

Specification

Reverse Osmosis Systems **WaterLine RO / ROB**

The fully wired compact reverse osmosis systems WaterLine RO / ROB serve for supplying steam humidifiers as well as high and low-pressure adiabatic systems with fully demineralised or blended water. They are completely pre-assembled on a plastic base and suitable for wall mounting. Operation without pre-treatment with a softener is possible (with iron, manganese and chlorine-free raw water up to 446 ppm total hardness or 12° dH (German hardness) carbonate hardness).

Efficient water treatment for producing permeate with a conductivity of 5-20 µS/cm at a permeate output of 170 litres per hour* and a water yield of about 50%*, salt rejection approx. 96-98%*. With easy installation and maintenance, the reverse osmosis systems were designed specifically to be combined with all HygroMatik humidification systems in order to make low-maintenance operation possible.

WaterLine RO / ROB consists of:

- Reverse-osmosis system including manometer and pressure switch for monitoring water inlet pressure (dry-run protection), sliding vane pump, stainless steel pressure pipe including highly efficient reverse osmosis membrane, manometer and pressure switch 1-3.5 bar for monitoring the reverse-osmosis system when it is switched on and adjusting the discharge pressure, conductivity measuring cell 0-100 µS/cm, plug connection 230 V / 50 Hz
- Backflow preventer type BA for protection in accordance with DIN EN 1717 and DIN 1988-100 for water up to Class 4 including integrated dirt trap plus pressure reducer and manometer
- Membrane pressure tank, 18 litres capacity
- Sampling valve for testing water quality
- Microprocessor controller with 2 LEDs for displaying operating and service messages
- Sensors for monitoring water inlet pressure, permeate conductivity and permeate flow
- Potential free release and fault message contacts
- Bypass valve for maintenance (only WaterLine ROB)
- Blending device for blending permeate with raw water to increase water conductivity specifically for electrode steam humidifiers (only WaterLine ROB)

Technical data:

Volume flow rate permeate.....	170 l/h*
Required raw water volume flow rate.....	approx. 340 l/h
Desalination rate	approx. 96 – 98%
Yield	approx. 50%*
Inlet pressure of raw water (minimum / maximum)....	2 – 6 bar**
Discharge pressure of permeate (via pressure switch)	1 – 3.5 bar
Water installations	¾"
Electric connection	230 V / 50 Hz
Electric connected load.....	0.56 kW
Empty weight.....	30 kg
Operating weight.....	approx. 48 kg
Dimensions (WxHxD).....	650x1100x340 mm

*All performance data is based on a water temperature of 15°C and a total raw water salt content ≤ 750 ppm. Reducing the raw water temperature lowers the permeate output by 3% per 1°C.

** Water pre-pressure min.1 bar higher than permeate pressure if using the blending device (factory setting 3.0 bar)
Subject to technical amendments without notice