

**Baxter**

**CWP 100**

WATER SYSTEM

# CWP 100

Designed for water purity

The quality of the water used to prepare dialysis fluid is extremely important. Even water considered as acceptable according to international standards may have chronic as well as acute effects on dialysis patients.<sup>1,2</sup>

The **CWP 100** system is an integral part of the Hygienic Chain concept and allows for achieving and maintaining of the fluid purity.<sup>3</sup>

- Automated heat disinfection of the distribution loop
- Fully enclosed central water plant
- Water saving functionality
- Chemical disinfection of the RO membranes
- Quiet, reliable operation



# CWP 100 SYSTEM

## Performance and specifications<sup>4</sup>

### MINIMUM OUTLET CAPACITY

Minimum capacity in liters/minute (liters/hour) at a product water outlet pressure of 200 kPa:

Model	101 H	102 H	103 H	104 H	106 H	106 HDP
+ 5 °C	8 (480)	14 (840)	19 (1140)	23 (1380)	30 (1800)	41 (2460)
+10 °C	9 (540)	16 (960)	21 (1260)	25 (1500)	32 (1920)	43 (2580)
+15 °C	11 (660)	18 (1080)	23 (1380)	27 (1620)	35 (2100)	45 (2700)
+20 °C	13 (780)	20 (1200)	25 (1500)	29 (1740)	35 (2100)	45 (2700)

### QUALITY

Depends on the inlet water quality. If potable water is used and the system is properly maintained, the following rejection rates are obtained:

Total dissolved salts	> 95%
Bacteria (CFU) & endotoxins (EU)	> 99%
Water conversion factor	max. 75%

### WATER SUPPLY

Model	101 H	102 H	103 H	104 H	106 H	106 HDP
Min. input, l/min (l/h)	20 (1200)	30 (1800)	40 (2400)	50 (3000)	60 (3600)	80 (4800)
Min. input pressure (to the WRO) MPa	0.1	0.1	0.15	0.25	0.35	0.35
Max. input pressure (to the WRO)	0.5 MPa (all models)					
Temperature	+5 °C to +25 °C*					

\* Maximum +20 °C if peracetic acid is used for chemical disinfection

### QUALITY

Potable water must be used. Additional pretreatment is normally necessary. Membrane and machine life expectancy depends on the inlet water quality. Only operate the CWP if the values are below the following limits:

Hardness	< 1 °dH (1.8 °fH)
Iron	< 0.1 mg/l
Manganese	< 0.1 mg/l
Chloride	< 100 mg/l
Silica	< 25 mg/l
Jackson Turbidity Unit (JTU)	≤ 1 (JTU)
Total dissolved salts (TDS)	< 1500 mg/l
Chlorine	< 0.1 mg/l
Silt Density Index (SDI)	< 5

### DRAIN REQUIREMENTS

Model	101 H	102 H	103 H	104 H	106 H	106 HDP
l/min	20	30	40	50	60	80

### CONNECTIONS

Inlet	PVC union, fits to OD 25 mm
Drain from heating tank	PP female union, fits to pipe OD 32 mm (heat resistant)
Drain from RO unit	PP female union, fits to pipe OD 40 mm
Drain from tray	1/2" female thread
Product water outlet & return	Wirsbo® 25 mm male, fits to pipe OD 25 mm

### MEMBRANES

Membrane material	Modified polyamide, thin film composite
Membrane configuration	Spiral wound
pH-tolerance	2-11

### POWER SUPPLY

Mains voltage	230/400 V, 50 Hz, three-phase (five wires); other voltages on request.	
Power rating	RO-unit:	1.8 kW (model 101 H-102 H) 2.5 kW (model 103 H-104 H, 106 H) 4.7 kW (model 106 H DP)
	Heating unit:	9.0 kW (all models)
Fuse for units	WRO H:	10 AT + 16 AT (slow blow)
3x380-400 V, 50 Hz	WRO H DP:	25 AT + 16 AT (slow blow)
3x415 V, 50 Hz	or if powered from one supply:	
	WRO H:	25 AT (slow blow)
	WRO H DP:	32 AT (slow blow)

### MEASURING RANGES

Temperature	0-100 °C (±10%)	
Flow	Inlet water:	3-80 l/min (±10%)
	Reject flow:	2-40 l/min (± 10%)
	Return water flow:	3-60 l/min (± 10%)

### CONDUCTIVITY

Inlet water	100-1000 µS/cm (±15%)
Product water	1-500 µS/cm (±15% or ±10 µS/cm whichever is the greatest)

### LOGGING INTERFACE

Interface	RS 232, 9 pin male according to EIA 232 C
Max input voltage	±15 VDC
High level min output	+5 VDC
Low level min output	-5 VDC
Max current	±5 mA
<b>Communication ports</b>	
Ethernet	Shielded RJ 45
USB	Host type A (USB 1.1), max output current 500 mA

### SOUND LEVEL

Sound level	At least 65 dBA at 3 meters distance
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### AMBIENT TEMPERATURE

Shipping and storage	-10 °C to +40 °C
Operation	+5 °C to +35 °C

### PHYSICAL DATA

Measures	Depth*: 650 (mm) Width: 2120 (mm) Height: 2040 (mm) 500 mm extra space is required both on the right-hand side and behind the CWP.
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\* Including handle, 40 mm

### HEATING TANK

Volume	Liters: 330
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### WEIGHT

Model	101 H	102 H	103 H	104 H	106 H	106 HDP
Unit (kg)	470	480	490	500	525	550
Unit+packing (kg)	720	730	740	750	775	800
Operation	780	800	820	840	880	920

## For safe and proper use of the device, please refer to the Instructions for Use

1. Hoenich NA, et al. *The Importance of Water Quality and Haemodialysis Fluid Composition*. Blood Purif 2006;24:11-18.
2. ISO 23500-3:2019.
3. Nystrand R. *Long Time follow up of microbial quality in a Gambro CWP WRO H system 1(5) BT 130501 S*. Bio-teq Nystrand Consulting.
4. HCEN124750120 User Manual CWP 100, 2020.

