southland filtration

Talk to an expert today
FREECALL 1800 656 771

HercoPur RO
Single Pass Reverse Osmosis HP

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

Reduction of operating costs

Operational cost reduction by permanent proportional adjustment of the waste water quantity to the current permeate consumption. This recovery optimisation saves enormous costs, particularly in partial load operation.

Ready to Use

Completely thermal disinfectable Reverse Osmosis unit for consumption-based supply of demineralised water for dialysis applications. 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

As an option, the downstream permeate ring main with the double-hose connections (free from dead zones) to the dialysis machines can be thermal disinfected in the same step.

The complete reverse osmosis unit ,including the modules, is thermal disinfectable at a temperature of up to 90°C (Photo: HP5500D 1200L/H)

HercoPur RO
Single Pass Reverse Osmosis HP units

- **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 programmes** (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 withdistribution ring main
- **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
- **Control redundancy** to ensure permeate production in case of failure of the control unit. The reverse osmosis unit can be activated directly by a separate second control unit in case of failure.

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" touch screen, 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 themal 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 .... L/H		**300**	**600**	**900**	**1200**	**1500**	**1800**	**2200**	**3000**	**4500**
Permeate Flow	l/h	300	600	900	1200	1500	1800	2200	3000	4500
Salt Rejection	%	98 - 99.8								
Recovery	%	75-90								
Voltage	V/Hz	3ph 415 V/50 Hz								
Motor power RO	kW	4.8						11.2		
Motor power thermal disinfection	kW	9.0								
Pre-fusing RO	A	16						32		
Pre-fusing hot san	A	63								
Height	mm	1810						2030		
Width	mm	1210					1370	1530	1830	
Depth	mm	755						940		
Depth inc HercoTherm unit	mm	985						1190		
Empty Weight approx.	kg	320	330	350	370	390	410	420	800	900
Operating weight approx.	kg	370	380	400	420	440	460	470	900	1000

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