

# RO 100

## Reverse osmosis plant



- Compact and with everything in one cabinet
- Easy to place where space is limited
- Fast and simple electric installation and plumbing
- Manufactured with quality components such as Grundfos motor, Danfoss pressure switch.
- Ready-assembled control box - no extra electric installations
- Flow meter and manometer for easy control of permeate performance and pressure
- By lacking water supply (inlet pressure) the plant automatically shuts down
- High capacity per membrane

### Function

Reverse osmosis is a membrane separation process which, by means of a high water pressure, is capable of separating (retaining) the dissolved salts (ions) present in the raw water and let the pure water molecules pass through the membrane.

In reality it is the molecules which are removed from the dissolved salts and not, as known from ion exchange, the ions that are removed from the water.

The dissolved salts are removed almost 100 %, and the membrane pores are so small that even micro organisms such as bacteria and pyrogens cannot penetrate.

The pure water (permeate) is collected in the reservoir and from here it is pumped to point of use. The "filthy" water (concentrate) is led to drain.

### Pressure

Model RO-100 is equipped with a reservoir pump which ensures a stable pressure to consumption, e.g. 2 m<sup>3</sup>/hour at 3.7 bar pressure.

### Quality

The permeate purity is determined by the quality of the raw water to be treated. If the raw water is normal drinking water, the conductivity of the treated water will usually be 10-20 µS/cm.

UV and mixed-bed plants can be connected as auxiliary equipment (ask for our special brochure)

### Options

- Conductivity meter with alarm outlet /4-20 mA
- Integral mixing valve
- Assembly kit
- Bypass function



The RO-100 series with built-in reservoir and pump.

Technical data	RO-111	RO-112	RO-113	RO-114	RO-115	RO-116
Capacity, litres/hour*	50	100	150	200	250	300
Recovery max., %	40-80	40-80	40-80	40-80	40-80	40-80
Salt reduction approx., %	> 98	> 98	> 98	> 98	> 98	> 98
Water quality approx., µS/cm	< 20	< 20	< 20	< 20	< 20	< 20
Reservoir, litres	100	100	100	100	100	100
Power connection, V/Hz	230/50	230/50	230/50	230/50	230/50	230/50
Installed power, kW	1.3	1.3	1.3	1.3	1.3	1.3
Inlet, Ø "	1/2	1/2	1/2	1/2	1/2	1/2
Outlet, Ø mm	10	10	10	10	10	10
Discharge point, Ø "	3/4	3/4	3/4	3/4	3/4	3/4
Measures L x W x H, mm	580x580x810	580x580x810	580x580x810	580x580x810	580x580x810	580x580x810
Max. water temperature, °C	25	25	25	25	25	25
Dynamic inlet press., min./max., bar	3/7	3/7	3/7	3/7	3/7	3/7

\* At drinking water quality 10 °C, 3 bar, max. 500 mg/l total salt content