

Haemodialysis

# Bloodlines, Tubing Systems, Accessories

Product Range



**2010/2011**



Fresenius Medical Care

# 5008 Therapy System – the innovation ...

Enabling the application of ONLINE Haemodiafiltration in the most practical way.



## ONLINE Priming/ONLINE HDF

- Saline free priming of extracorporeal circuit
- ONLINE HDF treatment as standard
- Enabled by the SafeLine included in every bloodline set

## Reliable Precision

- Exact measurement of arterial pressure via pressure dome
- Trouble-free air detection directly on system tube

## Convenience

- Clear layout and optimised tube lengths
- Machine assisted set-up and disassembling
- Reduced filling volume and less blood-air contact

# 4008 Sustained dependability

Reliability established over several years and millions of treatments.



## Superior quality and safety

- Consistent and validated manufacturing
- Rigorous testing of bloodline performance
- Highly compatible interface between bloodlines and machine

## Reliable therapy

- Matured technology recognised worldwide
- Extensive experience in the production of bloodlines – ensuring consistent product quality

## Meeting diverse needs

- Appropriate sterilisation to suit varying demands
- Broad product range to meet all requirements

# Ensuring safety with the authentic Fresenius Medical Care Original Bloodlines....

Quality and reliability characterise the Fresenius bloodlines in function and use.



## Handling

- Clearly colour-coded components
- Ergonomic components and layout

## Quality

- Certified quality systems for development, production and sales
- Perfect compatibility to machine interfaces

## Safety

- Assurance of highest safety and performance with our 4008 and 5008 machines
- Transducer protector with integrated inspection windows
- Injection port with enlarged finger-protection shield

## Biocompatibility

- Use of plasticisers with high haemocompatibility and low cytotoxic reaction
- Free of DEHP

# Product Range 5008

**DEHP-free**

## LifeLine<sup>Beta</sup>

- Phtalate free
- Beta-sterilisation by accelerated electrons (e-beam) Atitikimas 24,26 pirkimo dalims
- Fewer material alterations in comparison to gamma-irradiation
- No radioactive source of radiation

## Adult Bloodlines

### Beta sterilisation – DEHP free

Type	To be used with	Filling volume	Units per box	Art.-No.	
<b>AV-Sets</b>					
AV-Set ONLINEplus 5008-R	5008/5008S	132 ml	24	F00000384	Atitikimas 24 pirkimo daliai
AV-Set ONLINEplus BVM 5008-R	5008	136 ml	24	F00000385	
AV-Set ONLINE Priming 5008S-R	5008S	132 ml	24	F00000700	Atitikimas 26 pirkimo daliai
<b>SN-Sets</b>					
SN-Set ONLINEplus 5008-R	5008/5008S	166 ml	20	F00000386	
SN-Set ONLINEplus BVM 5008-R	5008	169 ml	20	F00000387	



## Paediatric Bloodlines

### Beta sterilisation – DEHP free

Type	To be used with	Inner diameter pump segment	Filling volume	Units per box	Art.-No.
<b>AV-Sets</b>					
AV-Set ONLINEplus BVM Paed 5008-R	5008	8 mm	108 ml	24	F00001068
<b>SN-Sets</b>					
SN-Set ONLINEplus BVM Paed 5008-R	5008	8 mm	142 ml	20	F00001069



BVM: Blood Volume Monitor  
 -R: Beta Sterilisation (Radiation)

Inner diameter of pump segment: 8 mm  
 Diameter of venous bubble catcher: 22 mm

Atitikimas 24,26 pirkimo dalims

# Product Range 4008

**DEHP-free**

## LifeLine<sup>Beta</sup>

- Phtalate free
- Sterilisation by accelerated electrons (e-beam) Atitikimas 25 pirkimo daliai
- Less material alterations in comparison to gamma-irradiation
- No radioactive source of radiation

## Adult Bloodlines

Beta sterilisation – DEHP free

Type	To be used with	Filling volume	Units per box	Art.-No.
<b>AV-Sets</b>				
AV-Set B-R	2008/4008	161 ml	24	F00001124
AV-Set SRB-R	2008/4008	161 ml	24	F00000257 Atitikimas 25 pirkimo daliai
AV-Set SRB BVM-R	4008	172 ml	24	F00000258
<b>SN-Sets</b>				
SN-Set B-R	2008/4008	197 ml	20	F00001125
SN-Set SRB L-R	2008/4008	211 ml	20	F00000259
SN-Set SRB L BVM-R	4008	225 ml	20	F00001132

## Paediatric Bloodlines

Beta sterilisation – DEHP free

Type	To be used with	Inner diameter pump segment	Filling volume	Units per box	Art.-No.
<b>AV-Sets</b>					
AV-Set-FMC Paed R	2008/4008	6.4 mm	117 ml	24	F00001064
AV-Set-FMC BVM/BTM Paed R	4008	6.4 mm	126 ml	24	F00001065
AV-Set-FMC Paed/Baby R	2008/4008	6.4 mm	56 ml	24	F00001063
<b>SN-Sets</b>					
AV-SN-Set-FMC Paed R	2008/4008	6.4 mm	155 ml	24	F00001067
AV-SN-Set-FMC Paed/Baby R	2008/4008	6.4 mm	88 ml	24	F00001066

All paediatric bloodlines 4008 are equipped with spike, waste bag and recirculation connector.

- S: Spike
- R: Recirculation connector
- B: Waste bag Atitikimas 25 pirkimo daliai
- L: Long tubes to SN expansion chamber (needed for SN-treatment with 4008 S)
- BVM: Blood Volume Monitor
- R: Beta Sterilisation (Radiation)

Inner diameter of pump segment: 8 mm  
Diameter of venous bubble catcher: 22 mm





## Adult Bloodlines ETO sterilisation

### BasicLine

- Sterilisation by ethylene oxide
- Special pre-conditioning and degassing process leads to minimised residual ETO content

Type	To be used with	Filling volume	Spike	Waste bag	Recirculation connector	Units per box	Art.-No.
<b>AV-Sets</b>							
AV-Set-FMC (FA 204 C/FV 204 C)	2008/4008	161 ml	•		•	24	5000541
AV-Set-FMC (FA 204 B/FV 204 B)	2008/4008	161 ml		•		24	5000561
AV-Set-FMC (FA 204 C/FV 204 E)	2008/4008	161 ml	•	•	•	24	5003451
AV-Set-FMC (FA 204 C/FV 204 E) BVM	4008	172 ml	•	•	•	24	5016631
<b>SN-Sets</b>							
AV-SN-Set-FMC (FA 514 SN C/FV 204 E)	2008/4008	211 ml	•	•	•	20	5017411

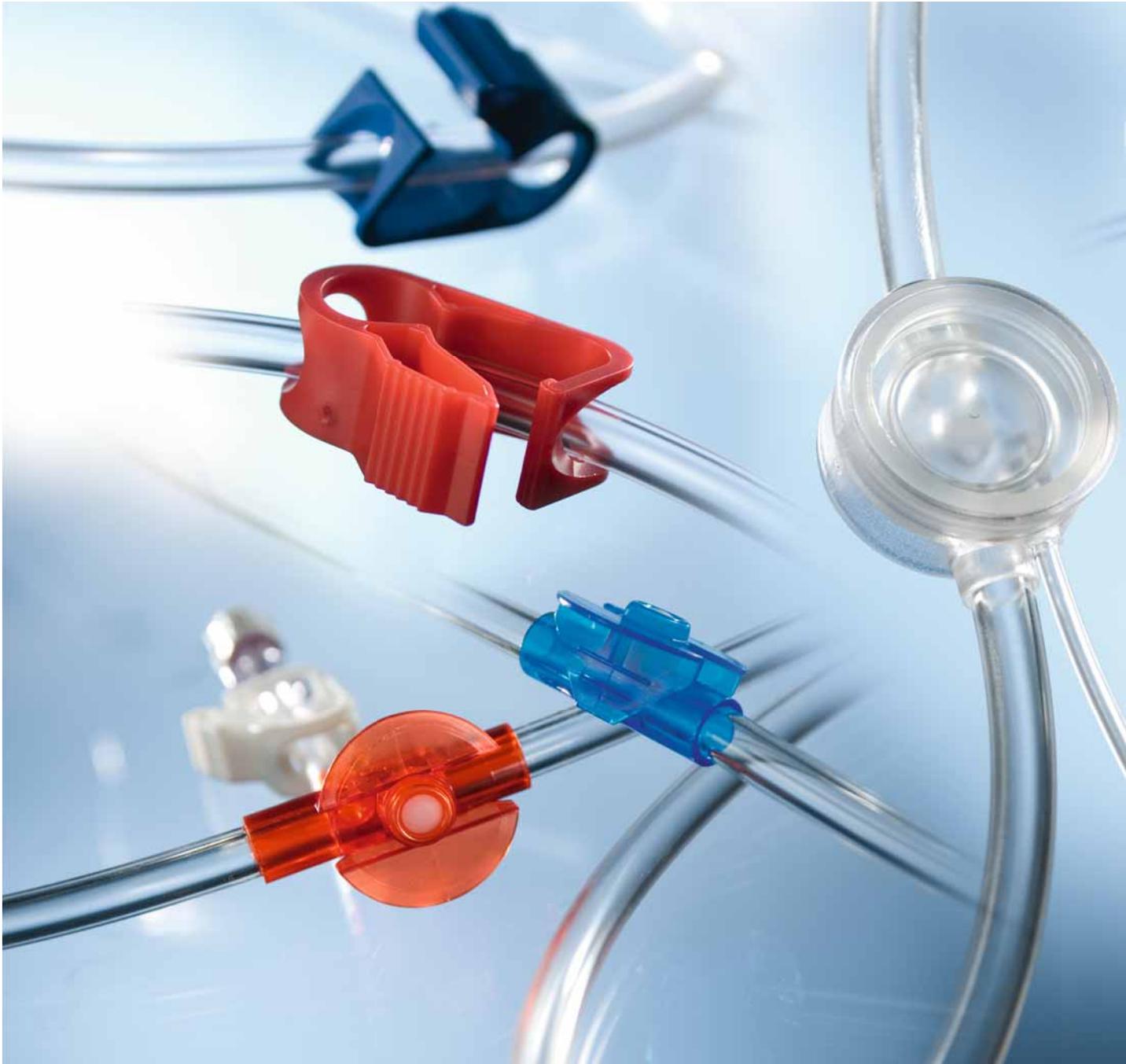
BVM: Blood Volume Monitor

Inner diameter of pump segment: 8 mm

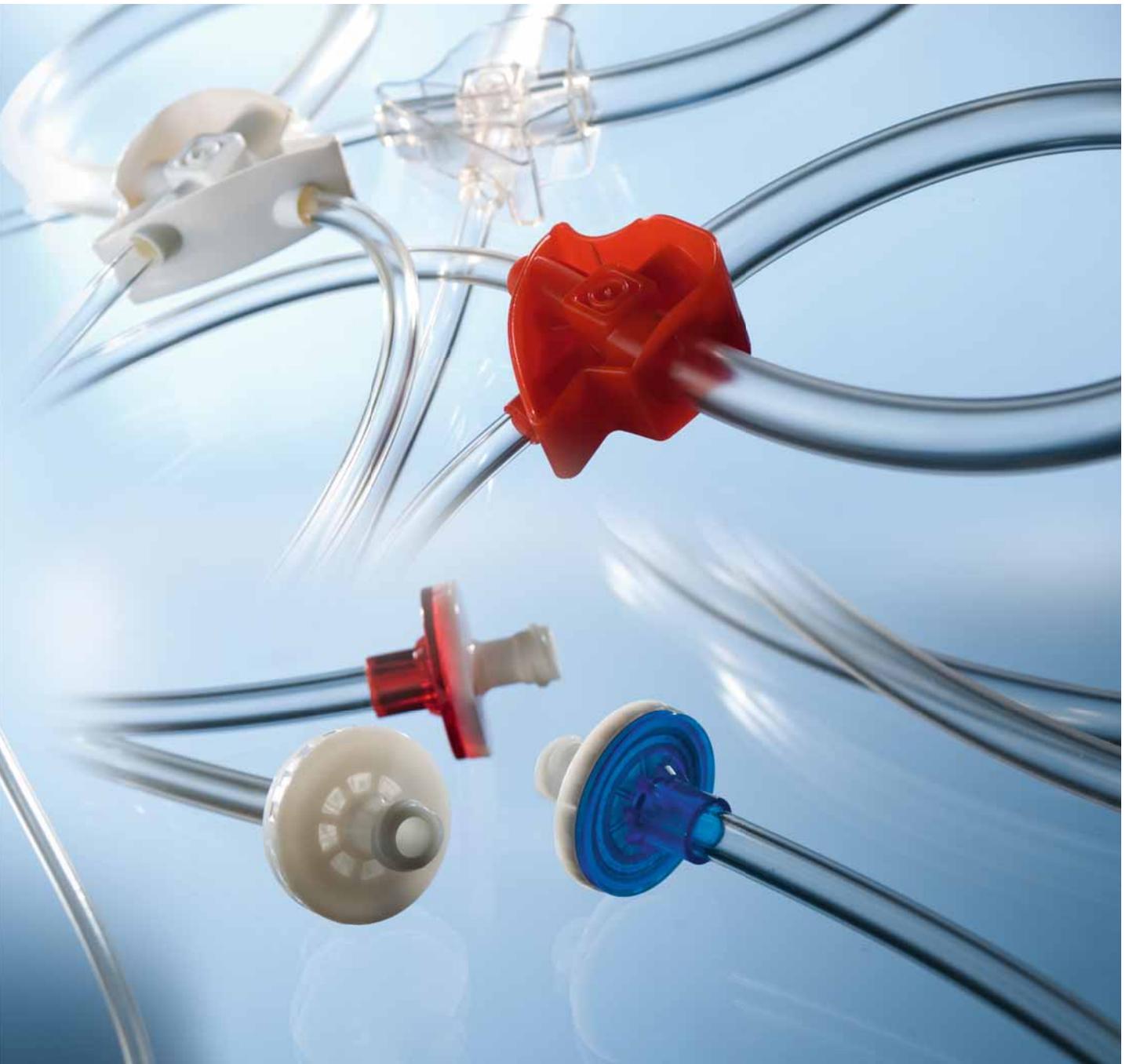
Diameter of venous bubble catcher: 22 mm

# Fresenius Medical Care's bloodline components ...

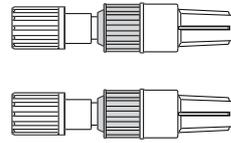
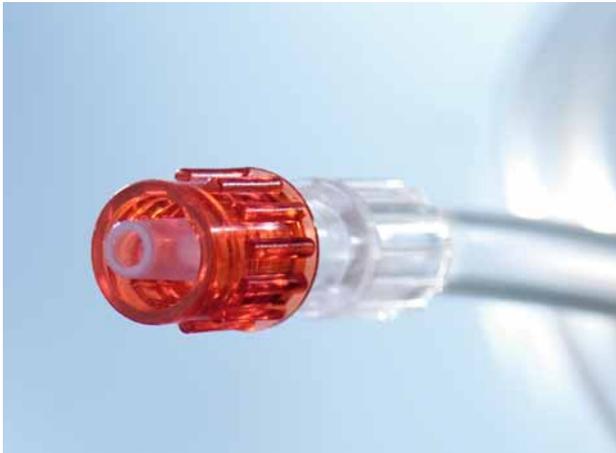
Atitikimas 25 pirkimo daliai



... developed to meet all your needs



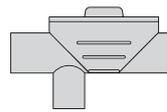
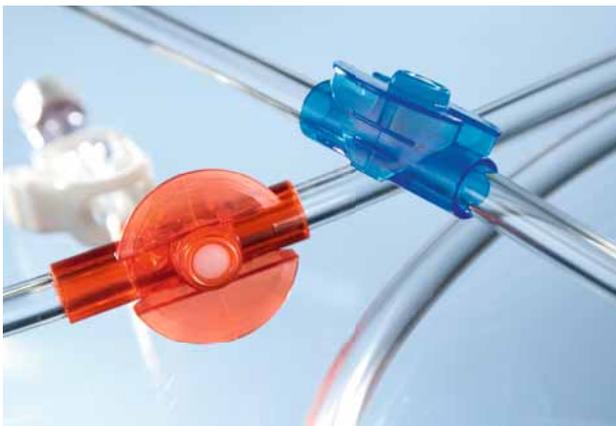
# Components



## Patient connectors

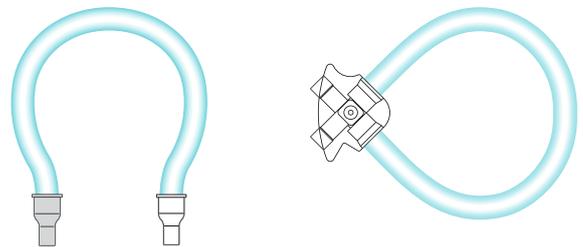
Optimal handling and safety:

- Ergonomic grip on the rotating part ensures secure connection
- Easy to remove protective caps



## Injection ports

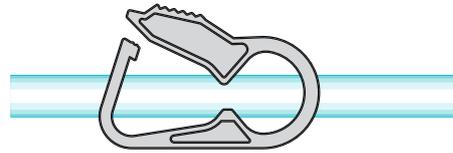
- Latex-free septum
- Colour coding
- Large finger-protection shield



## Pump segment 4008/5008

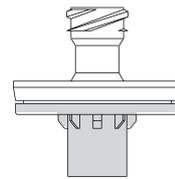
- Perfect fit to the Fresenius Medical Care dialysis machines (geometry, shore hardness, occlusion performance)
  - Qualified for the effective blood flow measurement
  - Allows achievement of prescribed dialysis dose

# Components



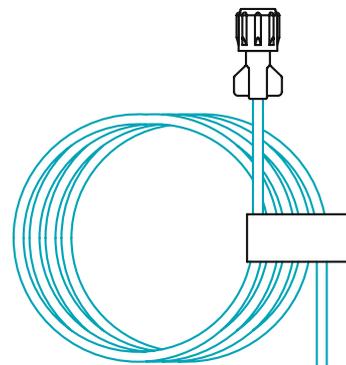
## Line clamps **Atitikimas 25 pirkimo daliai**

- Colour coding
- Optimal ergonomics for easy and reliable handling
- No additional clamps required



## Transducer protectors

- Inspection windows
- Colour coding

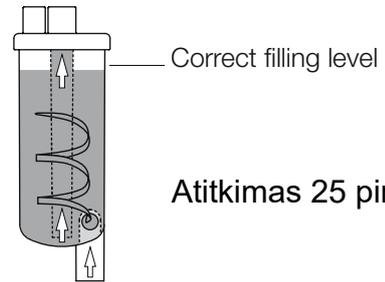
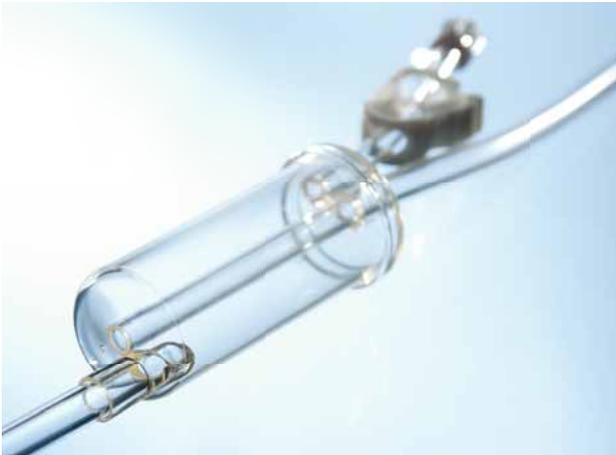


## Heparin line

- Luer-Lock female Adapter with protecting cap
- Easy to remove paper tape

**Atitikimas 24, 26 pirkimo dalims**

# Components



Atitikimas 25 pirkimo daliai

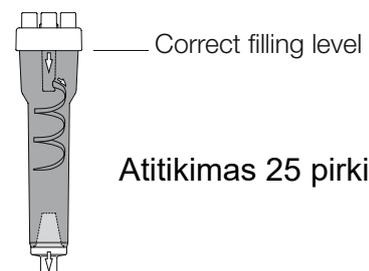
## Arterial bubble catcher

- Dynamic blood flow due to special geometry
- Safe and effective air separation



## Single Needle chamber

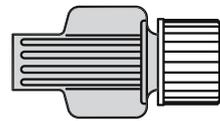
- Dynamic blood flow
- Level mark for easy handling



Atitikimas 25 pirkimo daliai

## Venous bubble catcher

- Inlet distributor reduces activation of clotting
  - Directed blood flow
  - No "free fall" of blood
- Allows an easy and correct positioning in the air detector due to the special shape of venous bubble trap (22 mm Ø)



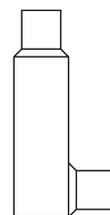
## Dialyser connector

- Soft material allows safe connection to dialyser
- Easy to remove protective caps



## Pressure dome

- Precise pressure measurement
- Reduced filling volume
- No blood-air contact



## BVM cuvette

- Precise BVM measurement
- Easy handling

# Technical drawings 5008

## Atitikimas 24 pirkimo daliai

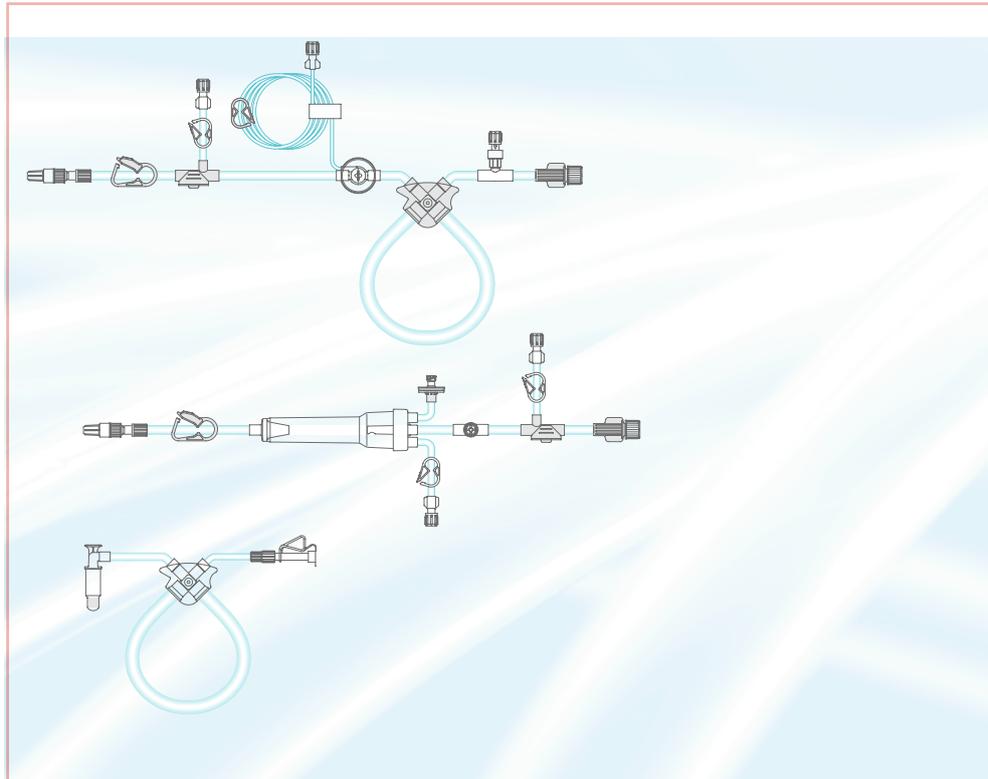
### AV-Set ONLINEplus 5008-R (F00000384)

Arterial line

Venous line

SafeLine

Atitikimas 24 pirkimo daliai



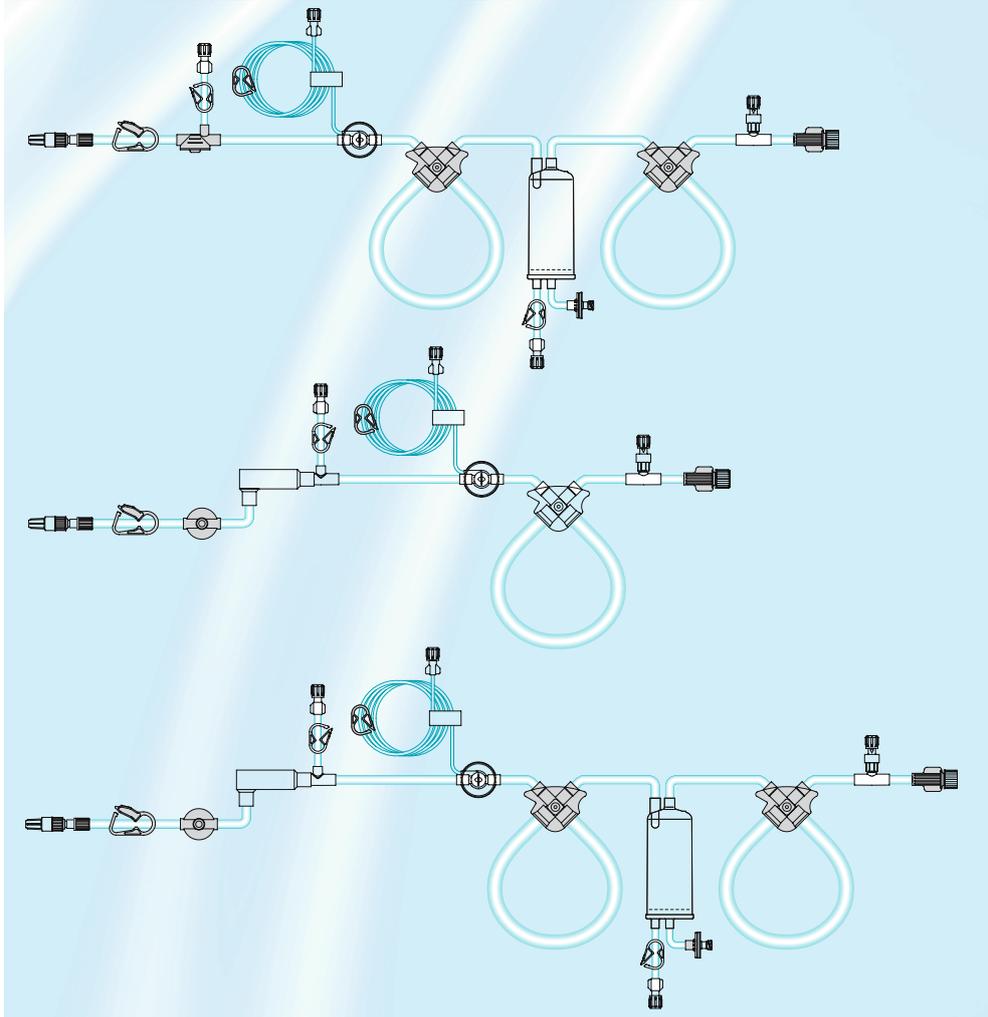
### Variants

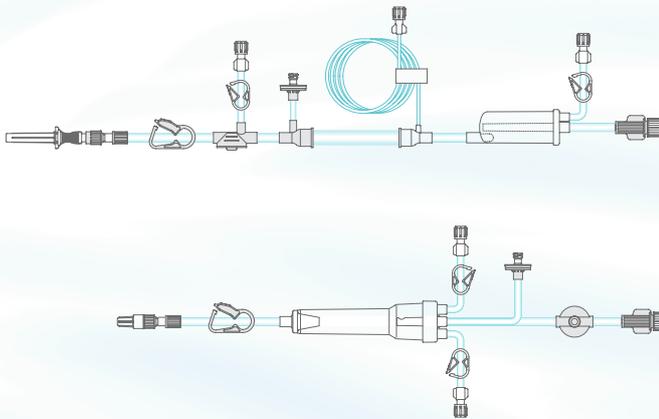
(Venous line and SafeLine unchanged)

SN-Set ONLINEplus 5008-R  
(F00000386)

AV-Set ONLINEplus BVM 5008-R  
(F00000385)

SN-Set ONLINEplus BVM 5008-R  
(F00000387)



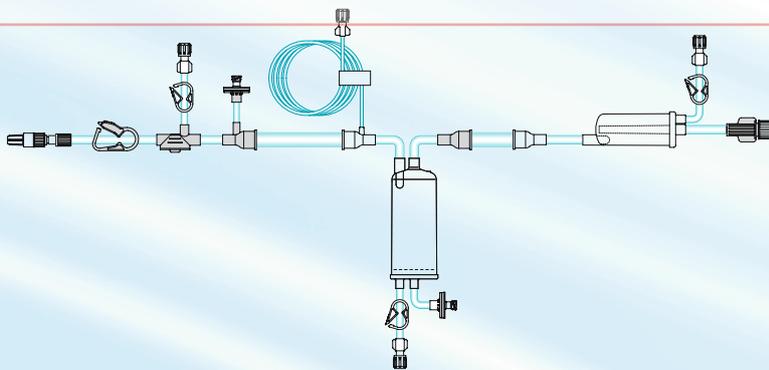


## AV-Set SRB-R (F0000257)

Arterial line

Atitikimas 25 pirkimo daliai

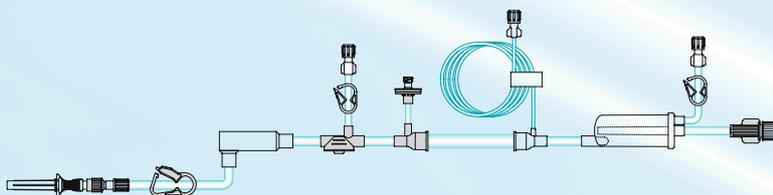
Venous line



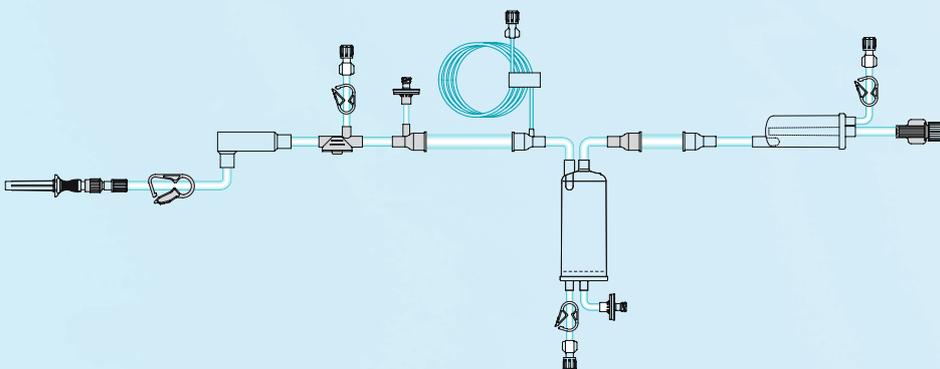
## Variants

(Venous lines unchanged)

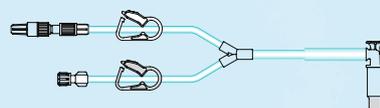
SN-Set B-R  
(F00001125)



AV-Set SRB BVM-R  
(F00000258)



AV-SN-Set-FMC (FA 514-SN C/  
FV 204E) BVM  
(5017411)

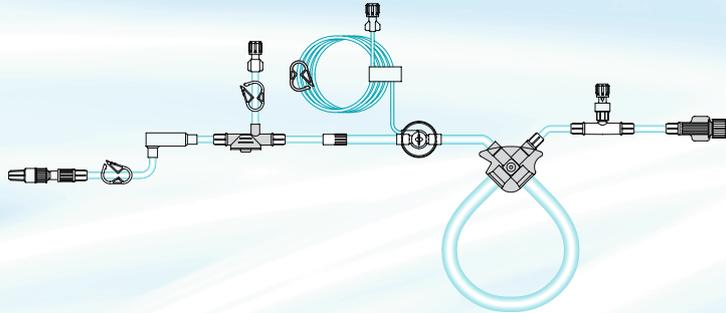


SafeLine  
(F00001195)

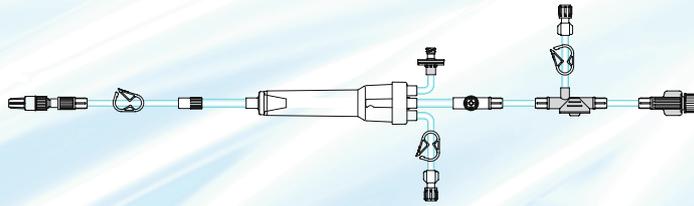
# Technical drawings paediatric lines

## 5008 AV-Set ONLINEplus – BVM Paed 5008-R (F00001068)

Arterial line



Venous line

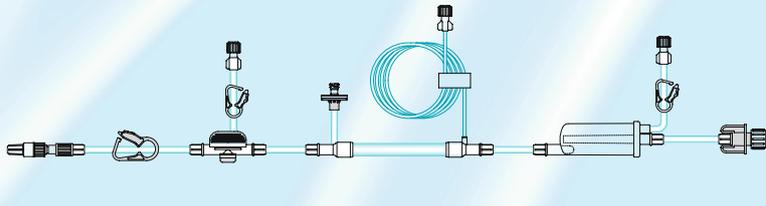


SafeLine

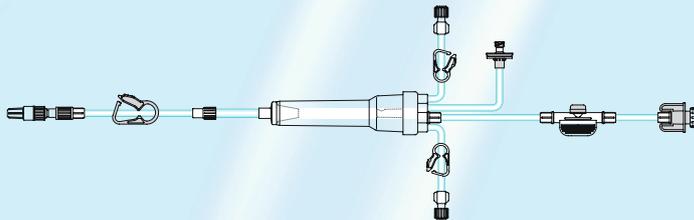


## 4008 AV-Set-FMC Paed R (F00001064)

Arterial line

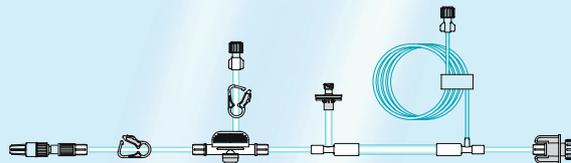


Venous line

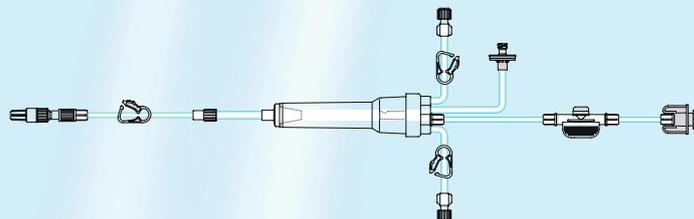


## AV-Set-FMC Paed/Baby R (F00001063)

Arterial line



Venous line



# Important handling aspects ...

Atitikimas 24, 26 pirkimo dalims

## Pressure line

Connect the pressure transducer protector to the machine ensuring it is straight and secure (do not overtighten!). If the membrane is wet, replace either the bloodline or the pressure line with a new one.

## Arterial bubble catcher

For level setting release the cap, raise the level slowly to the filling line. Make sure that the caps are secure and the clamps closed.

## Venous bubble catcher (4008)

Rest the shoulder of the chamber on the top of the level detector holder, so the filter of the chamber is 1 cm below the level of the door.

Make sure that the caps are secure and the clamps closed.

## Pump segment (4008)

Insert the pump segment with the red colour coding on the left hand side.

## SN-pump segment (4008)

Make sure that all air has been removed during the priming of the pump segment.

## Injection port

Clean the septum by using an alcohol wipe. Hold the injection port by the finger grips underneath the protection shield. Insert the needle directly into the septum (90°).

## SN-chamber

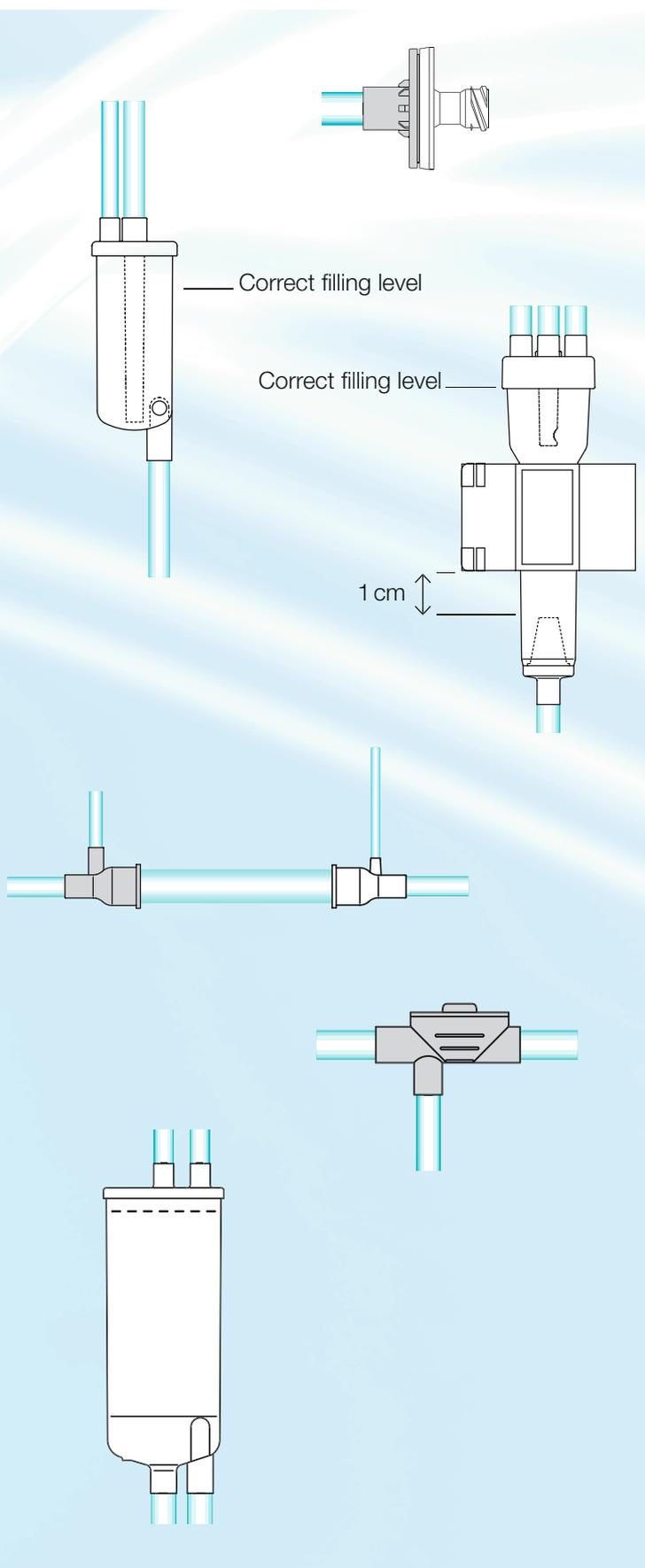
Place the chamber into the holder.

Connect the pressure line (see above).

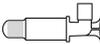
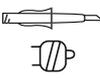
Make sure that the caps are secure and the clamps closed.

Do not invert the chamber.

During priming, the filling level will be set automatically (do not raise the level manually).



# Accessories

Type	To be used with	Sterilisation	Description	Connectors	Units per box	Art.-No.
<b>HF / HDF</b>						
Drainage connector	4008/5008	Beta	ONLINEplus HDF 5008		12	7030031
SafeLine	4008	Beta	ONLINEplus 4008, pump segment 6.4 mm		100	F00001195
Tubing system FS 130	4008	ETO	Standard HDF, Pump segment 4.4 mm		40	5046301
<b>Infusion sets</b>						
Frekaflex infusion set	4008	ETO	Infusion set Luer-Lock male / Luer-Lock male with roller clamp		150	2889011
Infusion set	4008	ETO	Infusion set with vented spike, Luer-Lock male and drip chamber		150	5016371
Transfer set	4008	ETO	Infusion set Luer-Lock male / Luer-Lock male		150	5016391
<b>Waste bags Atitikimas 25 pirkimo daliai</b>						
Waste bag 2,000 ml	4008	ETO	Rinsing of extracorporeal circuit		100	5015091
<b>Transducer protectors</b>						
Transducer protector	4008/5008	ETO	Luer-Lock male/female		100	5015911
Pressure line 30 cm	4008/5008	ETO	Complete pressure line 30 cm, Luer-Lock male/female		100	5014631
Pressure line 60 cm	4008/5008	ETO	Complete pressure line 60 cm, Luer-Lock male/female		200	5019151
<b>Various accessories</b>						
Heparin syringe 30 ml	5008	ETO	Luer-Lock male, separate closure cap, latex-free plug		100	5030321
Heparin syringe 20 ml	4008/5008	ETO	Luer-Lock male, separate closure cap, latex-free plug		120	F0000125*
SN-adapter Luer-Lock	4008/5008	ETO	Y-adapter, 2 x Luer-Lock female, 1 x Luer-Lock male		100	5027851

\*coming soon

Type	To be used with	Sterilisation	Description	Connectors	Units per box	Art.-No.
Scissor clamp	4008/5008	---	For clamping tubes		5	2845241
Recirculation connector	4008/5008	Beta	For short-circuit of AV-set, Luer-Lock female / Luer-Lock female		100	5015971
Adapter Luer-Lock female / Luer-Lock female	4008/5008	ETO	For short circuit of blood tubings (AV-sets)		100	5014801
Adapter Luer-Lock male / Luer-Lock male	4008/5008	ETO	For short circuit of fistula needles		100	5014771
Spike	4008/5008	Beta	Spike/Luer-Lock female		100	5015921
Prolongation 75 cm	4008/5008	Beta	Luer-Lock male/female		100	7030011
Dialyser exchange set	4008/5008	ETO	Tubing system for exchange of dialyser during treatment, short-circuit AV-set		75	5018001
<b>Mounts</b>						
Universal mount, single	4008	---	Mount for arterial bubble trap for 4008 E/H		1	5000271
Universal mount, double	4008	---	Mount for arterial bubble trap and SN expansion chamber, for 2008 and 4008 B/S		1	5000261
<b>HD Connection-Disconnection Set</b>						
proHD Set S		ETO	Drape, nitrile gloves, non-woven gauzes, adhesive tapes, haemostatic plasters		170	F00000836
proHD Set M		ETO	Drape, nitrile gloves, non-woven gauzes, adhesive tapes, haemostatic plasters		170	F00000837
proHD Set L		ETO	Drape, nitrile gloves, non-woven gauzes, adhesive tapes, haemostatic plasters		170	F00000838
The letters S, M and L in the name of the proHD Sets indicate the glove size. For more detailed information see brochure F00001561						

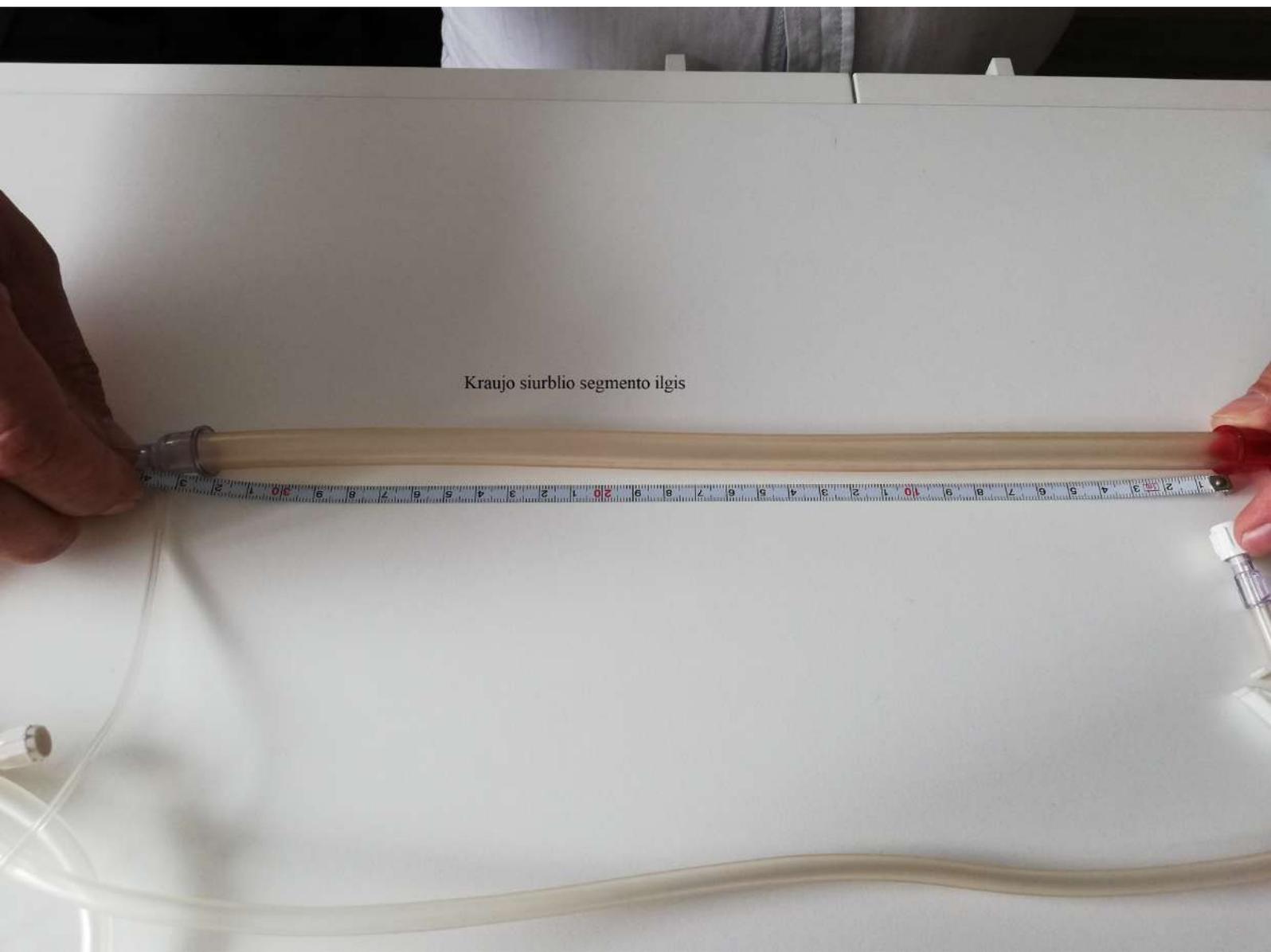


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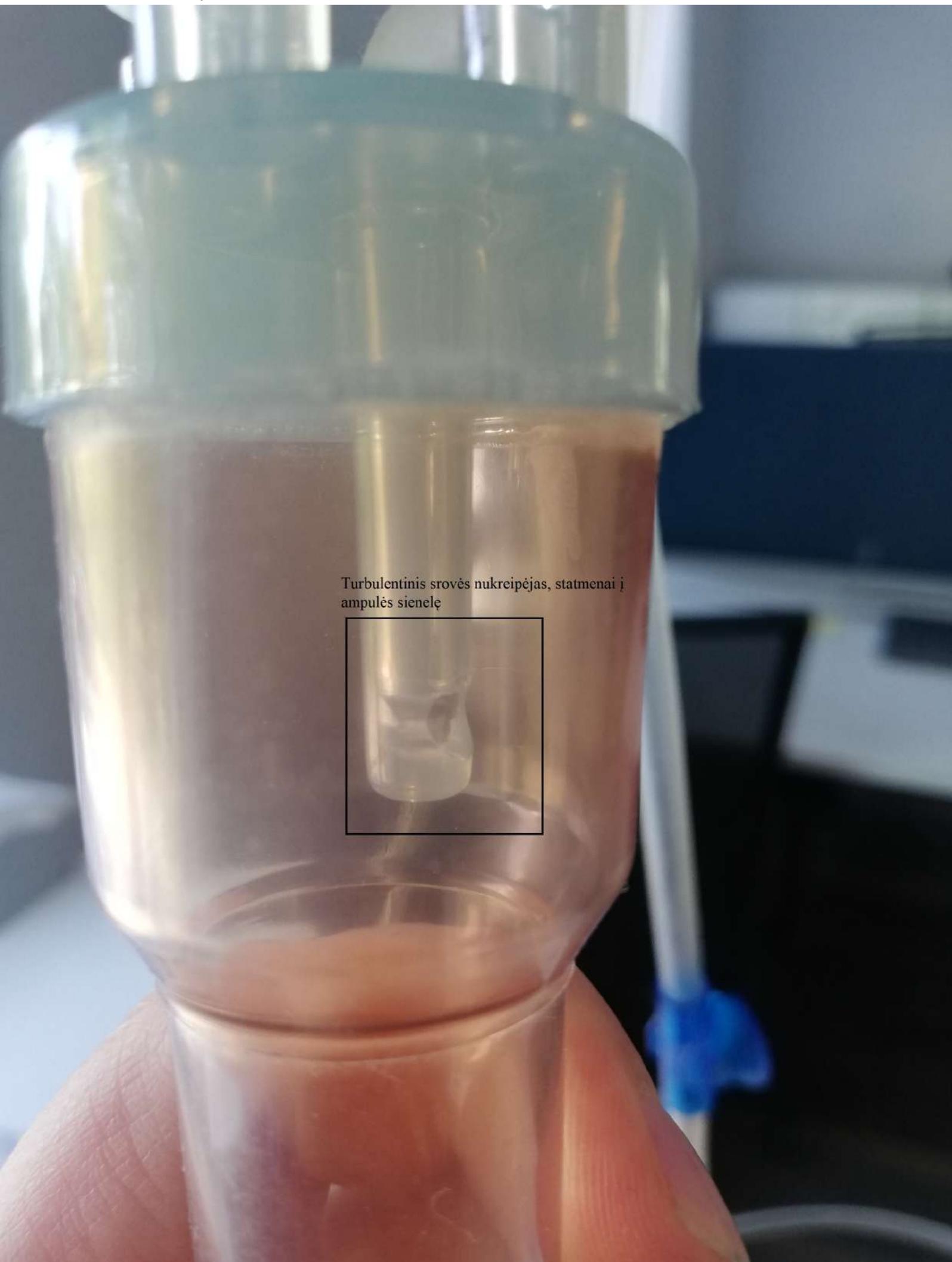
Atitikimas 25 pirkimo daliai

Kraujo siurblio segmento ilgis





Turbulentinis srovės nukreipėjas,  
statmenai į ampulės sienelę.



Turbulentinis srovės nukrypimas, statmenai į ampulės sienelę

