

How can diffusion, convection and adsorption be combined for an optimally balanced CRRT?



Prismaflex sets with the AN69 membrane

M60 set

M100 set

M150 set

Leading the way

 **GAMBRO**[®]

Prismaflex M60 set / M100 set / M150 set

General data

	Prismaflex M60 Set	Prismaflex M100 Set	Prismaflex M150 Set
Weight	780 g	800 g	860 g
Overall dimensions	27 x 22 x 9 cm	27 x 22 x 9 cm	27 x 22 x 9 cm
Blood volume in set ± 10 %	93 ml	152 ml	189 ml
Minimal patient weight	20Kg	30 Kg	30 Kg

Materials

- AN69 HF hollow fiber: - Acrylonitrile and sodium methallyl sulfonate copolymer
- Filter housing and headers: Polycarbonate
- Filter potting compound: Polyurethane
- Tubing material: plasticized polyvinyl chloride (PVC)
- Cartridge: PETG
- Sterilization mode: EtO (ethylene oxide)

Filter operating specifications

- Maximum TMP* (mmHg/kPa): 450/60
- Maximum blood pressure (mmHg/kPa): 500/66.6
- Range of blood flow rate:
 - Prismaflex M60 Set: 50 – 180 ml/min
 - Prismaflex M100 Set: 75 – 400 ml/min
 - Prismaflex M150 Set: 100 – 450 ml/min

Filter data

- Nominal physical characteristics
 - Effective surface area:
 - Prismaflex M60 Set: 0.6 m²
 - Prismaflex M100 Set: 0.9 m²
 - Prismaflex M150 Set: 1.5 m²
 - Fiber internal diameter (wet): 240 µm
 - Fiber wall thickness: 50 µm

In vitro performances

- Blood priming volume in filter ±10%,
 - TMP = 100 mmHg
 - Prismaflex M60 Set: 42 ml
 - Prismaflex M100 Set: 66 ml
 - Prismaflex M150 Set: 105 ml
- Blood pressure drop (in post dilution mode)
 - (bovine blood, Hematocrit 32%, Pc*** = 60 g/l, T = 37°C)

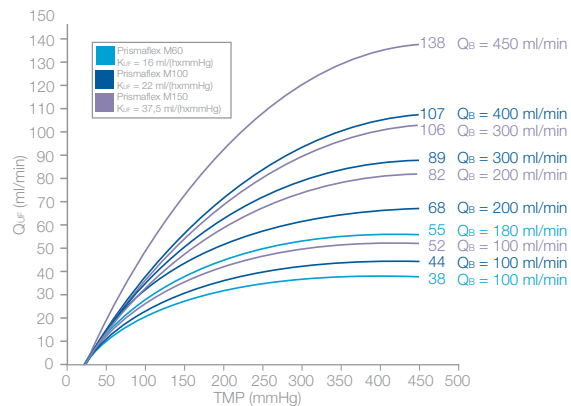
	Prismaflex M60 Set	Prismaflex M100 Set	Prismaflex M150 Set
$Q_B^{**} = 100 \text{ ml/min} - Q_{UF}^{****} = 1 \text{ l/h}$	47 mmHg	31 mmHg	20 mmHg
$Q_B = 180 \text{ ml/min} - Q_{UF} = 2 \text{ l/h}$	91 mmHg	60 mmHg	—
$Q_B = 300 \text{ ml/min} - Q_{UF} = 2 \text{ l/h}$	—	73 mmHg	51 mmHg
$Q_B = 400 \text{ ml/min} - Q_{UF} = 2 \text{ l/h}$	—	105 mmHg	64 mmHg

• Sieving coefficient

(bovine plasma, Pc 60 g/l, T = 37°C)
 Urea = 1, Creatinine = 1, Vitamin B12 = 1,
 Inulin = 0.95, Myoglobin = 0.55, Albumin ≤0.01

CVH Performances

- “In vitro” ultrafiltration with blood (in post-dilution)
 - (values ±15%) (Continuous venovenous hemofiltration)
 - (Bovine blood at 37°C, Hematocrit 32%, Pc*** 60 g/l).



CVVHD Clearances

- Clearances versus inlet dialysate flow rate
 - (Continuous venovenous hemodialysis) (Saline, T = 37°C).

	Prismaflex M60 Set QB** = 100 ml/min QUF**** = 0 ml/min			Prismaflex M100 Set QB** = 150 ml/min QUF**** = 0 ml/min			Prismaflex M150 Set QB** = 200 ml/min QUF**** = 0 ml/min		
	1	2.5	4	1	2.5	4	1	2.5	4
QD l/h ml/min	17	42	67	17	42	67	17	42	67
Urea (±10%)	17	39	54	17	41	63	17	42	66
Vitamin B12 (±20%)	14	23	28	16	30	37	17	37	49
Inulin (±20%)	12	17	19	14	23	26	16	31	37

*Transmembrane pressure. **Access blood flow rate.
 Protein concentration. *Ultrafiltration flow rate (1).
 (1)The ultrafiltration flow rate is the “patient fluid removal flow rate + replacement flow rate + pre-blood-pump flow rate”.

Ordering information

	Factory ID	Code N°	N° units/box
PRISMAFLEX M60 Set	8353510	106696	4
PRISMAFLEX M100 Set	8353520	106697	4
PRISMAFLEX M150 Set	8353584	109990	4
SP414 - 5-liter bag	6032957	106690	50
SP418 - 9-liter bag	6033765	107650	30

