Dialog⁺

Outstanding usability and reliability for an effective therapy



Hemodialysis

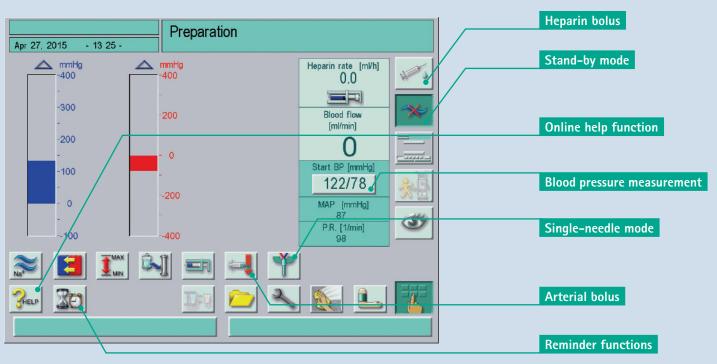


Our highly intuitive interface improves usability and safety

Intuitive user guide

The neatly arranged touch screen allows easy and fast operation. Even users with less experience benefit from the self-explanatory icons and the clear user guide. Online help functions and messages in plaintext support the user in all operating phases. As a result, medical staff can quickly and reliably take the appropriate measures. Reminder functions – e.g., for drug

administration, blood pressure measurements and heparin administration – assist the user, thus assuring optimized treatment procedures even in phases of frenzied activity. The intuitive operation of the system is also ensured in stressful situations, so that the user can always rely on the system's safety.



Dialog+ graphic user interface in Preparation Mode

Benefits of Dialog* - Usability

- 15" touch screen with iconographic interface
- Self-explanatory and intuitive software
- Smart functions like reminder and arterial bolus
- Ergonomic arrangement of machine components
- Short preparation and disinfection times
- Simplified management of access problems by easy-to-use single-needle mode

Meeting requirements through operating reliability and treatment efficiency

Reliability and cost efficiency made with the expertise of B. Braun

With our more than fifty years of experience in the field of extracorporeal blood treatment, we can ensure that the excellent quality of all our products remains on a high level. The well-engineered technology ensures reliable functionality.

The balanced price-performance ratio is convincing over the entire system lifetime, providing economic efficiency in daily operation.

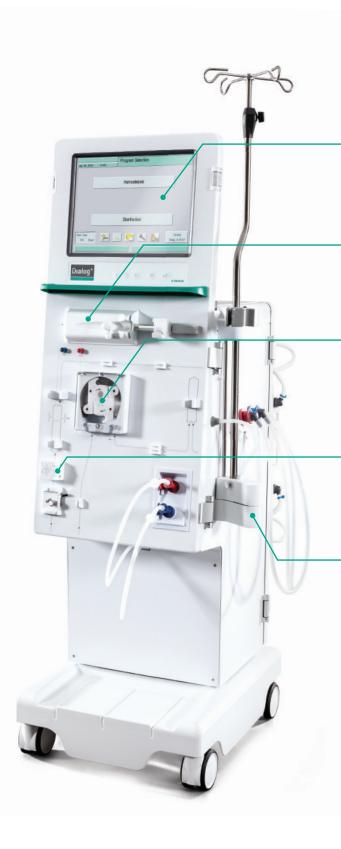
The requirement for high treatment quality is also reflected by the B. Braun commitment to the highest safety standards.

Benefits of Dialog+ - Reliability

- High mean time before failure
- Robust assembly and technology
- Application of high technical standards by consistent global processes

Benefits of Dialog* - Cost-effectiveness

- Efficient consumption of resources in treatment
- Dialysis fluid filter lasting 150 treatments or 900 hours
- Stand-by mode reducing dialysate flow to 0 ml/mir before connecting the patient
- Possibility to use standard bloodlines and concentrates for maximum customer flexibility



Important information at a glance

15" touch screen with iconographic interface

Heparin pump

Blood pump

Safety air detector and red detector

Bicarbonate cartridge holder

Dialog* (single pump and

battery backup) 710200A

Dialog+ (single pump, battery

backup and BIC cart. holder) 7102001

Option Item number
ABPM 7102226
Battery backup 7102244
Dialog computer interface 7107218
Dialysate flow filter 7102102
Blood pump roller 7x10 7102340

General data

Nominal voltage: 230 V (option: 120/240 V)

Nominal frequency: 50 Hz / 60 Hz

Nominal current (max.): max. 11 A for 230 V

Dimensions (W x D x H): approx. 510 x 637 x 1678 mm

Weight (empty): approx. 78 kg in the basic design

Water intake

Pressure range: 0.5 to 6 bar Temperature range: +10 to +30°C

Concentrate supply: canisters, bicarbonate cartridge

Pressure range: 0 to +1 bar

Standards: EN 60601-1: (IEC 601-1) EN 60601-2-16: (IEC 601-2-16) EN 60601-1-2: (IEC 601-1-2)

Produced in conformity with directive 93/42/EEC

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Dialysis fluid system

Temperature working range: selectable between +33 and $+40^{\circ}$ C

Conductivity processing: conductivity regulated

Working range: - conductivity of bicarbonate 2 to 4 mS/cm or 4 to 7 mS/cm

- total conductivity 12.5 to 16 mS/cm

 $\begin{array}{ll} \mbox{Measurement tolerance:} & \pm 0.2 \mbox{ mS/cm} \\ \mbox{Flow:} & 300 \mbox{ to } 800 \mbox{ ml/min} \end{array}$

Tolerance: ±5%

Blood leak detector: optical, color-specific
Alarm limit value: > 0.50 ml/min (HCT 45%)
> 0.35 ml/min (HCT 25%)

Ultrafiltration: - volume regulated through the balance chamber,

- sequential ultrafiltration (Bergström)

Working range: 0 to +4000 ml/h

Measurement tolerance: 0.2 ml per chamber cycle, UF-pump tolerance < 1% Degassing device: mechanical, through regulated degassing low pressure

Extracorporeal circuit

Blood pump: 2-roller pump
Transportation rate: 50 to 600 ml/min

Transportation tolerance: < 10% with pressure up to -150 mmHg
Heparin pump: injection pump for 10-, 20-, and 30-ml syringes

Transportation rate: 0.1 to 10 ml/h
Transportation tolerance: < 10%

Safety air detector: ultrasound measurement in the tube

Protection system: ultrasound detector, automatic cyclical testing during the entire

operating phase

Arterial input pressure measurement (PA) working area: -400 to +400 mmHg

Venous backflow pressure measurement (PV) working area: $\pm 10 \text{ mmHg}$ Venous backflow pressure measurement (PV) working area: $\pm 10 \text{ mmHg}$ Measurement tolerance: $\pm 10 \text{ mmHg}$

Disinfection

Chemical disinfection/cleaning: automatic running of program with minimal free rinse time;

various disinfection means may be installed automatic running of program at approx. 85°C

Thermal disinfection/cleaning:

Central thermal/chemical for cleaning/rinsing:

: for cleaning/rinsing the feed connection, for the device with simultaneous chemical

for the device with simultaneous chemical or thermal disinfection of the ring connection

²⁾ More configurations possible under different item numbers.

Individual therapy selection with six treatment profiles

Every patient is unique. With this in mind the Dialog⁺ dialysis system uses six different treatment profiles, so dialysis processes can be adjusted and optimized to accommodate important treatment settings – entirely in line with patients' individual needs.

Ultrafiltration profile:

Adjusts fluid removal in the patient individually and variably

Sodium profile:

Stabilizes electrolyte levels

Bicarbonate profile:

Adjustment for acid-base balance

Heparin profile:

Individually adjusted for the coagulation and bleeding situation

DF flow profile:

Reduces use of concentrate, water, and energy for a more efficient treatment

Temperature profile:

Prevents hypotensive episodes¹ by stabilizing body temperature

Dialog* Bypass General Architecture Bypass General Architectur

Benefits of Dialog* - Therapy individualization

- Flexible combination of treatment profiles for successful therapeutic short outcomes
- Individual adjustment to various therapy conditions

Source: ¹⁾ Selby NM., McIntyre CW.: "A systematic review of the clinical effects of reducing dialysate fluid temperature", Nephrology Dialysis Transplantation 21: 1883–1898 (2006)

