

Cardioprotective Haemodialysis

Granumix *plus*

Simplicity where it counts most



Cardioprotective Haemodialysis



**FRESENIUS
MEDICAL CARE**

Protect your Patient

Granumix *plus* – for the reliable preparation and supply of acid concentrate

The Online Purification Cascade (OPC) is a significant part of the Fresenius Medical Care integrated approach to dialysis therapy. The OPC product line covers all processes for the delivery of high-quality fluids required for dialysis treatment.

One of these processes is the straightforward preparation and distribution of dialysis concentrates.

The manual preparation, storage and delivery of haemodialysis concentrate is a time-consuming task for clinical staff. Additionally, safety plays an essential role during each step of the process. As a result, Fresenius Medical Care has developed Granumix *plus* to provide haemodialysis concentrate fully automatically with high safety standards and the operational reliability to build on.

Convenient

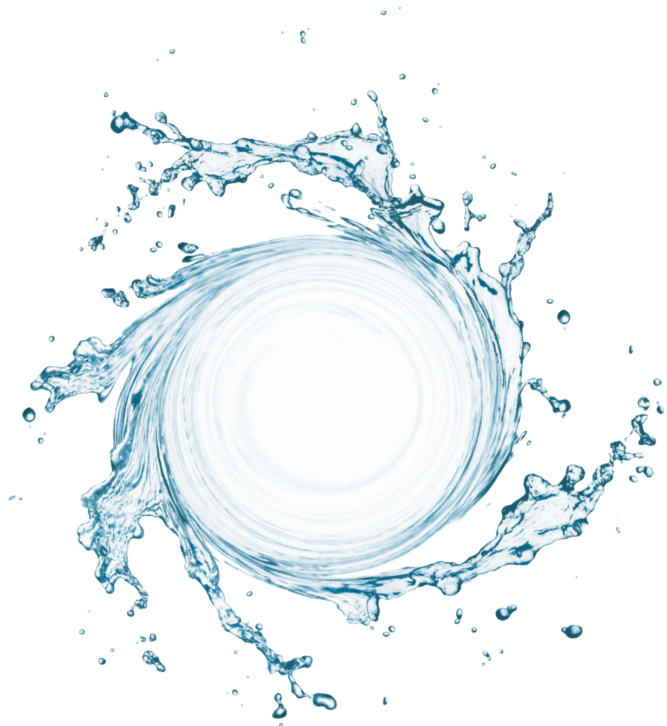
- Easy operation with no special concentrate mixing expertise required
- High degree of automation for minimum operator input when it comes to mixing and documentation
- Clean, dust-free mixing without spillage thanks to a sealed system

Protective

- No additional quality control necessary, thanks to validated mixing process
- All information relevant for batch mixing and documentation included in the bar code on each DIAMIX® container
- Uninterrupted concentrate supply via concentrate delivery system (CDS*plus*) fail-safe mode
- Supporting system validation and revalidation

Innovative

- Easy integration into existing IT infrastructure via Ethernet interface
- Ready for the future thanks to a smart combination of products



Granumix *plus* comprises perfectly matched components, each dedicated to one of the processes in concentrate mixing, storage and distribution:

SPOT on:

- Automatic process, reliability and resource savings

Mixing unit

The mixing unit is the heart of Granumix *plus*. It controls and documents all steps of the mixing process. Equipped with six concentrate tanks and three CDS*plus* systems, it has the capacity to – fully automatically – control the mixing procedures for three different types of concentrate.



Storage and supply unit

Two 750 L tanks provide redundant storage for up to 1,500 L per concentrate type. CDS*plus* provides the supply to the concentrate ring main. Together, the two devices can supply up to two concentrate ring mains per concentrate. They are fully controlled and monitored by the mixing unit.



DIAMIX®

The pre-dosed concentrate needed for the automated mixing process is delivered in the DIAMIX® container. It contains all ingredients needed for dilution with permeate and comes in many different compositions.



Technical Data

Specifications			
	Mixing unit	DIAMIX®	Storage and supply unit
Capacity	1/2/3 concentrates	For 750 L concentrate	1,500 L per concentrate
Dimensions (h × w × d)	210 × 100 × 180 cm	133 × 60 × 60 cm	210 × 205 × 15 cm
Weight (empty/filled)	260/1,200 kg	26/350 kg	200/2,000 kg
Power supply	380–400 V, 50 Hz, 16 A	–	24 V DC, 4 A

Configuration Options										
	Storage tank	Storage tank levelling	Concentrate rings	CDSplus	Fixture/cart for CDSplus	Visual status indicator	Tank protector	Extra cover for mixing unit	Network connection	Concentrates available
Granumix plus 1 concentrate	2	○	1/2	1	○	1	2	1	●	DIAMIX® AC-F 213/1, 219/1, 313/1, 313/2, 413/1, 419
Granumix plus 2 concentrates	4	○	2/4	2	○	1	4	1	●	
Granumix plus 3 concentrates	6	○	3/6	3	○	1	6	1	●	Others on request

- Standard
- Optional
- Not available