

## Budget 130 Reverse Osmosis Unit



**Under sink or bench unit** for the desalination of softened drinking water (free chlorine not detectable), operating using reverse osmosis (RO). 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.

### Unit design

**Stainless steel back plate** with all the controls mounted.

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

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

**Valves and instruments** including solenoid inlet valve, feed water pressure switch, vibration-resistant pressure gauge for pump pressure, flow restrictor for limitation of permeate and concentrate flow rate. Solenoid valve for automatic concentrate rinse.

**Microprocessor control system** as described below, 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 113 part 1.

**\*Option:** Permeate conductivity measurement (item no 391 903)

**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, concentrate flushing each operating cycle, forced flushing after 24 h standby

**Additional connections possible:**

**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) and 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 reaches design permeate flow. The permeate recovery depends on the raw water quality and the type of pre-treatment.

### Technical Data

**Permeate flow rate : 130 l/hr (at 15C), 100 l/hr at 10C**

Min. salt rejection	%	95
Recovery	%	50
Operating pressure approx.	bar	10.0
Membrane element/ amount		4021/1
Voltage	V/Hz	230/50
Motor power	kW	0.4
Pre-fusing	A	16
Feedwater connection	R	3/4" AG
Permeate/concentrate connection	DN	10
Conductivity range*	µS/cm	1 – 99
Min./max. feedwater pressure	bar	3 / 6
Min./max. feedwater temperature	°C	5 / 35
Max. ambient temperature	°C	40
pH		3 – 11
Height	mm	370
Width	mm	800
Depth	mm	370
Weight approx.	ca. kg	31