



Custom Pack Design Manual Edition 2009/2010

Cardiac Surgery Division Europe





What's in the Custom Pack Design Manual?

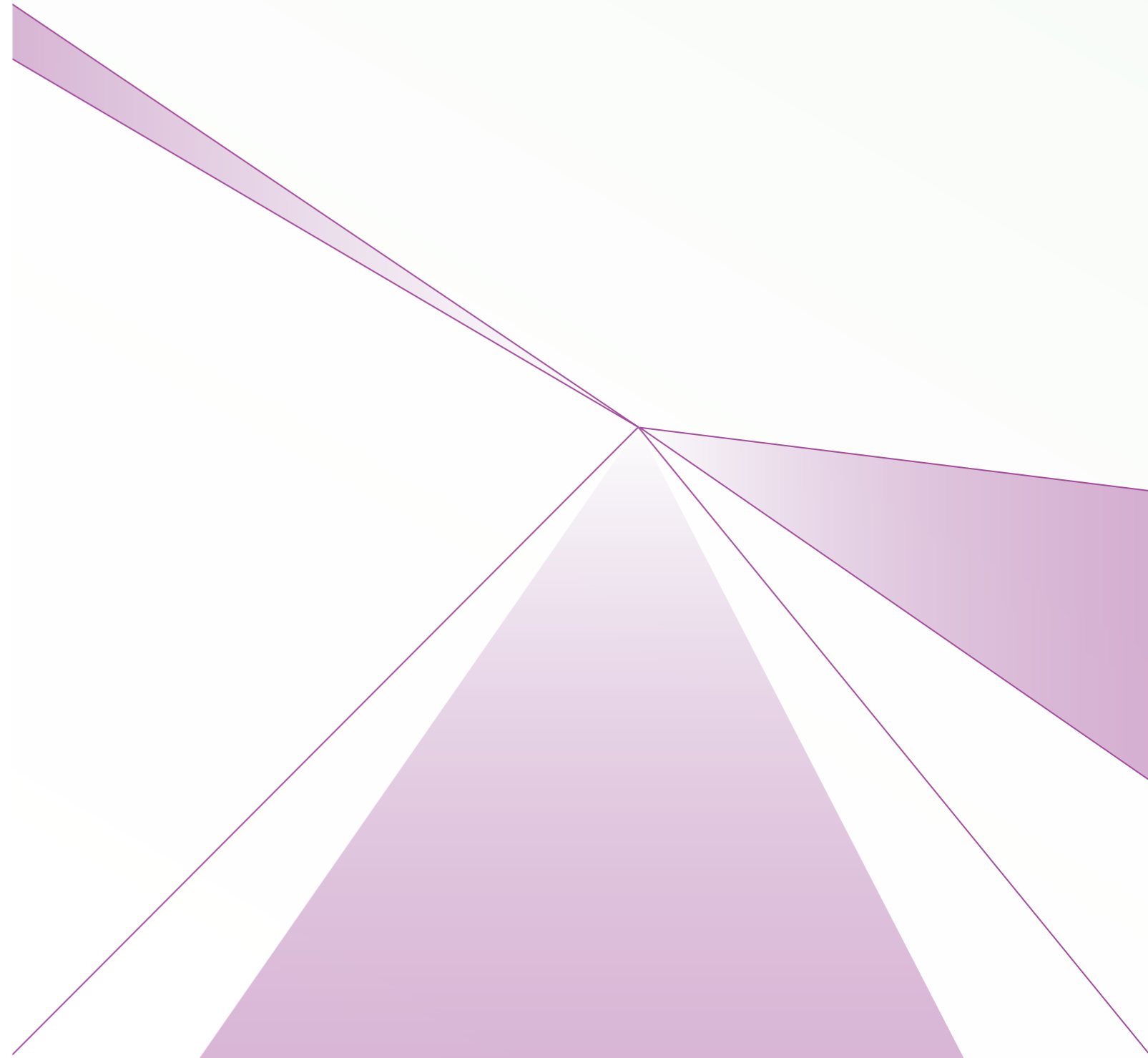
This manual provides the sales force with instruction tools to help to discuss an extracorporeal circuit. The manual contains all sterile standard sets and accessories and all non-sterile available components in Kerkrade. Chapter 1 contains an overview of all available CB circuits and accessories in Heerlen. All other chapters contain all non-sterile components divided in functional groups. Each group has got a brief explanation about its application followed by an overview of all qualified and available components which can be used/offered in a custom pack.

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Sterile Standard Products

1



Sterile Standard Products

This part contains all standard sets and accessories. The general functional drawings of all coated standard circuits are presented in this chapter.

Table 1-1. Standard Circuits non coated 1-1. Standard Circuits non coated

M999147C	STARTER 1 1/B	00885074524511
M999149A	EL240-V1 4/B	00721902538766
M999210C	CARDIOPL. WITHOUT MYOTHERM MODEL 990-DL 5/B	00681490902304
M999214E	61399404996 MYOTHERM XP 4:1 4/B	20885074524522
M999231A	CARDIOPL. WITH MYOTHERM MODEL 990CT-DL 4/B	00681490901253

Table 1-2. Standard Circuits coated

M999422C	CB BPX80 VAD PRE-PRIME 1/B	00885074524542
M999423C	CB BPX80 VAD TABLE PRIME 1/B	00885074524559
M999424A	CB LIVER ACCESSORY KIT 1/B	00681490420822
M999425G	CB AFFINITY CB BPX-80 ECMO/CCS 1/B	00885074524566
M999426E	CB M.M.PLUS 3381 BP50 ECMO/CCS 1/B	00885074524573

Table 1-3. Standard Accessories non coated

M999106C	PRESSURE ISOLATOR LINE 5/B	00721902975608
M999107D	STANDARD PRESSURE ISOLATOR LINE 5/B	20613994107026
M999108B	VACUUM RELIEVE VALVE VRV II 12/B	20613994114734
M999123D	VRV-100 SINGLE STERILE 20/B	20885074524461
M999135B	BLIND PLUG 1/2x3/32 5/B	20885074524492
M999136B	STANDARD PATIENT LINE 5/B	00721902990779
M999138C	STANDARD MYOTHERM XP PATIENT LINE 5/B	20613994107057
M999146B	CP PURGELINE SK1334 4/B	00721902098277

Table 1-4. Standard Accessories coated

M999409A	CB 4-WAY STOPCOCK 20EA 1/B	00681490420624
M999433A	CB HIFLOW STOPCOCK 20PCK 1/B	00681490420990
M999434D	CB STANDARD PRESSURE LINE 5/B	20613994102007

Table 1-5. Standard Tubing non coated

M999132D	TUBING 1/4x1/16x200cm 5/B	20613994110743
M999133C	TUBING 3/8x3/32x200cm 5/B	20613994107033

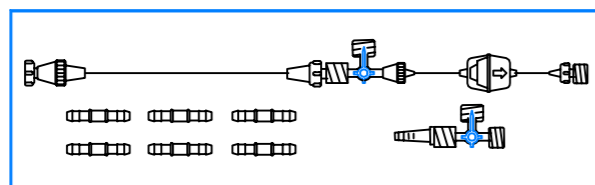
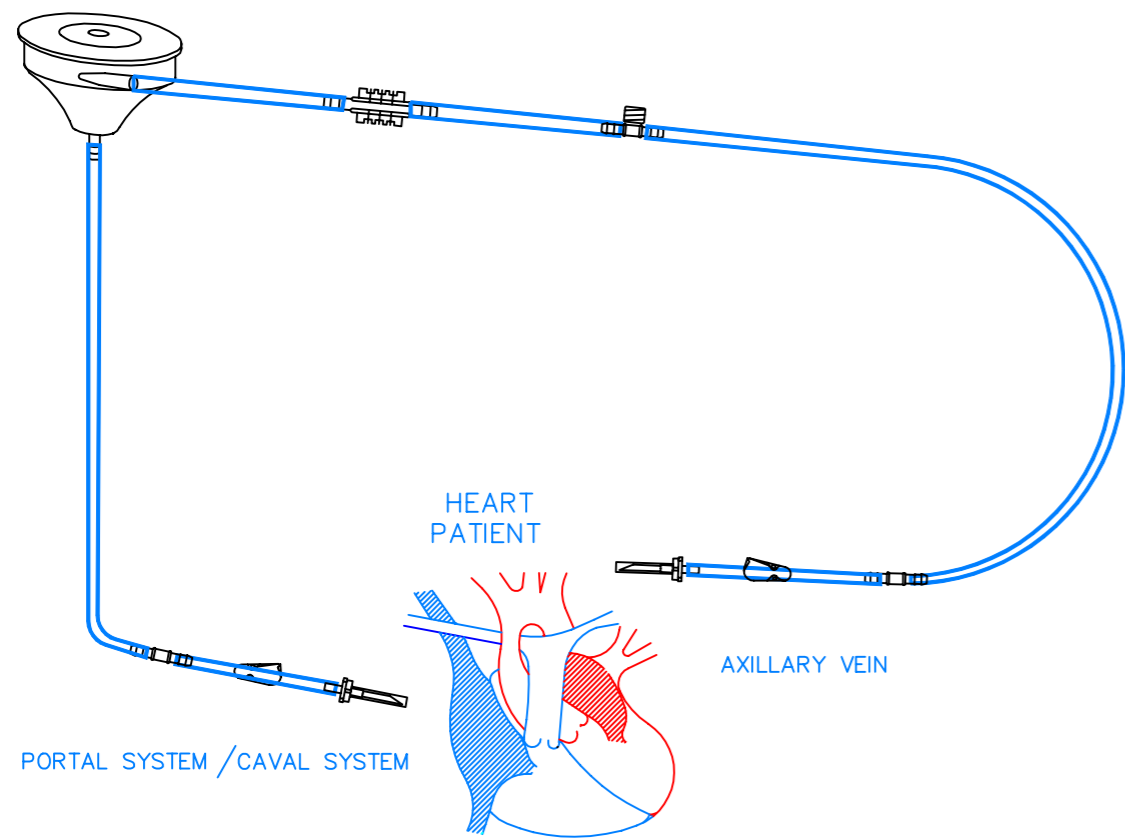
Table 1-6. Standard Tubing coated

M999413C	CB TUBING 1/4x1/16x185cm 5/B	20885074524539
M999414C	CB TUBING 3/8x3/32x185cm 5/B	00885074262673
M999415B	CB TUBING 1/2x3/32x185cm 5/B	00885074250397
M999428B	CB TUBING 3/8x3/32x230cm 5/B	00885074072296
M999429C	CB TUBING 1/4x1/16x15cm 5/B	20613994237419
M999430C	CB TUBING 3/8x3/32x100cm 5/B	20613994107064

Table 1-7. Resting Heart Circuits

M999306D	CB RESTING HEART 1/B	00613994227546
M999308D	CB PERFORMER CPB RESTING HEART 1/B	00613994227553

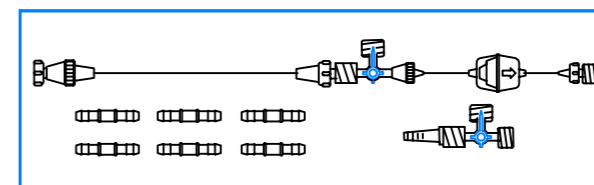
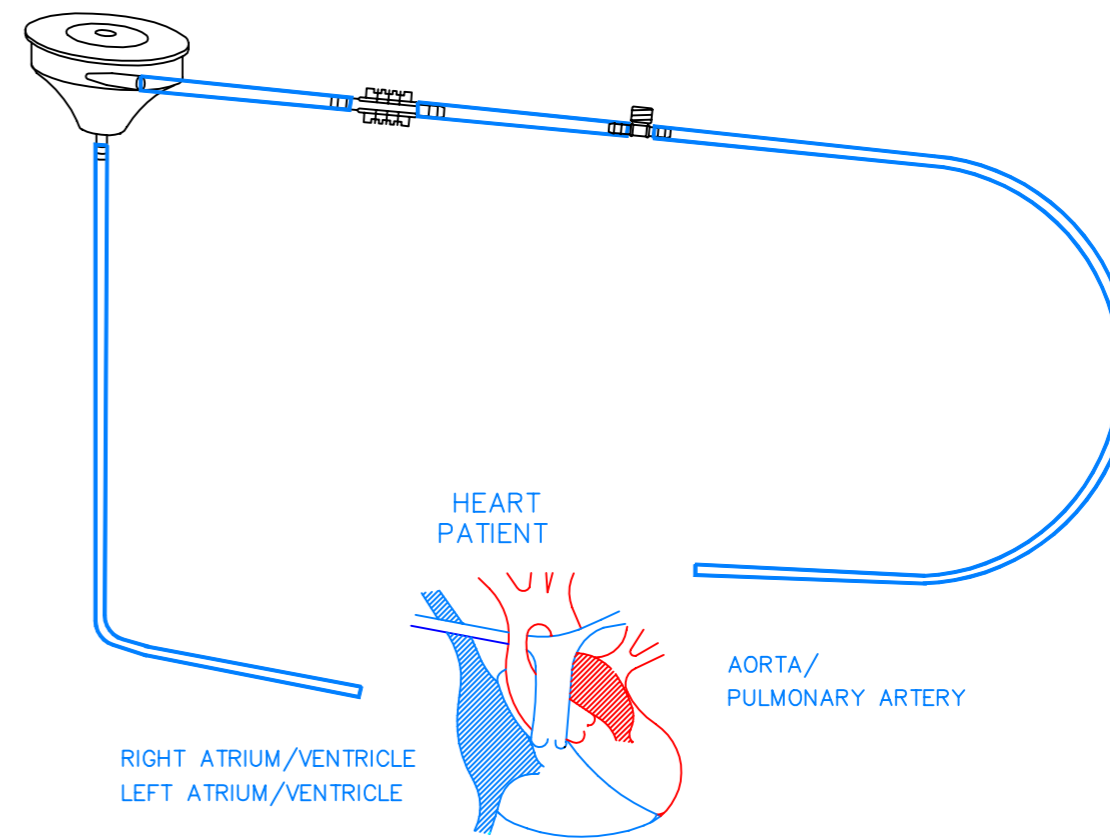
Custom Pack Specifications



CB BPX80 VAD PRE PRIME

M999422

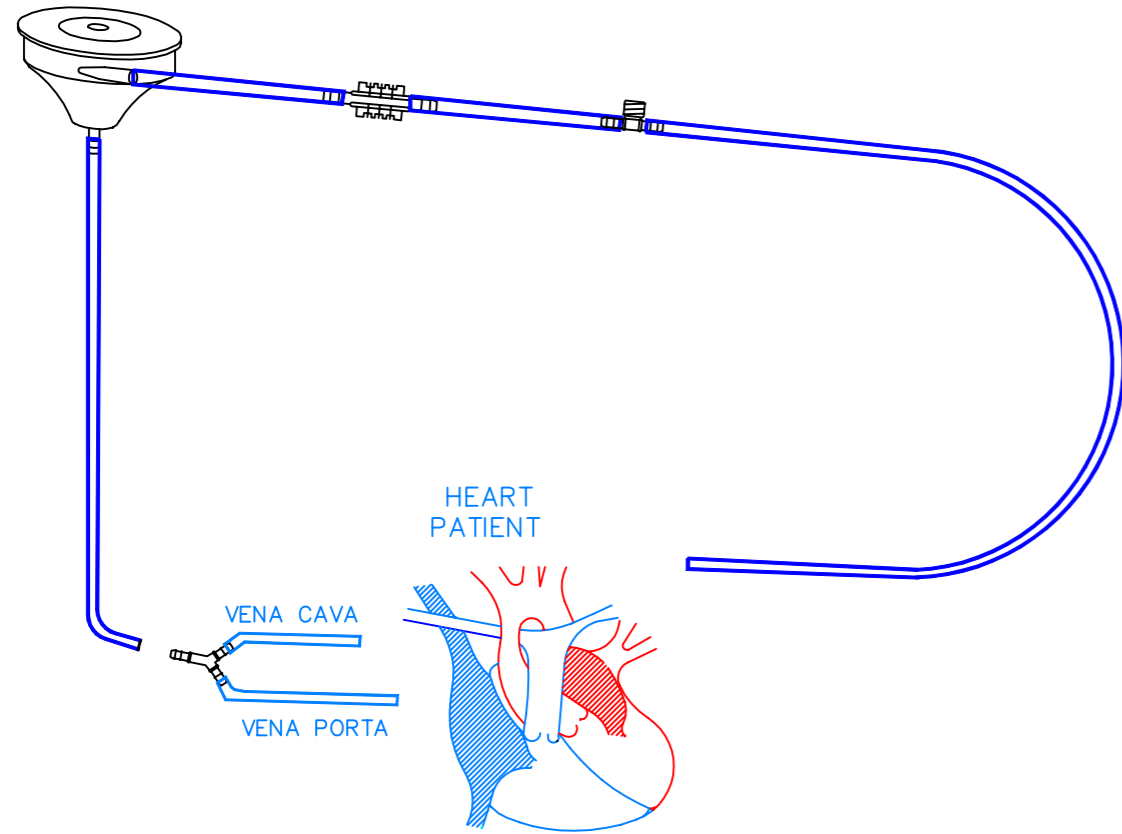
Custom Pack Specifications



CB BPX80 VAD TABLE PRIME

M999423

Custom Pack Specifications

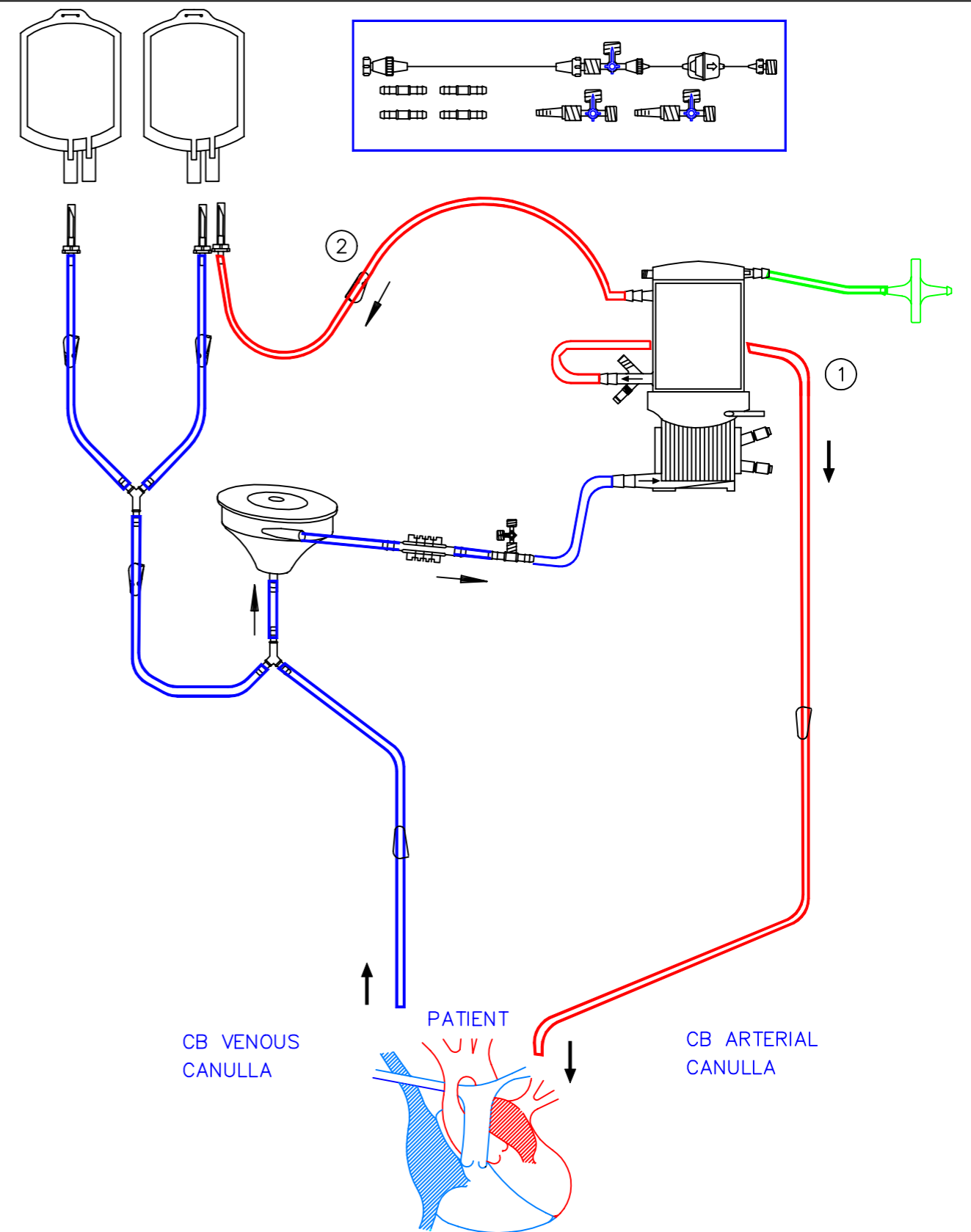


**THIS ADAPTOR SET CAN ONLY BE USED
TOGETHER WITH : M999422
M999423**

CB LIVER ACCESSORY KIT

M999424

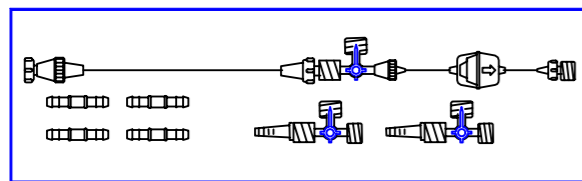
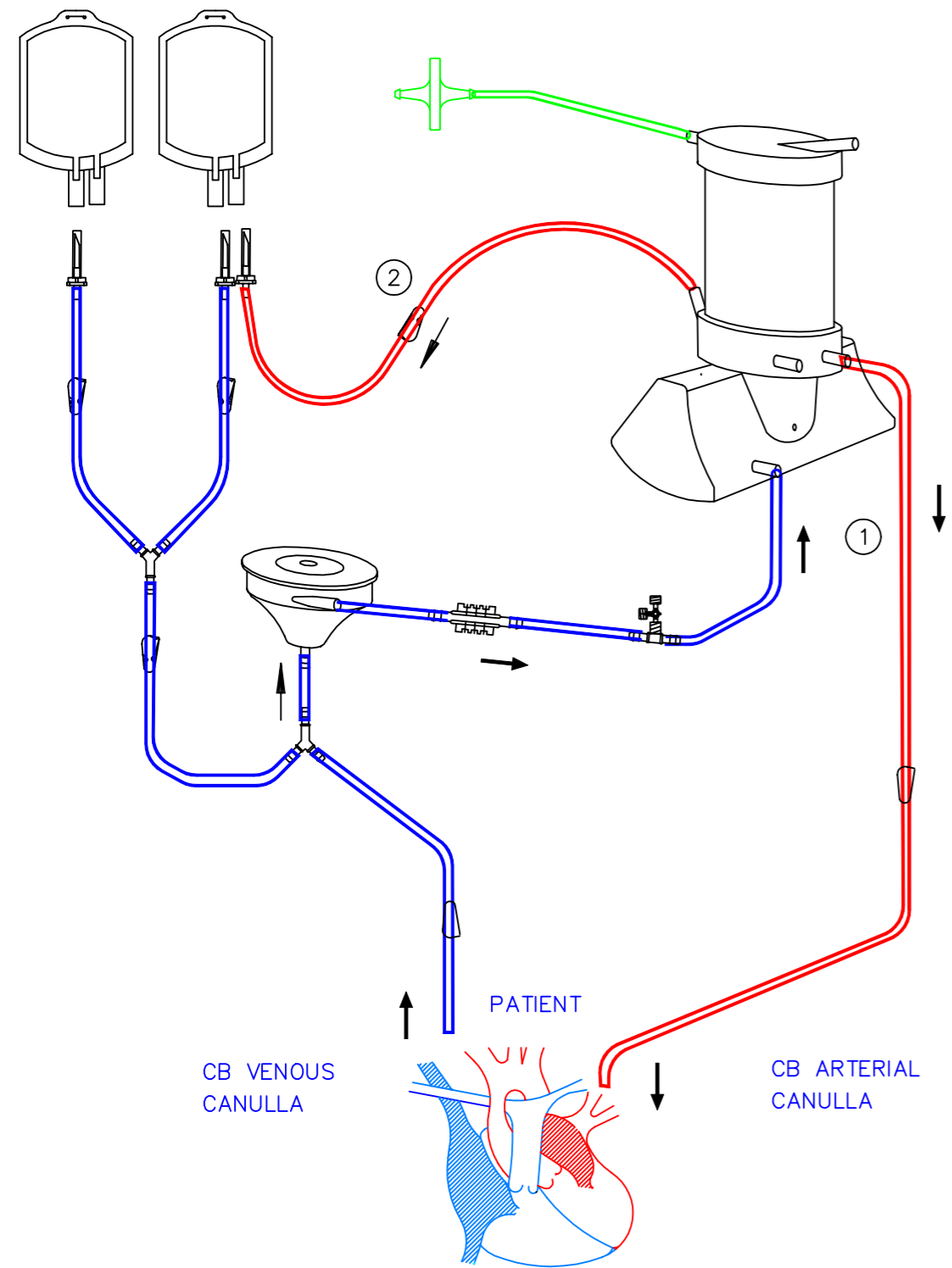
Custompack Specifications



CB AFFINITY BPX80 ECMO / CCS

M999425

Custompack Specifications



CB M.M.PLUS 3381 BP50 ECMO / CCS M999426

Tubing and caps

2

PVC Tubing	14
Silicone tubing	17
Coloured dust covers	19
Luer caps	21

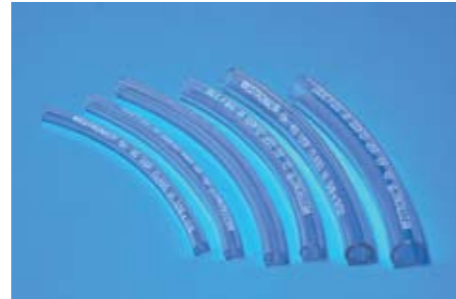
PVC Tubing

Tubing used for transportation of the blood outside the patient. Properties of this tubing are:

1. Transparent for good visibility
2. Smooth surface to minimize haemolyses and clot formation
3. Excellent properties Biocompatibility
4. Reasonable kink resistant and flexible. Choice for 3 different hardness's 65 - 70 - 75 Shore A. Hardness Shore 70 is standard used unless other specified. Tubing shore 65 is white coloured text, shore 70 blue and shore 75 black.
5. Low budget alternative for potential pump applications (only standard procedures)
6. Available with colour striping (red, blue, yellow, white and green). It is a perfect alternative for using coloured tape markers.
7. Tubing description contains following parameters above the line: inner diameter x wall thickness x length in cm. Under the line material, brand or producer and shore A hardness.

Table 2-1. PVC Medtronic Shore 65

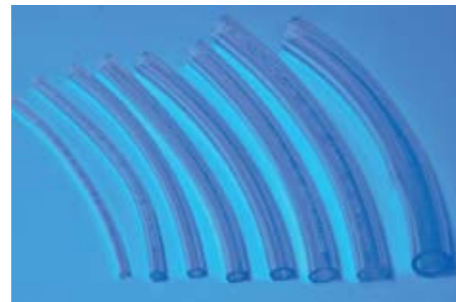
991134-06	PVC MED-65 3/16 x 1/16
991134-01	PVC MED-65 1/4 x 1/16
991134-05	PVC MED-65 1/4 x 3/32
991134-04	PVC MED-65 3/8 x 1/16
991134-02	PVC MED-65 3/8 x 3/32
991134-03	PVC MED-65 1/2 x 3/32



3/8 x 3/32 x 50cm
PVC MED-65 Sh

Table 2-2. PVC Medtronic Shore 70

991136-08	PVC MED-70 1/8 x 1/32
991136-09	PVC MED-70 1/8 x 1/16
991136-12	PVC MED-70 3.8 x 0.85 mm
991136-11	PVC MED-70 4.5 x 1.25 mm
991136-07	PVC MED-70 3/16 x 1/32
991136-10	PVC MED-70 3/16 x 3/64
991136-06	PVC MED-70 3/16 x 1/16
991136-13	PVC MED-70 3/16 x 3/32
991136-01	PVC MED-70 1/4 x 1/16
991136-05	PVC MED-70 1/4 x 3/32
991136-04	PVC MED-70 3/8 x 1/16
991136-02	PVC MED-70 3/8 x 3/32
991136-03	PVC MED-70 1/2 x 3/32



3/8 x 3/32 x 50cm
PVC MED-70 Sh

Table 2-2. PVC Medtronic Shore 70 (Continued)

991145-01	PVC MED-70 1/4 x 1/16 02 GAS LINE GREEN
991132-07	PVC MED-70 1/4 x 1/16 GREEN STRIPING
991132-08	PVC MED-70 1/4 x 1/16 YELLOW STRIPING
991132-09	PVC MED-70 1/4 x 1/16 WHITE STRIPING
991132-04	PVC MED-70 1/4 x 1/16 BLUE STRIPING
991132-01	PVC MED-70 1/4 x 1/16 RED STRIPING
991132-03	PVC MED-70 3/8 x 1/16 RED STRIPING
991132-02	PVC MED-70 3/8 x 3/32 RED STRIPING
991132-05	PVC MED-70 3/8 x 3/32 BLUE STRIPING
991132-06	PVC MED-70 1/2 x 3/32 BLUE STRIPING



3/8 x 3/32 x 50cm
PVC MED-70 COLOR

Table 2-3. PVC Medtronic Shore 75

991138-06	PVC MED-75 3.8 x 0.85 mm
M703038B001	PVC MED-75 3/16 x 1/16
991138-01	PVC MED-75 1/4 x 1/16
991138-02	PVC MED-75 3/8 x 3/32
991138-03	PVC MED-75 1/2 x 3/32



3/8 x 3/32 x 50cm
PVC MED-75 Sh

Table 2-4. PVC Norton Tygon

991180-07	PVC TYGON-S-50-HL 3/16 x 1/16
991180-02	PVC TYGON-S-50-HL 1/4 x 1/16
991180-06	PVC TYGON-S-50-HL 1/4 x 3/32
991180-05	PVC TYGON-S-50-HL 3/8 x 1/16
991180-03	PVC TYGON-S-50-HL 3/8 x 3/32
991180-04	PVC TYGON-S-50-HL 1/2 x 3/32
M707428B001	PVC TYGON-S-95-E 1/4 x 1/16
M707429B001	PVC TYGON-S-95-E 3/8 x 3/32
M707427B001	PVC TYGON-S-95-E 1/2 x 3/32



3/8 x 3/32 x 50cm
TYGON S-50HL

Table 2-5. PVC Rehau No Dop

991184-03	PVC REHAU NO DOP-75 3/16 x 1/16
991184-04	PVC REHAU NO DOP-75 1/4 x 1/16
991184-02	PVC REHAU NO DOP-75 1/4 x 3/32
991184-09	PVC REHAU NO DOP-75 5/16 x 1/16
991184-06	PVC REHAU NO DOP-75 3/8 x 1/16
991184-07	PVC REHAU NO DOP-75 3/8 x 3/32
991184-08	PVC REHAU NO DOP-75 1/2 x 3/32



3/8x3/32 x 10 cm
REHAU NO-DOP-75

991188-01	PVC REHAU-80 1/2 x 3/32
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1/2x3/32 x 10 cm
REHAU-80

Table 2-4. PVC Norton Tygon

1130108-504	PVC TAPER 68 1/4 x 3/32-3/8 x 3/32-1/4 x 3/32
1130108-1	PVC TAPER 68 3/8 x 3/32-1/2 x 3/32-3/8 x 3/32



TAPER TYGON

Silicone tubing

Tubing mostly used for pump applications.
Properties of this tubing are:

1. Excellent performance in mechanical and physical properties.
2. Reliable and equal performance at low temperatures
3. Costs are about 20 times higher than PVC tubing
4. Kink free and very flexible.
5. Better biocompatible than uncoated PVC tubing.

Table 2-7. Silicone Dow Corning

991172-01	SIL RX50 DOW-50 1/4 x 1/16
991172-04	SIL RX50 DOW-50 3/8 x 1/16
991172-02	SIL RX50 DOW-50 3/8 x 3/32
991172-03	SIL RX50 DOW-50 1/2 x 3/32



3/8 x 3/32 x 50cm
SIL RXP-DOW

991170-13	SIL RXP DOW-50 1/8 x 1/16
991170-10	SIL RXP DOW-50 3/16 x 1/16
991170-01	SIL RXP DOW-50 1/4 x 1/16
991170-06	SIL RXP DOW-50 1/4 x 3/32
991170-07	SIL RXP DOW-50 5/16 x 1/16
991170-11	SIL RXP DOW-50 5/16 x 3/32
991170-02	SIL RXP DOW-50 3/8 x 1/16
991170-08	SIL RXP DOW-50 3/8 x 3/32
991170-03	SIL RXP DOW-50 3/8 x 1/8
991170-04	SIL RXP DOW-50 1/2 x 3/32
991170-09	SIL RXP DOW-50 1/2 x 1/8
991170-05	SIL RXP DOW-50 5/8 x 1/8

991171-05	SIL RX80 DOW-78 3/16 x 1/16
991171-01	SIL RX80 DOW-78 1/4 x 1/16
991171-02	SIL RX80 DOW-78 3/8 x 3/32
991171-03	SIL RX80 DOW-78 1/2 x 3/32

Table 2-8. Silicone Rehau Raumedic

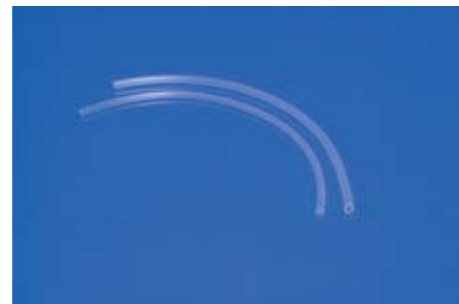
991185-10	SIL REHAU-60 3/16 x 1/16
991185-04	SIL REHAU-60 1/4 x 1/16
991185-03	SIL REHAU-60 1/4 x 3/32
991185-14	SIL REHAU-60 1/4 x 1/8
991185-11	SIL REHAU-60 8 x 2 mm
991185-07	SIL REHAU-60 3/8 x 3/32
991185-05	SIL REHAU-60 3/8 x 1/8
991185-13	SIL REHAU-60 10 x 15 mm
991185-12	SIL REHAU-60 12 x 18 mm
991185-06	SIL REHAU-60 1/2 x 1/8
991185-08	SIL REHAU-60 1/2 x 3/32
991185-09	SIL REHAU-60 5/8 x 1/8
M709810B001	SIL REHAU-60 2.5 x 4.5 mm



3/8 x 3/32 x 50cm
REHAU SIL-65

Table 2-9. Silicone Specials

991187-01	SIL PORTEX-50 3 x 1 mm
991187-02	SIL PORTEX-50 4 x 1 mm



4 x 6 x 50cm
PORTEX SIL

Coloured dust covers

Coloured caps used on tubing ends and connectors for protection against dust and contamination.

Table 2-10. Coloured dust covers

0132308-1	CAP 1/8 x 1/32 RED
0132308-501	CAP 1/8 x 1/32 BLUE
0132309-1	CAP 1/8 x 1/16 RED
0132309-501	CAP 1/8 x 1/16 BLUE
0132309-503	CAP 1/8 x 1/16 GREEN
0132309-504	CAP 1/8 x 1/16 YELLOW
0132309-506	CAP 1/8 x 1/16 WHITE
0132310-1	CAP 3/16 x 1/16 RED
0132310-501	CAP 3/16 x 1/16 BLUE
0132310-502	CAP 3/16 x 1/16 PINK
0132310-503	CAP 3/16 x 1/16 GREEN
0132310-504	CAP 3/16 x 1/16 YELLOW
0132310-506	CAP 3/16 x 1/16 WHITE
0132311-1	CAP 1/4 x 1/16 RED
0132311-501	CAP 1/4 x 1/16 BLUE
0132311-502	CAP 1/4 x 1/16 PINK
0132311-503	CAP 1/4 x 1/16 GREEN
0132311-504	CAP 1/4 x 1/16 YELLOW
0132311-506	CAP 1/4 x 1/16 WHITE
0132312-1	CAP 1/4 x 3/32 RED
0132312-501	CAP 1/4 x 3/32 BLUE
0132312-502	CAP 1/4 x 3/32 PINK
0132312-503	CAP 1/4 x 3/32 GREEN



POL-RED
3/8x3/32

Table 2-10. Coloured dust covers	
0132312-504	CAP 1/4 x 3/32 YELLOW
0132312-506	CAP 1/4 x 3/32 WHITE
0132313-1	CAP 3/8 x 1/16 RED
0132313-501	CAP 3/8 x 1/16 BLUE
0132313-502	CAP 3/8 x 1/16 PINK
61399400213	CAP 3/8 x 1/16 GREEN
0132313-504	CAP 3/8 x 1/16 YELLOW
0132313-506	CAP 3/8 x 1/16 WHITE
0132314-1	CAP 3/8 x 3/32 RED
0132314-501	CAP 3/8 x 3/32 BLUE
0132314-502	CAP 3/8 x 3/32 PINK
0132314-503	CAP 3/8 x 3/32 GREEN
0132314-504	CAP 3/8 x 3/32 YELLOW
0132314-506	CAP 3/8 x 3/32 WHITE
0132315-501	CAP 1/2 x 1/16 BLUE
0132316-1	CAP 1/2 x 3/32 RED
0132316-501	CAP 1/2 x 3/32 BLUE
0132316-506	CAP 1/2 x 3/32 WHITE
0132317-501	CAP 1/2 x 1/8 BLUE
0132317-506	CAP 1/2 x 1/8 WHITE
0132318-501	CAP 5/8 x 3/32 BLUE

Table 2-11. Non vented covers	
991276-01	CAP CLOSED 9.5 mm BLUE
1160094-1	CAP CLOSED 3/8 BLUE
1160192-1	CAP CLOSED 1/4 BLUE

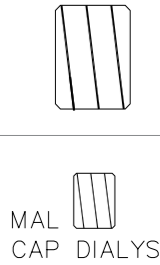


CLOSECAP
xxx BLUE

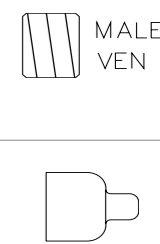
Luer caps

Caps used on a luer connection for protection against dust and contamination. Available as closed (white) and vented cap (light blue).

Table 2-12. Luer caps	
1140008-503	CAP MALE CLOSED WHITE I
991283-04	CAP MALE CLOSED DIALYSE





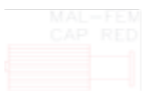


1130403-502	CAP MALE VENTED BLUE
61399401003	CAP MALE VENTED LARGE BORE CON



0524301-0803	CAP FEMALE VENTED WHITE
991283-08	CAP FEMALE OPEN WHITE INSIDE
0132306-1	CAP FEMALE VENTED CLEAR
61399402978	CAP FEMALE OPEN BLUE



Table 2-12. Luer caps			
991283-07	DIAL CLOSED CAP FEM		 <p>DIAL CLOSED CAP</p>
991283-09	VENTED CAP FOR MALE DIAL CON		 <p>DIAL VENTED CAP</p>
991279-01	CAP MALE / FEMALE CLOSED RED		 <p>MALE-FEM CAP RED</p>

Connectors

3

Tubing connectors	24
Measurement cells	27
Flow Probes	28
Luer connectors Special	28
Connectors	30
One way valves Vacuum	33
Vaccum Relieve Valves	34

Tubing connectors

Tubing connectors connect tubing parts. Basically there are two types:

1. straight connectors. These connect two tubing parts, which can be different size.
2. Y-connectors. These connect three tubing parts, which can be of different size.

Both types of connectors can be equipped with a luer connection.

Tubing - connector fixation can be achieved by:

1. put the tubing over the barbs of the connector
2. as 1, but secured with a cable tie
3. use cyclohexanone to bond connector and tubing

The method used depends on results of the strength tests performed on every connection we use. Customer can demand a stronger connection than necessary, e.g. an extra cable tie.

Table 3-1. Straight

M706853B001	CON 1/8 x 1/8
0131432-1	CON 3/16 x 3/16
1130204-1	CON 1/4 x 1/4
1130205-1	CON 3/8 x 3/8
1130206-1	CON 1/2 x 1/2

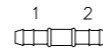


Table 3-2. Straight LL

1130223-1	CON 3/16 x 3/16 LUER
1130207-1	CON 1/4 x 1/4 LUER
1130208-1	CON 3/8 x 3/8 LUER
1130209-1	CON 1/2 x 1/2 LUER

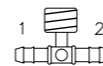


Table 3-3. Straight double LL

61399400254	CON 1/4 x 1/4 DOUBLE LUER
30613994002526	CON 3/8 x 3/8 DOUBLE LUER
61399400253	CON 1/2 x 1/2 DOUBLE LUER

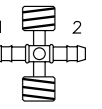


Table 3-4. Reducer

0130508-501	CON NEEDLE LUER 3/16
992357-01	CON NEEDLE LUER 1/4
1130200-1	CON 1/4 x 3/16
1130201-1	CON 3/8 x 1/4
992322-02	CON 1/2 x 1/4
1130202-1	CON 1/2 x 3/8
1130203-1	CON 5/8 x 3/8

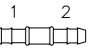
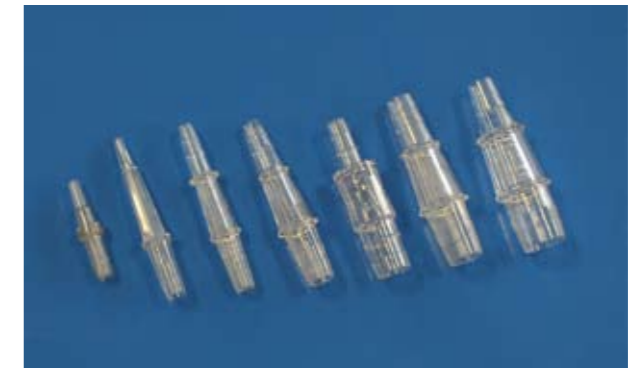


Table 3-5. Reducer LL

0131418-502	CON 1/4 x 3/16 LUER
1130210-1	CON 3/8 x 1/4 LUER
1130222-1	CON 1/2 x 3/8 LUER

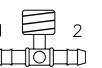


Table 3-6. Y-connectors

0131405-1	CON 1/8 x 1/8 x 1/8
1130215-1	CON 3/8 x 3/8 x 3/8
1130221-1	CON 3/16 x 3/16 x 3/16
1130220-1	CON 1/2 x 1/2 x 1/2
1130213-1	CON 1/4 x 1/4 x 1/4

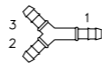


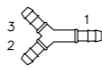
Table 3-7. Y-connectors LL

992344-10	CON 3/16 x 3/16 x 3/16 LUER
1130231-1	CON 1/4 x 1/4 x 1/4 LUER
1130229-1	CON 3/8 x 3/8 x 3/8 LUER
1130230-1	CON 1/2 x 1/2 x 1/2 LUER



Table 3-8. Y-connectors reducers

1130214-1	CON 3/8 x 3/8 x 1/4
61399402953	CON 1/2 x 3/8 x 1/4
0131494-504	CON 3/8 x 1/4 x 1/4
1130216-1	CON 1/2 x 3/8 x 3/8
1130225-1	CON 1/4 x 3/8 x 3/8

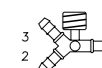


992344-20	CON 1/2 x 1/2 x 1/4
992344-21	CON 1/2 x 1/2 x 3/8
0131424-501	CON 1/4 x 3/16 x 3/16
992344-01	CON 1/2 x 1/4 x 1/2 SIDEARM



Table 3-9. Y-connectors reducers LL

992344-16	CON 3/8 x 1/4 x 3/8 LUER
992344-09	CON 3/8 x 3/8 x 1/4 LUER
1130232-1	CON 3/8 x 1/4 x 1/4 LUER
992344-02	CON 1/4 x 3/8 x 3/8 LUER



0131416-502	CON 1/2 x 3/8 x 3/8 LUER
992344-19	CON 1/2 x 1/2 x 3/8 LUER
992344-03	CON 1/2 x 1/2 x 1/4 LUER
992344-11	CON 1/2 x 3/8 x 1/2 LUER



992344-17	CON 1/4 x 3/16 x 3/16 YL
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Measurement cells

Measurement cells are placeholders for sensors, which can measure blood parameters. Measurements can be done on the arterial and venous side with arterial- and venous cells.

- The parameters for most of the venous probes are Hematocrit (Hct), venous oxygen saturation (SvO2), and temperature. Some probes do have extra parameters like pH and PCO2.
- The parameters for most of the arterial probes are arterial oxygen saturation (SaO2), PO2 and temperature. Some probes do have extra parameters like pH and PCO2.

Table 3-10. Measurements cells

M930435A001	MEASUREMENT CELL 1/2x1/2 TMC50
1145267-501	MEASUREMENT CELL 3/8x3/8 TMC38
1145267-502	MEASUREMENT CELL 1/4x1/4 TMC25



0130211-503	MEASUREMENT CELL SAT 1/2 x 1/2
0130211-501	MEASUREMENT CELL SAT 3/8 x 3/8
0130211-1	MEASUREMENT CELL SAT 1/4 x 1/4



Flow Probes

Flow probes are used to measure the flow in the system

They normally will be used in combination with the bio pump

Table 3-11.

20721902390207	DP-38 BIO PROBE 3/8"
95140	DP38P BIO PROBE 1/4"



Luer connectors

These connectors are used as tubing ends to make a screw connection to other parts in the system. All tubing to luer connections are bonded connections. Connectors are made out of polycarbonate or equivalent hard plastic.

Table 3-12. Luer male connectors

B03002-00	CON MALE LUER B03002-00
0130534-1	CON MALE LUER 1/8
0130510-1	CON MALE LUER 3/16
992374-03	CON MALE-MALE SPINLOCK
992374-01	CON MALE SPINLOCK 3/16
20681490874407	10007 PERFUSION ADAPTER 1/4" - MLL
20681490874421	1008 PERFUSION ADAPTER 3/8" - MLL

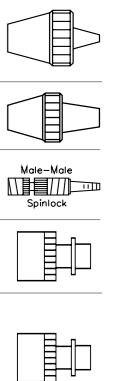


Table 3-13. Luer female connectors

B03003-00	CON FEMALE LUER B03003-00
61399401034	CON FEMALE LUER 1/8
0130542-501	CON FEMALE LUER 1/8 W/O WINGS
0130509-1	CON FEMALE LUER 3/16
61399402847	CON FEMALE LUER 1/4
0130501-501	CON FEMALE-FEMALE LL

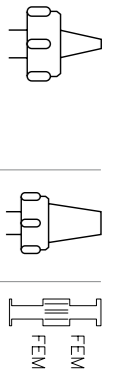


Table 3-14. Large Bore connectors

992362-04	CON MALE DIALYSE ADAPTOR CLEAR
992362-05	CON FEMALE DIALYSE ADAPTOR RED
992362-06	CON FEMALE DIALYSE ADAPTOR BLUE
0131448-502	CON MALE LARGE BORE 5mm
0131448-1	CON FEMALE LARGE BORE 5mm

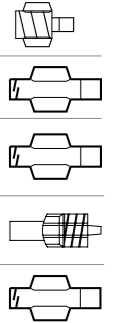


Table 3-14. Large Bore connectors

992364-09	CON FEMALE COUPLING 3/8
992364-08	CON MALE COUPLING 3/8
992364-11	CON FEMALE COUPLING 1/4
992364-10	CON MALE COUPLING 1/4
992364-06	CON FEMALE COUPLING 1/2
992364-07	CON MALE COUPLING 1/2

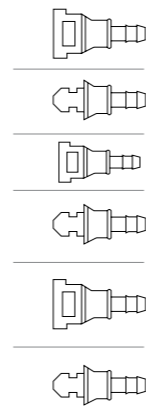
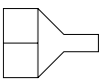
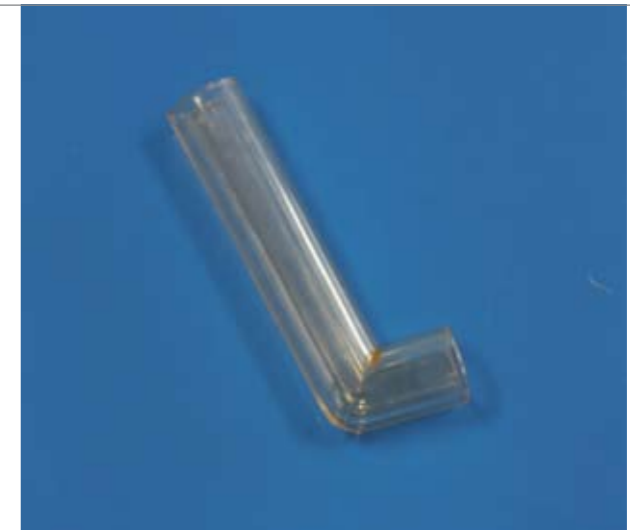


Table 3-15. Special connectors (Continued)

988790	CON 1/4 x 1/4 x 1/4 PARALLEL
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1140055-1	CON PVC ELBOW 1/2 x 1/2 90 DEGREE
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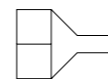
Special Connectors

Table 3-15. Special connectors

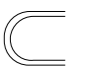
0170071-1	CON SOFT PVC 1/8 x 1/8 x 1/8 PARALLEL
0170071-501	CON SOFT PVC 3/16 x 3/16 x 3/16 PARALLEL
992375-01	CON SOFT PVC 1/4 x 1/4 x 1/4 PARALLE



1130244-1	CON SOFT PVC 1/4 x 1/4 x 1/8 PARALLEL
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M710763B001	CON U-SILICONE 3/8x3/8
992371-04	CON U-SILICONE 1/2x3/8



992374-04	SMART SITE NEEDLESS CON
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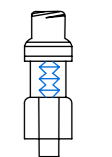
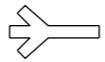
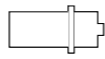


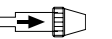
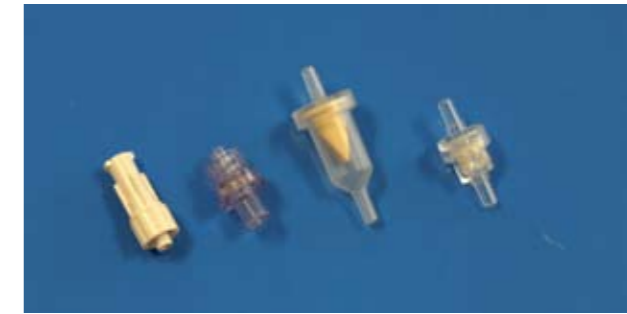
Table 3-15. Special connectors (Continued)	
992285-03	CON IN-STOP
61399402845	CON MLL - Triple FL ADAPTOR
992341-03	CON 3/16 TRI SITE



One way valves

One-way valves prevent retrograde flow. These valves are mostly used in arterial purge lines where retrograde flow can occur and cause air in the direction of the patient.

Table 3-16. Valves	
1160079-1	VALVE 1-WAY MALE/FEMALE
0131317-1	VALVE 1-WAY MALE/FEMALE
0131300-1	VALVE DUCKBILL
992394-01	VALVE VERNAY



0131312-501	VALVE RETRO-GUARD QUEST 3/8"
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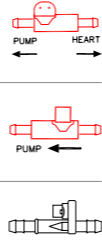
Vacuum Relieve Valves

Vacuum relieve valves can be used in suction or vent applications. All valves are triple action. Actions are:

1. To relieve excess negative pressure in the vent line.
2. To prevent against retrograde flow
3. To relieve excess positive line pressure.

Table 3-17. Valves

0131301-503	VALVE DELTA VRV-II
0131304-1	VALVE AMO SUCTION CONTROL RLV2100B
1140333-1	VALVE VRV-100



20721902350096	GENTLE VENT PUMP HEADER
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Oxygenator Venous Reservoirs Bio pumps

4

Oxygenators	36
Venous Reservoirs	37
Bio pumps	40

Oxygenators

Venous Reservoirs

Affinity with access port

The Affinity oxygenator is a high performance hollow fibre oxygenator.

1. This product contains the proven PRF fibre for excellent plasma breakthrough.
2. Clear housing for total visibility pre and post membrane for priming confidence.
3. Heat exchanger with great performance and minimal pressure drop.
4. Very consistent, efficient gas transfer due to patented radial flow design.

Membrane surface is 2.5 m²
 Priming volume is 270 ml
 Heat Exchanger surface area is 0.168m²
 Pressure drop 80 mmHg at 6 l/min

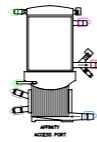


Table 4-1. Oxygenators

90573	OXYGENATOR AFFINITY w AP
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Minimax SK33

This oxygenator is a hollow fibre oxygenator for paediatric purposes. This oxygenator delivers predictable levels of gas transfer at all flow rates up to 2.3 LPM. Priming volume is 149 cc and membrane surface is 0.8 m².

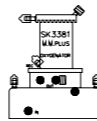


Table 4-2. Oxygenators

1150377-505	OXYGENATOR MINIMAX PLUS SK3381
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Venous reservoirs are divided in hard shells (for open systems) and reservoir bags (for closed systems).

Hard shell reservoirs contain venous blood from the patient and from the suction devices.

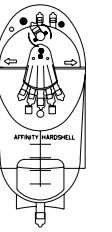
Reservoir bags contain venous blood from the patient and blood from the cardiotomy reservoir.

Affinity Cardiotomy Venous Reservoir CVR 540 NT

This venous hard shell reservoir got a capacity of 4000 cc. Minimum operating level is 200cc. Venous inlet screen is 200 micron and the final screen is 150 micron. Reservoir got a safety device for negative and positive pressure. It also has excellent defoaming capabilities.

Table 4-3. Cardiotomy Venous Hard shell Reservoir

61399409468	HARD SHELL AFFINITY CVR NT
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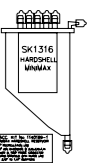


Hard shell Venous Reservoir SK1316

This venous hard shell for paediatric purposes got a capacity of 2000cc. Minimum operating level is 150cc. Cardiotomy filtration is 20 micron. Integrated venting system prevents excess pressurization. 3/8" to 1/4" screw adapters for easy outlet / inlet conversion are available in the accessory kit.

Table 4-4. Cardiotomy Venous Hard shell Reservoir

1140266-1	HARD SHELL MINIMAX SK1316
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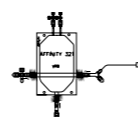


Venous Reservoir Bag 321

This venous soft-shell reservoir has a flexible operating volume between 300 and 1250 cc. Separation screen is 105 micron. Bag is designed for effective micro bubble handling and excellent mixing.

Table 4-5. Soft Venous Reservoir Bag

61399408599	VEN RES BAG AFFINITY
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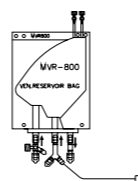
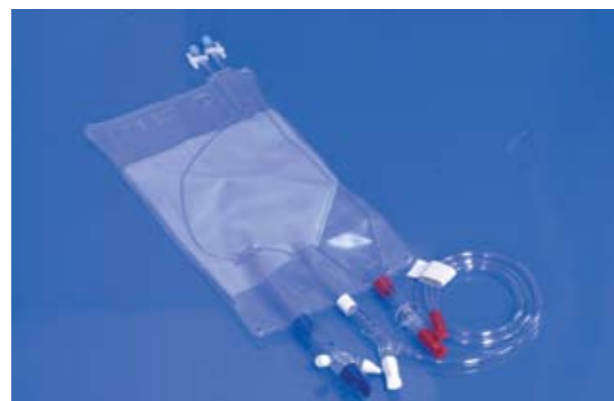


Venous Reservoir Bag MVR800 / MVR1600

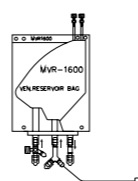
These 2 reservoirs do have a flexible operating volume with a maximum of 800 and 1600 cc to treat a wide range of patients. Separation screen is 105 micron. This bag is designed to efficiently remove venous air while providing excellent flow dynamics.

Table 4-6. Soft Venous Reservoir Bag

M929111A004	VEN RES BAG MVR800
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M929111A001	VEN RES BAG MVR1600
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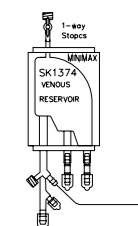


Venous Reservoir Bag SK1374

This venous soft-shell reservoir has a flexible operating volume between 110 and 230 cc. Separation screen is 105 micron. SK1374 got a 1/4" pump outlet.

Table 4-7. Soft Venous Reservoir Bag

1143010-503	VEN RES BAG 1/4 SK1374
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M709405B001	VEN RES BAG VVR1800
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Bio pumps

Bio Pump BPX80

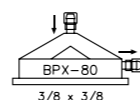
This Biomedicus centrifugal blood pump represents the highest standard in gentle blood handling. This product is being improved by utilizing polycarbonate plastic instead of acrylic. Also there are some improvements to the design to have an even more gentle blood flow. This improved very reliable product got a minimal risk for port breakage, better resistance to alcohol and other chemicals and reduces shear and haemolysis because of outlet redesign. Priming volume is 86 cc with 3/8" connections.

Bio pump BP50

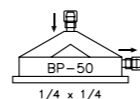
This Biomedicus paediatric centrifugal pump represents the highest standard in gentle blood handling. This product creates an optimal safety and reduces risk of patient complications, which is very important special with children. Priming volume is 48 cc with 1/4" connections.

Table 4-8. Bio Pump

95281	BPX-80 BIO PUMP ADULT
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95173	BP-50 BIO PUMP PEDIATRIC
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Cardiotomy Reservoirs

5

Cardiotomy reservoir EL 404	42
Cardiotomy reservoir EL 402	42
Cardiotomy reservoir EL 400	42
Cardiotomy reservoir SK1351	43
Cardiotomy reservoir EL240	43
Cardiotomy reservoir ATR2900DF	44

Cardiotomy reservoirs are reservoirs for cardiovascular, postoperative and auto transfusion applications. The blood comes from suction devices, will pass defoamer and filter screen before it will be ready for use to supply to the venous reservoir bag.

Cardiotomy reservoir EL 404

Volume: 4000cc
 Max blood flow: 6 LPM
 Screen filter: 40 micron

Cardiotomy reservoir EL 402

Volume: 4000cc
 Max blood flow: 6 LPM
 Screen filter: 20 micron

Cardiotomy reservoir EL 400

Volume: 4000cc
 Max blood flow: 6 LPM
 Screen filter: 120 micron

Table 5-1. Cardiotomy Reservoirs

NSEL404	CARD RES MDT EL404		
NSEL402	CARD RES MDT EL402		
M930355A001	CARD RES MDT EL400		

Cardiotomy reservoir SK1351

Volume: 2600cc
 Max blood flow: 4 LPM
 Screen filter: 20 micron

Table 5-2. Cardiotomy Reservoirs

1144009-1	CARD RES MDT SK1351
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Cardiotomy reservoir EL240

Volume: 4000cc
 Max blood flow: 4 LPM
 Screen filter: 40 micron

Table 5-3. Cardiotomy Reservoirs

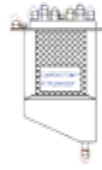
20673978523563	CARD RES MDT EL240
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Cardiotomy reservoir ATR2900DF

Table 5-4. Cardiotomy Reservoirs

994415-08	CARD. RES. GISH ATR2900DF
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Suction devices and Cannulae

6

Suction devices	46
Cannulae	47

Suction devices

Suction devices can be divided in two groups: the rigid suckers and the flexible suckers. The rigid suckers can be held in the hand and be used if needed. The flexible sucker can be positioned and fastened to the patient cover and keeps the field continuously free of liquid.

1. Rigid suckers

This is a lightweight stainless steel construction with a comfortable moulded handle with a fluted pool tip. Also several total plastic suckers with different tips are available.

2. Flexible Suckers

This is mostly a flexible tube around 30 cm length with a connector and a specific tip.

Table 6-1.

20673978175458	10061 SUCTION TUBE 13" MACRO 20 FR
20673978175427	10060 SUCTION TUBE 6" INTRACARDIAC 20 FR



995499-01	SUCTION TUBE VYGON
0130805-1	SUCKER TMP ADULT SUMP



Table 6-2.

995473-01	SUCKER YANKAUER ESCHMANN
61399404955	SUCKER YANKAUER
995473-03	SUCKER YANKAUER SHERWOOD



0130801-501	SARNS PEDIATRIC TYPE 15236
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Cannulae

Canulae are the connection between the extra corporeal system and the corporeal system. We can divide several sorts of cannulae like:

1. Arterial cannulae
2. Venous cannulae
3. Femoral cannulae
4. Cardioplegia circuit cannulae
 - Aortic Root cannulae
 - Aortic needles
 - Antegrade Perfusion (coronary artery ostial cannulae)
 - Retrograde coronary sinus perfusion cannulae

For all available Medtronic cannulae see Cardiac Surgical Products Cannulae guide.

Filters

7

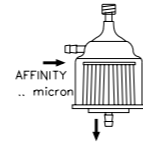
Arterial filters / Arterial Bubble traps	49
Pre Bypass filters	50
Gas / Bacterial filters	51
Transfusion filters	52
Cardioplegia filters	52
Hemoconcentrators	53

Arterial filters / Arterial Bubble traps

Arterial filters are recognized in many places as an important part of perfusion safety. There is a strong body of evidence to believe that the arterial filter reduces the micro embolic load to the patient. Most of the filters have a heparin coating for easy priming. We divide three types screen filter sizes. For the arterial filters between 20 and 40 micron and for arterial bubble traps 120 microns. There are filters for adult, paediatric and infant applications.

Table 7-1. Arterial Filters Medtronic

61399401125	ART FILTER ADULT AFFINTY 38 mu
61399409511	ART FILTER ADULT AFFINTY 20 mu



M929334A001	ART FILTER PED 30mu
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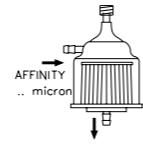


Table 7-2. Arterial Filters / Bubble traps Adult

996426-08	ART FILTER ADULT PALL AV6SV
996430-14	ART FILTER ADULT PALL AL-08

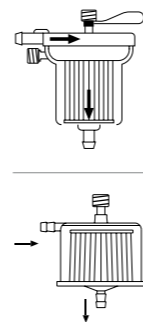
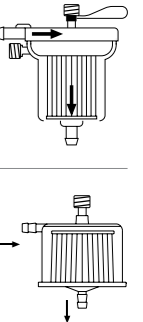
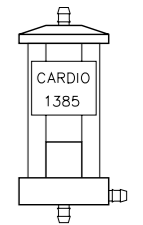


Table 7-2. Arterial Filters / Bubble traps Adult

996426-07	ART FILTER ADULT PALL LG6
M706726B001	ART FILTER ADULT PALL AL-6



990499-04	ART BT CARDIACORP 1385
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Pre Bypass filters

Pre bypass filters are used to eliminate particles in the system during priming. There are roughly 2 groups of filters. The highest safety will give the first with 0.2 micron filter and the other group is the 4-5 micron PBP filter. Of course price difference between these groups is understandable.

Table 7-3. PBP Filters

61399405548	PRE-BYPASS FILTER 1/2 x 1/2
61399406125	PRE-BYPASS FILTER 1/2 x 3/8
61399406126	PRE-BYPASS FILTER 1/4 x 1/4, 1/4 x 3/8, 3/8 x 3/8

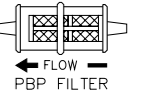
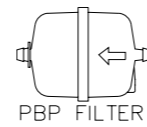
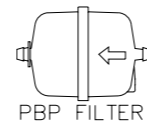


Table 7-3. PBP Filters

996437-03	PRE-BYPASS FILT PALL PP1202
996437-02	PRE-BYPASS FILT PALL PP3802-12
996437-01	PRE-BYPASS FILT PALL PP3802
996437-04	PRE-BYPASS FILT PALL R3802



017016900	PBF 1/2x1/2 0.2 Micron
017016902	PBF 3/8x1/2 0.2 Micron
017016901	PBF 3/8x3/8 0.2 Micron

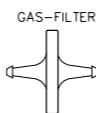
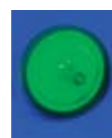


Gas / Bacterial filters

Gas and bacterial filters are used for filtrating air that enters the system. This filter (0.2 micron) has to remove 99.99 % of the bacteria, viruses and other particulate contaminants. All filters are bi-directional unless otherwise specified.

Table 7-4. Gas / Bacterial Filters

0170061-1	GASFILTER BIDIRECTIONAL
996377-01	BACTERIAL AIRFILTER
996377-02	BACTERIAL AIRFILTER FEMALE LUER
996377-03	BACTERIAL AIRFILTER MALE/FEMALE
6094421	INFANT IV FILTER
996377-05	BACTERIAL FLUIDFILTER

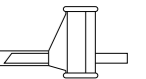


Transfusion filters

These filters have been designed to maximize patient protection during blood transfusion.

Table 7-5. Transfusion Filters

996441-01	TRANSFUSION FILTER 40mu PALL SQ-40S
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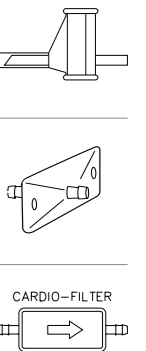


Cardioplegia filters

Cardioplegia filters have been designed to aid the user by providing an air-retentive surface, removing particles and creating a microbial protection just prior to fluid entry to the heart. Several types of filters in different pore sizes are available.

Table 7-6. Cardioplegia Filters

996441-02	CARDIOPLEGIA FILTER 0.2mu CPS-02
996441-03	CARDIOPLEGIA FILTER V800 VENT
0131625-1	CARDIOPLEGIA FILT CRYSTALLOID



Hemoconcentrators

HC has become the preferred Medtronic controlling hemodilution during cardiopulmonary surgery. This process is also being performed to maintain higher hematocrit levels and to reduce the need for additional blood product during and after bypass.

Table 7-7. Hemo concentrators

30677964011116	HPH MINI
30677964000868	HPH JUNIOR
30677964011208	HEMOCONCENTRATOR HPH400
30677964011178	HEMOCONCENTRATOR HPH700
30677964011215	HEMOCONCENTRATOR HPH1000
30677964011222	HEMOCONCENTRATOR HPH1400



Monitoring Equipment

8

Stopcocks	55
Manifolds	56
Monitoring lines	56
Temperature devices	57
Pressure devices	57

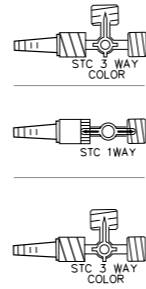
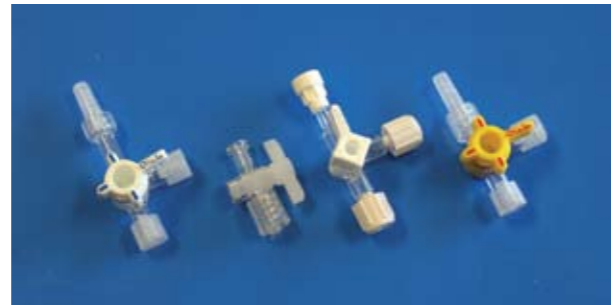
Stopcocks

Stopcocks have been designed for a broad range of clinical applications in fluid and drug administration as well as pressure monitoring and relieving air. In most cases, stopcocks are manufactured out of clear polycarbonate with a coloured handle.

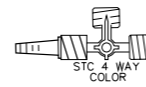
- 4way stopcocks have 2 female luers and one male luer with spinlock. Handle is 360° rotatable. Flow is possible through two or three ports.
- 3way stopcocks look identical to 4way but handle rotates only 180°. Flow is only possible through 2 ports.
- 1way stopcock is only a straight connection (Male spinlock - female). Handle rotates 360°. Flow can only be interrupted.

Table 8-1. Stopcocks

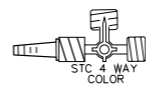
0130003-502	STOPCOCK 3-WAY MLL
0130021-1	STOPCOCK 1-WAY TMP
0130071-503	STOPCOCK 3-WAY W PROT. M/SLIP
0130026-501	STOPCOCK 4-WAY 2FLL HI FLOW



997380-06	STOPCOCK 4-WAY RED
61399406157	STOPCOCK 4-WAY WHITE
997380-04	STOPCOCK 4-WAY BLUE



997381-07	STOPCOCK 4-WAY BLUE ROT CODAN
997381-01	STOPCOCK 4-WAY RED ROT CODAN
997381-09	STOPCOCK 4-WAY BLUE ROT BRAUN
997381-08	STOPCOCK 4-WAY RED ROT BRAUN

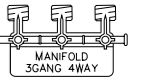


Manifolds

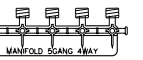
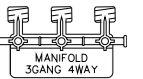
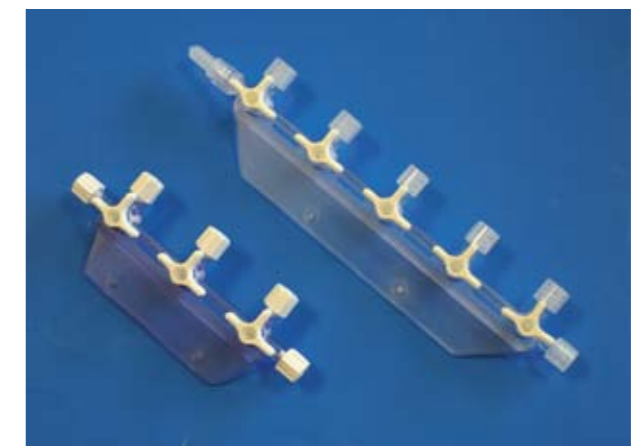
Manifolds do have the same application as stopcocks. General usage in CPS is the arterial - venous blood sampling line. Manifolds do have 4way stopcocks and are available in 3-Gang and 5-Gang.

Table 8-2. Manifolds

61399401158	MANIFOLD WITH LINES Standard
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61399404948	MANIFOLD 3-GANG 4-WAY
A469466-G	MANIFOLD 5-GANG 4-WAY Mednet



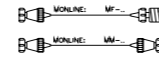
Monitoring lines

Monitoring lines are mostly used for pressure monitoring devices. The small diameter gives a quicker response of your manometer.

This tubing can also be used for infant applications as replacement for 1/8" tubing to reduce priming volume

Table 8-3. Monitoring lines

0130113-1	PVC MON.LINE MF-15 cm
0130113-501	PVC MON.LINE MF-30 cm
0130113-509	PVC MON.LINE MM-30 cm
0130113-502	PVC MON.LINE MF-60 cm
0130113-510	PVC MON.LINE MM-60 cm
0130113-503	PVC MON.LINE MF-90 cm
0130113-511	PVC MON.LINE MM-90 cm
0130113-504	PVC MON.LINE MF-120 cm
0130113-512	PVC MON.LINE MM-120 cm
0130113-505	PVC MON.LINE MF-150 cm
0130113-506	PVC MON.LINE MF-180 cm
0130113-515	PVC MON.LINE MM-210 cm
0130113-508	PVC MON.LINE MF-245 cm

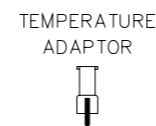


Temperature devices

Additional temperature devices can be added in your CPS. These are disposable temperature luer adaptors to be screwed in a female luer. Standard hardware equipment can be connected in the quick off connection. Medtronic oxygenators, venous reservoirs and heat exchangers already contain temperature probes.

Table 8-4. Temperature devices

71251	ADAPTOR TEMP MONITORING
997376-01	ADAPTOR TEMP MONITORING Dideco



Pressure devices

Pressure devices are used to read out positive and negative pressure of the CPS. Two devices can be offered.

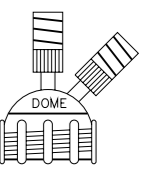
1. Pressure domes (disposable part) need to be screwed on a transducer (hardware part). Several transducers are available like:

Bentley-Trantec	D-400
Statham P23 ID/XL	D-603
MDT 61000	MDT 60000/63000/64000

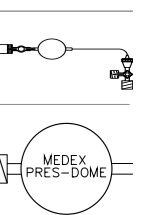
Medex	MX-848/MX960XY
Becton Dickinson	TA1019M

Table 8-5. Pressure devices - pressure domes

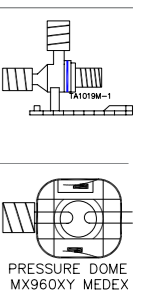
997446-03	PRESSURE DOME D400
997446-06	PRESSURE DOME D603



20681490876715	PRESSURE DISPLAY SET MDT 61000
997446-04	PRESSURE DOME MX848



997446-11	PRESSURE DOME TA1019M
997446-12	PRESSURE DOME MX960XY



2. Pressure isolators will be primed on the system side and the other side will be connected to the manometer (or bio console). We advise to place the pressure isolator as short as possible to the system to increase the velocity of the measurement.

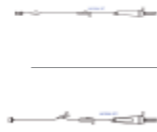
Table 8-6. Pressure devices - pressure isolators

AVECORTP10	PRES-ISOLATOR
996378-05	GAMBRO TRANS. PROTECTOR C1

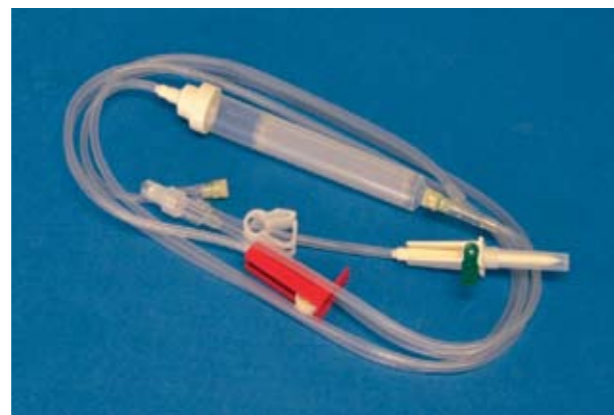


Table 8-7. Administration sets

M708483B001	INFUSION SET
M708484B001	INFUSION SET WITH INJECTION SITE



M708482B001	TRANSFUSION SET
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Cardioplegia Equipment

9

Heat Exchangers and cooling coils	61
Stainless steel needles	63
Drip chambers	64

Heat Exchangers and cooling coils

Heat exchangers will be used during all kind of cardioplegia applications. Delivering a hot shot or cooling the heart quickly are wanted requirements and a convenient performance is necessary.

Cooling coils are used in crystalloid cardioplegia delivery systems. This is a safe and inexpensive method of myocardial cooling. The cooling coil is placed in a bucket of ice and this system is able to cool down from ambient temperature.

Table 9-1. Heat exchangers / Cooling coils

61399405409	HEAT EXCHANGER MYOTHERM XP		
61399408605	HEAT EXCHANGER ECMOTHERM II		
61399408606	HEAT EXCHANGER BIOTHERM		

Table 9-1. Heat exchangers / Cooling coils

998487-09	HEAT EXCHANGER 3M CONDUCTER 1/4"		
1130411-1	COOLING COIL STAINLESS STEEL		
1133026-502	HEAT EXCHANGER GISH HE4		
1131011-1	COOLING COIL PVC PLA		

Table 9-2. CSS Adaptor

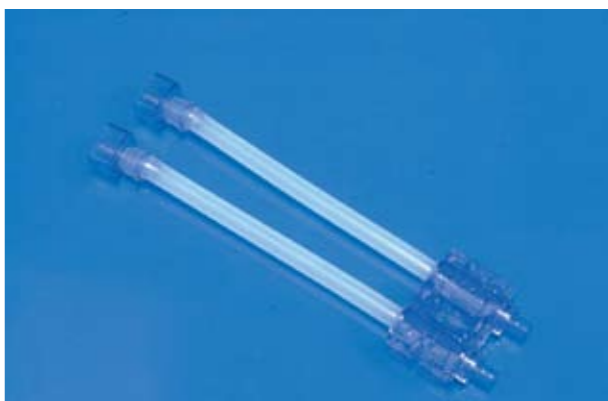
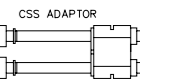
1140438-1	ADAPTOR FOR CSS PUMP		
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Table 9-3. CARDIOPLEGIA BAGS

996405-07	CARDIOPL. BAG EUROSETS 1000cc
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996405-10	CARDIOPL. BAG EUROSETS 3000cc
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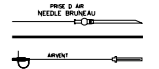
Table 9-4. Needles

998399-05	NEEDLE 1 x 10 mm
998399-02	NEEDLE 2.5 x 10 mm version 1001



NEEDLE
1x10 mm
NEEDLE type ..
2.5x10mm

998399-04	NEEDLE 2x170 mm FOR AIR VENT
996284-01	NEEDLE 2x40 mm FOR AIR VENT



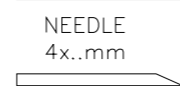
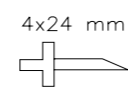
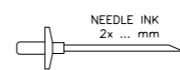
Stainless steel needles

The application of needles is to connect crystalloid solution

1. Injection needles for bags/bottles
2. Air vent needles

Table 9-4. Needles

998399-12	NEEDLE 2 x 26 mm
M702014B001	NEEDLE 2 x 70 mm
998399-07	NEEDLE 2 x 240 mm
998399-08	NEEDLE 4 x 24 mm
998399-03	NEEDLE 4 x 27 mm
998399-01	NEEDLE 4 x 55 mm



Drip chambers

Drip chambers are used in prime lines or cardioplegia applications to relieve the air in the line and/or to have a filter in the line.

Table 9-5. Dripchambers

998393-07	DRIPCHAMBER SAGE 3-WAY
998393-03	DRIPCHAMBER SAGE 2-WAY
61399401001	AIR ELIMINATOR

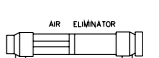


Table 9-5. Dripchambers

M706728B001	DRIPCHAMBER HMC
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998393-19	DRIPCHAMBER BURETROL
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0130706-1	HAEMOTRONIC DRIPCHAMBER W/F
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Packaging Materials

10

Sub Assembly Packaging	67
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Sub Assembly Packaging

Table 10-1. Table Tray

999506-06	TABLE TRAY GREY with COVER
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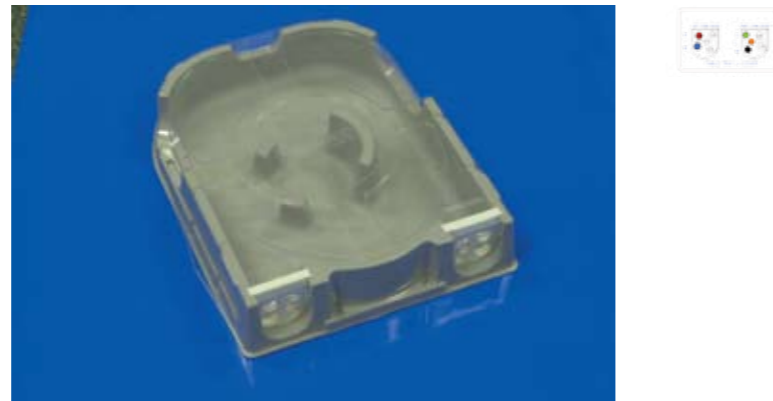


Table 10-2. Blue Medical wrap

999535-08	WRAP KIM 20 x 20"
999535-01	WRAP KIM 30 x 30"
999535-02	WRAP KIM 40 x 40"
999535-05	WRAP KIM 48 x 48"
999535-03	WRAP KIM 54 x 54"
999535-04	WRAP KIM 54 x 72"



Table 10-3. Peel pouch bags paper

999521-01	PBAG 100 x 200 mm
999521-03	PBAG 150 x 300 mm
999521-04	PBAG 205 x 400 mm
999521-02	PBAG 420 x 600 mm

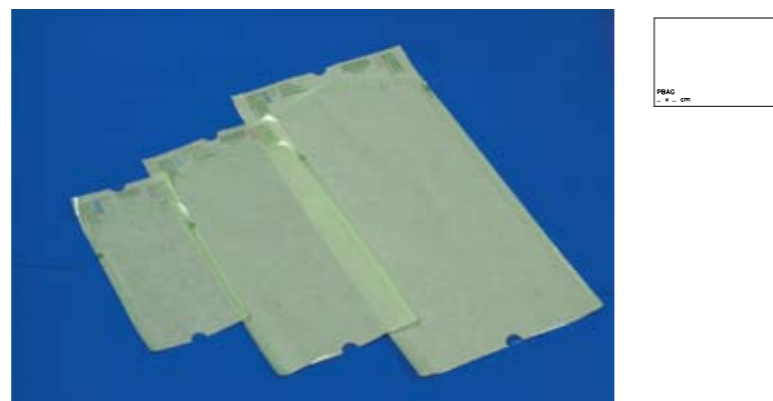


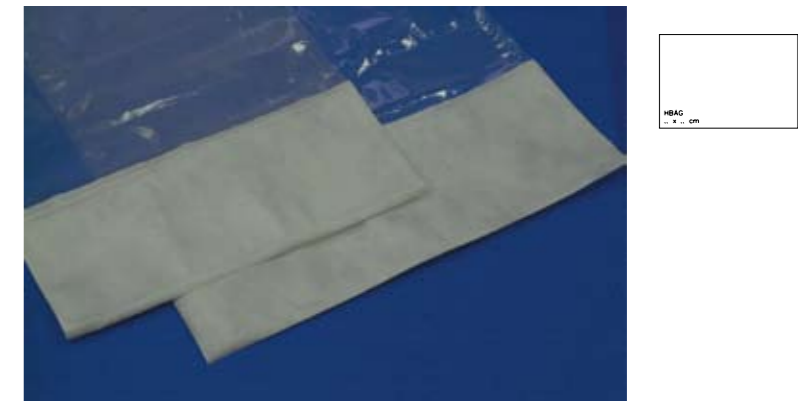
Table 10-4. Peel pouch bags tyvek

999518-01	PBAG 150 x 250 mm
999518-02	PBAG 200 x 300 mm
0133100-503	PBAG 300 x 460 mm
999518-07	PBAG 410 x 560 mm
999518-04	PBAG 500 x 600 mm
999518-03	PBAG 500 x 900 mm



Table 10-5. Header bags

03932	HBAG 190 x 592 mm
1130601-502	HBAG 300 x 460 mm
1130601-501	HBAG 410 x 560 mm
1130601-1	HBAG 510 x 580 mm
1130601-504	HBAG 610 x 660 mm
999518-06	HBAG 610 x 1010 mm



End Packaging

Table 10-6. Trays

999509-10	TRAY CARDIO KIT CLEAR 495 x 150 x 38 mm
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999509-11	TRAY MYOTHERM CLEAR 320 x 240 x 104 mm
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999509-05	TRAY SQUARE II CLEAR 405 x 405 x 140 mm
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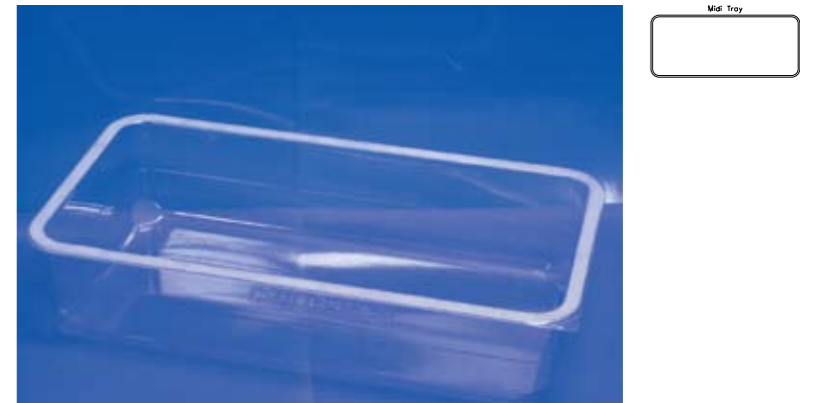


999509-12	TRAY SQUARE DEEP CLEAR 405 x 405 x 170 mm
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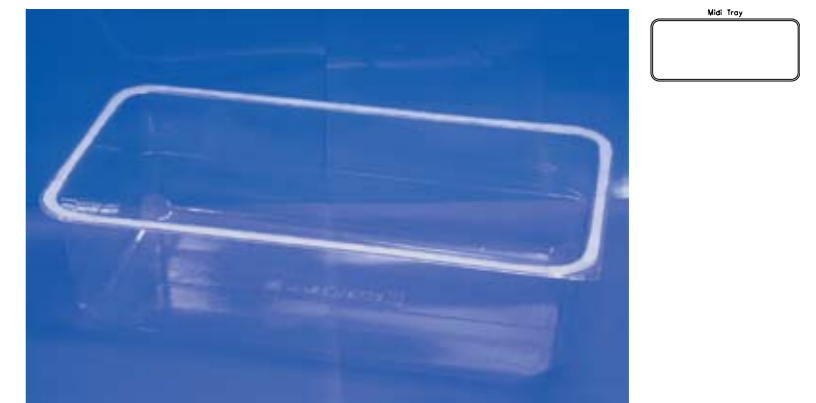


Table 10-6. Trays

999509-03	TRAY MIDI LOW CLEAR 760 x 405 x 160 mm
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999509-02	TRAY MIDI CLEAR 760 x 405 x 205 mm
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999505-04	TRAY MAXPACK II CLEAR 700 x 600 x 265 mm
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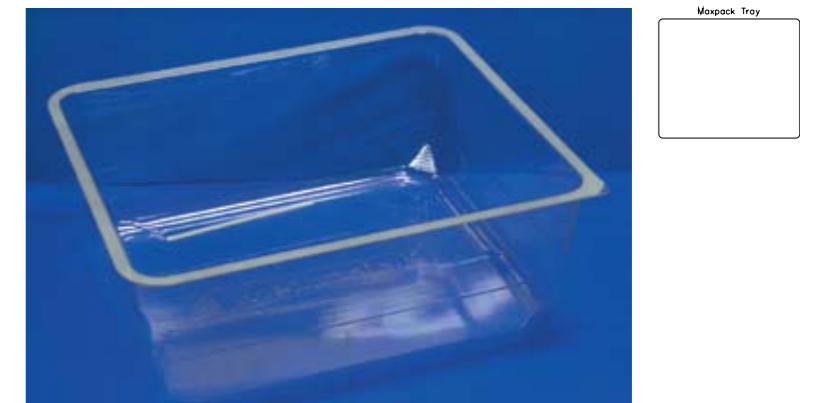


Table 10-7. Boxes

999848-01	BOX Cardiokit 505 x 165 x 220 mm
M703039B001	BOX ACCESSORIES 338 x 259 x 140 mm
999840-05	BOX Myotherm 500 x 330 x 238 mm
999840-03	BOX Square II Single 412 x 412 x 150 mm
999840-01	BOX Square II Double 412 x 412 x 260 mm
999840-04	BOX Square Deep 412 x 412 x 180 mm
999845-06	BOX Midi Low 765 x 413 x 165 mm
999845-07	BOX Midi 765 x 413 x 210 mm
999835-03	BOX Maxpack 720 x 620 x 298 mm

Miscellaneous Components

11

Blood contact components	72
Non blood contact components	76



All kind of general used components are collected in this chapter. We divided two main groups.

Blood contact components

- Plastic spikes non vented
The application is to connect transfer bags or priming bags. If a vent is needed it should be done separately.
- Plastic spikes vented
The application is to connect transfer bags or priming bags/bottles and you want to have the possibility to vent the bottle.
- Syringes
Syringes are used to relieve air in difficult lines, to take samples from the system and to supply drugs.
- Transfer bags
Bags used for transferring (post-operative) blood from the CPS to patient or cell saving systems.

Table 11-1. Bladder bags

61399401229	R14 BLADDER BAG N/S
61399401230	R38 BLADDER BAG N/S



995500-01	BLADDER BAG 1/4 GISH
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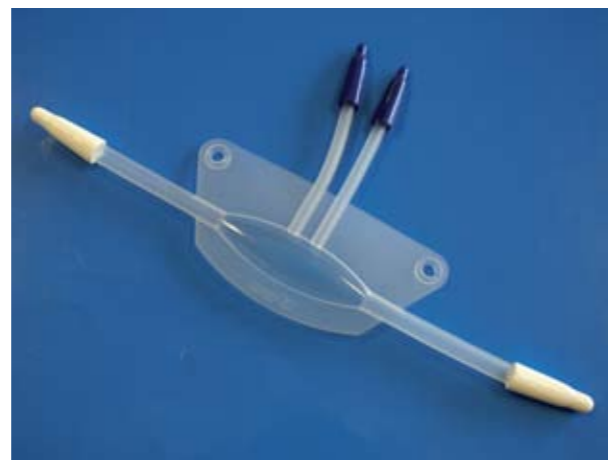


Table 11-2. Spikes Non Vented

0130516-1	SPIKE NON VENTED BLUNT + CAP
998398-05	SPIKE NON VENTED HEA + CAP
998398-08	SPIKE NON VENTED QOSINA+CAP



Table 11-3. Spikes Vented

017014900	SPIKE VENTED BRAUN
0130516-501	SPIKE VENTED UNIVERSAL 1/8 + CAP
998398-06	SPIKE VENTED Qosina + CAP
998398-09	SPIKE VENTED PROMEPLA
998398-10	SPIKE VENTED LL QOSINA



Table 11-4. Syringes

998395-06	SYRINGE 2 cc Luer lock
998395-03	SYRINGE 20 cc Luer lock
998395-05	SYRINGE 60 cc Luer lock



M709851B001	SYRINGE 100 cc Catheter Tip
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Table 11-5. Transferbags

998490-04	TRANSFERBAG 2000 cc MEDISTAD 33 x 18 cm
998490-05	TRANSFERBAG 1000 cc MEDISTAD 26 x 14 cm II WITH EXTENS

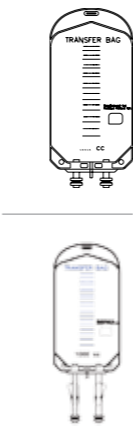


Table 11-6. Vapor traps

0130708-1	VAPOR TRAP SHERWOOD 40 cc
0130708-501	VAPOR TRAP SHERWOOD 70 cc
998393-10	VAPOR TRAP UNOPLAST

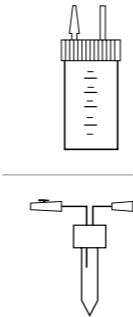


Table 11-7. Blind plugs

990275-02	BLINDPLUG FOR TRANSFERBAG
0130511-1	BLIND PLUG 1/4"
0130512-1	BLIND PLUG 3/8"
990275-01	BLIND PLUG 1/2"

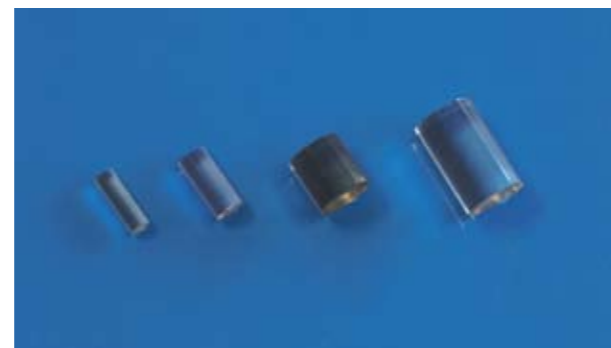


Table 11-8. Urine bags

998493-02	URINE BAG MED. RES. 2000 cc
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998493-05	URINE BAG BRAUN 2000 cc
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Non blood contact components

All kind of accessories, which can be used in a CPS like waste bags, gloves, lock nuts, knives, tubing clamps and tubing organizers.

Table 11-9. Tubing Organizer

990631-01	TUBING ORG.PLATE 140 x 80 mm
990631-03	TUBING ORG.PLATE 180 x 80 mm
M707422B001	CLAMP 1/4
M707423B001	CLAMP 3/8
M707424B001	CLAMP 1/2
AG/3/1165	TUBING ORGANIZER GREY FLEXIBLE
AVECORSNP2	CLAMP 1/4
AVECORSNP8	CLAMP 3/8
SNP12	CLAMP 1/2
61399404919	TUBING ORGANIZER PRESHAPED

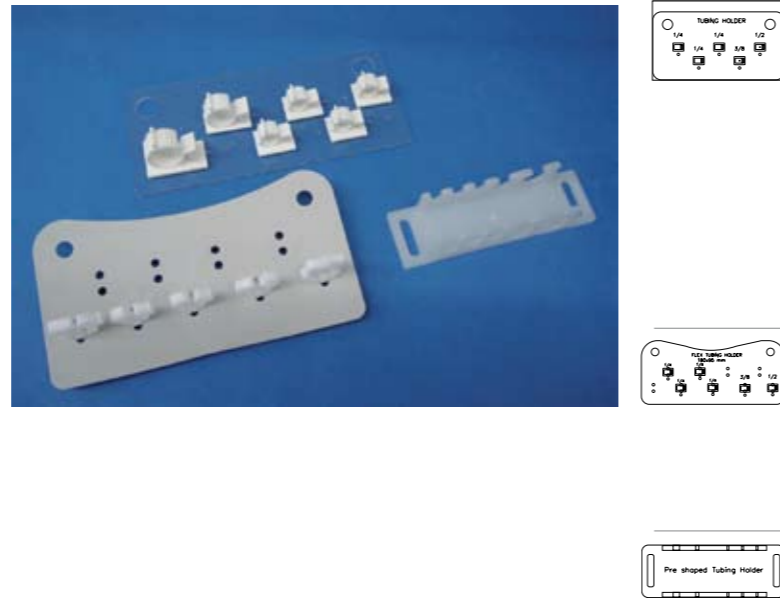


Table 11-10. Clamps

990638-06	CLAMP 1/8X1/32 RED
00346	CLAMP SMALL WHITE
990638-07	CLAMP 1/8X1/32 BLUE
0131204-504	TUBING CLAMP LARGE RED
0131204-1	TUBING CLAMP LARGE WHITE
0131204-503	TUBING CLAMP LARGE BLUE
0131204-509	TUBING CLAMP LARGE YELLOW
0131204-501	TUBING CLAMP SUPER WHITE



990638-05	ROLLER CLAMP 1/4 BODY
990638-04	ROLLER CLAMP 1/4 WHEEL
0131206-1	ROLLER CLAMP LARGE DIAMETER
0131201-1	ROLLER CLAMP MINI
0131208-1	CLAMP ON/OFF 1/4
990638-03	SLIDE CLAMP 1/2" OD
990638-02	SLIDE CLAMP 5/16" OD



Table 11-11. Waste bags

999515-05	WBAG 120x110 cm Yellow
999515-06	WBAG 120x60 cm Yellow with innerbag



Table 11-12. Gloves

990655-01	GLOVE LATEX PERRY SIZE 6 ST
990655-03	GLOVE LATEX PERRY SIZE 6.5 ST
990655-02	GLOVE LATEX PERRY SIZE 7 ST
990655-04	GLOVE LATEX PERRY SIZE 7.5 ST



Table 11-13. Accessory's

999636-01	TOUCH KNIFE TK-1
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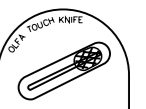


Table 11-13. Accesory's

0132700-501	CLEAR LAY FLAT 3"
0132700-502	CLEAR LAY FLAT 5"



1130505-1	PACKAGING DISC
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0131901-1	DIRECTION ARROW TAPE BLACK
PP9065	DIRECTION ARROW TAPE RED



Table 11-14. Kink protectors

61399408165	COIL SPRING YELLOW 1/2"
61399408167	COIL SPRING BLUE 1/2"
61399408166	COIL SPRING RED 3/8"
990195-01	P.E. STRING LARGE 1/2"
990195-02	P.E. STRING SMALL 1/4"
61399404990	P.E. STRING SMALL 3/8"
61399404977	P.E. STRING SMALL 1/8"



Table 11-15. Shirtband

61399402861	SHIRTBAND
990620-03	TWIST STRIP
990625-02	TWISTLOCK LARGE
990625-01	TWISTLOCK SMALL



CB Components

All available carmeda coated components.

12

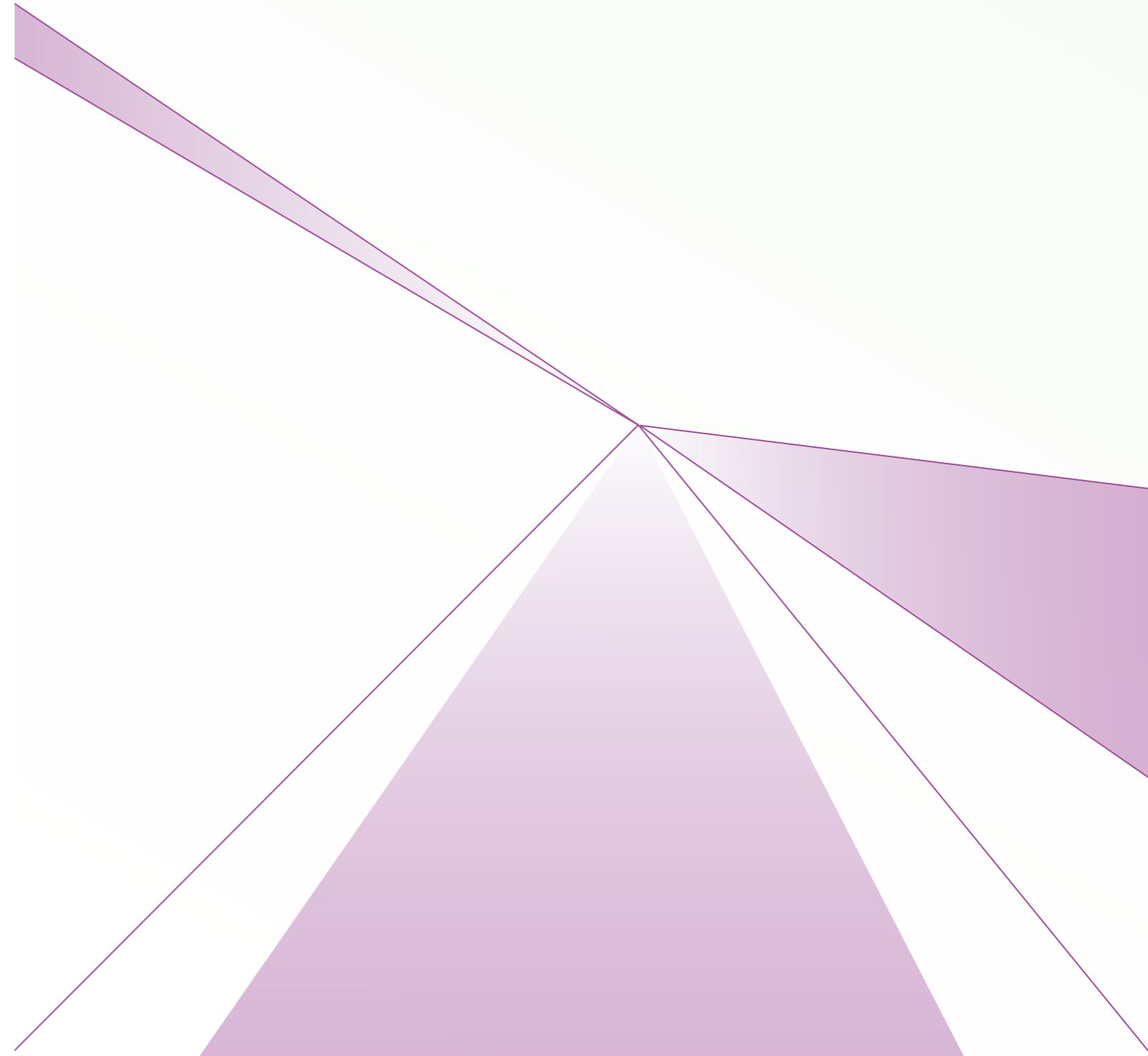


Table 12-1. Tubing	
1133008-543	CB PVC 70 1/8 x 1/32 x 180cm w.MLL
1133005-509	CB PVC 70 3/16 x 1/16
7630	CB PVC 70 1/4 x 1/16
7664	CB PVC 70 1/4 x 3/32
1133005-506	CB PVC 70 3/8 x 1/16
7628	CB PVC 70 3/8 x 3/32
7663	CB PVC 70 1/2 x 3/32
1133005-510	CB SUPER TYGON-66 1/4 x 1/16
7629	CB SUPER TYGON-66 3/8 x 3/32
7666	CB SUPER TYGON-66 1/2 x 3/32

Table 12-2. Connectors	
1133006-525	CB CON 3/16 x 3/16 STR
7635	CB CON 1/4 x 1/4 STR
7631	CB CON 3/8 x 3/8 STR
7656	CB CON 1/2 x 1/2 STR
1133006-526	CB CON 3/16 x 3/16 STR/LL
7647	CB CON 1/4 x 1/4 STR/LL
7632	CB CON 3/8 x 3/8 STR/LL
7658	CB CON 1/2 x 1/2 STR/LL
7648	CB CON 1/4 x 1/4 STR W/DBL LL
7637	CB CON 3/8 x 3/8 STR W/DBL LL
7652	CB CON 1/4 x 3/16 RED
7653	CB CON 3/8 x 1/4 RED
7654	CB CON 1/2 x 3/8 RED
1133006-523	CB CON 1/2 x 1/4 RED
7655	CB CON 5/8 x 3/8 RED
1133006-524	CB CON 1/4 x 3/16 RED/LL
7633	CB CON 3/8 x 1/4 RED/LL
7673	CB CON 1/2 x 3/8 RED/LL
1133006-535	CB CON 1/8 x 1/8 x 1/8 Y
1133006-530	CB CON 3/16 x 3/16 x 3/16 Y
7649	CB CON 1/4 x 1/4 x 1/4 Y
7634	CB CON 3/8 x 3/8 x 3/8 Y
1133006-521	CB CON 1/2 x 1/2 x 1/2 Y

Table 12-2. Connectors	
1133006-529	CB CON 1/4 x 1/4 x 1/4 Y/LL
7668	CB CON 3/8 x 3/8 x 3/8 Y/LL
1133006-534	CB CON 1/2 x 1/2 x 1/2 Y/LL
1133006-532	CB CON 1/4 x 3/16 x 3/16 Y
1133006-542	CB CON 1/4 x 3/8 x 3/8 Y
7675	CB CON 3/8 x 1/4 x 1/4 Y
7636	CB CON 3/8 x 3/8 x 1/4 Y
7659	CB CON 1/2 x 3/8 x 3/8 Y
7674	CB CON 1/2 x 1/2 x 3/8 Y
1133006-533	CB CON 3/8 x 1/4 x 1/4 Y/LL
1133006-558	CB CON 3/8 x 3/8 x 1/4 Y/LL
1133006-531	CB CON 1/2 x 3/8 x 3/8 Y/LL
1133006-545	CB TMC25 1/4 x 1/4
1133006-544	CB TMC38 3/8 x 3/8
1133006-543	CB TMC50 1/2 x 1/2
1133006-536	CB SATCON 1/4 x 1/4
1133006-537	CB SATCON 3/8 x 3/8
1133006-539	CB SATCON 1/2 x 1/2
1133008-530	CB CON MALE LL LARGE
7696	CB LUER CON FEM LARGE
1133006-549	CB CON LARGE BORE FEMALE
1133006-550	CB CON LARGE BORE MALE
1133006-541	CB PERFUSION ADAPTOR DLP 10007
7700 C	B PERF.ADAPTOR 1/4 x ML
7697	CB ADAPTOR LUER DOUBLE MALE
113300662	CB COUPLING MALE 3/8 CLEAR
113300663	CB COUPLING FEM 3/8 CLEAR

Table 12-3. Suckers	
1133024-1	CB SUCKER ADULT TMP
1133024-504	CB SUCKER INFANT TMP

Table 12-4. Monitoring equipment	
1133008-542	CB STOPCOCK 1WAY
7695	CB STOPCOCK 4WAYv

Table 12-4. Monitoring equipment	
1133008-541	CB STOPCOCK 4WAY HI FLOW
1133008-533	CB MANIFOLD 3GANG 4WAY
1133008-531	CB STANDARD PURGE LINE w.VALVE
7640	CB MON-LINE MF-15 SOFTWALL
1133008-516	CB MON-LINE MF-30 SOFTWALL
7641	CB MON-LINE MF-60 SOFTWALL
7705	CB MON-LINE MF-90 SOFTWALL
7704	CB MON-LINE MF-120 SOFTWALL
1133008-517	CB MON-LINE MF-150 SOFTWALL
1133008-518	CB MON-LINE MF-180 SOFTWALL
1133008-519	CCB MON-LINE MF-210 SOFTWALL
1133008-520	CB MON-LINE MF-250 SOFTWALL
1133008-521	CB MON-LINE MM-30 SOFTWALL
1133008-522	CB MON-LINE MM-60 SOFTWALL
7703	CB MON-LINE MM-90 SOFTWALL
1133008-523	CB MON-LINE MM-120 SOFTWALL
1133008-524	CB MON-LINE MM-150 SOFTWALL
1133008-525	CB MON-LINE MM-180 SOFTWALL
1133008-526	CB MON-LINE MM-210 SOFTWALL
1133008-527	CB MON-LINE MM-250 SOFTWALL

Table 12-5. Oxygenator	
1144074-1	CB OXY AFFINITY
1140400-1	CB OXY CLEARHOUSE MINIMAX PLUS

Table 12-6. Bio pumps	
113301602	CB BIO-PUMP BPX-80
1133016-501	CB BIO-PUMP BP-50
113301202	CB BIO-PROBE DP-38 3/8 CB2980
1133012-501	CB BIO-PROBE DP-38P 1/4 CB4627

Table 12-7. Ven Res Bags	
M929117A001	CB VEN RES BAG CBMVR800
M929119A001	CB VEN RES BAG CBMVR1600
1133015-502	CB VRB MINIMAX 1/4 CB1374

Table 12-8. Cardiotomy Reservoir	
1144027-1	CB CARD RES CB1351

Table 12-9. Heat exchanger	
1170009-1	CB MYOTHERM

Table 12-10. Arterial Filters	
1133056-502	CB ART FILTER Affinity 38mu
1133056-503	CB ART FILTER Affinity 20mu
A10105001	CB ART FILTER PED 20mu CB1338

Trillium Components

All available trillium coated components.

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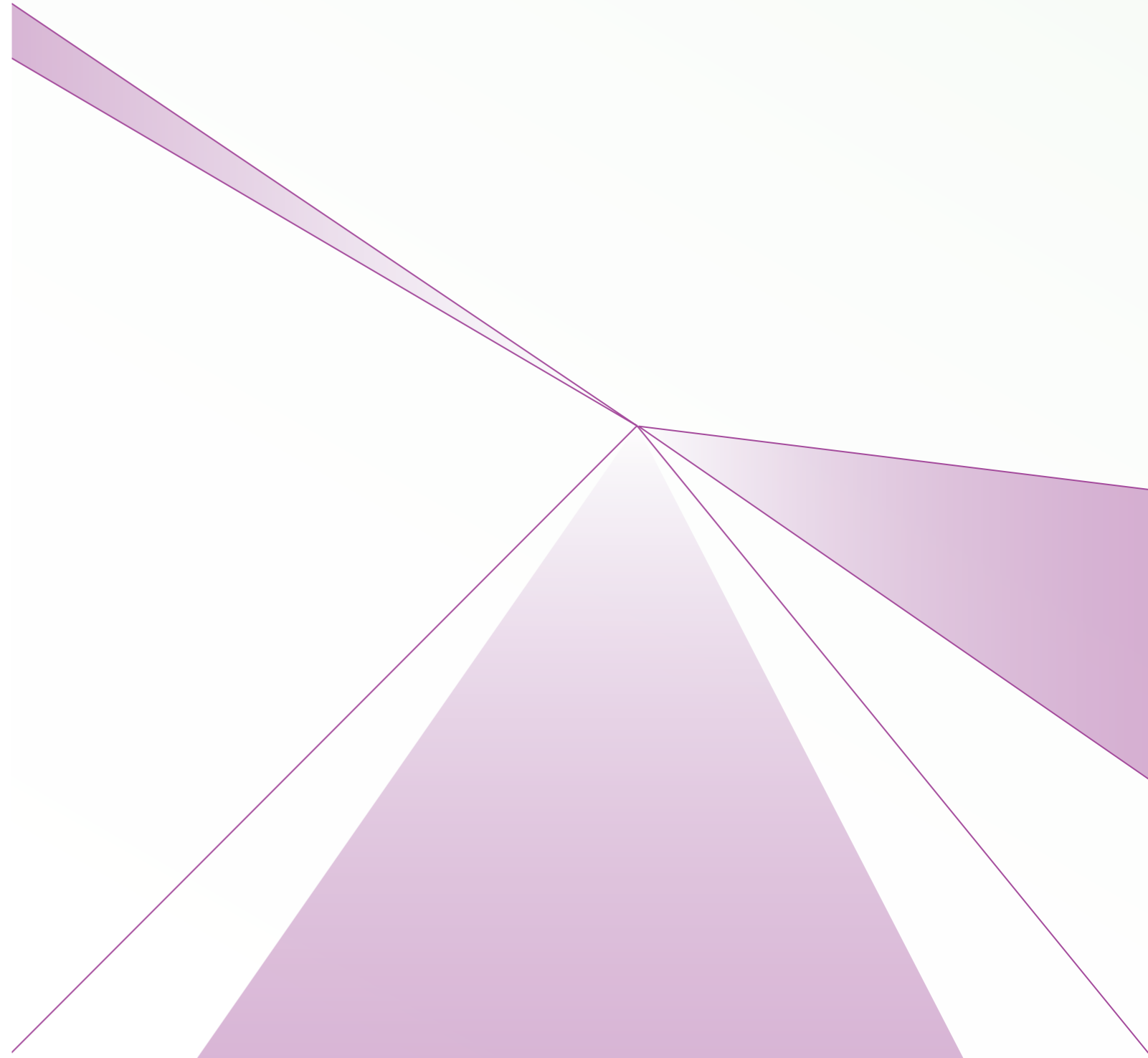


Table 13-1. Tubing	
1160271-520	TR PLA 68 1/8 x 1/16
1160271-1	TR PLA 68 3/16 x 1/32
1160271-501	TR PLA 68 3/16 x 1/16
1160271-521	TR PLA 68 3/16 x 3/32
1160271-502	TR PLA 68 1/4 x 1/16
1160271-503	TR PLA 68 1/4 x 3/32
1160271-507	TR PLA 68 5/16 x 3/32
1160271-504	TR PLA 68 3/8 x 1/16
1160271-505	TR PLA 68 3/8 x 3/32
1160271-506	TR PLA 68 1/2 x 3/32
1160271-510	TR PLA 71 1/4 x 1/16
1160271-508	TR PLA 71 3/8 x 1/16
1160271-512	TR PLA 71 3/8 x 3/32
1160271-509	TR PLA 71 1/2 x 3/32
1160271-515	TR PLA 65 3/16 x 1/16
1160271-516	TR PLA 65 1/4 x 1/16
1160271-517	TR PLA 65 1/4 x 3/32
1160271-514	TR PLA 65 3/8 x 1/16
1160271-513	TR PLA 65 3/8 x 3/32
1160271-518	TR PLA 65 1/2 x 1/16
1160271-519	TR PLA 65 1/2 x 3/32

Table 13-2. Connectors	
1160270-527	TR CON 3/16 x 3/16 STR
1160270-504	TR CON 1/4 x 1/4 STR
1160270-1	TR CON 3/8 x 3/8 STR
1160270-514	TR CON 1/2 x 1/2 STR
1160270-528	TR CON 3/16 x 3/16 STR/LL
1160270-507	TR CON 1/4 x 1/4 STR/LL
1160270-501	TR CON 3/8 x 3/8 STR/LL
1160270-515	TR CON 1/2 x 1/2 STR/LL
1160270-508	TR CON 1/4 x 1/4 STR/DBL LL
1160270-506	TR CON 3/8 x 3/8 STR/DBL LL
1160270-529	TR CON 1/2 x 1/2 STR/DBL LL
1160270-510	TR CON 1/4 x 3/16 RED
1160270-511	TR CON 1/4 x 3/8 RED

Table 13-2. Connectors	
1160270-525	TR CON 1/2 x 1/4 RED
1160270-512	TR CON 1/2 x 3/8 RED
1160270-513	TR CON 5/8 x 3/8 RED
1160270-526	TR CON 1/4 x 3/16 RED/LL
1160270-502	TR CON 1/4 x 3/8 RED/LL
1160270-518	TR CON 1/2 x 3/8 RED/LL
1160270-531	TR CON 3/16 x 3/16 x 3/16 Y
1160270-509	TR CON 1/4 x 1/4 x 1/4 Y
1160270-503	TR CON 3/8 x 3/8 x 3/8 Y
1160270-523	TR CON 1/2 x 1/2 x 1/2 Y
1160270-549	TR CON 3/16 x 3/16 x 3/16 Y/LL
1160270-530	TR CON 1/4 x 1/4 x 1/4 Y/LL
1160270-517	TR CON 3/8 x 3/8 x 3/8 Y/LL
1160270-535	TR CON 1/2 x 1/2 x 1/2 Y/LL
1160270-533	TR CON 1/4 x 3/16 x 3/16 Y
1160270-538	TR CON 1/4 x 3/8 x 3/8 Y
1160270-520	TR CON 3/8 x 1/4 x 1/4 Y
1160270-505	TR CON 3/8 x 3/8 x 1/4 Y
1160270-516	TR CON 1/2 x 3/8 x 3/8 Y
1160270-519	TR CON 1/2 x 1/2 x 3/8 Y
1160270-534	TR CON 3/8 x 1/4 x 1/4 Y/LL
1160270-521	TR CON 1/2 x 1/2 x 3/8 Y/LL
1160270-532	TR CON 1/2 x 3/8 x 3/8 Y/LL
1160270-539	TR TMC50 1/2 x 1/2
1160270-540	TR TMC38 3/8 x 3/8
1160270-541	TR TMC25 1/4 x 1/4
1160270-548	TR CON Y .187
1160270-542	TR CON FEMALE LARGE BORE
1160270-543	TR CON MALE LARGE BORE
1160282-510	TR CON MALE 1/8
1160282-1	TR CON FEMALE 3/16
1160282-502	TR PERFUSION 1/4"
1160282-507	TR CON 3/16 TO MLL

Trillium Components

Table 13-2. Connectors

1160270-537	TR 1/4" PERFUSION ADAP MLL
1160282-503	TR CON FEM DOUBLE LL
1160282-501	TR CON MALE DOUBLE LL

Table 13-3. Monitoring equipment

1160282-511	TR STOPCOCK 4-WAY
116028212	TR MANIFOLD 4-WAY

Table 13-4. Bio pumps

1160270-545	TR BIO PROBE DP-38 3/8 POLY
1160270-546	TR BIO PROBE DP-38P 1/4 POLY
A08135001	TR BPX-80 BIO PUMP ADULT

Table 13-5. Heat exchanger

1160273-1	TR MYOTHERM
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Table 13-6. Arterial filters

1160272-1	TR AFF ART FILTER 38MU
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Table 13-7. Hardshell

90756	TR AFFINITY CVR HARDSHELL
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Table 13-8. Oxygenator

90588	TR OXYGENATOR
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Appendix

NON MEDTRONIC PARTS

A

Measurements cells by Terumo	95
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Arterial Filters Pediatric/Infant by Sorin Dideco	96
Arterial Filters / Bubble traps Adult by Jostra Maquet	96
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Level sensors by Sorin Dideco / Jostra Maquet	97
Heat exchangers / Cooling coils Sorin Dideco	98

Appendix

Table A-1. Measurements cells by Terumo

992476-02	CDI-100 CELL 1/2x1/2	6912
992476-07	CDI-100 CELL 3/8x3/8	6913
992476-08	CDI-100 CELL 1/4x1/4	6914

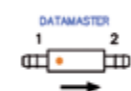


0130226-502	cdi-400 quick cell 1/4"	6725
992476-03	cdi-400 quick cell 3/8	6735



Table A-2. Measurements cells by Sorin Dideco

992476-09	DATAMASTER CELL 1/2 x 1/2 VENOUS
M706727B001	DATAMASTER CELL 3/8 x 3/8 VENOUS



992476-10	DATAMASTER CELL 3/8 x 3/8 ART.
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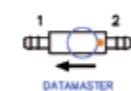


Table A-2. Measurements cells by Sorin Dideco (Continued)

991283-05	CAP FOR DATAMASTER 3/8 ART.
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CS01734-01	SATCRIT CONNECTOR 1/2x1/2
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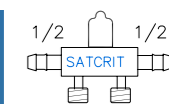


Table A-3. Arterial Filters Pediatric/Infant by Sorin Dideco

996430-11	ART FILTER INFANT 20mu DIDEKO D-735
996430-08	ART FILTER INFANT 40mu DIDEKO D-736

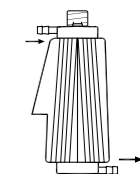


Table A-4. Arterial Filters / Bubble traps Adult by Jostra Maquet

996430-13	ART FILTER ADULT JOSTRA QUART
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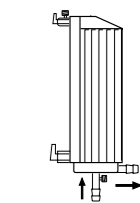


Table A-5. Arterial Filters / Bubble traps
Adult by Terumo

996438-01	BUBBLE TRAP TERUMO CXBT-15
996438-03	BUBBLE TRAP TERUMO CXBT-05
996438-02	ART FILTER TERUMO CXAF02

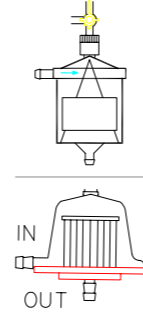


Table A-6. Administration sets by Terumo

998393-14	EXTENSION LINE TERUMO
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Table A-7. Level sensors by Sorin Dideco / Jostra Maquet

998393-12	LEVEL SENSOR STOCKERT
998393-09	LEVEL SENSOR JOSTRA

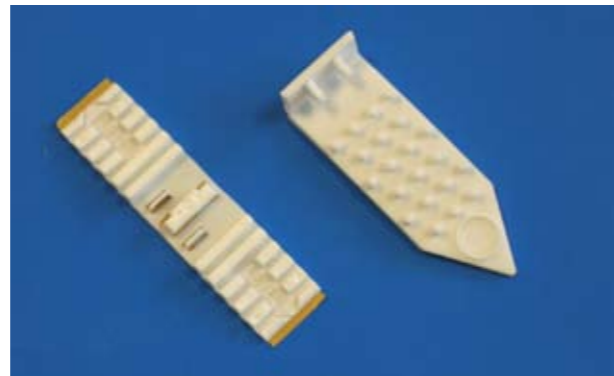
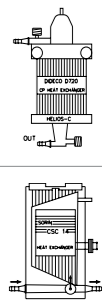
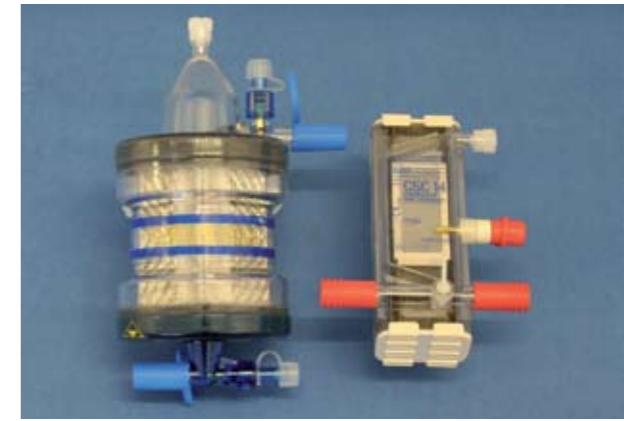


Table A-8. Heat exchangers / Cooling coils
Sorin Dideco

998487-04	HEAT EXCHANGER DIDECO D720 C
998487-05	HEAT EXCHANGER SORIN CSC14



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