

HercoPur RO

Two Pass Reverse Osmosis HP units

Thermal disinfectable, two pass Reverse Osmosis unit for consumption-based production of demineralised, ultrapure water for Renal Dialysis

Reduction of operating costs

Due to permanent regulation of waste water quantity. 2nd RO can be completely waste water free.

Ready to Use

With TGA registration and certification according to MDD 93/42/EEC, Annex II excluding (4), classification as medical product class II b.

High operational safety

Two pass technology consists of two series connected Reverse Osmosis units. This guarantees the highest quality of pure water ensuring consistent operational safety.

100% redundancy

The twin pass Reverse Osmosis units can be operated independently without downtime, delivering 100% redundancy.



The complete reverse osmosis unit, including the modules, is heat disinfectable at a temperature of up to 90°C

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- **Dead zone free construction** including membrane elements
- **Rugged, durable stainless steel piping** on stainless steel base frame
- **Series arrangement** of thin film membrane modules with tangential flow and vortex grid in order to **avoid biological and mineral deposit formation on the membrane surface**. This also ensures a better pure water quality and a longer service life of the modules.
- **Sample valves without dead zones** at the beginning and at the end of the ringmain
- **Interval-flushing programs** (flushing with water and rinsing with permeate in order to avoid deposit formation on the membrane surface)
- **Chemical disinfection**
- **Thermal disinfection**, time intervals selectable according to site requirements
- **Leakage detection system** for RO units with distribution ringmain
- **Over temperature and over pressure protection** of the loop with pressure regulator
- **Fully automatic, selectable interval flushing** of the system during idle times
- **Week timer** for programming production and idle times according to site requirements
- **Water economiser, quadruplicate-acting through:**
 - a) consumption-based controller
 - b) concentrate recirculation
 - c) concentrate adjustment during partial utilisation of the capacity, for recovery optimisation
 - d) permeate recirculation
- **Selection button for automatic switchover of operating mode:**
 - a) both Reverse Osmosis Units connected in series
 - b) only Reverse Osmosis Unit 1 in operation
 - c) only Reverse Osmosis Unit 2 in operation

Controller for reverse osmosis units Diatron 5500

Microprocessor control system for fully automatic performance monitoring of dialysis water treatment units.

HercoPur RO assembly includes:

7" touchscreen, LEDs for service and malfunction, main processor, watchdog for internal system monitoring, SD card slot for storing log data, parameters and calibration data, input/output unit with removable single terminals for connection of probes and actuators, LAN interface for connecting to a network, USB port for software updates and storage of log data on a USB stick

HercoPur RO with HercoTherm assembly includes:

Sub processor, watchdog for internal system monitoring, input/output unit with removable single terminals for connection of probes and actuators, intuitive user guidance via touch screen, automatic operation via week timer with 8 freely adjustable dialysis and 4 heat disinfection programs, clear graphical display of the set periods of dialysis and thermal disinfection, adjustable prolongation of the dialysis time during the running dialysis operation for the current day e.g. at delays due to emergency dialyses, integrated control and monitoring of the heat disinfection for reverse osmosis system/ permeate loop/ permeate loop + dialysis machines/ reverse osmosis system + permeate loop/ reverse osmosis system + permeate loop + dialysis machine, diagnostic menu for the individual check of the inputs and outputs, lifetime logging of all measurement data and faults on the integrated SD card, download possibility of log data in CSV format via the integrated USB interface to an external USB drive.

Thus, a simple further processing and evaluation of the log data via Excel is possible. Optional worldwide remote monitoring and operation via TeamViewer.

The units are designed for a maximum TDS of 1,000 mg/l, a water temperature of 15°C, a maximum colloidal index of 3 and free permeate outlet. Under these conditions, the units still reach designed flow after three years of operation. The permeate recovery depends on the raw water quality and the type of pre-treatment.

| HP5500D P/H | | 500 | 750 | 1000 | 1250 | 1500 | 2000 | 2500 | 3000 | 3500 | 4000 | 4500 |
|----------------------------------|------|-----------------|-----|------|------|------|------|------|------|------|------|------|
| Permeate Flow | l/h | 500 | 750 | 1000 | 1250 | 1500 | 2000 | 2500 | 3000 | 3500 | 4000 | 4500 |
| Salt Rejection | % | 98 - 99.8 | | | | | | | | | | |
| Recovery | % | 75-90 | | | | | | | | | | |
| Voltage | V/Hz | 3ph 415 V/50 Hz | | | | | | | | | | |
| Motor power RO | kW | 9.4 | | | | | 22.2 | | | | | |
| Motor power thermal disinfection | kW | 12.0 | | | | | 18.0 | | | | | |
| Pre-fusing RO | A | 25 | | | | | 50 | | | | | |
| Pre-fusing hot san | A | 63 | | | | | | | | | | |
| Height | mm | 1820 | | | | | 2030 | | | | | |
| Width | mm | 1480 | | | 1640 | | 1800 | | | 2620 | | |
| Depth | mm | 780 | | | | | 940 | | | | | |
| Depth inc HercoTherm unit | mm | 985 | | | | | 1190 | | | | | |
| Weight | kg | 520 | 540 | 580 | 620 | 660 | 740 | 1200 | 1250 | 1300 | 1350 | 1400 |

Conductivity Range 0.5 - 50µS/cm. Operating Pressure Max. 25bar. Feed Water Pressure Min./Max. 2/6bar. Feed Water Temperature Min./Max. 5/25°C. Ambient Temperature Min./Max. 5/30°C.