

Dialog⁺

Flexible and efficient dialysis treatment



Haemodialysis



Flexible or efficient?

Concept Dialog⁺

Dialog⁺

Evolving to meet customer needs

The Dialog⁺ sets standards with its three basic device configurations for extracorporeal blood treatment. The integrated and efficient treatment system permits users to have the greatest number of possible configurations in setting up the individual dialysis device. The new generation of the Dialog⁺ demonstrates numerous comfort improvements for providers and patients. It also rigorously meets today's economic and medical needs.

Options, accessories and consumables from one partner offer customers a single treatment system that fits together perfectly.

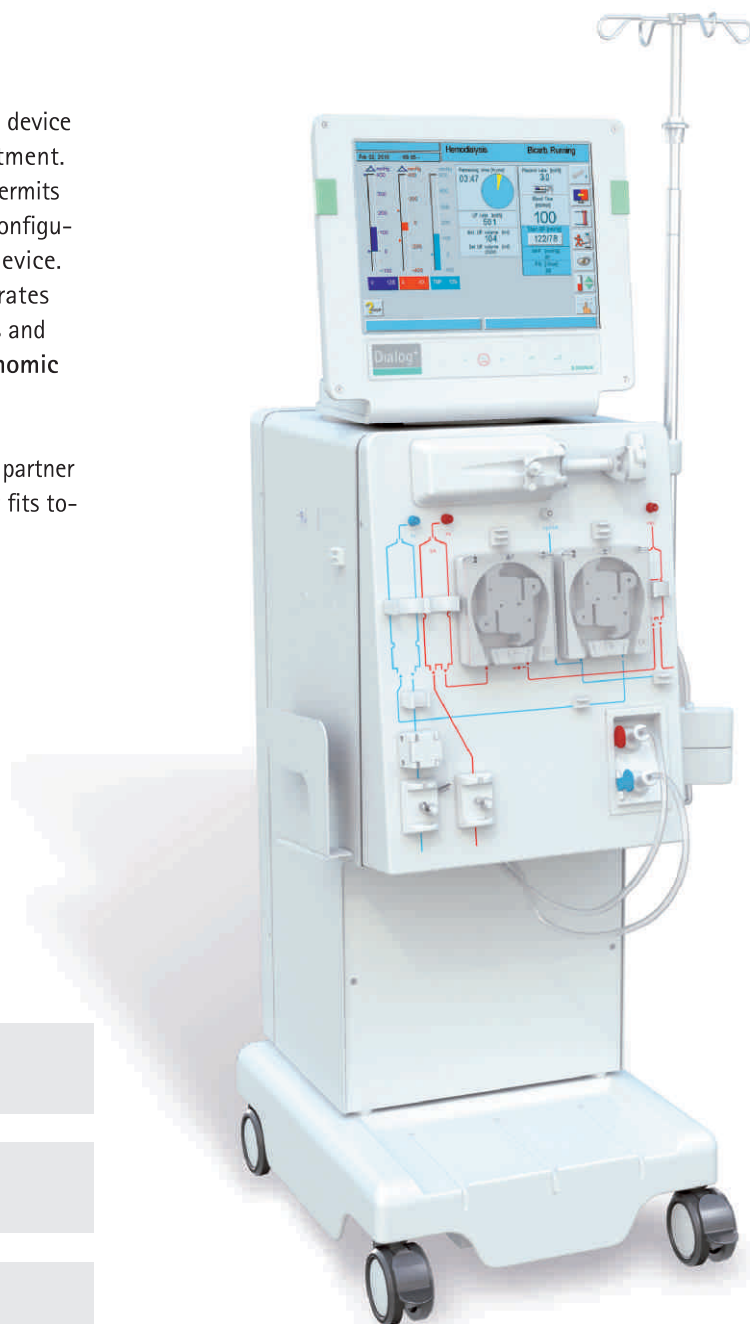
B. Braun – we share expertise to support you knowledgeably at all times.

Available in 3 basic configurations:

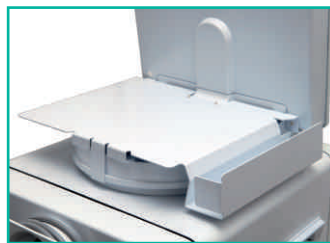
Single pump

Double pump

HDF Online



Storage system



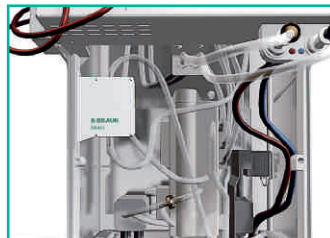
Card reader



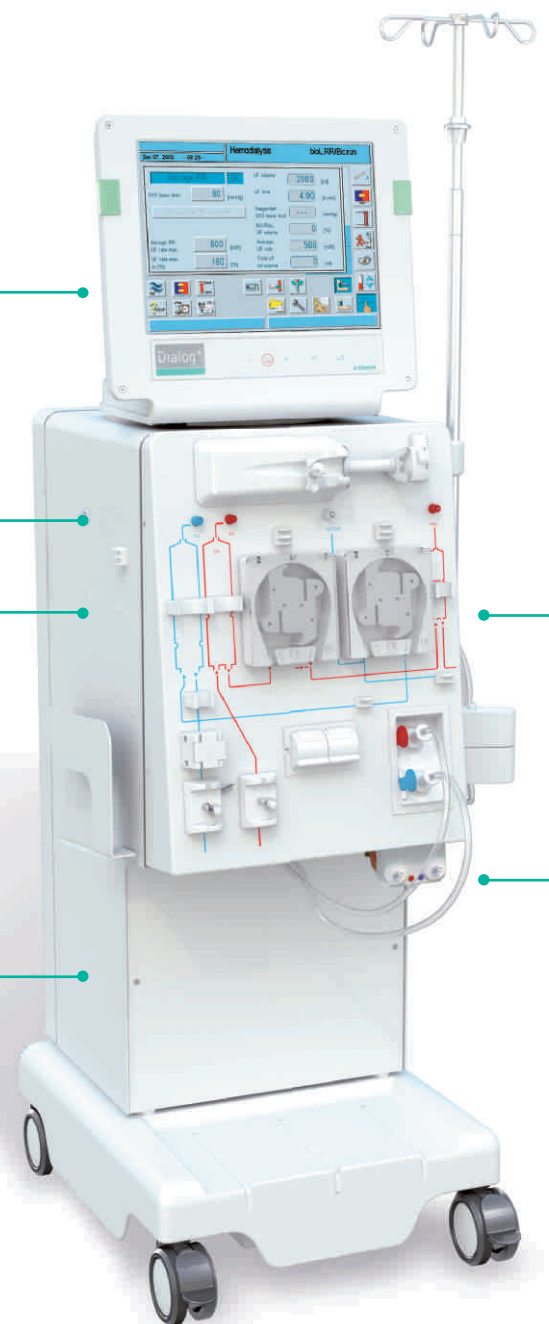
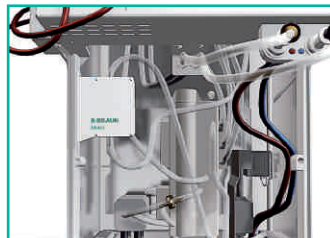
Treatment option:
bioLogic RR® Comfort



ABPM: Automatic
Blood Pressure
Measurement



Treatment option:
Adimea





DF-filter for
ultra-pure
dialysis fluid



BIC cartridge:
dry concentrate



Central concentrate
supply

High quality treatment and unbeatable flexibility.

Choose both.

Our task is to meet your needs



Meeting customer requirements, providing high quality dialysis treatment and cost effectiveness are the features of the new generation of the Dialog+ system. Inspired by users, developed by system specialists.

A system with many configuration possibilities, extensive accessories and smart options – you get exactly the solution suited to your individual requirements. For the best possible medical care and optimum economic efficiency.

In everything that we do, we focus on the human being – patient, partner, customer – with all the associated special requirements and needs. We develop progressive solutions to continue to improve medical care and the efficiency of medical practice.

Continuous development



Natural and durable

The Dialog+ is a polished and reliable system. Still, we are not resting on our laurels. The B. Braun philosophy is one of continuous development of treatment quality for patients and providers.

The result:

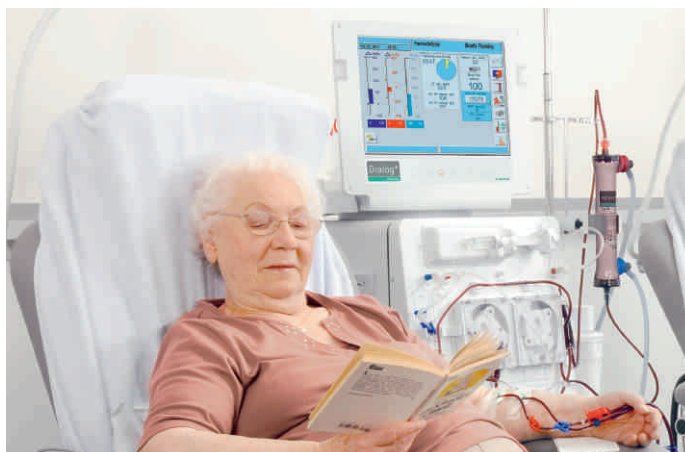
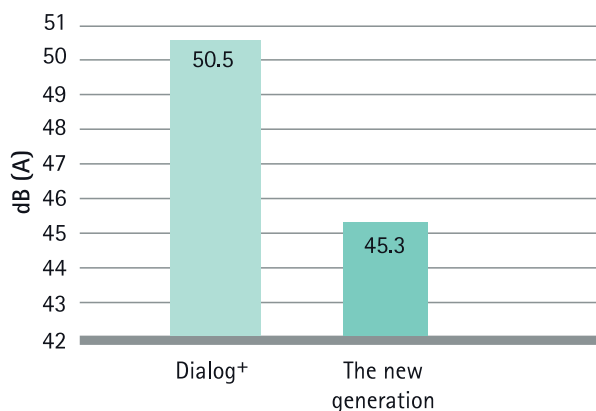
Developing solutions that continue to improve medical care. The Dialog+ has been and continues to be such a progressive development. A haemodialysis system that points to the future, one that you will profit from with regular updates and upgrades.

The new generation of the Dialog+ is characterised by

- More comfort
- More functionality
- More environmental awareness.

Comfort

Special design measures lead to a significant reduction of noise emission. The measurable noise reduction is 5.2 dB (A). This corresponds to around 50% of the noise perceptible to the human ear. In this way the Dialog+ contributes to a pleasant atmosphere in the dialysis centre.



5.2 db (A) reduction corresponds to cutting acoustic perception in half.

Functionality

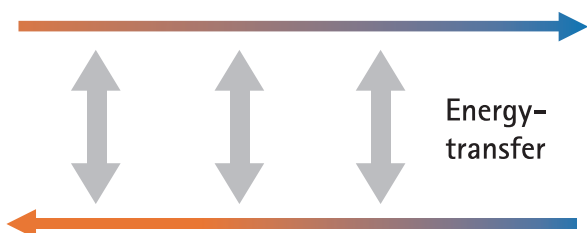
As a new standard feature, the Dialog+ now offers level regulation with a simple push of a button on the monitor screen. This creates a noticeable improvement for the nursing staff in the daily use of the machine

- Easy setting of fluid levels with the level regulation function using the touch screen.
- Full functionality in the DN and SN modes.
- Available in all operating phases (preparation, treatment, disinfection).

Environmental awareness

The search for savings in energy and water with environmentally conscious technology is found throughout the new Dialog+ series. One example of our ecological and cost-conscious thinking is shown by the heat exchanger integrated into all models.

Using the counter-flow stream principle, the heat exchanger draws its thermal energy from the water flowing by. Less energy is expended in achieving the desired temperature for the dialysis fluid.



Flexible and efficient

Adimea

Real-time monitoring of the dialysis dose – Adimea

Adimea is an innovative measurement procedure for reliable and continuous dialysis dose control (Kt/V) throughout the entire treatment.

The innovative system utilizes the principles of spectroscopy for determining the reduction in the molar concentration of urinary excreted substances in the dialysate drain. The pioneering technology enables measurement in the used dialysate. Because it continuously analyses change in the molar concentration, Adimea is directly connected to the patient. Physicians and nursing staff can selectively adjust the treatment parameters during the treatment, which is of great benefit to the patient. In other words, the equipment provides an optimum means for reaching the set treatment goals. Clinical trials show a very close correlation between the spKt/V established in blood samples and the spKt/V established by Adimea.

Precise, innovative real-time measurement method

Precise, innovative determination of the reduction of urinary excreted substances in the spent dialysate using UV technology

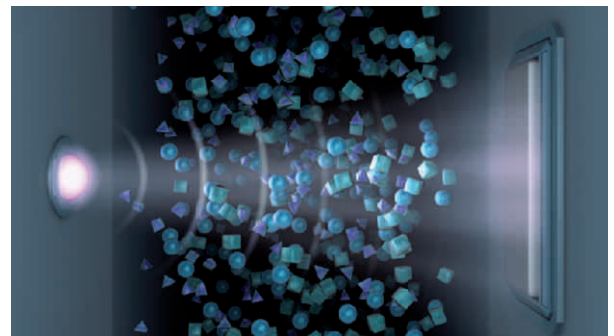
Real-time monitoring during the entire treatment period via continual effectiveness measurement

Simple and clear operation

No determination of V – merely requires the pre-dialysis weight

Configurable and clear display of URR, spKt/V, eKt/V as well as result prognosis

Changes to treatment parameters possible at any time.
Usable in all treatment procedures with no extra costs



Usable at no extra cost in all current modes of dialysis treatment (HD, HDF, SN-CO).

Source: Uhlin F, Fridolin I, Magnusson M, Lindberg LG. Dialysis dose (Kt/V) and clearance variation-sensitivity using measurement of ultraviolet-absorbance (on-line), blood urea, dialysate urea and ionic dialysance. *Nephrol Dial Transplant.* (2006) 21: 2225-2231.

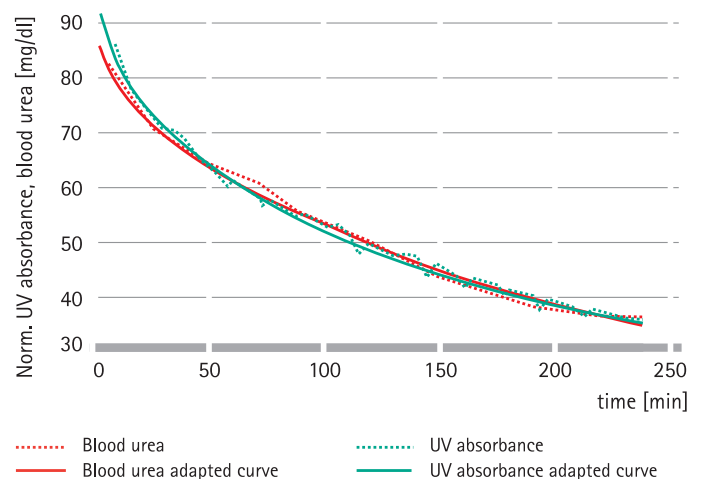


Fig. 1: This sample display for the UV absorption signal's treatment progress and the serum urea values at 20-minute measurement intervals reveals the excellent correlation.

You can also get detailed information from the separate brochure on Adimea or on the website www.adimea-bbraun.com.

Special options

bioLogic RR® Comfort

Biofeedback system bioLogic RR® Comfort

Using an automatic and predictive adjusted adaption of the ultrafiltration rate, bioLogic RR® Comfort can prevent excessive drops in blood pressure during treatment. This system is the only biofeedback system on the market that measures directly patient blood pressure. In addition, it also utilises stored blood pressure curves of previous treatments, through its intelligent guideline technology. This results in an especially safe and reliable system.

The system is easily operated by just two key settings on Dialog+ touch screen, thus providing nursing staff with additional safety. More time remains for the patients.

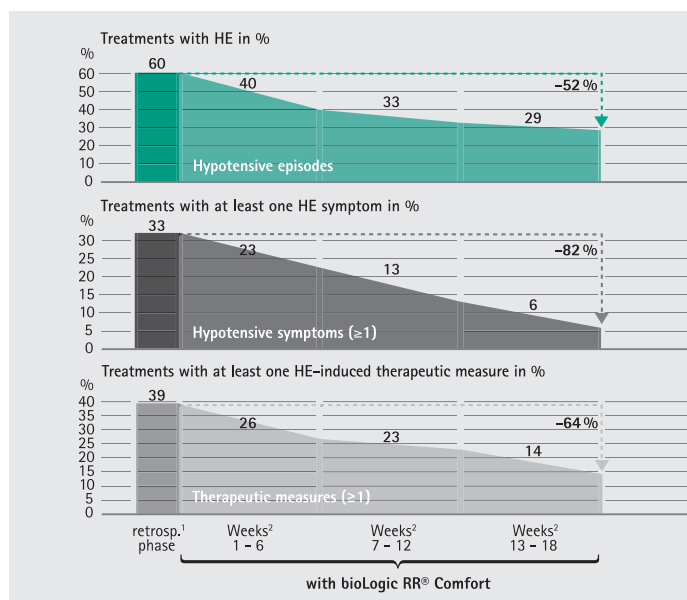
Studies show the outstanding results of the use of the bioLogic RR® Comfort:



Significant reduction of hypotensive episodes

Continual improvement of the quality of treatment

Simple operation



Reduction of treatments with hypotensive episodes (HE) by 52%

Reduction of treatments with at least one HE symptom by 82%

Reduction of treatments with at least one HE-induced therapeutic measure by 64%

You can also get detailed information from the separate brochure on bioLogic RR® or on the website www.bioLogicRRcomfort-bbraun.com.

Source: Roehrer O, Schmidt R, Korth S et al.: bioLogic RR® Comfort reduces hypotensive episodes in patients prone to intradialytic hypotension. 38th Congress of the German Society of Nephrology, Munich, 2007

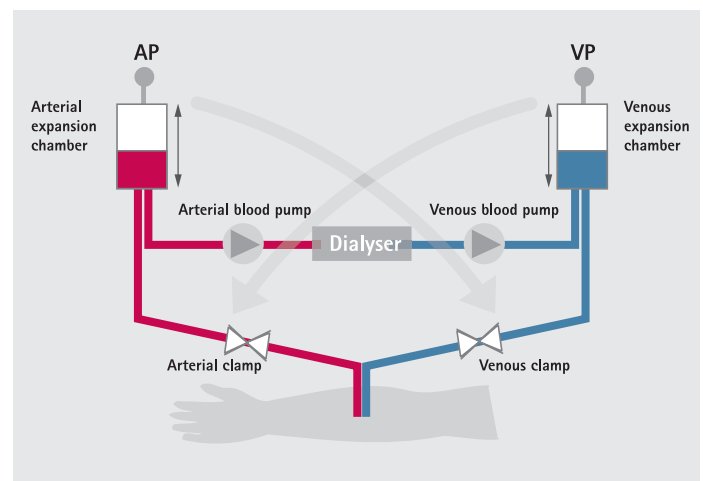
Flexible and efficient

Therapy management

Single-Needle Cross-Over

The Single-Needle Cross-Over (SN-CO) name is derived from the control's special feature: Upon reaching a certain switch-over or control pressure, the opposite hose clamp closes and the other phase begins. Hence, the clamps' control is carried out crosswise: "Cross-Over"

- Unique pressure-pressure controlled SN process
- Constant blood flow as a result of simultaneously operating pumps
- Virtually constant pressure in the dialyser
- Minimum recirculation
- Low impact on shunt as a result of indirect blood transport
- More than 15 years of market experience



HDF online

Permits a high-volume haemodiafiltration with a substitute solution created online in the dialyser for very high treatment effectiveness.

The Dialog+ online device offers all the standard substitution processes with minimal follow-up costs thanks to a long-life dialysis fluid filter and the reduction to a minimum of the need for one-time consumables.

Economic advantages:

- As-needed prompt self-production of the required online substitution solution.
- Self-production of the filling and rinsing solution for the preparation of the HD, HDF and HE treatments.
- Auto-priming: Also filling the blood hose systems in the HD mode without additional disposables, thus saving on saline bags.

Haemodialysis

The diffusion process eliminates small molecular substances

Haemofiltration

Convection transport eliminates small and medium molecules

Haemodiafiltration

Ultra-pure substitution solution is produced online in the device

Treatment advantages of the HDF online procedure:

- High clearance in the area of small and medium molecular urea substances.
- Greater circulation stability during treatment.
- Haemodiafiltration possible in post-dilution and pre-dilution modes.
- Quick and safe administration of infusion bolus in HD, HDF and HE modes.

Process optimisation



Intuitive operation

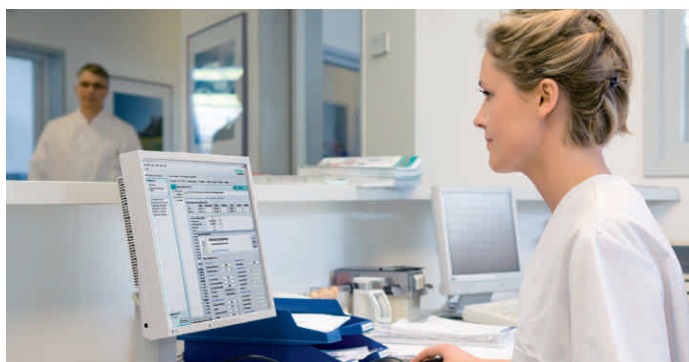
The long-established touch screen of the Dialog+ with its unique interface convinces users from day one. The operating approach allows first-time users to become quickly acquainted with using the machine.

- Self-explanatory symbols
- Overview and structured guidance through user menus
- Online help function.

Choice of profiles

The Dialog+ is the only device that offers six freely combinable profiles. These can be set individually according to the needs of the patient.

- Ultrafiltration profile
- Sodium management capability profile
- Temperature profile
- Bicarbonate profile
- Heparin profile
- DF flow profile



Nexadia®:

Our innovative and intelligent Nexadia® data management system helps to simplify dialysis processes considerably and facilitates preparation of the documentation required for quality management. Nexadia® provides efficient support in your everyday practice routine.

You can also get detailed information from the separate brochure on Nexadia® or on the website www.nexadia-bbraun.com.

Service

A trusted partner for our customers

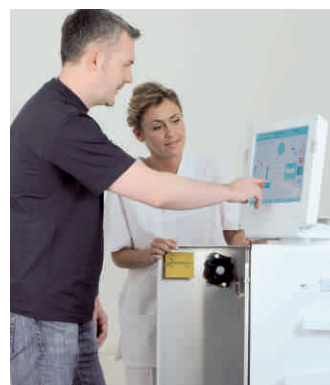


At all times ...
we are there for you!

Our clients benefit from the comprehensive expertise of one of the leading medical companies worldwide through personal and individual services:

We are with you whenever you need our support and expertise.

- Intensive consultation regarding investments.
- Samples, guidance on site, continuing education programs and continuous support.
- Comprehensive technical service and support.
- Individual training offerings: Product and user training, certified further training on medical topics.



Important information at a glance

General data		Dialysis fluid system			
Nominal voltage:	230 V (option: 120/240 V)	Temperature working range:	selectable between +33 and +40 °C		
Nominal frequency:	50 Hz (230/240 V) or 60 Hz (120 V)	Conductivity processing:	conductivity regulated		
Nominal current (max.):	max. 11 A for 230 V or 16 A for 120 V	Working range:	- Conductivity of bicarbonate 2 to 4 mS/cm or 4 to 7 mS/cm - Total conductivity 12.5 to 16 mS/cm		
Dimensions (W x D x H):	approx. 510 x 637 x 1678 mm				
Weight (empty):	approx. 85 kg in the basic design	Measurement tolerance:	±0.2 mS/cm		
Water intake		Flow:	300 to 800 ml/min		
Pressure range:	0.5 to 6 bar	Tolerance:	±5%		
Temperature range:	+10 to +30 °C	Blood leakage detector:	optical, colour-specific		
		Alarm limit value:	> 0.50 ml/min (HCT 45%) > 0.35 ml/min (HCT 25%)		
Concentrate supply:	Canister/central supply/bicarbonate cartridge				
Pressure range:	0 to +1 bar	Ultrafiltration:	- volume regulated through the balance chamber, ultrafiltration through ultrafiltration pump - sequential ultrafiltration (Bergström)		
Standards:	EN 60601-1: (IEC 601-1) EN 60601-2-16: (IEC 601-2-16) EN 60601-1-2: (IEC 601-1-2)	Working range:	0 to +3000 ml/h		
Produced in conformity with directive 93/42/EEC		Measurement tolerance:	0.2 ml per chamber cycle, UF-pump tolerance < 1%		
		Degassing device:	mechanical, through regulated degassing low pressure		
Extracorporeal circulation		Disinfection			
Blood pump:	2-roll pump	Chemical disinfection/cleaning:	automatic running of program with minimal free rinse time; various disinfection means may be installed.		
Transportation rate:	50 to 600 ml/min				
Transportation tolerance:	< 10% with pressure up to -150 mm Hg	Thermal disinfection/cleaning:	automatic running of program at approx. 85 °C		
Heparin pump:	injection pump for 10, 20 and 30 ml syringes	Central thermal/chemical	for cleaning/rinsing the feed connection		
Transportation rate:	0.1 to 10 ml/h	Cleaning/rinsing:	for the device with simultaneous chemical or thermal (> 85 °C) disinfection of the ring connection		
Transportation tolerance:	< 10%				
Safety air detector:	Ultrasound measurement in the tube				
Protection system:	Ultrasound detector, automatic cyclical testing during the entire operating phase				
Pressure measurement at the arterial feed into the dialyser (PBE) Working area:	0 to +700 mm Hg				
Measurement tolerance:	±10 mm Hg				
Arterial input pressure measurement (PA) working area:	-400 to +400 mm Hg				
Measurement tolerance:	±10 mm Hg				
Venous backflow pressure measurement (PV) working area:	20 to +390 mm Hg				
Measurement tolerance:	±10 mm Hg				
Machine	Item number*	Option	Item number	Accessories	Item number
Dialog+ (Single pump)	7102005	Dialog computer interface	7107218	Box	7107320
Dialog+ (Dual pump)	7102013	Crit-Line interface	7106604	Box comfort	7107322
Dialog+ HDF-online	7102072	Nexadia® BSL	7102230	Monitor tray	7102872
		Card reader (includes 5 cards)	7105230	Protocol storage	7102873
Option	Item number	Patient treatment card (5 pieces)	7105232	Flat combination storage facility	7102890
Adimea	7105233	Bicarbonate cartridge	7105171	Universal socket storage	7105500
bioLogic RR® Comfort f. Card Reader	7105324	Centralised supply of concentrate	7105196		
ABPM	7102226	Sterile filter	7102102		
Emergency current supply	7102244	Staff call	7102315		
		Roll runner for pump segment 7x10	7102340		

*More configurations possible under different item numbers.

