



VETsmart is a state of the art system to provide Renal Replacement Therapies to small to medium size animals like cats and dogs affected by renal failure.

VETsmart provides the following treatments:

- SCUF (Slow Continuous Ultrafiltration)
- CVVHD (Continuous Veno-Venous Dialysis)
- CVVH (Continuous Veno-Venous Hemofiltration)
- PEX (Plasma exchange)

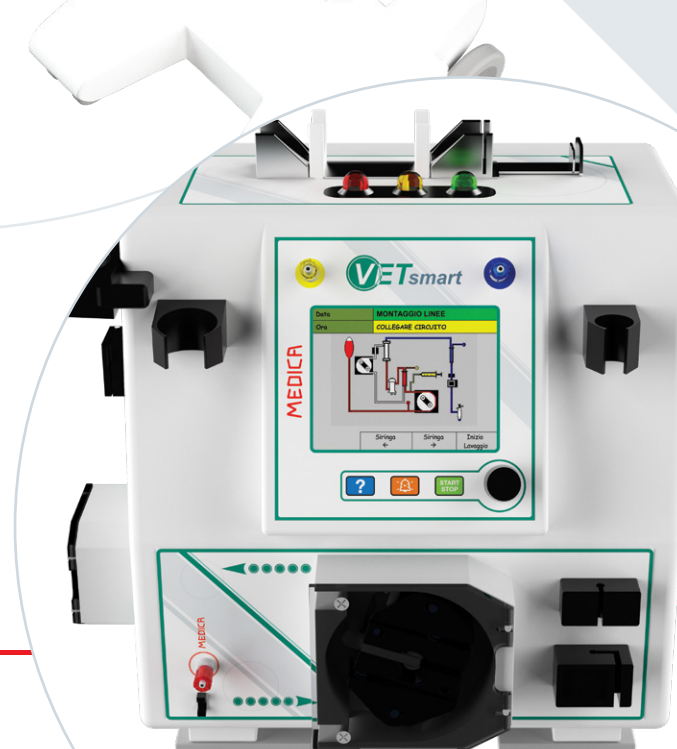
VETsmart tubing sets have been optimized in order to keep the blood priming volume as low as possible.

A complete range of VETsmart disposable kits is available with various kinds and size of filters suitable for all therapies.

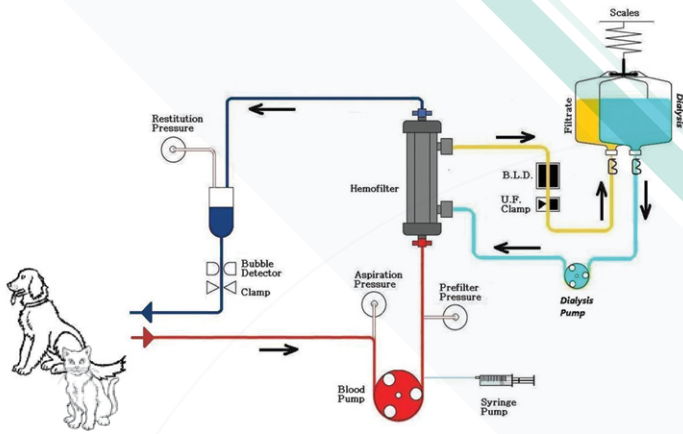
Renal Replacement		PEX	
Kit	Filter	Kit	Filter
KIT050	D050	KIT PEX50	Plasmart 50
KIT100	D100	KIT PEX100	Plasmart 100
KIT150	D150	KIT PEX200	Plasmart 200
KIT200	DP03HE	KIT PEX400	Plasmart 400
KIT700	DP07HE		
KIT1200	DP120HE		

Gruppo _____

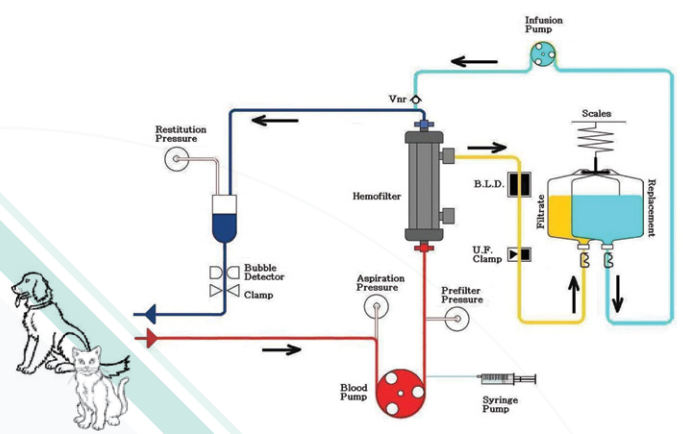
MEDICA
Group



Available Treatments:



Continuous Veno-Venous Dialysis



Continuous Veno-Venous Hemofiltration PEX

TECHNICAL DATA	
Electrical power supply	230V(+/-10%), 50Hz - 115V(+/-10%), 60Hz
Power absorber	75 VA in normal operating conditions 135 VA for one second upon opening of the venous electroclamp
Class	Class 1 Type BF IEN 60601-1
Outside machine dimensions	Height 360 mm, Width 370 mm, Depth 285 mm
Trolley dimensions	Base 440x500 mm - Machine level 930 mm Max IV pole height 1970 mm
Machine and trolley weight	12 Kg - 21 Kg
Arterial pressure	-300 mmHg to +200 mmHg / Resolution 5 mmHg Accuracy 20 mmHg 3% of actual value
Venous and pre-filter pressure	-100 mmHg to +400 mmHg / Resolution 5 mmHg Accuracy 20 mmHg 3% of actual value
Blood pump flow	Programmable from 2 ml/min to 250 ml/min. Resolution 1ml/min. Acoustic alarm in case of 2 minutes stop.
Infusion pump flow	Programmable from 0 ml/min to 1000 ml/h.
Ultrafiltration flow	Programmable from 0 ml/min to 1000 ml/h.
Weight loss rate	From 0 to 17 ml/min
Dialysate flow	20-120 ml/min
Dialysis session duration	30-240 min
Weight loss in dialysis	0-500 g
Pump flow accuracy	± 10% with inlet and outlet pressures between -300 and +600 mmHg
Anticoagulant pump	Programmable in Bolus (bolus volume from 0.1 to 3 ml) and Continuous mode (Heparin flow from 0 to 20 ml/h). Use 30cc syringe included in the tubing set.
Scales	0-6.5 Kg; Accuracy 1% nominal value.
Display	4.7 INCH back-lighted colour graph
Air Sensor	Ultrasound with alarm threshold for bubbles >10µl at the maximum blood pump flow rated
BLD	Optical, with alarm threshold for 0.1 ml blood into 10ml of ultrafiltrate (hematocrit: 25%); Accuracy: 0.2%

VETsmart code (230V,50 Hz) : M03993

HEMOFILTERS TECHNICAL DATA	D050	D100	D150	DP03HE	DP07HE	DP120HE
Area m ²	0,075	0,15	0,25	0,3	0,7	1,2
Inner diameter µm	250	250	250	200	200	200
Wall thickness µm	50	50	50	30	30	30
Priming volume ml	5	10	19	21	49	69
Max TMP (mmHg)	500	500	500	600	600	600
Cartridge blood connectors	MLL	Tube Site	Twist	Twist	Twist	Twist
Cartridge filtrate connectors	FLL	Tube Site	FLL	FLL	FLL	H
KUF ml/h/mmHg	1,3	3,0	5,5	14	32	55
Hollow Fiber Material	MediSulfone®		PUREMA®			
Sterilisation method	ETO					

MediSulfone® is a registered trade mark of Medica SpA

PUREMA® is a registered trade mark of Membrana GmbH

PLASMAFILTERS TECHNICAL DATA	PLASMA 50	PLASMA 100	PLASMA 200	PLASMA 400
Membrane area (m ²)	0,05	0,1	0,2	0,4
Fibre internal diameter (µm)	300	300	300	300
Fibre wall thickness (µm)	85	85	85	85
Priming volume (ml)	3,9	8,6	13,2	30,5
Max. TMP (mmHg) *	100	100	100	100
Max. blood flow (ml/min)	50	80	100	160
Plasma flow (% of blood flow)	20-30%**	20-30%**	20-30%**	20-30%**
Cartridge blood connectors	LLM	Twist lock	Twist lock	Twist lock
Cartridge filtrate connectors	FLL	FLL	FLL	FLL
Hollow fiber material	Versatile® -PES			
Sterilization method	ETO			

* Tested with bovine blood 35% Hct, 60g/l Total Protein

** TMP values higher than 60 mmHg could cause hemolysis

*** Versatile® -PES is a registered Trade Mark of MEDICA S.p.A.

MANUFACTURER

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