

# **STULZ UltraWater®**

6-stage Reverse Osmosis System





# STULZ UltraWater® reverse osmosis system

Adiabatic humidifying systems produce cold mist and must be supplied with demineralised water in order to prevent the formation of a chalk film in the system and in the humidified room. This can be achieved very simply in practice by positioning the STULZ UltraWater® reverse osmosis system upstream.

The heart of the STULZ UltraWater® reverse osmosis system is a high-performance membrane, which removes chalk, sediment and other undesirable substances from tap water. Special features of this system are an integrated pressure pump and four different filter stages, which ensure low-cost operation and a long service life.

Finally, a UV lamp reliably ensures complete hygiene. Compact technology at a low price! With a capacity of 12.5 litres of demineralised water per hour, the STULZ UltraWater® reverse osmosis system can remove

- 95 % of all solutes
- 99 % of all organic substances
- 99 % of all chlorides
- 99 % of all bacteria and viruses

# from the water.

# Technical data

- Membrane capacity: 12.5 litres per hour (= 300 litres per day)
- Connected voltage: 230 V/50 Hz
- Unit dimensions (cm) LxHxW: 47x42x20
- Storage tank dimensions (cm) LxHxW: 28x28x35
- Unit weight: 15 kg
- Weight of water tank when empty: 4 kg

## **Technical features**

- 12-litre water tank for demineralised water
- Fully preassembled for simple, low-cost installation
- Includes all filters, UV lamp and conductivity meter
- · All connectors and threaded couplings required for connection to the fresh water mains
- 2-metre connecting hoses, colour coded, for fresh water, waste water, osmosis water and water tank pipe
- Controller for continuous conductivity measurement and automatic flushing of membranes
- Operating hours counter
- Pressure pump for improved membrane efficiency
- UV lamp in stainless steel housing for disinfecting the demineralised water
- Three prefilters for maximum membrane service life
- Filter bodies sealed with double O-ring
- Automatic stop valve and return valve of stainless steel
- Elutriation valve



## Operating conditions

Maximum water temperature: 45 °C Maximum conductivity: 2,000 μS/cm Maximum hardness: 30°dH Maximum silt density index: SDI 5 Concentration of iron and manganese: less than 0.1 mg/l Hard drinking water and well or spring water may adversely affect the service life of filters and membranes and the quality of the demineralised water. It may be a good idea in such cases to install a water softener upstream. In order for the system to function correctly, concentrations of bacteria must conform to drinking water regulations and mains water must not contain any strontium or barium.

# 6-stage reverse osmosis system



5-µm sediment filter removes, dust, rust and other particles (min. service life 6 months)



Granulate activated carbon filter removes chlorine, odours, organic matter, pesticides and chemicals (min. service life 6 months)



Carbon filter block removes chlorine, odours, organic matter, pesticides and chemicals, to protect the membranes, for example (min. service life 6 months)



TFC (Thin Film Composite Membrane) removes elements such as lead, copper, barium, chromium, mercury, sodium, cadmium, fluoride, nitrides, nitrates and selenium (min. service life 2 years)



Carbon afterfilter removes any remaining residues and odours (min. service life 1 year)



## Stage 6:

UV lamp disinfects and kills off free viruses and bacteria in the water by means of UVC light (min. service life 1 year)

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