA/PS composite membranes in stainless steel pressure vessel.

**Inlet solenoid valve.**

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

**Flow restrictor** for limitation of permeate and concentrate flow rate.

**Solenoid valve** for automatic concentrate-rinse.

**Connecting cable** (2 m) with shockproof 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 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		Budget 80	Budget 130
Permeate flow rate	l/h	80	130
Min. salt rejection	%		95
Recovery	%		50
Design pressure	bar		10,0
Membrane element/number			4021/1
Voltage	V/Hz		230/50
Motor power	kW		0,4
Height	mm		360
Width	mm		800
Depth	mm		360
Weight approx.	kg		31
<b>Item no.</b>		<b>381 900</b>	<b>381 901</b>
Pre-fusing 16 A, feed water connection R ¾" AG, permeate/concentrate connection DN 10, conductivity range* 1 - 99 µS/cm, feed water pressure min./max. 3/6 bar, feed water temperature min./max. 5/35 °C, Ambient temperature max. 40 °C, pH-value 3 – 11			

\* option conductivity measurement permeate (**item no. 381 903**)