

Wound drainage /  
Surgery

# PRODUCT CATALOG



**Primed<sup>®</sup>**



**Primed<sup>®</sup>** Medizintechnik GmbH is a highly experienced manufacturer of medical devices.

For many years, we have been supplying our customers with high-quality products "MADE IN GERMANY".

**Primed<sup>®</sup>** both develops and manufactures all its products in-house employing a development process certified in accordance with DIN EN 13485.

From with the initial product idea to material tests and tool construction right up to the product launch, we produce innovative medical devices from a single source. Our production spans the entire manufacturing process (injection moulding/extrusion/assembly) up to sterilisation.

These conditions enable us to react extremely flexibly to market requirements and to ensure the continuous development of our products.

High-vacuum systems **PRIVAC®** ..... 5

    Use of PRIVAC® ..... 7

    200 ml PVC..... 8

    400 ml PVC..... 9

    600 ml PVC..... 10

    200 ml PVC-free..... 11

    400 ml PVC-free..... 12

    600 ml PVC-free..... 13

    Special variant 400 ml..... 14

    Connecting tube PRIVAC® ..... 15

**REDON DRAINS** ..... 16

    Redon drains (PVC) without trocar ..... 17

    Redon drains (PVC) with trocar..... 18

    Redon drains (PU) with trocar ..... 19

    Redon drains (PU) without trocar..... 20

**LOW-VACUUM SYSTEMS** ..... 21

    MINI ..... 22

    PRI-LOW-VAC® ..... 23

        200 ml ..... 24

        500 ml ..... 25

    PRI-LOW-VAC® SAVE..... 27

        250 ml ..... 28

        500 ml ..... 29

        Connecting tube PRI-LOW-VAC® SAVE..... 30

    PRI-ACTIVE-PASSIVE drains ..... 31

        with silicone soft drain with trocar ..... 32

        with Redon drain with trocar..... 33

    PUMP drains..... 34

    DRAINAGE SET with flat drain ..... 36

    SILICONE RESERVOIR with Luer lock connection..... 37

    PASSIVE DRAINAGE ..... 38

        with silicone soft drain ..... 38

        with silicone capillary drain..... 39

    BILIARY DRAINAGE BAG..... 40

**SILICONE DRAINS** .....42

    Soft drains .....43

    Capillary drains .....44

    Perforated capillary drains .....45

    Flat capillary drains .....46

    Drainage strip .....47

    Channel drains without trocar .....48

    Channel drains with trocar.....49

    Flat drains .....50

**PRIMEDILOOP® vessel loops** .....51

**PLV WOUND PRODUCTS** ..... 54

**PLV ProVac** ..... 55

        PLV ProVac Abdomen .....56

        PLV ProVac .....60

            PLV ProVac.....62

            PLV ProVac S .....63

        PLV universal adapter .....64

        PLV Y-connector.....65

    PLV fistula adapter sets .....66

        PLV fistula adapter sets 3/15 .....68

        PLV fistula adapter sets 3/30 .....69

        PLV fistula adapter sets 3/45 .....70

        PLV fistula adapter sets 6/15 .....71

    PLV wound foams.....72

    PLV ports .....73

    PLV film .....74

**PRI-AUTOTRANS autologous blood transfusion** .....75

    Autologous blood transfusion systems.....76

    Accessories .....78

Pictograms/ explanations .....79



## High-vacuum systems

Systems for postoperative wound drainage and routine use in operating theatres.

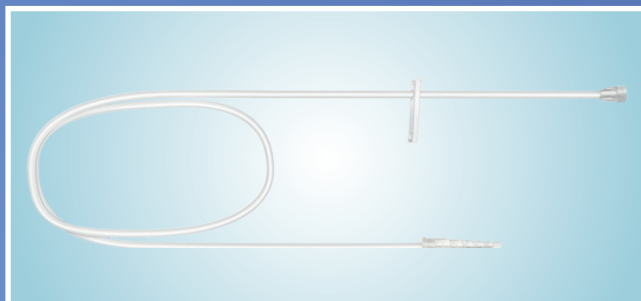


**PRIVAC® Redon systems for postoperative wound drainage are available as complete sets, OR systems and ward systems.**



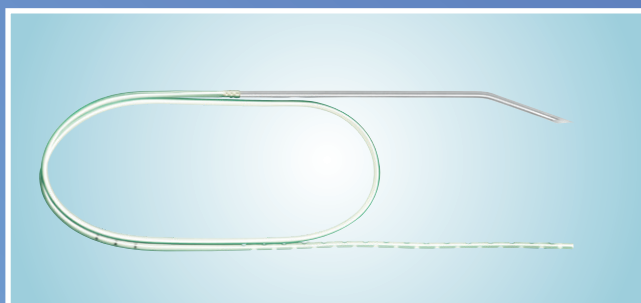
### Redon bottle

- Pre-evacuated reservoir with a high initial vacuum of max. 980 mbar
- With integrated vacuum indicator
- Available with Large lock or Luer lock connector
- Easy activation of suction via quick release of slide clamp
- 200 ml and 400 ml bottles include an additional safety volume of 50 ml
- Large and small scales for exact determination of filling quantity



### Connecting tube

- Length = 125 cm
- Available with Large lock or Luer lock connector for safe connection/ disconnection of bottle and tube
- Universal connector for attachment of 6-18 Ch. Redon drains
- With slide clamp



### Redon drain

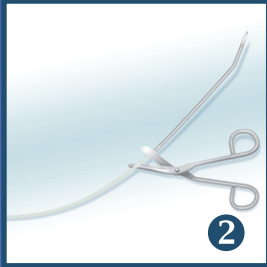
- Redon drain with trocar (guide needle)
- Perforations along 150 mm

### Technical data

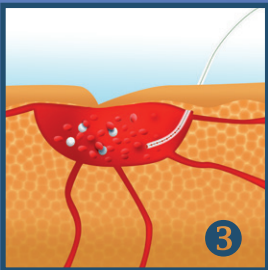
- High initial vacuum
- Bottle volume: 200 ml/ 400 ml/ 600 ml
- Drain size: 6-18 Ch.
- Length of drain with perforations: 150 mm
- Luer lock & large lock connector



Insert the drain into the open wound and route it out with the help of the trocar (guide needle) from the surface near the wound, leaving the perforated end in the wound. .



Remove the trocar using sterile scissors.



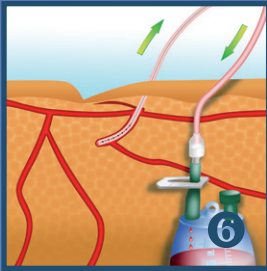
Length markings help to place the drain in the correct position. Fix the drain at approx. 3-5 cm from the point where it exits the wound.



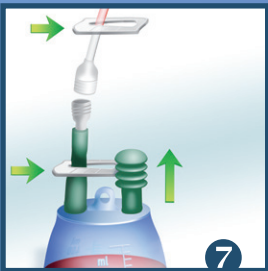
Connect the connecting tube to the PRIVAC® high-vacuum bottle. Cut the graduated connector to the required drain size and then connect the drain. (The vacuum indicator must be compressed. If it is open, there is no vacuum and the bottle must be replaced.)



Establish the vacuum suction by opening the slide clamp on the green fitting of the bottle.



The drainage fluid now runs into the PRIVAC® high-vacuum bottle.



To change the bottle, close the slide clamp on the connecting tube and detach the tube (there is no more vacuum once the vacuum indicator has opened up). Then connect a new PRIVAC® bottle to the connecting tube (continue with point 5).

HIGH-VACUUM SYSTEMS  
PRIVAC® 200ml  
PVC



PRIVAC® 200 ml complete set

- Redon bottle, connecting tube, Redon drain with trocar (guide needle)

Ch.	Drain length	Connector	PU/SU	REF
8	500 mm	Large lock	60/60	<b>22005</b>
10	800 mm	Large lock	60/60	<b>22006</b>
12	800 mm	Large lock	60/60	<b>22007</b>
14	800 mm	Large lock	60/60	<b>22008</b>



PRIVAC® 200 ml OR system

- Redon bottle, connecting tube

Connector	PU/SU	REF
Large lock	60/60	<b>24500</b>
Luer lock	60/60	<b>22003</b>



PRIVAC® 200 ml ward system  
(replacement bottle)

- Redon bottle

Connector	PU/SU	REF
Large lock	60/60	<b>24501</b>
Luer lock	60/60	<b>22004</b>



CONNECTION  
OPTIONS



HIGH-VACUUM SYSTEMS

PRIVAC® 400ml

PVC



**PRIVAC® 400 ml complete set**

- Redon bottle, connecting tube, Redon drain with trocar (guide needle)

Ch.	Drain length	Connector	PU/SU	REF
8	500 mm	Large lock	50/50	<b>22020</b>
10	800 mm	Large lock	50/50	<b>22021</b>
12	800 mm	Large lock	50/50	<b>22022</b>
14	800 mm	Large lock	50/50	<b>22023</b>
16	800 mm	Large lock	50/50	<b>22024</b>
18	800 mm	Large lock	50/50	<b>22025</b>

Ch.	Drain length	Connector	PU/SU	REF
8	500 mm	Luer lock	50/50	<b>24620</b>
10	800 mm	Luer lock	50/50	<b>24621</b>
12	800 mm	Luer lock	50/50	<b>24622</b>
14	800 mm	Luer lock	50/50	<b>24623</b>
16	800 mm	Luer lock	50/50	<b>24624</b>
18	800 mm	Luer lock	50/50	<b>24625</b>



**PRIVAC® 400 ml OR system**

- Redon bottle, connecting tube

Connector	PU/SU	REF
Large lock	50/50	<b>24502</b>
Luer lock	50/50	<b>21949</b>



**PRIVAC® 400 ml ward system (replacement bottle)**

- Redon bottle

Connector	PU/SU	REF
Large lock	50/50	<b>24503</b>
Luer lock	50/50	<b>21948</b>



Large lock



Luer lock

CONNECTION  
OPTIONS

HIGH-VACUUM SYSTEMS

PRIVAC® 600ml

PVC



**PRIVAC® 600 ml complete set**

- Redon bottle, connecting tube, Redon drain with trocar (guide needle)

Ch.	Drain length	Connector	PU/SU	REF
8	500 mm	Large lock	35/35	<b>22400</b>
10	800 mm	Large lock	35/35	<b>22401</b>
12	800 mm	Large lock	35/35	<b>22402</b>
14	800 mm	Large lock	35/35	<b>22403</b>
16	800 mm	Large lock	35/35	<b>22404</b>
18	800 mm	Large lock	35/35	<b>22405</b>



**PRIVAC® 600 ml OR system**

- Redon bottle, connecting tube

Connector	PU/SU	REF
Large lock	35/35	<b>24504</b>
Luer lock	35/35	<b>22407</b>



**PRIVAC® 600 ml ward system (replacement bottle)**

- Redon bottle

Connector	PU/SU	REF
Large lock	35/35	<b>24505</b>
Luer lock	35/35	<b>22406</b>



Large lock



Luer lock

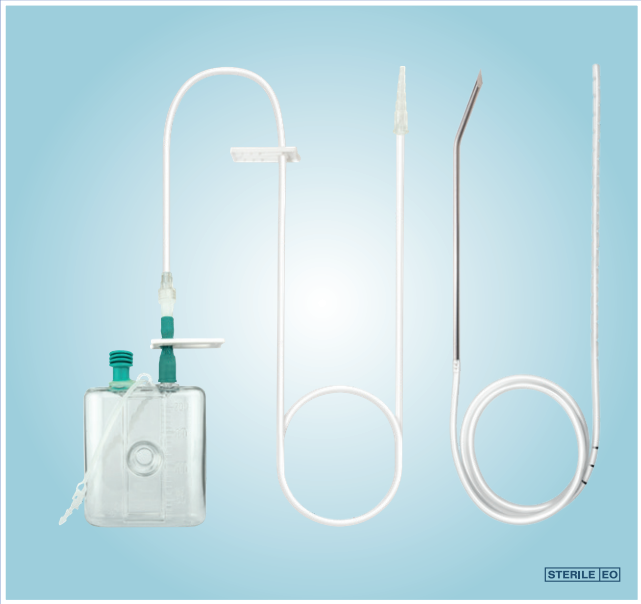
CONNECTION  
OPTIONS



HIGH-VACUUM SYSTEMS

PRIVAC® 200ml

PVC-free



**PRIVAC® 200 ml complete set**

- Redon bottle (PVC-free), connecting tube, Redon drain with trocar (guide needle)

Ch.	Drain length	Connector	PU/SU	REF
6	500 mm	Large lock	60/60	<b>24829</b>
8	500 mm	Large lock	60/60	<b>24830</b>
10	800 mm	Large lock	60/60	<b>24831</b>
12	800 mm	Large lock	60/60	<b>24832</b>
14	800 mm	Large lock	60/60	<b>24833</b>
16	800 mm	Large lock	60/60	<b>24834</b>
18	800 mm	Large lock	60/60	<b>24835</b>



**PRIVAC® 200 ml OR system**

- Redon bottle (PVC-free), connecting tube

Connector	PU/SU	REF
Large lock	60/60	<b>22490</b>



**PRIVAC® 200 ml ward system (replacement bottle)**

- Redon bottle (PVC-free)

Connector	PU/SU	REF
Large lock	60/60	<b>22491</b>

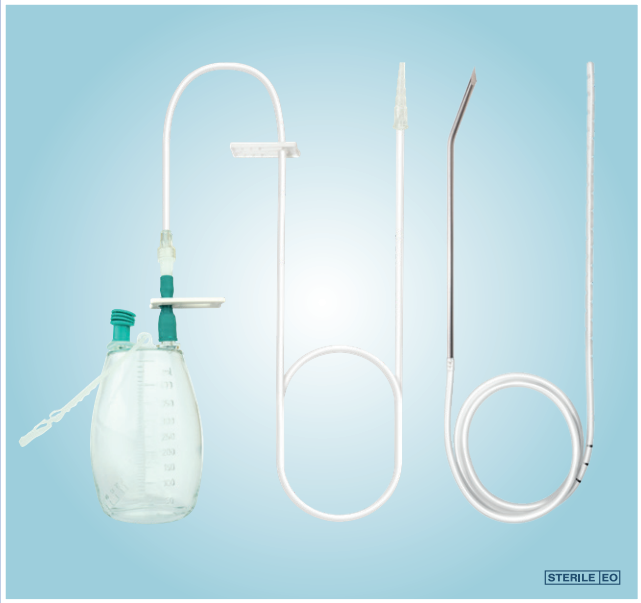


Large lock connector

HIGH-VACUUM SYSTEMS

PRIVAC® 400ml

PVC-free



**PRIVAC® 400 ml complete set**

- Redon bottle (PVC-free), connecting tube, Redon drain with trocar (guide needle)

Ch.	Drain length	Connector	PU/SU	REF
6	500 mm	Large lock	50/50	<b>24877</b>
8	500 mm	Large lock	50/50	<b>24878</b>
10	800 mm	Large lock	50/50	<b>24879</b>
12	800 mm	Large lock	50/50	<b>24880</b>
14	800 mm	Large lock	50/50	<b>24881</b>
16	800 mm	Large lock	50/50	<b>24882</b>
18	800 mm	Large lock	50/50	<b>24883</b>



**PRIVAC® 400 ml OR system**

- Redon bottle (PVC-free), connecting tube

Connector	PU/SU	REF
Large lock	50/50	<b>22392</b>



**PRIVAC® 400 ml ward system (replacement bottle)**

- Redon bottle (PVC-free)

Connector	PU/SU	REF
Large lock	50/50	<b>22393</b>

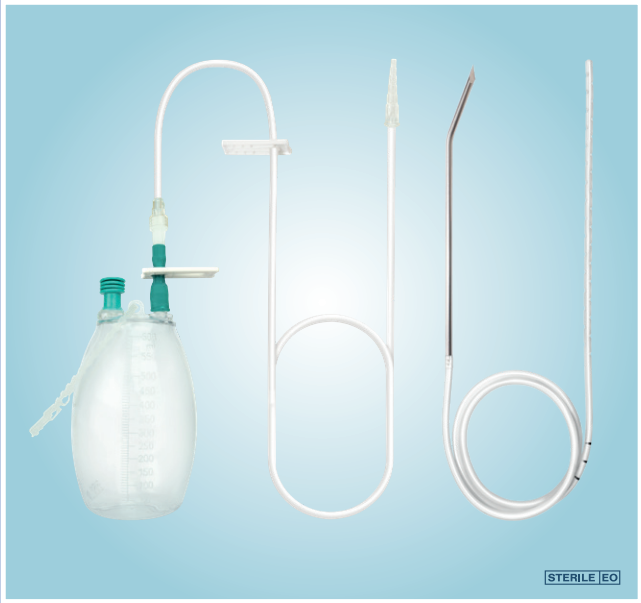


Large lock connector

HIGH-VACUUM SYSTEMS

PRIVAC® 600ml

PVC-free



**PRIVAC® 600 ml complete set**

- Redon bottle (PVC-free), connecting tube, Redon drain with trocar (guide needle)

Ch.	Drain length	Connector	PU/SU	REF
6	500 mm	Large lock	35/35	<b>24790</b>
8	500 mm	Large lock	35/35	<b>24791</b>
10	800 mm	Large lock	35/35	<b>24792</b>
12	800 mm	Large lock	35/35	<b>24793</b>
14	800 mm	Large lock	35/35	<b>24794</b>
16	800 mm	Large lock	35/35	<b>24795</b>
18	800 mm	Large lock	35/35	<b>24796</b>



**PRIVAC® 600 ml OR system**

- Redon bottle (PVC-free), connecting tube

Connector	PU/SU	REF
Large lock	35/35	<b>22439</b>



**PRIVAC® 600 ml ward system (replacement bottle)**

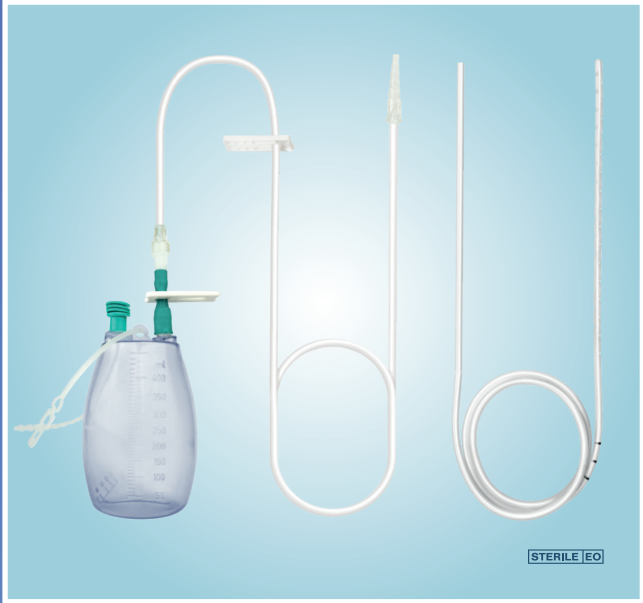
- Redon bottle (PVC-free)

Connector	PU/SU	REF
Large lock	35/35	<b>22438</b>



Large lock connector

HIGH-VACUUM SYSTEMS  
PRIVAC® Special variant  
400ml



**PRIVAC® 400 ml complete set**

- Redon bottle (PVC), connecting tube, Redon drain without trocar (PU)

Ch.	Drain length	Connector	PU/SU	REF
10	500 mm	Large-Lock	50/50	<b>21958</b>
12	500 mm	Large-Lock	50/50	<b>21959</b>
14	500 mm	Large-Lock	50/50	<b>21957</b>
16	500 mm	Large-Lock	50/50	<b>21956</b>
18	500 mm	Large-Lock	50/50	<b>21955</b>

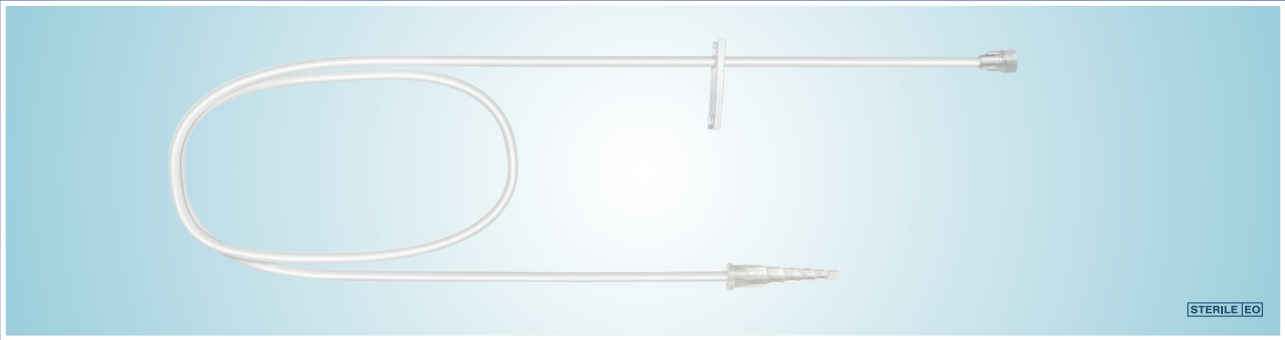


Large lock connector

Connecting tube for PRIVAC® high-vacuum systems

The connecting tube can be ordered separately and is used to connect the Redon drains to the pre-evacuated Redon bottle.

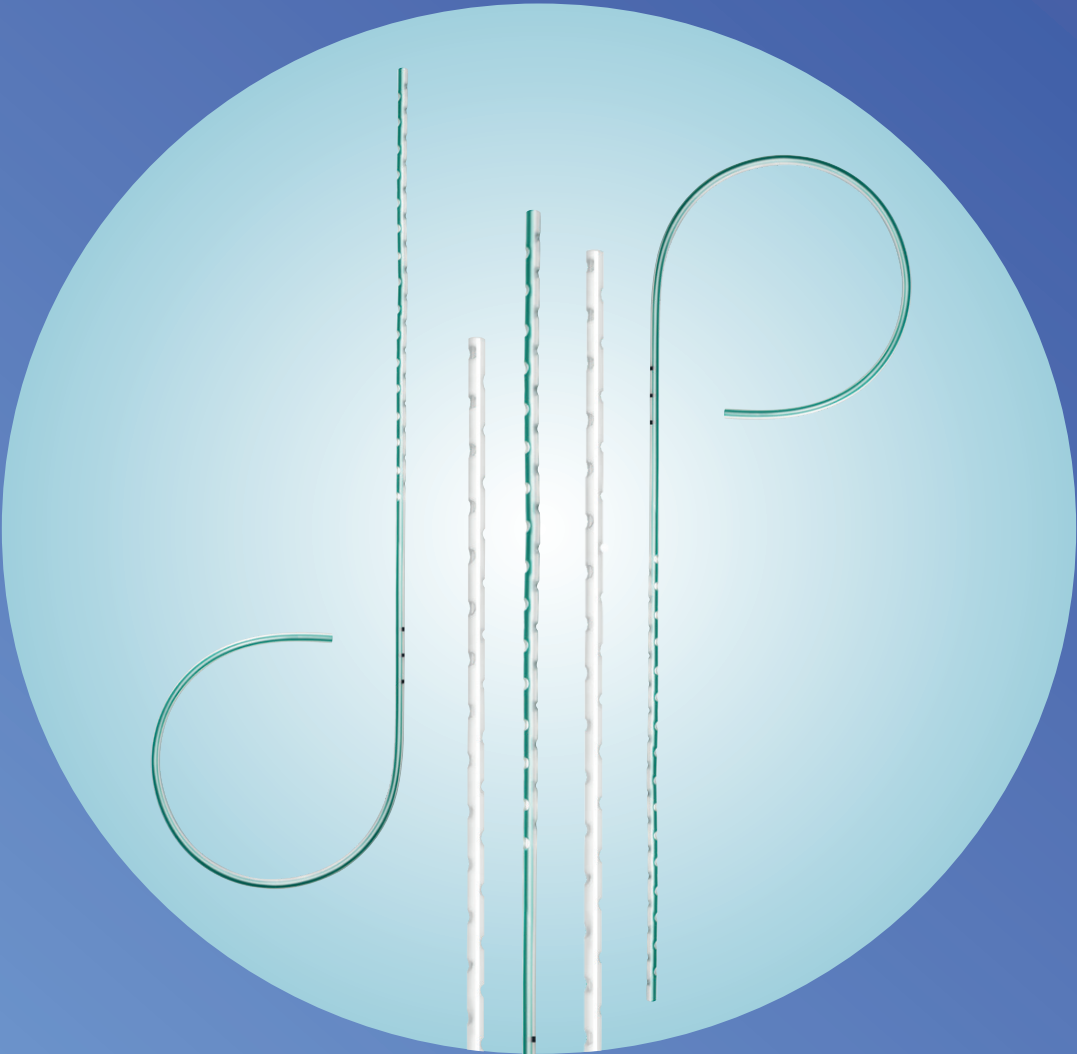
Connecting tube with large lock connector and universal connector



PU/SU	REF
25/75	24513

**REDON DRAINS**

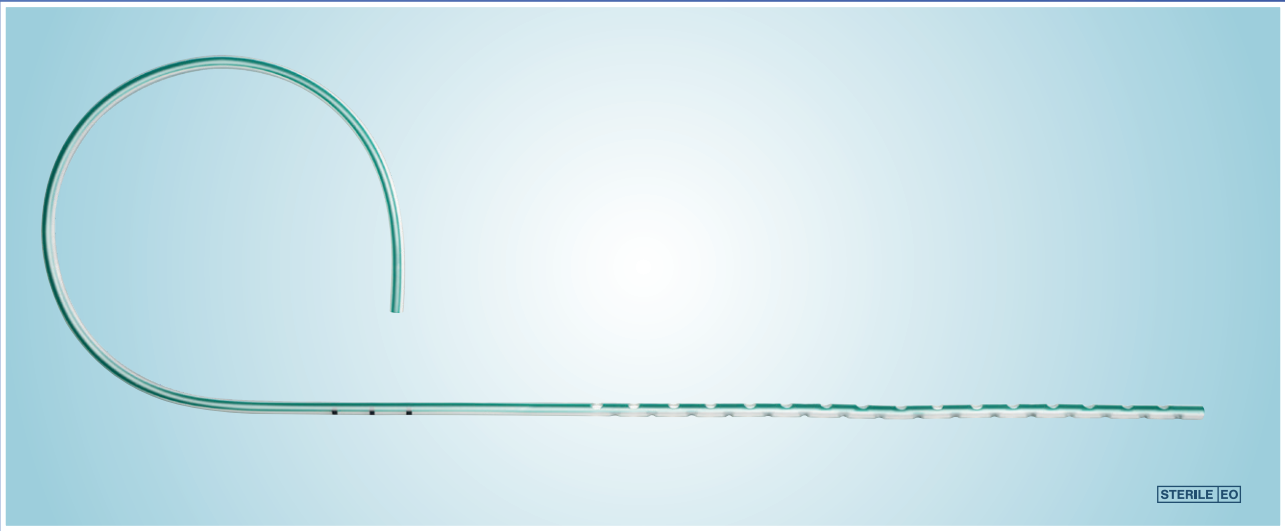
**Redon drains are suitable for use with high-vacuum systems and low-vacuum systems for postoperative wound drainage.**





Redon drains (PVC) without trocar

Redon drains are suitable for use with high-vacuum systems and low-vacuum systems for postoperative wound drainage.



Product features:

- Made of soft, flexible polyvinyl chloride (PVC)
- With radiopaque stripe
- Implant tested in accordance with USP XXIII
- Alternating perforation to avoid ingrowth of tissue
- Rounded drainage openings for removal of secretion
- Length markings allow simple repositioning

Ch.	Length	PU/SU	REF
6	500 mm	100/300	<b>21860</b>
8	500 mm	100/300	<b>21861</b>
10	500 mm	100/300	<b>21862</b>
12	500 mm	100/300	<b>21863</b>
14	500 mm	100/300	<b>21864</b>
16	500 mm	100/300	<b>21865</b>
18	500 mm	100/300	<b>21866</b>

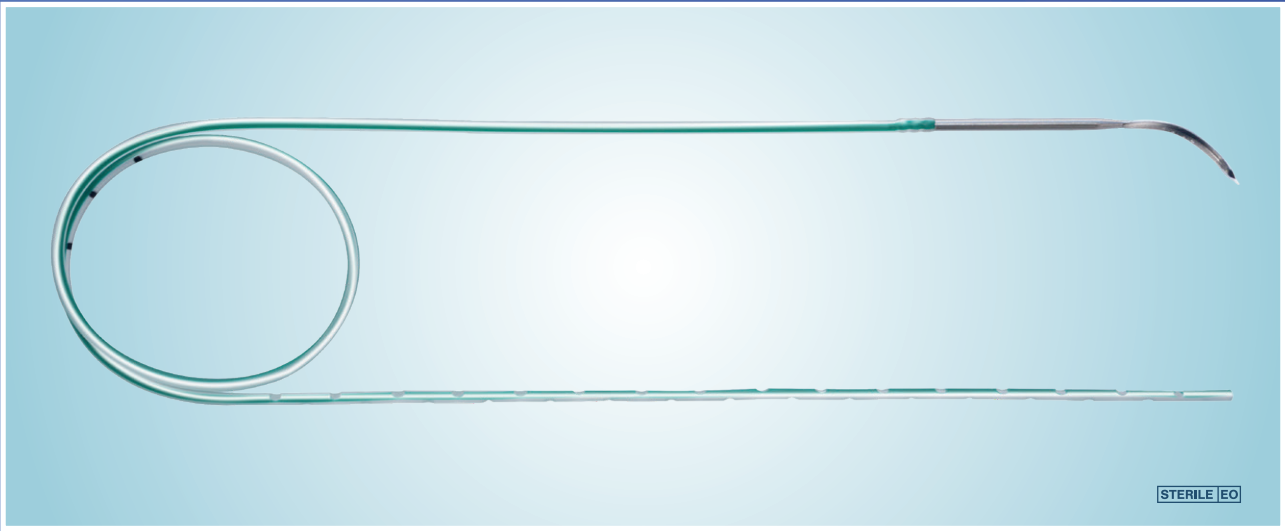
Ch.	Length	PU/SU	REF
6	800 mm	100/300	<b>21880</b>
8	800 mm	100/300	<b>21881</b>
10	800 mm	100/300	<b>21882</b>
12	800 mm	100/300	<b>21883</b>
14	800 mm	100/300	<b>21884</b>
16	800 mm	100/300	<b>21885</b>
18	800 mm	100/300	<b>21886</b>

# REDON DRAINS (PVC)

## with trocar

### Redon drains (PVC) with trocar

Redon drains are suitable for use with high-vacuum systems and low-vacuum systems for postoperative wound drainage.



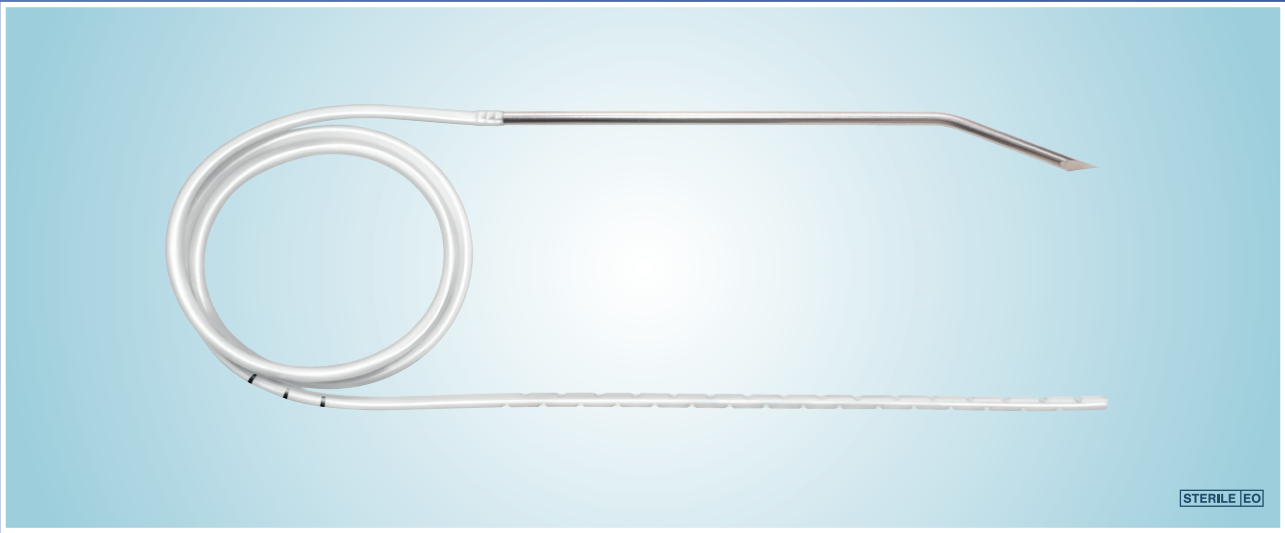
#### Product features:

- Made of soft, flexible polyvinyl chloride (PVC) and a trocar (preconnected guide needle) made of medical grade stainless steel
- Sharp trocar enables ideal positioning of the drain
- With radiopaque stripe
- Implant tested in accordance with USP XXIII
- Alternating perforation to avoid ingrowth of tissue
- Rounded drainage openings for removal of secretion
- Length markings allow simple repositioning

Guide needle (trocar)	Ch.	Length	PU/SU	REF
Lancet tip	6	500 mm	100/300	<b>21890</b>
Lancet tip	8	500 mm	100/300	<b>21891</b>
Lancet tip	10	800 mm	100/200	<b>21892</b>
Blade tip	12	800 mm	100/200	<b>21893</b>
Blade tip	14	800 mm	100/200	<b>21894</b>
Blade tip	16	800 mm	100/200	<b>21846</b>
Blade tip	18	800 mm	100/200	<b>21847</b>

Redon drains (PU) with trocar

Redon drains are suitable for use with high-vacuum systems and low-vacuum systems for postoperative wound drainage.



Product features:

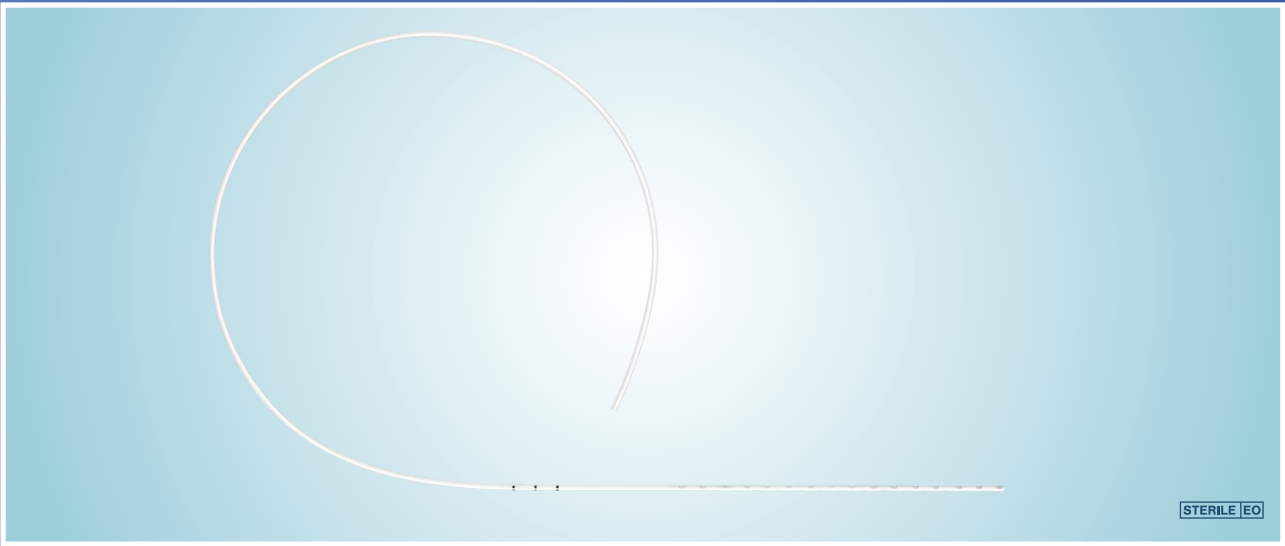
- Made of soft, flexible polyurethane (PU) and a trocar (preconnected guide needle) made of medical grade stainless steel
- PVC-free
- Sharp trocar enables ideal positioning of the drain
- The drain boasts particularly good flow properties thanks to its material characteristics
- With radiopaque stripe
- Implant tested in accordance with USP XXIII
- Alternating perforation to avoid ingrowth of tissue
- Rounded drainage openings for removal of secretion
- Length markings allow simple repositioning

Guide needle (trocar)	Ch.	Length	PU/SU	REF
Lancet tip	6	500 mm	100/300	24870
Lancet tip	8	500 mm	100/300	24871
Lancet tip	10	800 mm	100/200	24872
Blade tip	12	800 mm	100/200	24873
Blade tip	14	800 mm	100/200	24874
Blade tip	16	800 mm	100/200	24875
Blade tip	18	800 mm	100/200	24876

REDON DRAINS (PU)  
without trocar

Redon drains (PU) without trocar

Redon drains are suitable for use with high-vacuum systems and low-vacuum systems for postoperative wound drainage.



Product features:

- Made of soft, flexible polyurethane (PU)
- PVC-free
- The drain boasts particularly good flow properties thanks to its material characteristics
- With radiopaque stripe
- Implant tested in accordance with USP XXIII
- Alternating perforation to avoid ingrowth of tissue
- Rounded drainage openings for removal of secretion
- Length markings allow simple repositioning

Ch.	Length	PU/SU	REF
6	500 mm	100/300	24850
8	500 mm	100/300	24851
10	500 mm	100/300	24852
12	500 mm	100/300	24853
14	500 mm	100/300	24854
16	500 mm	100/300	24855
18	500 mm	100/300	24856

Ch.	Length	PU/SU	REF
6	800 mm	100/300	24860
8	800 mm	100/300	24861
10	800 mm	100/300	24862
12	800 mm	100/300	24863
14	800 mm	100/300	24864
16	800 mm	100/300	24865
18	800 mm	100/300	24866

## Low-vacuum systems

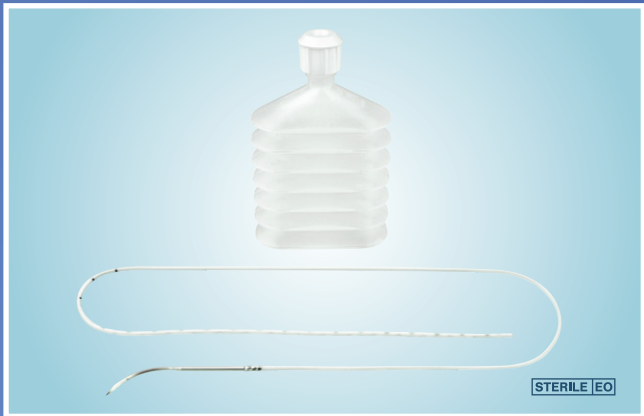
Low-vacuum systems are used for gentle wound drainage. They drain wound secretions using a considerably lower vacuum than their high-vacuum counterparts and can either be adjusted manually via bellows or pump systems or function passively by means of gravity drainage.





Low-Vacuum Systems Mini

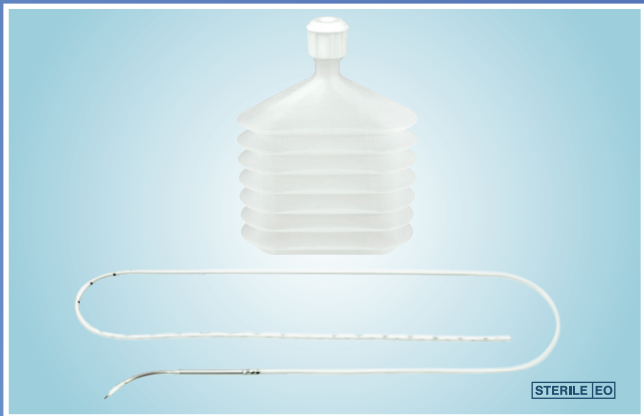
Low-vacuum systems Mini are suitable for gentle wound drainage in sensitive tissue. A manually compressible bellows is used to generate a low vacuum, which allows intra- and postoperative wound drainage. The mini low-vacuum set is completely free of PVC and comprises a small bellows and a polyurethane Redon drain with trocar.



Low-vacuum system Mini 20 ml

- Mini Redon bellows (20 ml) with universal screw connector for safe connection of 6 Ch. or 8 Ch. Redon drains
- With soft Redon drain made of polyurethane (PU) with trocar (preconnected guide needle)

	PU/SU	REF
6 Ch.	20/160	21614
8 Ch.	20/160	21615



Low-vacuum system Mini 50 ml

- Mini Redon bellows (50 ml) with universal screw connector for safe connection of 6 Ch. or 8 Ch. Redon drains
- With soft Redon drain made of polyurethane (PU) with trocar (preconnected guide needle)

	PU/SU	REF
6 Ch.	10/80	21635
8 Ch.	10/80	21636



Mini Redon bellows

- With universal screw connector for safe connection of 6 Ch. or 8 Ch. Redon drains
- Transparent material allows visual control of drained fluid
- By compressing the bellows a negative pressure in the low vacuum range is generated

	PU/SU	REF
20 ml	20/160	21612
50 ml	10/80	21637

Technical data

- Bellows volume: 20 ml / 50 ml
  - Drain size: 6 Ch. / 8 Ch.
  - Drain length = 500 mm (150 mm of perforations)
- ① can also be used in combination with Redon drains made of PVC



PRI-LOW-VAC® low-vacuum systems

PRI-LOW-VAC® low-vacuum systems are suitable for gentle wound drainage in sensitive tissue.

A manually compressible bellows is used to build up a low vacuum for conservative wound drainage. The low-vacuum system comprises a bellows, a connecting tube and a Redon drain with trocar.



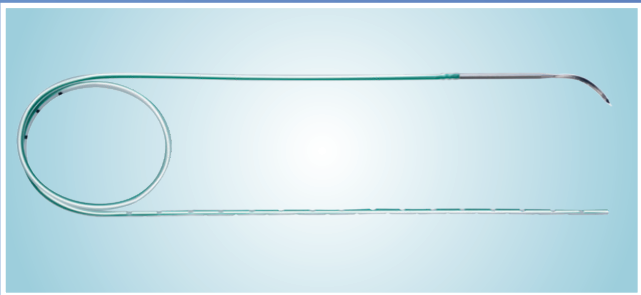
Redon bellows

- By compressing the bellows a negative pressure in the low vacuum range is generated
- 200 ml / 500 ml
- Including scale on underside
- Round design



Connecting tube

- 125 cm long
- With universal connector for safe connection of 6-18 Ch. Redon drains
- Including grid clamp



Redon drain (PVC) with trocar

- 150 mm of perforations
- With radiopaque stripe
- Implant tested in accordance with USP XXIII
- Alternating perforation
- With length markings

Technical data

- Bellows volume: 200 ml/ 500 ml
- Drain size: 8-18 Ch. (150 mm of perforations)

LOW-VACUUM SYSTEMS

PRI-LOW-VAC®  
200 ml



**PRI-LOW-VAC® 200 ml complete set**

- Redon bellows with connecting tube, Redon drain (PVC) with trocar

Ch.	Drain length	PU/SU	REF
8	500 mm	60/ 60	<b>21581</b>
10	800 mm	60/ 60	<b>22086</b>
12	800 mm	60/ 60	<b>22087</b>



**PRI-LOW-VAC® 200 ml OR system**

- Redon bellows with connecting tube

PU/SU	REF
60/ 60	<b>21632</b>



**PRI-LOW-VAC® 200 ml ward system (replacement bellows)**

- Redon bellows

PU/SU	REF
60/60	<b>21622</b>

LOW-VACUUM SYSTEMS

PRI-LOW-VAC®  
500 ml



**PRI-LOW-VAC® 500 ml complete set**

- Redon bellows with connecting tube, Redon drain (PVC) with trocar

Ch.	Drain length	PU/SU	REF
10	800 mm	35/ 35	<b>21605</b>
12	800 mm	35/ 35	<b>21601</b>
14	800 mm	35/ 35	<b>21599</b>



**PRI-LOW-VAC® 500 ml OR system**

- Redon bellows with connecting tube

PU/SU	REF
35/ 35	<b>21631</b>



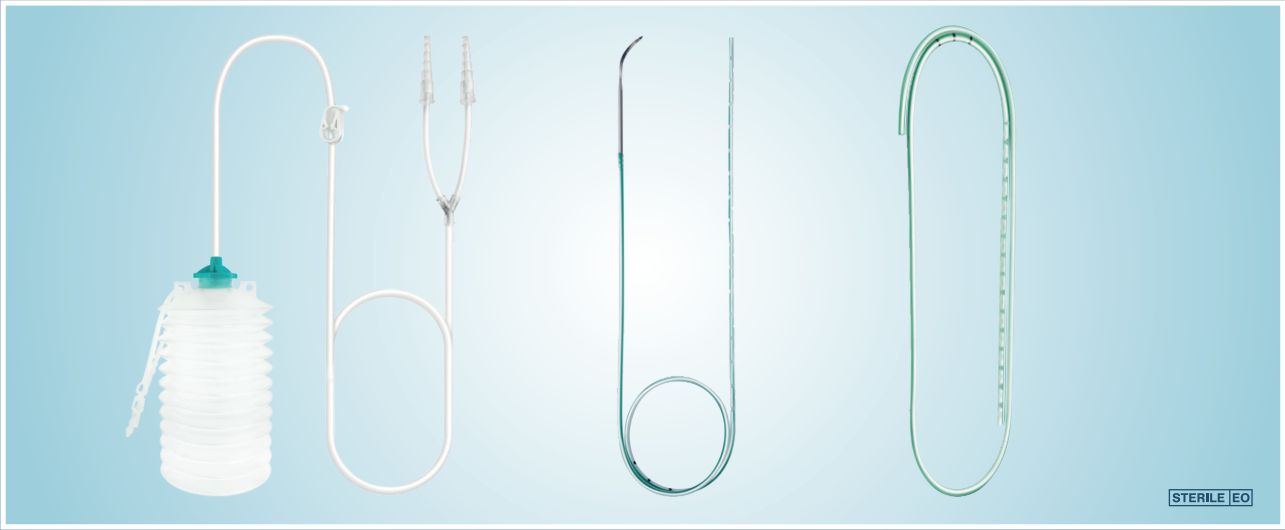
**PRI-LOW-VAC® 500 ml ward system (replacement bellows)**

- Redon bellows with closed lid attachment

PU/SU	REF
35/ 35	<b>21621</b>

LOW-VACUUM SYSTEMS

PRI-LOW-VAC®  
500 ml



**PRI-LOW-VAC® 500 ml complete set with 2 drains**

- Redon bellows with Y-connecting tube, Redon drain (PVC) with trocar, Redon drain (PVC) without trocar

Ch.	Drain length	PU/SU	REF
12	800 mm	35/ 35	<b>21592</b>
14	800 mm	35/ 35	<b>21593</b>
16	800 mm	35/ 35	<b>21594</b>
18	800 mm	35/ 35	<b>21595</b>

PRI-LOW-VAC® SAVE low-vacuum systems

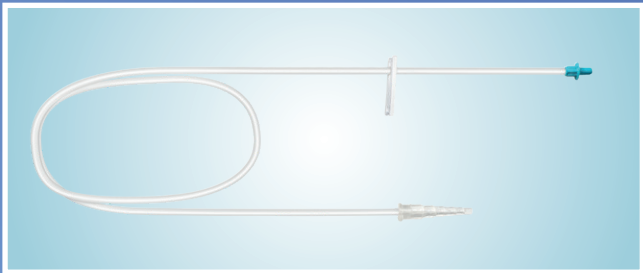
PRI-LOW-VAC® SAVE low-vacuum systems are suitable for gentle wound drainage in sensitive tissue.

A manually compressible bellows is used to build up a low vacuum for conservative wound drainage. The low-vacuum system comprises a bellows, a connecting tube and a Redon drain with trocar. In the SAVE versions, a non-return valve prevents the secretions from flowing back into the Redon bellows.



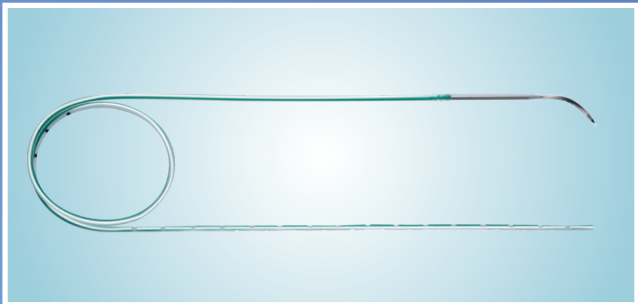
Redon bellows

- By compressing the bellows a negative pressure in the low vacuum range is generated
- 250 ml / 500 ml
- Including scale on under side
- With non-return valve
- Flat, oval form



Connecting tube

- 125 cm long
- With universal connector for safe connection of 6-18 Ch. Redon drains
- Including slide clamp
- With plug connection



Redon drain (PVC) with trocar

- 150 mm of perforations
- With radiopaque stripe
- Implant tested in accordance with USP XXIII
- Alternating perforation
- With length markings

Technical data

- Bellows volume: 250 ml/ 500 ml
- Drain size: 10-18 Ch. (150 mm of perforations)
- SAVE: With non-return valve



LOW-VACUUM SYSTEMS

PRI-LOW-VAC® SAVE  
250 ml



**PRI-LOW-VAC® SAVE 250 ml complete set**

- Redon bellows with connecting tube, Redon drain (PVC) with trocar

Ch.	Drain length	PU/SU	REF
10	800 mm	35/ 35	<b>22091</b>
12	800 mm	35/ 35	<b>22092</b>
14	800 mm	35/ 35	<b>22093</b>
16	800 mm	35/ 35	<b>22094</b>
18	800 mm	35/ 35	<b>22095</b>



**PRI-LOW-VAC® SAVE 250 ml OR system**

- Redon bellows with connecting tube

PU/SU	REF
35/ 35	<b>21962</b>



**PRI-LOW-VAC® SAVE 250 ml ward system (replacement bellows)**

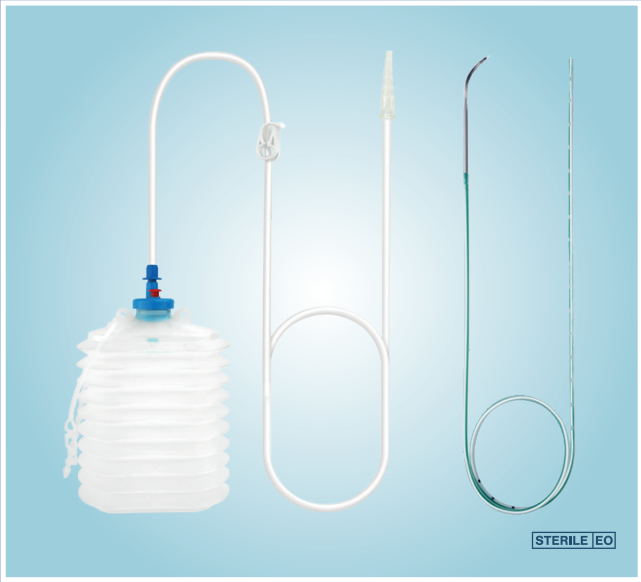
- Redon bellows

PU/SU	REF
35/ 35	<b>21961</b>



LOW-VACUUM SYSTEMS

PRI-LOW-VAC® SAVE  
500 ml



**PRI-LOW-VAC® SAVE 500 ml complete set**

- Redon bellows with connecting tube, Redon drain (PVC) with trocar

Ch.	Drain length	PU/SU	REF
10	800 mm	35/ 35	<b>21981</b>
12	800 mm	35/ 35	<b>21987</b>
14	800 mm	35/ 35	<b>21988</b>
16	800 mm	35/ 35	<b>21989</b>
18	800 mm	35/ 35	<b>21980</b>



**PRI-LOW-VAC® SAVE 500 ml OR system**

- Redon bellows with connecting tube

PU/SU	REF
35/ 35	<b>21972</b>



**PRI-LOW-VAC® SAVE 500 ml ward system  
(replacement bellows)**

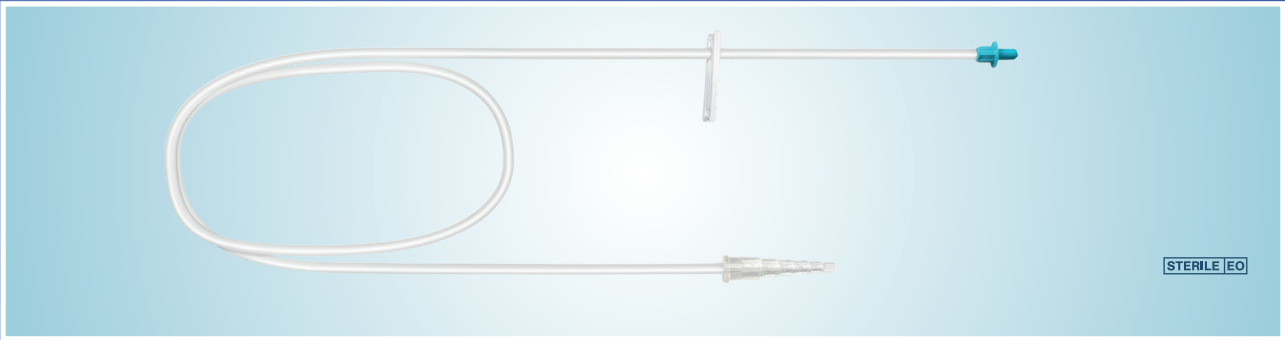
- Redon bellows

PU/SU	REF
35/ 35	<b>21971</b>

Connecting tube for PRI-LOW-VAC® SAVE  
Low-vacuum systems

This connecting tube can be ordered separately and is used to connect a Redon drain to a PRI-LOW-VAC® SAVE Redon bellow.

Connecting tube with SAVE plug connection and universal connector



PU/SU	REF
25/50	21954

Product features:

- With plug connection for easy connection to PRI-LOW-VAC® SAVE Redon bellows
- Universal connector enables safe connection of 6-18 Ch. Redon drains

PRI-ACTIVE-PASSIVE DRAINS

Pri-Active-Passive drains are suitable for gentle wound drainage in sensitive tissue.



A manually compressible bellows is used to generate a low vacuum, which allows postoperative wound drainage.

The system can also function by means of gravity drainage.

The drained fluids are collected in a drainage bag, which can be exchanged when necessary by simply unscrewing it.

Technical data

- Bellows volume: 250 ml
- Drainage bag volume: 500 ml
- Suitable for 10-18 Ch. drains
- SAVE: With non-return valve

Pri-Active-Passive drain with silicone soft drain with trocar

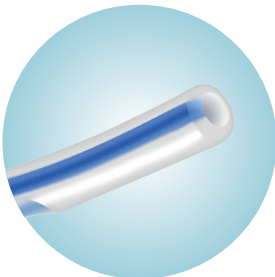
Pri-Active-Passive drains are suitable for gentle wound drainage in sensitive tissue. A manually compressible bellows is used to generate a low vacuum, which allows postoperative wound drainage. In addition to this active drainage, the system can also function by means of passive (gravity) drainage.



Product features

- Drainage bag 500 ml
  - With non-return valve to avoid secretion backflow
  - With large-lumen tap
  - With scale
  - Patient information can be entered in pre-printed fields
- SAVE bellows 250 ml
  - With integrated non-return valve to avoid secretion backflow
  - With plug connection
- Connecting tube (length = 700 mm)
  - With universal connector
  - With blue slide clamp
- Silicone soft drain with trocar
  - Soft, medical grade silicone ensures good tissue compatibility
  - Rounded, atraumatic tip
  - With Redon perforation
  - With radiopaque stripe
  - Alternating perforation to avoid ingrowth of tissue

Ch.	Drain length	PU/SU	REF
10	800 mm	25/25	21749
12	800 mm	25/25	21760
14	800 mm	25/25	21761



Soft drain

Pri-Active-Passive drain with Redon drain with trocar

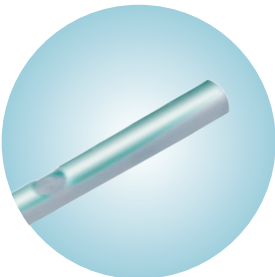
Pri-Active-Passive drains are suitable for gentle wound drainage in sensitive tissue. A manually compressible bellows is used to generate a low vacuum, which allows postoperative wound drainage. In addition to this active drainage, the system can also function by means of passive (gravity) drainage.



Product features

- Drainage bag 500 ml
  - With non-return valve to avoid secretion backflow
  - With large-lumen tap
  - With scale
  - Patient information can be entered in pre-printed fields
- SAVE bellows 250 ml
  - Initial vacuum = 120 mbar
  - With integrated non-return valve to avoid secretion backflow
  - With plug connection
- Connecting tube (length = 1250 mm)
  - With universal connector
  - With slide clamp
- Redon drain (PVC) with trocar
  - 150 mm of perforations
  - With radiopaque stripe
  - Implant tested in accordance with USP XXIII
  - Alternating perforation to avoid ingrowth of tissue
  - With length markings

Ch.	Drain length	PU/SU	REF
10	800 mm	25/ 25	<b>24464</b>
12	800 mm	25/ 25	<b>24465</b>
14	800 mm	25/ 25	<b>24466</b>
16	800 mm	25/ 25	<b>24467</b>
18	800 mm	25/ 25	<b>21789</b>



Redon-Drain



PUMP DRAINS

Pump drains are suitable for gentle wound drainage in sensitive tissue. Depressing the secretion pump creates a low vacuum for wound drainage.



The secretion pump above the drainage bag can be used to create a low vacuum, which allows wound drainage and direct influencing of the secretion flow. The system also functions by means of gravity drainage.

A pump drain can be used in combination with different types of silicone drains.

The drained fluid collects in a drainage bag with an easy-to-use tap for rapid draining of the accumulated fluid.

Technical data

- Secretion pump
- Drainage bag volume: 500 ml
- Suitable for 12-30 Ch. drains

Pump drain with silicone soft drain

This Pump chamber drain is used for gentle wound drainage in sensitive tissues. The secretion pump above the drainage bag can be used to create a low vacuum, which allows wound drainage. In addition to this active drainage, the system can also function by means of passive (gravity) drainage.

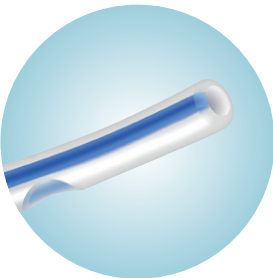


Product features

- Drainage bag 500 ml
  - With non-return valve to avoid secretion backflow
  - With large-lumen tap
  - With scale
  - Patient information can be entered in pre-printed fields
- Secretion pump
  - Can be activated by squeezing slightly
- Preconnected silicone soft drain
  - Soft, medical grade silicone ensures good tissue compatibility
  - Rounded, atraumatic tip
  - 6 side openings
  - With radiopaque stripe

Ch.	Drain length	PU/SU	REF
12	1000 mm	10/20	22060
15	1000 mm	10/20	22061
18	1000 mm	10/20	22062
21	1000 mm	10/20	22063
24	1000 mm	10/20	22064
27	1000 mm	10/20	22065
30	1000 mm	10/20	22066

	PU/SU	REF
Drainage bag (500 ml) with secretion pump	10/ 20	22069



Soft drain

DRAINAGE SET  
with flat drain

Drainage set with flat drain

Low-vacuum drains with flat drains are used for suction-assisted, post-operative drainage of wound secretions. The comprise a silicone collecting bulb, which can be compressed to generate a vacuum for active suction support and a J.P. flat drain made of silicone. In addition to this active drainage, the system can also function by means of passive (gravity) drainage.



Drainage set with flat drain

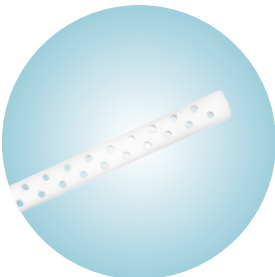
- Silicone collecting bulb 100 cm<sup>3</sup>
  - Volume = 100 ml
  - Transparent material allows visual control of drained fluid
  - With universal hanger
  - With non-return valve
  - With scale to provide an at-a-glance information about current fill levels
  - Stepless plug connection for safe and gentle removal of the drain
- J.P. flat drain
  - Soft, medical grade silicone ensures good tissue compatibility
  - Total length = 600 mm, of which 200 mm are a fully perforated flat drain
  - Fully radiopaque
  - Inner ribbing prevents the drain from collapsing (even at higher pressures or when a vacuum is applied)
  - With rounded, atraumatic holes

Fat drain			Drain body		PU/SU	REF
Width	Height	Length	Ch.	Length		
4 mm	3mm	200mm	Ch. 15	600 mm	10/ 40	<b>24840</b>
7 mm	3mm	200mm	Ch. 15	600 mm	10/ 40	<b>24841</b>
10 mm	4mm	200mm	Ch. 15	600 mm	10/ 40	<b>24842</b>

Silicone reservoir

- With connector for J.P. flat drains
- Made of medical grade silicone

	PU/SU	REF
100 cm <sup>3</sup>	10/30	<b>21078</b>
150 cm <sup>3</sup>	10/30	<b>21085</b>
400 cm <sup>3</sup>	10/30	<b>21086</b>



Flat drain

SILICONE RESERVOIR  
with Luer lock  
connection

Silicone reservoir with Luer lock connection

This collection reservoir can be used in combination with a drain for suction-assisted, postoperative drainage of wound secretions. The Silicone collection reservoir functions by means of passive (gravity) drainage, but can also be compressed to generate a negative pressure and support active suction.



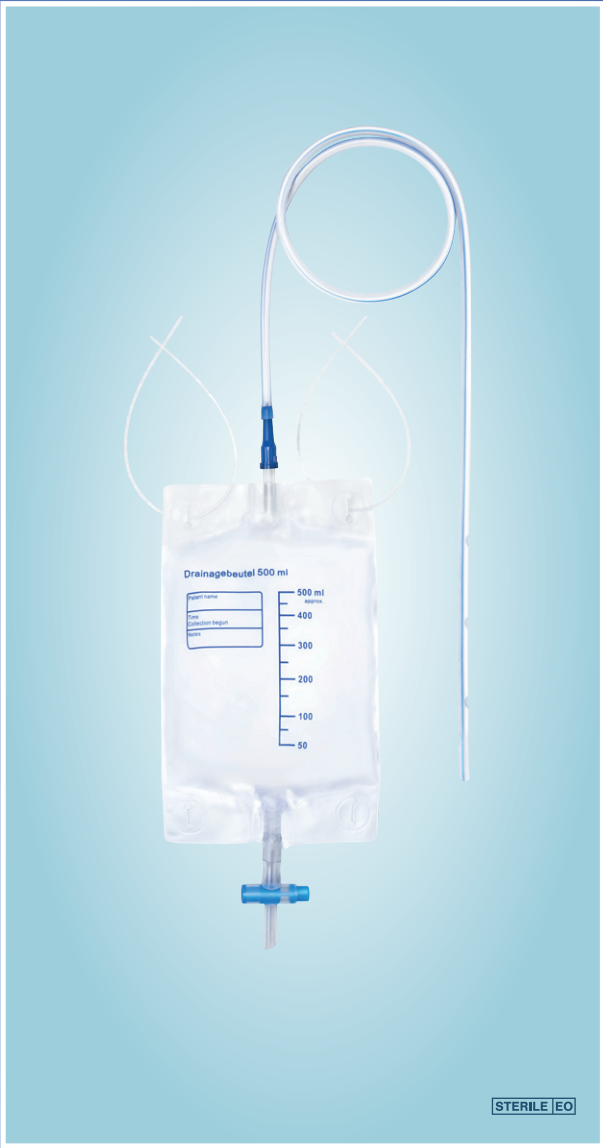
Product features

- Silicone collecting bulb 400 cm<sup>3</sup>
  - Volume = 400 ml
  - Transparent material allows visual control of drained fluid
  - With universal hanger
  - With non-return valve
  - With scale to provide an at-a-glance information about current fill levels
  - With Luer lock connection
  - Stepless plug connection for safe and gentle removal of silicone drains
- Venting filter

	PU/SU	REF
400 cm <sup>3</sup>	15/15	21203

Passive Drainage (Gravity drainage)  
with silicone soft drain

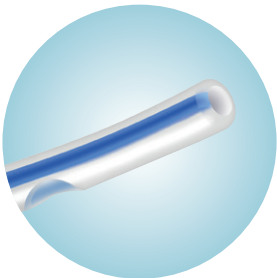
Passive drainage is used for for open for half-open wound drainage by gravity. This drainage system consists of a drainage bag with non-return valve, a connecting tube and a silicone soft drain.



Product features

- Drainage bag 500 ml
  - With non-return valve to avoid secretion backflow
  - With large-lumen tap
  - With scale
  - Patient information can be entered in pre-printed fields
- Silicone soft drain
  - Soft, medical grade silicone ensures good tissue compatibility
  - Rounded, atraumatic tip
  - 6 side openings
  - With radiopaque stripe

Ch.	Drain length	PU/SU	REF
Ch. 10	1000 mm	25/ 50	<b>22051</b>
Ch. 12	1000 mm	25/ 50	<b>21910</b>
Ch. 14	1000 mm	25/ 50	<b>21898</b>
Ch. 15	1000 mm	25/ 50	<b>21911</b>
Ch. 16	1000 mm	25/ 50	<b>21845</b>
Ch. 18	1000 mm	25/ 50	<b>21912</b>
Ch. 20	1000 mm	25/ 50	<b>21888</b>
Ch. 21	1000 mm	25/ 50	<b>21913</b>
Ch. 24	1000 mm	25/ 50	<b>21914</b>
Ch. 26	1000 mm	25/ 50	<b>21134</b>
Ch. 27	1000 mm	25/ 50	<b>21915</b>
Ch. 30	1000 mm	25/ 50	<b>21916</b>
Ch. 33	1000 mm	25/ 50	<b>21917</b>
Ch. 36	1000 mm	25/ 50	<b>21918</b>



Soft drain



Passive Drainage (Gravity drainage)  
with silicone capillary drain

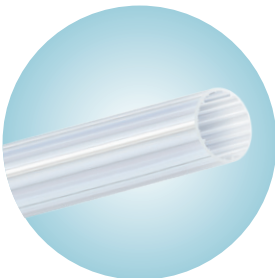
Passive drainage is used for for open for half-open wound drainage by gravity. This drainage system consists of a drainage bag with non-return valve, a connecting tube and a silicone capillary drain.



Product features

- Drainage bag 500 ml
  - With non-return valve to avoid secretion backflow
  - With large-lumen tap
  - With scale
  - Patient information can be entered in pre-printed fields
- Capillary drain
  - Soft, medical grade silicone ensures good tissue compatibility
  - Inner ribbing enables continuous secretion flow and avoids incrustations
  - The asymmetric ribbing structure ensures a high level of kink resistance.
  - With radiopaque stripe

Ch.	Drain length	PU/SU	REF
6	300 mm	25/50	21119
8	300 mm	25/50	21120



Capillary drain

Biliary drainage bag

This biliary drainage bag can used in conjunction with a T-drain for external discharge of bile by gravity.



Product features

- Volume = 500 ml
- With secretion tube (length = 80 cm)
- With different connectors for safe connection of 8-24 Ch. T-drains and Soft drains (see page 43)
- With non-return valve to avoid secretion back-flow
- With large-lumen tap
- With scale
- Patient information can be entered in pre-printed fields
- Safe mounting of bag by means of double-welded eyelets and quick-tying device

PU/SU	REF
25/25	21999

Biliary drainage bag

This biliary drainage bag can used in conjunction with a T-drain for external discharge of bile by gravity.

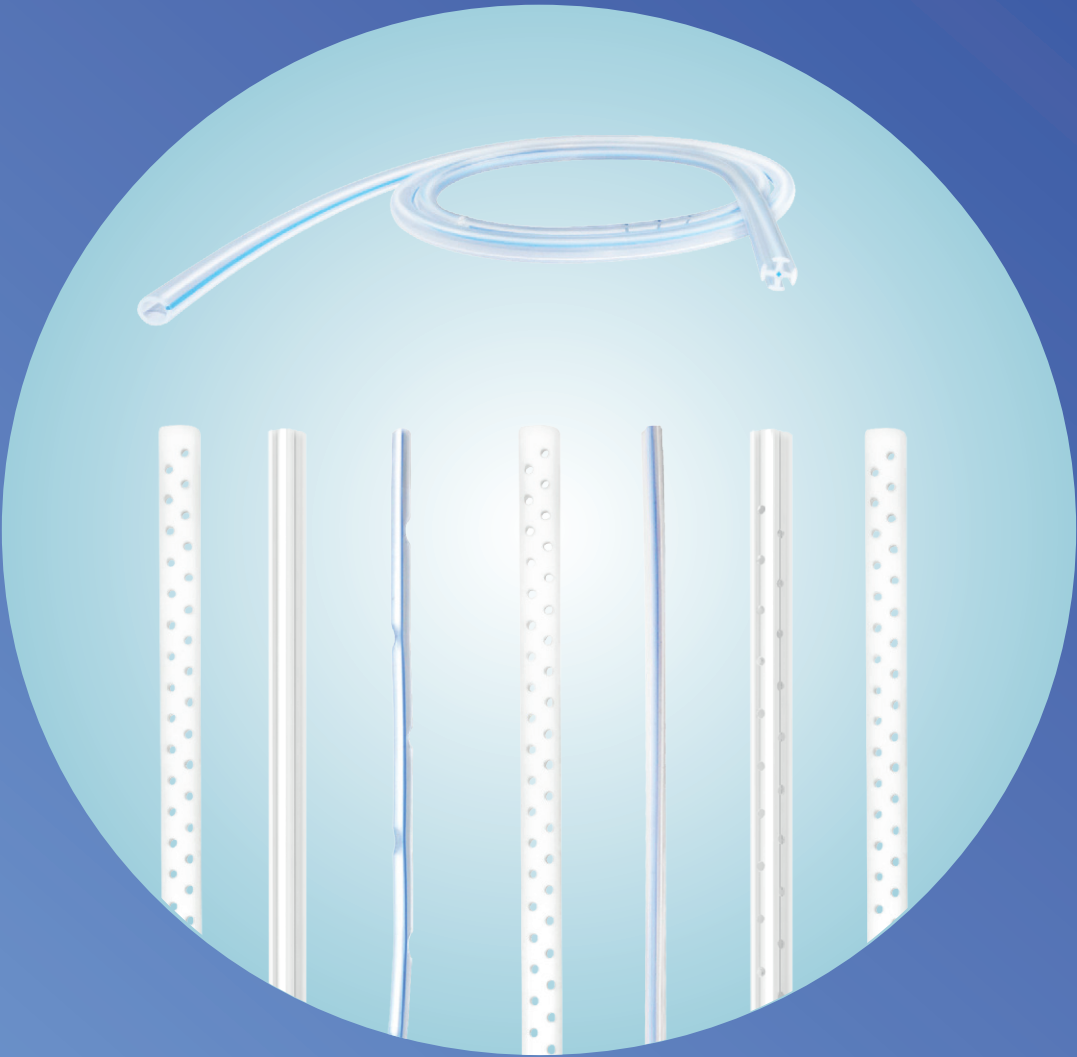


Product features

- Volume = 500 ml
- With secretion tube (length = 80 cm)
- With different connectors for safe connection of 8-24 Ch. T-drains and Soft drains (see page 43)
- With non-return valve to avoid secretion back-flow
- With large-lumen tap
- With scale
- Patient information can be entered in pre-printed fields
- Safe mounting of bag by means of double-welded eyelets and quick-tying device

PU/SU	REF
25/25	21030

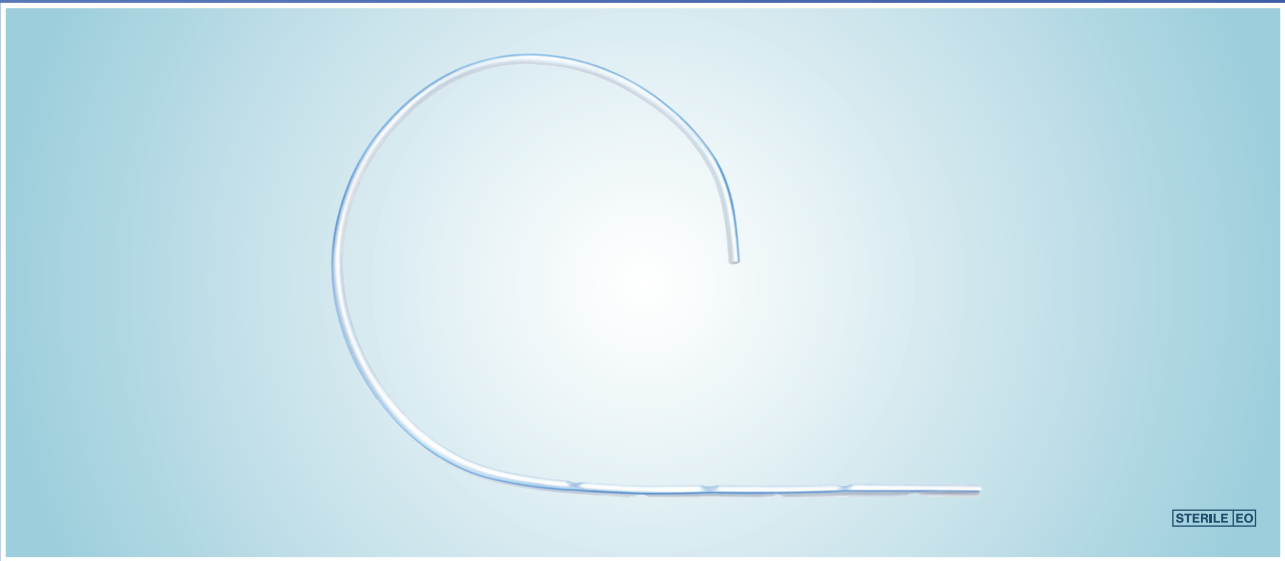
SILICONE DRAINS



Soft drains

Soft drains

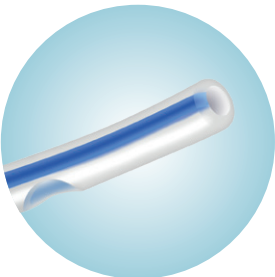
Soft drains are round drains made of medical grade silicone and used for open or half-open wound drainage via gravity.



Product features:

- Soft, medical grade silicone ensures good tissue compatibility
- Rounded, atraumatic tip
- 6 side openings
- With radiopaque stripe
- Length = 500 mm

Ch.	PU/SU	REF
8	25/100	21899
10	25/100	21900
12	25/100	21901
14	25/100	21130
15	25/100	21902
18	25/100	21903
20	25/100	21131
21	25/100	21904
24	25/100	21905
26	25/100	21132
27	25/100	21906
30	25/100	21907
33	25/100	21908
36	25/100	21909
39	25/100	21133



Soft drain



Capillary drains

Capillary drains are made of medical grade silicone and feature an inner ribbing. They are suitable for gentle wound drainage by means of capillary suction and gravity, particularly in indications where the application of a low-vacuum is contraindicated, but sufficient drainage performance is required.

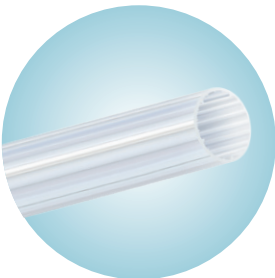


Product features:

- Soft, medical grade silicone ensures good tissue compatibility
- With radiopaque stripe
- Available in 2 lengths (300 mm / 500 mm)
- Inner ribbing enables continuous secretion flow and avoids incrustations
- The asymmetric ribbing structure ensures a high level of kink resistance.

Ø	Flat width	Length	PU/SU	REF
6 mm	10 mm	300 mm	25/200	21452
8 mm	12 mm	300 mm	25/200	21453
10 mm	16 mm	300 mm	25/200	21454
12 mm	19 mm	300 mm	25/200	21455

Ø	Flat width	Length	PU/SU	REF
6 mm	10 mm	500 mm	25/200	21150
8 mm	12 mm	500 mm	25/200	21151
10 mm	16 mm	500 mm	25/200	21152
12 mm	19 mm	500 mm	25/200	21153



Capillary drain

Perforated capillary drains

Perforated capillary drains

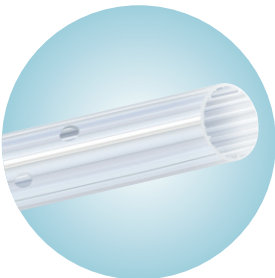
Capillary drains are made of medical grade silicone and feature an inner ribbing. They are suitable for gentle wound drainage by means of capillary suction and gravity, particularly in indications where the application of a low-vacuum is contraindicated, but sufficient drainage performance is required.



Product features:

- Soft, medical grade silicone ensures good tissue compatibility
- 180 mm of alternating perforations to avoid ingrowth of tissue
- With radiopaque stripe
- Length = 300 mm (special length of 500 mm available upon request)
- Inner ribbing enables continuous secretion flow and avoids incrustations
- The asymmetric ribbing structure ensures a high level of kink resistance.

Ø	Flat width	Length	PU/SU	REF
6 mm	10 mm	300 mm	10/360	21456
8 mm	12 mm	300 mm	10/360	21457
10 mm	16 mm	300 mm	10/360	21458
12 mm	19 mm	300 mm	10/360	21459

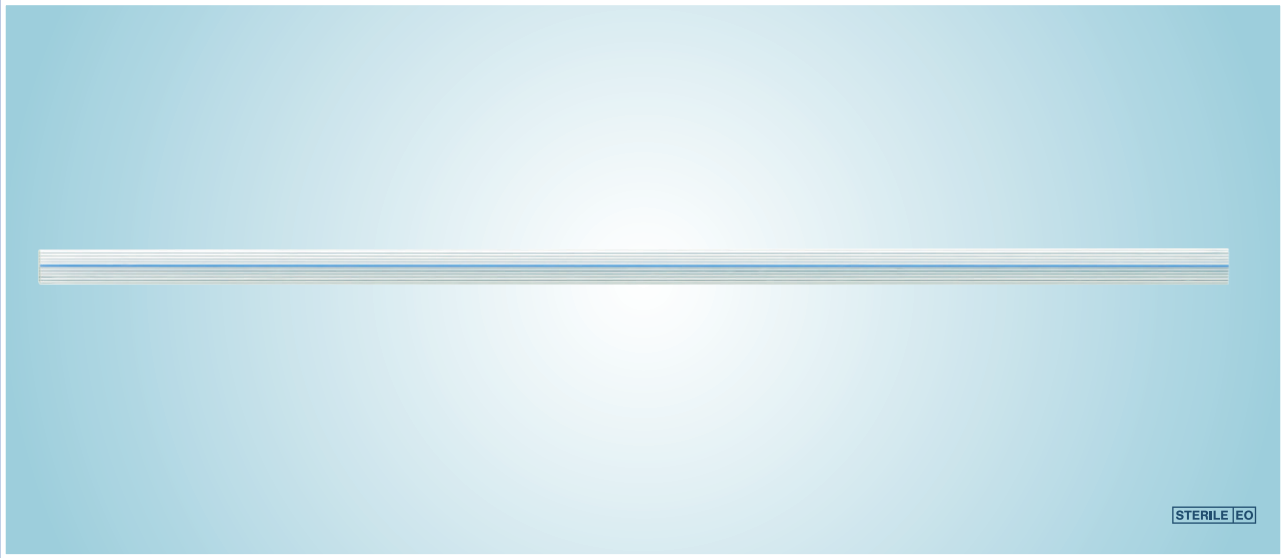


Perforated capillary drain

Flat capillary drains

Flat capillary drains

Capillary drains are made of medical grade silicone and feature an inner ribbing. They are suitable for gentle wound drainage by means of capillary suction and gravity, particularly in indications where the application of a low-vacuum is contraindicated, but sufficient drainage performance is required.

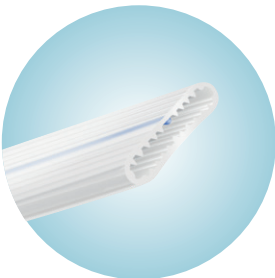


Product features:

- Soft, medical grade silicone ensures good tissue compatibility
- With radiopaque stripe
- Available in 2 lengths (300 mm / 500 mm)
- Inner ribbing enables continuous secretion flow and avoids incrustations
- The asymmetric ribbing structure ensures a high level of kink resistance.

Dia.	Flat width	Length	PU/SU	REF
6 mm	10 mm	300 mm	10/360	24450
8 mm	12 mm	300 mm	10/360	24451
10 mm	16 mm	300 mm	10/360	24452
12 mm	19 mm	300 mm	10/360	24453

Dia.	Flat width	Length	PU/SU	REF
6 mm	10 mm	500 mm	10/200	24454
8 mm	12 mm	500 mm	10/200	24455
10 mm	16 mm	500 mm	10/200	24456
12 mm	19 mm	500 mm	10/200	24457

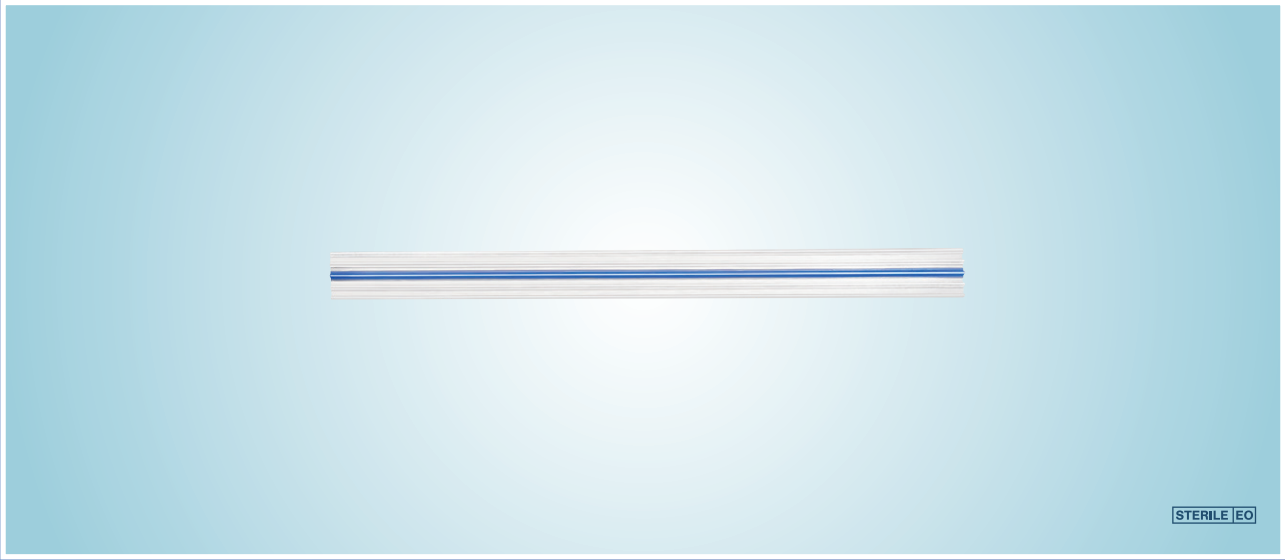


Flat capillary drain

Drainage strip

Drainage strip

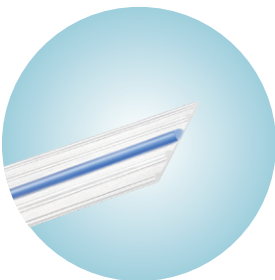
Drainage strip with capillary ribbing for gentle wound drainage by means of capillary suction or gravity. The drainage strip is used to hold the wound open and drain secretions. It is ideal for use in the fields of plastic surgery, hand and foot surgery, ENT surgery and oral and maxillofacial surgery.



Product features:

- Soft, medical grade silicone ensures good tissue compatibility
- With radiopaque stripe
- With inner ribbing for effective drainage
- Helps to keep wounds open and to evacuate secretion

Width	Length	PU/SU	REF
8 mm	100 mm	25/25	21060

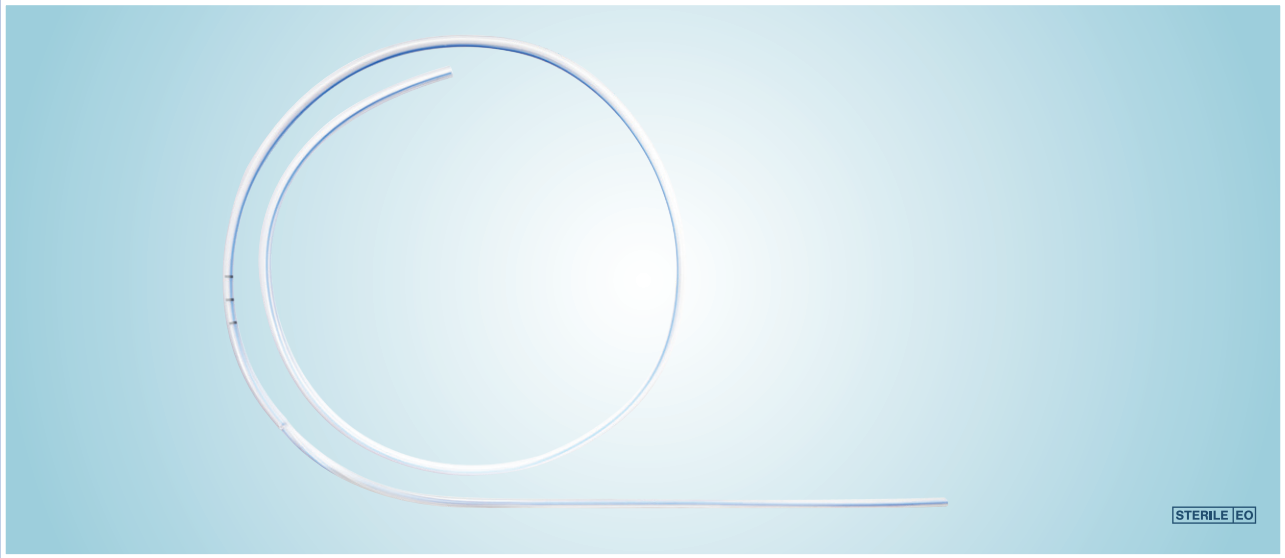


Drainage strip

Channel drains  
without trocar

Channel drains without trocar

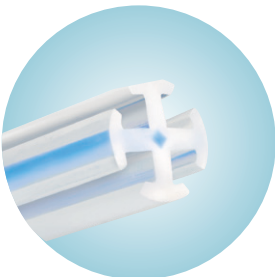
Cross-profile drain made of silicone with cross-shaped, slotted drain profile for open or half-open drainage of wound secretion.



Product features:

- Soft, medical grade silicone ensures good tissue compatibility
- With radiopaque stripe
- Kink resistant thanks to channel structure
- 4 drainage channels ensure continuous secretion flow and avoid incrustations
- Easy to remove thanks to low incidence of tissue ingrowth
- Length markings facilitate repositioning
- Transparent drain tube allows for easy visual inspection

Ch.	Total length	Length of drainage channels	PU/SU	REF
10	1100 mm	300 mm	10/10	<b>24458</b>
15	1100 mm	300 mm	10/10	<b>24468</b>
19	1100 mm	300 mm	10/10	<b>24472</b>
21	1100 mm	300 mm	10/10	<b>24469</b>
24	1100 mm	300 mm	10/10	<b>24470</b>
27	1100 mm	300 mm	10/10	<b>24471</b>



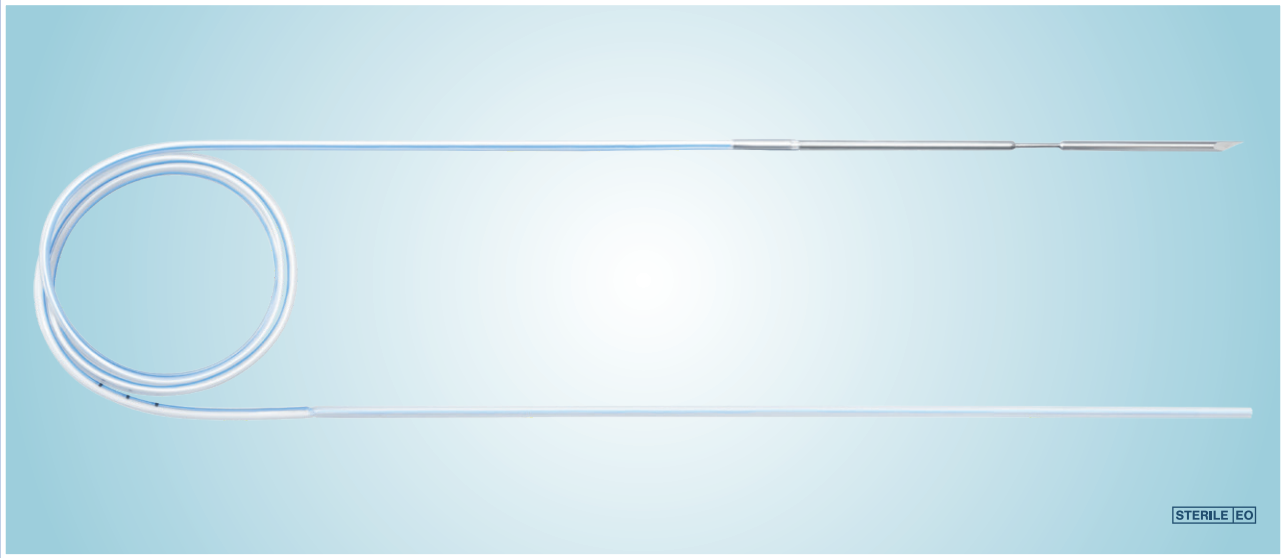
Channel drain



Channel drains  
with trocar

Channel drains with trocar

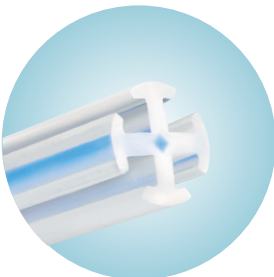
Channel drain made of silicone with cross-shaped, slotted drain profile and preconnected single-use guide needle (trocar) for optimal positioning. These drains are used for open and half-open drainage of wound secretion.



Product features:

- Made of soft medical grade silicone and a preconnected guiding needle (trocar) made of medical grade stainless steel
- Sharp trocar enables ideal positioning of the drain
- With radiopaque stripe
- Kink resistant thanks to channel structure
- 4 drainage channels ensure continuous secretion flow and avoid incrustations
- Easy to remove thanks to low incidence of tissue ingrowth
- Length markings facilitate repositioning
- Transparent drain tube allows for easy visual inspection

Ch.	Total length	Length of drainage channels	PU/SU	REF
10	1100 mm	300 mm	20/40	24384
15	1100 mm	300 mm	20/40	24385
19	1100 mm	300 mm	20/40	24386
21	1100 mm	300 mm	20/40	24387
24	1100 mm	300 mm	20/40	24388
27	1100 mm	300 mm	20/40	24389

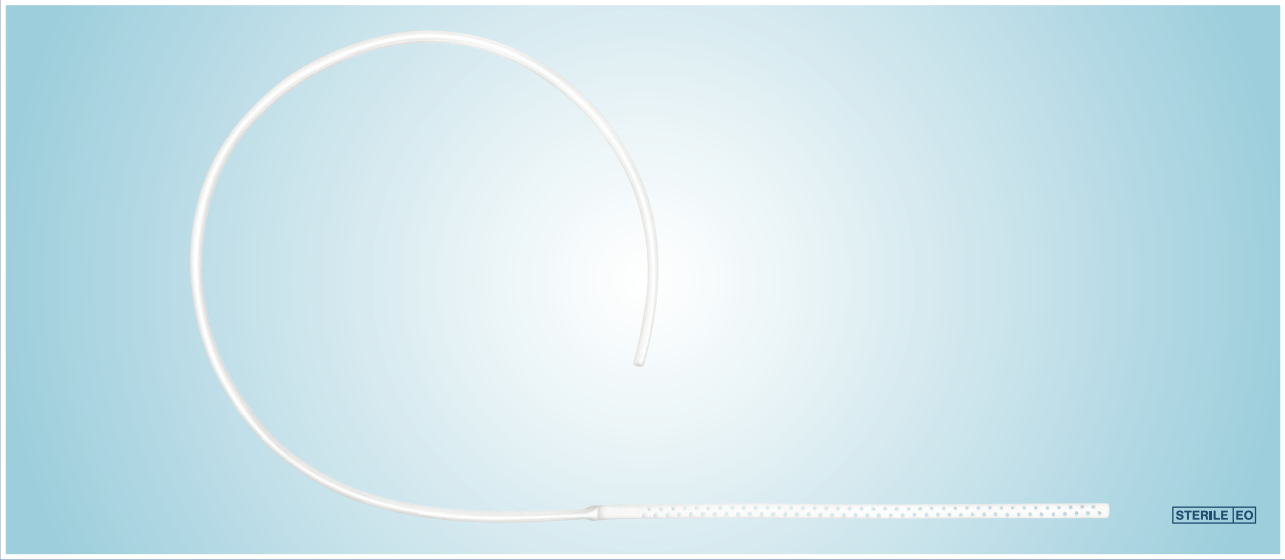


Channel drain

Flat drains

Flat drains

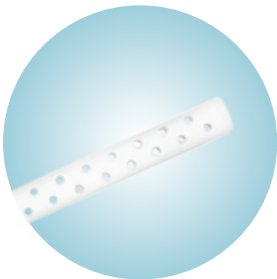
Flat drains made of medical grade silicone are used for open and half-open wound drainage by means of gravity and allow a small wound opening thanks to their flat shape.



Product features:

- Soft, medical grade silicone ensures good tissue compatibility
- Fully perforated, with atraumatic openings
- Fully radiopaque
- Flat drain length: 200 mm
- Drain body: 15 Ch., length = 600 mm
- Inner ribbing prevents it from collapsing even at higher pressures or when a vacuum is applied

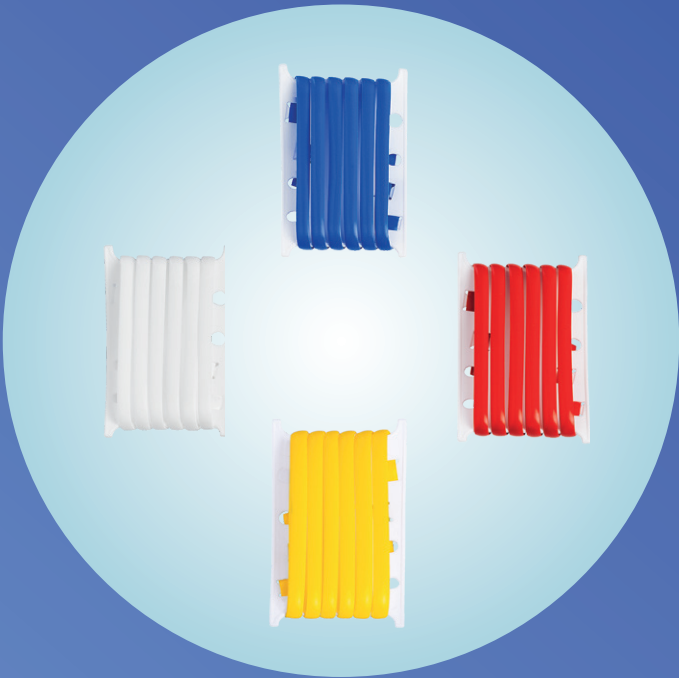
Flat drain			Drain body		PU/SU	REF
Width	Height	Length	Ch.	Length		
4 mm	3 mm	200 mm	15	600 mm	10/70	21080
7 mm	3 mm	200 mm	15	600 mm	10/70	21081
10 mm	4 mm	200 mm	15	600 mm	10/70	21082
13 mm	5 mm	200 mm	15	600 mm	10/70	21083



Flat drain

**PRIMEDILOOP®**

**PRIMEDILOOP® vessel loops made of silicone are an efficient aid during surgery. They allow rapid tying off, snaring and marking of arteries, veins, ureters and tendons.**



- COLOUR-CODED:**

PRIMEDILOOP® vascular loops are available in four different colours (blue, red, yellow and white), which ensure simple identification during the intervention.
- MATERIAL QUALITY:**

PRIMEDILOOPS® are biocompatible, latex-free and radio-paque. The smooth surface does not react with the tissue and stretches evenly.
- GENTLE CROSS-SECTION DESIGN:**

The oval cross-section of the loops is particularly gentle as it distributes the pressure across a larger surface area. This allows it to rest sleekly against the snared tissue.
- AREAS OF APPLICATION:**

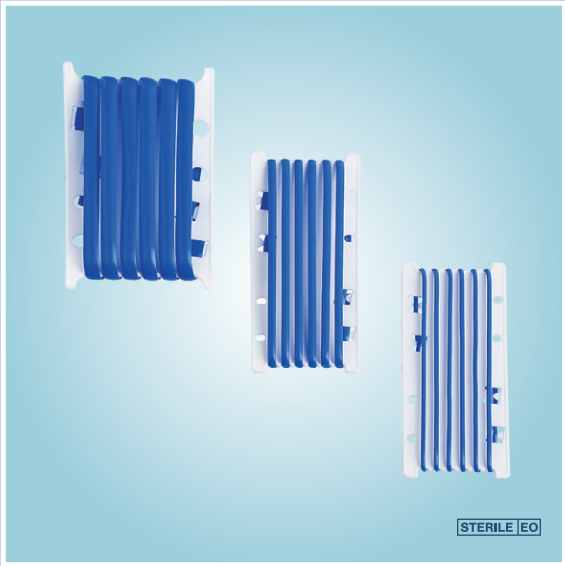
General vascular surgery, cardiothoracic surgery, neurosurgery and urology.



PRIMEDILOOP® vessel loops, white

- Used for marking nerves and tendons
- Radiopaque
- Oval cross-section shape ensures optimal distribution of pressure
- Tissue-compatible material
- Stretches evenly

Size	Measurements	Length	PU	REF
Super-Maxi	5.0 x 1.5 mm	47.5 cm	10 x 2 pieces	<b>20408</b>
Maxi	2.5 x 1.2 mm	47 cm	10 x 2 pieces	<b>20404</b>
Mini	1.5 x 1.0 mm	48 cm	10 x 2 pieces	<b>20400</b>



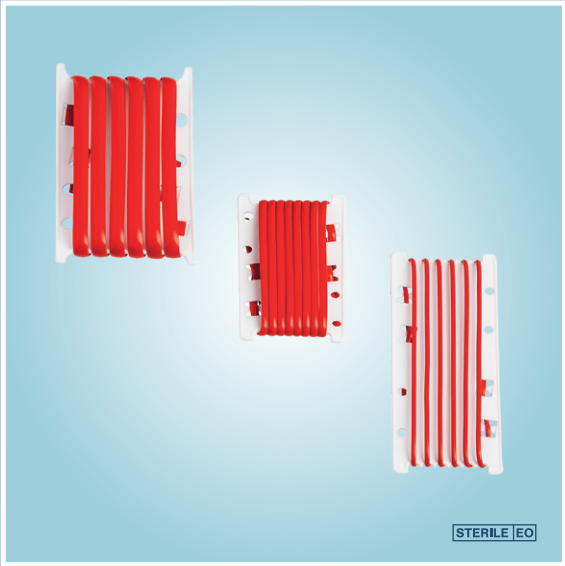
PRIMEDILOOP® vessel loops, blue

- Used to mark veins
- Radiopaque
- Oval cross-section shape ensures optimal distribution of pressure
- Tissue-compatible material
- Stretches evenly

Size	Measurements	Length	PU	REF
Super-Maxi	5.0 x 1.5 mm	47.5 cm	10 x 2 pieces	<b>20411</b>
Maxi	2.5 x 1.2 mm	47 cm	10 x 2 pieces	<b>20407</b>
Mini	1.5 x 1.0 mm	48 cm	10 x 2 pieces	<b>20403</b>



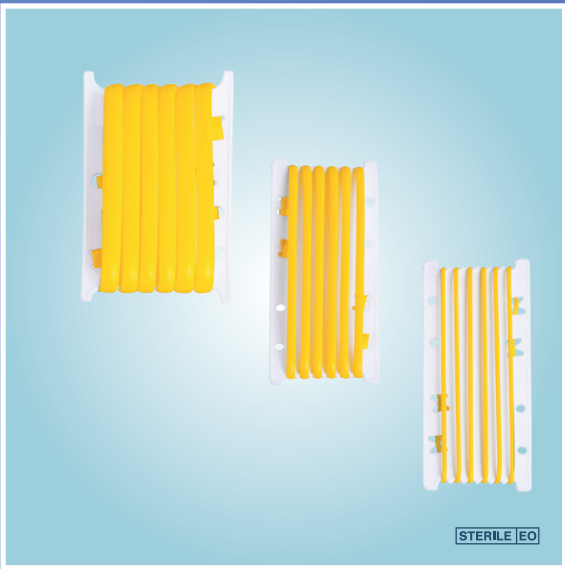
Detail Loop



PRIMEDILOOP® vessel loops, red

- Used to mark arteries
- Radiopaque
- Oval cross-section shape ensures optimal distribution of pressure
- Tissue-compatible material
- Stretches evenly

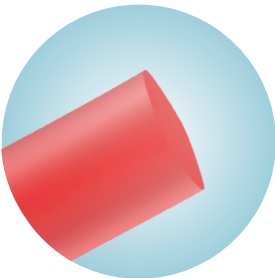
Size	Measurements	Length	PU	REF
Super-Maxi	5.0 x 1.5 mm	47.5 cm	10 x 2 pieces	<b>20410</b>
Maxi	2.5 x 1.2 mm	47 cm	10 x 2 pieces	<b>20406</b>
Mini	1.5 x 1.0 mm	48 cm	10 x 2 pieces	<b>20402</b>



PRIMEDILOOP® vessel loops, yellow

- Used to mark ureters
- Radiopaque
- Oval cross-section shape ensures optimal distribution of pressure
- Tissue-compatible material
- Stretches evenly

Size	Measurements	Length	PU	REF
Super-Maxi	5.0 x 1.5 mm	47.5 cm	10 x 2 pieces	<b>20409</b>
Maxi	2.5 x 1.2 mm	47 cm	10 x 2 pieces	<b>20405</b>
Mini	1.5 x 1.0 mm	48 cm	10 x 2 pieces	<b>20401</b>

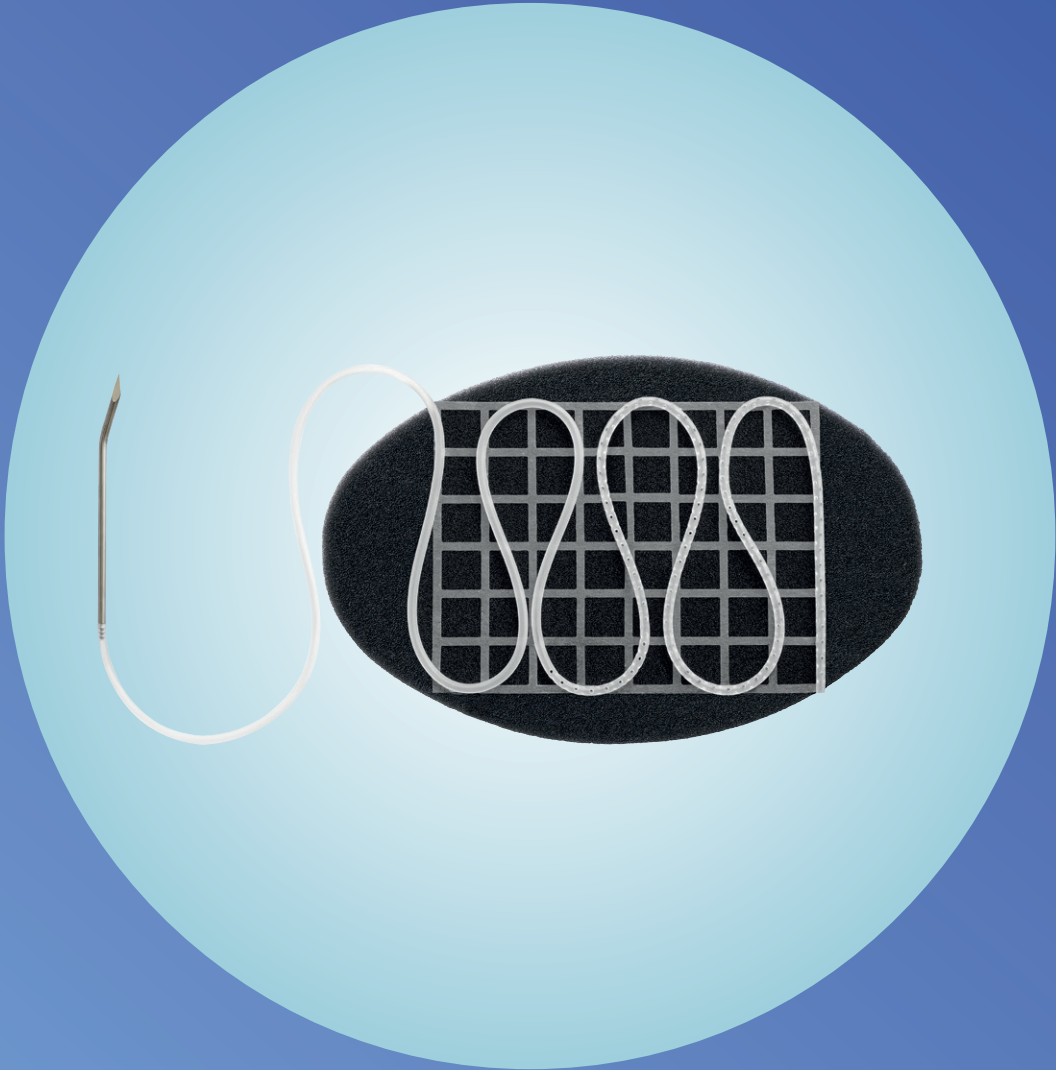


Detail Loop



**PLV wound products**

Negative pressure or vacuum therapy is an established treatment method. The PLV range offers a wide range of products for different forms of this treatment method and different areas of application.



PLV ProVac

PLV ProVac wound drainage systems combine vacuum sealing and wound closure. This closed vacuum therapy offers several advantages:

- Accelerated wound healing
- Early mobilisation of patients
- Minimisation of skin complaints
- Easy implementation of delayed wound closure via pretensioning of the skin
- Simplified application of the vacuum therapy in difficult locations, e.g., the anal region
- Minimisation of superficial scarring as far as possible

We offer systems for two different fields of application:

for  
abdominal treatment  
(PLV ProVac Abdomen)

for treatment of  
soft tissue wound  
(PLV ProVac / PLV ProVac S)

### PLV ProVac Abdomen

#### PLV ProVac Abdomen

**Peritonitis** is one of the most common infections in abdominal surgery. It may be the result of perforation of a hollow organ like the stomach, small intestine or bowel during surgery or, in other cases, it may develop postoperatively.

Its treatment is based on three steps:

- Removal the source of infection
- Reduction of the bacterial burden
- Prevention of persistence or recurrence of infection

Negative pressure wound therapy (NPWT) is an established method in the treatment of abdominal sepsis. However, prolonged use of NPWT may lead to non-closure of the abdominal fascia and development of further complications such as ventral hernias.

This led to the development of the innovative ProVac closed cavity vacuum sealing method, a modified version of the standard NPWT approach.

A combination with every commercially available NPWT device is enabled via the **ProVac universal adapter**.

Application of **ProVac systems** is a promising alternative for the treatment of peritonitis using NPWT. The main advantage is the prevention of fascial retraction during therapy compared to conventional open abdomen management or classic NPWT in abdominal sepsis.

## PLV ProVac Abdomen

### PLV ProVac Abdomen

**Negative pressure or vacuum therapy** is an established method for treatment of the open abdomen and is employed as a temporary abdominal wall closure. In cases of peritonitis in particular, it allows thorough cleaning of the wound cavity and thus a reduction of the intestinal oedema. Compared with standard open abdominal treatment, it offers two considerable advantages:

- The fascia closure rate has been improved significantly (57–84% vs 18–34%)<sup>1</sup>
- Reduction in the development of intestinal fistulae

Despite these advantages, the number of patients for which it is not possible to close the abdominal wall completely is still too high.

This results in:

- Extended stays in hospital
- Considerable patient stress
- Development of variety of complications
- Formation of incisional hernia
- Follow-up operations

A lack of abdominal wall closure is also associated with higher patient morbidity.

The combination of vacuum sealing and programmed lavage offers several advantages:

- Fascial and skin closure within the course of every programmed lavage
- Prevention of abdominal fascia retraction
- Early mobilisation of patients
- Minimisation of skin complaints
- Effective cleaning of the abdominal cavity
- Removal of redundant liquid and reduction of bowel oedema

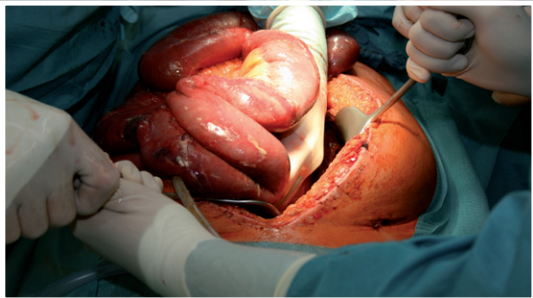
This idea was expanded to develop closed vacuum therapy in the abdominal cavity, a modified version of traditional vacuum therapy.

<sup>1</sup> Heller L, Levin SL, Butler CE. Management of abdominal wound dehiscence using vacuum assisted closure in patients with compromised healing. Am J Surg 2006; 191: 165-172; Perez D, Wildi S, Demartines N, Bramkamp M, Koehler C, Clavien PA. Prospective evaluation of vacuum-assisted closure in abdominal compartment syndrome and severe abdominal sepsis. J Am Coll Surg 2007; 205: 586-592; Quyn AJ, Johnston C, Hall D, Chambers A, Arapova N, Ogston S, Amin AI. The open abdomen and temporary abdominal closure systems - historical evolution and systematic review. Colorectal Dis 2012; 14: e429-438. doi: 10.1111/j.1463-1318.2012.03045.x; Tremblay LN, Feliciano DV, Schmidt J, Cava RA, Tchorz KM, Ingram WL, Salomone JP, Nicholas JM, Rozycki GS. Skin only or silo closure in the critically ill patient with an open abdomen. Am J Surg 2001; 182: 670-675; Miller RS, Morris JA Jr, Diaz JJ Jr, Herring MB, May AK. Complications after 344 damage-control open celiotomies. J Trauma 2005; 59: 1365-1374

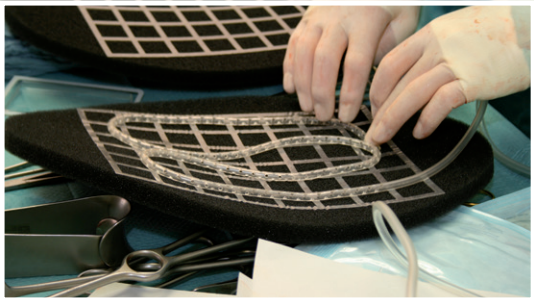


PLV ProVac  
Abdomen

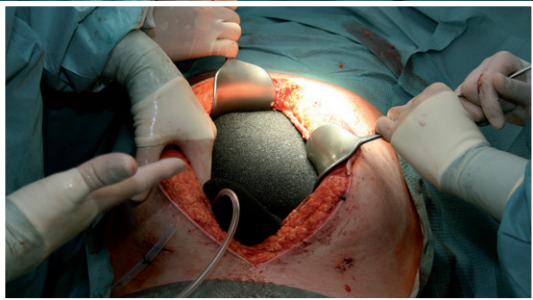
Application:



1. Cleaning of the abdominal cavity (lavage)



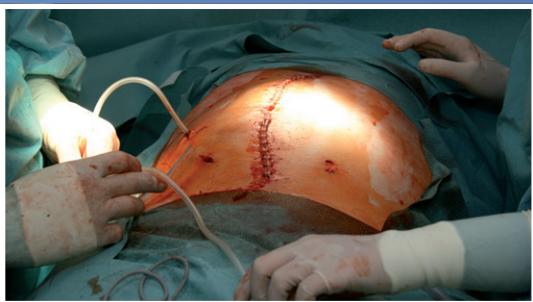
2. Adaptation of wound foams to suit findings, removal of protective films and positioning of drains on adhesive meshes.



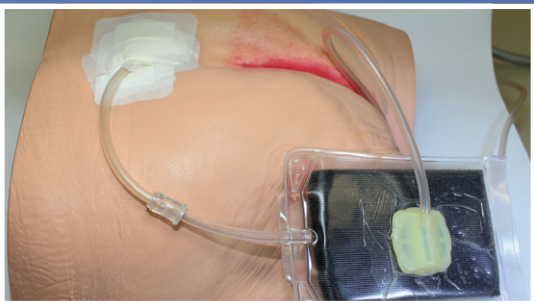
3. Application of intestinal protective film and positioning of folded wound foams in abdominal cavity. Lateral routing out of drain with help of trocar.



4. In contrast to “traditional” vacuum therapy, the fascia and skin of the abdominal wall are now closed over the foam.



5. Closed abdominal wall with laterally routed out drain. Closed tight with foil, hydrocolloid or foam dressings. Removal of trocar from drain.



6. Connection of drain to PLV universal adapter, opening of front side of universal adapter for connection of suction connector and then activation of vacuum.

Further treatment: The closed vacuum therapy system should be replaced after 3-4 days. Depending on the findings in the abdominal cavity, the treatment can be continued with fresh foam or the wound closed without foam.



PLV ProVac  
Abdomen

PLV ProVac Abdomen

PLV ProVac Abdomen is suitable for abdominal treatment with closed cavity vacuum sealing (treatment of peritonitis).



PLV ProVac Abdomen

- 2 PLV ProVac Abdomen wound foams (oval, with adhesive grid), 380 x 250 x 15 mm)
- 2 silicone soft drains with trocar, 18 Ch. (total length = 2,000 mm, length of cross perforation = 900 mm)
- 1 PLV universal adapter
- 1 PLV Y-connector
- 1 intestinal protective film (600 x 800 mm)
- 3 PLV sealing film

PU/SU	REF
1 set	24446

PLV ProVac

Skin and soft tissue infection and formation of an abscess is a common surgical problem.

The treatment of choice is incision of the abscess and open wound treatment. This often results in long periods of wound treatment, leaving patients uncomfortable and unable to work. Negative pressure wound therapy (NPWT) is an established method in wound conditioning. However, NPWT still results in long periods until skin closure, particularly in case of large wounds.

This led to the development of the innovative ProVac closed cavity vacuum sealing method, a modified version of the standard NPWT approach.

Combination with every commercially available NPWT device is enabled via the **ProVac universal adapter**.

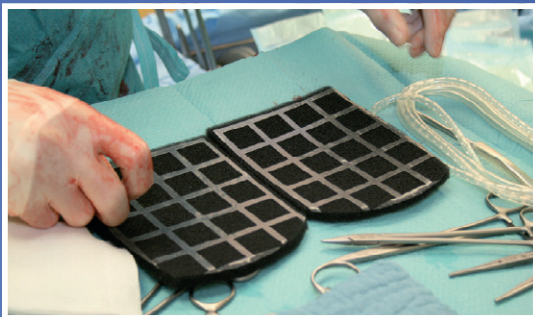
Application of **ProVac systems** is a promising alternative for open wound treatment of large soft tissue infections using NPWT. The main advantage is early skin closure and reduction of treatment time compared to conventional open wound management or classic NPWT.

The combination of vacuum sealing and primary wound closure offers several advantages:

- Accelerated wound healing
- Minimisation of superficial scarring as far as possible
- Easy implementation of delayed wound closure via pretensioning of the skin
- Simplified application of the vacuum therapy in difficult locations, e.g., the anal region

Sealing films for classic vacuum therapy often do not have enough sufficient adhesive effect, especially in the anal region. **PLV ProVac** avoids this by closing the skin over the foam. The connection via the **ProVac universal adapter** enables fixation of the connector on easily accessible body areas.

Application:



1. Adaptation of PLV ProVac wound foams with adhesive meshes to the respective findings and removal of protective films.



2. Positioning of the drain(s) on the adhesive mesh.



3. Folding of the foams and introduction of the set into the wound cavity. Lateral routing out of drain with help of trocar.



4. Closure of wound and sealing with film, hydrocolloid or foam dressings. Removal of trocar from drain.



5. Connection of drain to PLV universal adapter, opening of front side of universal adapter for connection of suction connector and then activation of vacuum.

Further treatment: The closed vacuum therapy system should be replaced after 3-5 days. Depending on the findings in the wound cavity, the treatment can be continued with fresh foam or the wound closed without foam.



PLV ProVac

PLV ProVac is suitable for the treatment of soft tissue wounds and abscesses with closed cavity vacuum sealing.



PLV ProVac

- 2 PLV ProVac wound foams (square, with adhesive grid, 310 x 240 x 10 mm)
- 2 silicone soft drains with trocar, 18 Ch. (total length = 2,000 mm, length of cross perforation = 900 mm)
- 1 PLV universal adapter
- 1 PLV Y-connector
- 1 intestinal protective film (600 x 800 mm)

PU/SU	REF
1 set	24448

PLV ProVac S

PLV ProVac S is suitable for the treatment of small soft tissue wounds and abscesses with closed cavity vacuum sealing.



PLV ProVac S

- 2 PLV ProVac wound foams (square, with adhesive grid, 100 x 150 x 10 mm)
- 1 silicone soft drain with trocar, 14 Ch. (total length = 1,000 mm, length of cross perforation = 400 mm)
- 1 PLV universal adapter
- 1 PLV Y-connector
- 1 intestinal protective film (600 x 800 mm)

PU/SU	REF
1 set	24447



PLV universal  
adapter

PLV universal adapter

The PLV universal adapter is a specially developed product in the PLV range which enables a combination of primary wound closure with the different market-relevant vacuum therapies.



PLV universal adapter

- With universal connector for safe connection of a 6-18 Ch. drain

PU/SU	REF
5 pieces	24394

PLV Y-connector

PLV Y-connector for connection of 2 drains.



PLV Y-connector

- With 2 universal connectors for safe connection of two 6-18 Ch. drains

PU/SU	REF
5 pieces	24437

PLV fistula adapter sets

PLV fistula adapter sets

The introduction of negative pressure wound therapy has improved **open abdomen** treatment in a wide range of ways. Unfortunately, the handling of **intestinal fistulae** remains a serious problem. Suction, applied via a sponge to the wound surface, often results in enlargement of the fistula or eventration of the mucosa. In addition, viscous stool can obstruct the sponge, resulting in separation of the sponge and wound surface. The suction becomes insufficient and may lead to contamination or infection of the wound.

Although several drainage systems using negative pressure wound therapy have been published, none has yet proven universally reliable. In the majority of cases, time-consuming customisations are required.

This was the reason for our development of four new types of fistula adapters for the management of enteroatmospheric fistulae in cooperation with doctors at University Hospital Magdeburg.



The original adapter with a height of 30 mm has an inner diameter of 15 mm. The lower brim transfers the negative pressure to the wound preventing slippage. The upper brim serves for fixation of an ostomy bag. The height of the adapter is adjusted to the usual thickness of the negative pressure wound therapy sponge.

There is also now a 60-mm-high adapter with an inner diameter of 15 mm available for the treatment of deep fistulae.

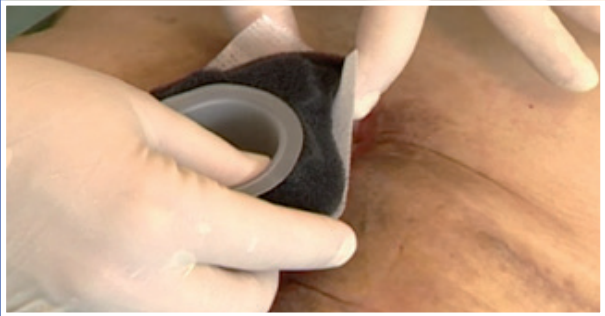
An adapter with a height of 30 mm and an inner diameter of 30 or 45 mm can be used for the management of large individual fistulae or multiple small fistulae in close vicinity. Thanks to its flexibility, it can also be fixed in an oval shape.

PLV fistula adapter  
sets

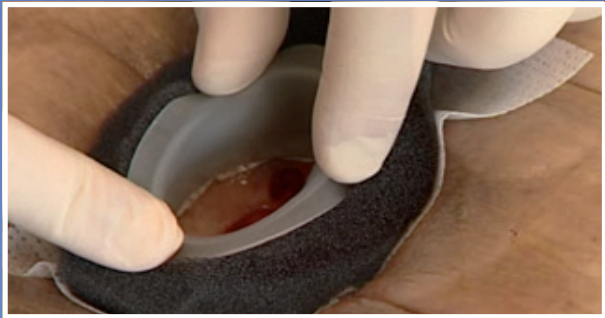
Application:



1. Multiple small intestine fistulae in a "Frozen abdomen"



2. Following cleaning of the wound surface, the size of the fistula and its distance from the wound margin are determined. A silicone dressing and wound foam are then cut to size and furnished with an opening at the measured position for the fistula adapter (narrow rim upwards, broad rim downwards).



3. The components are introduced into the wound together with the opening directly above the fistula. The wound foam should not come into direct contact with the intestines (which is why the silicone dressing and wide edge of the adapter are positioned on the underside).



4. After a PLV film is stuck over the wound foam, a suction connector (PLV port) is applied and the film cut out over the adapter. This images shows a negative pressure bandage employing the bridge technique.



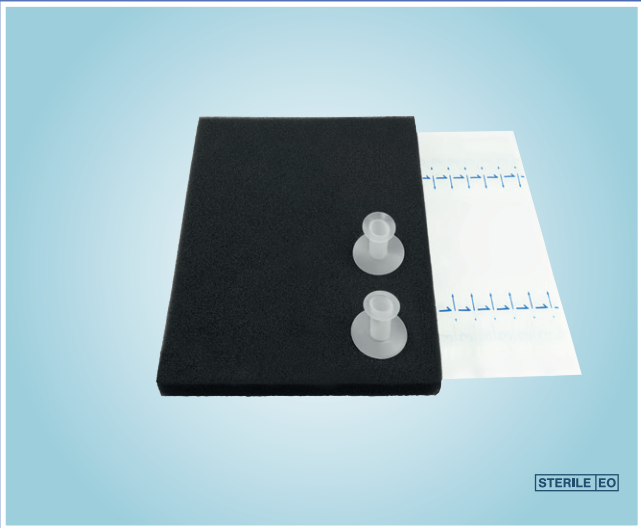
5. Verification of the correct position over the fistula, application of the stoma set and activation of the vacuum.  
Disconnecting the suction permits simple emptying and changing of the stoma bag.



PLV fistula adapter  
sets 3/15

PLV fistula adapter set 3/15 & 3/15 Plus

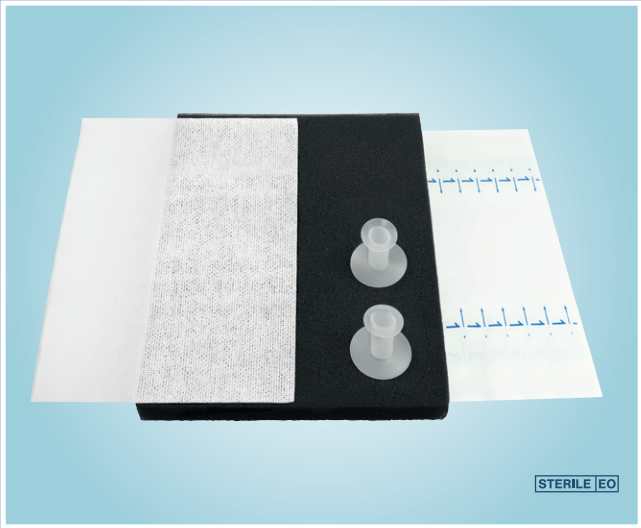
In combination with vacuum therapy, use of the fistula adapter presents a practicable and time-saving option for treating enteroatmospheric fistulae.



PLV fistula adapter set 3/15

- 2 PLV fistulae adapters 3/15 (height = 30 mm, inner diameter = 15 mm)
- 1 PLV wound foam (large-pored, anthracite, 240 x 310 x 30 mm)
- 3 PLV films (290 x 216 mm)

PU/SU	REF
1 set	24440



PLV fistula adapter set 3/15 Plus

- 2 PLV fistulae adapters 3/15 (height = 30 mm, inner diameter = 15 mm)
- 1 PLV wound foam (large-pored, anthracite, 240 x 310 x 30 mm)
- 3 PLV films (290 x 216 mm)

Plus additionally:

- 2 PLV silicone wound dressings (200 x 300 mm)

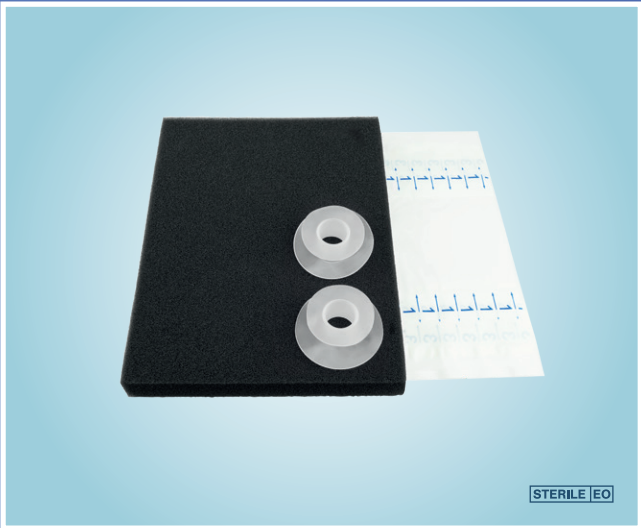
PU/SU	REF
1 set	24443



PLV fistula adapter  
sets 3/30

PLV fistula adapter set 3/30 & 3/30 Plus

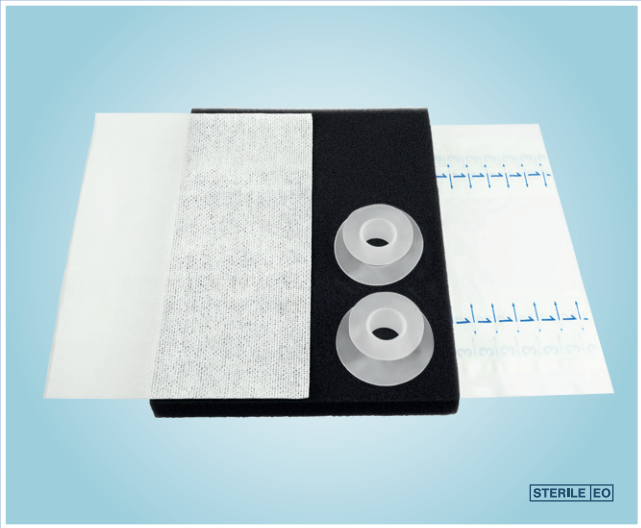
In combination with the vacuum therapy, the use of the fistula adapter presents a practicable and time-saving option for treating enteroatmospheric fistulae.



PLV fistula adapter set 3/30

- 2 PLV fistulae adapters 3/30 (height = 30 mm, inner diameter = 30 mm)
- 1 PLV wound foam (large-pored, anthracite, 240 x 310 x 30 mm)
- 3 PLV films (290 x 216 mm)

PU/SU	REF
1 set	24399



PLV fistula adapter set 3/30 Plus

- 2 PLV fistulae adapters 3/30 (height = 30 mm, inner diameter = 30 mm)
- 1 PLV wound foam (large-pored, anthracite, 240 x 310 x 30 mm)
- 3 PLV films (290 x 216 mm)

Plus additionally:

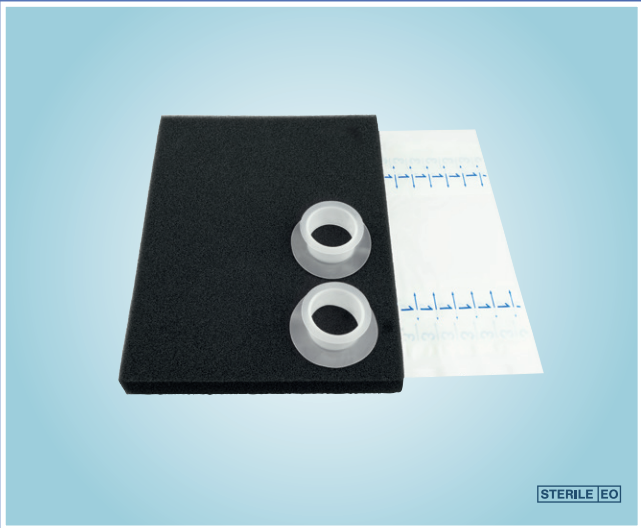
- 2 PLV silicone wound dressings (200 x 300 mm)

PU/SU	REF
1 set	24449

PLV fistula adapter  
sets 3/45

PLV fistula adapter set 3/45 & 3/45 Plus

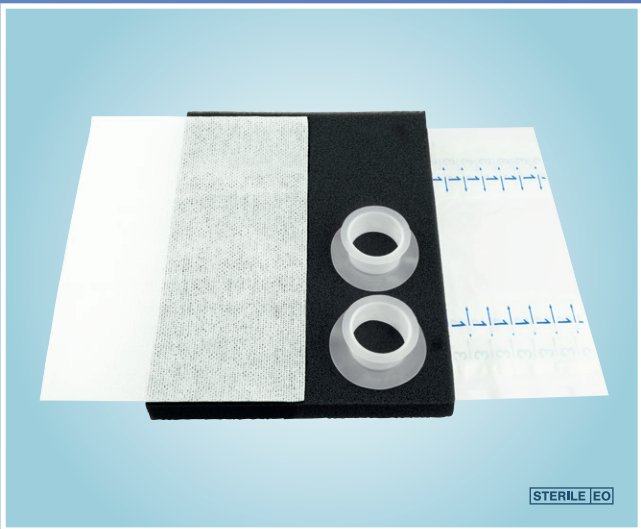
In combination with the vacuum therapy, the use of the fistula adapter presents a practicable and time-saving option for treating enteroatmospheric fistulae.



PLV fistula adapter set 3/45

- 2 PLV fistulae adapters 3/45 (height = 30 mm, inner diameter = 45 mm)
- 1 PLV wound foam (large-pored, anthracite, 240 x 310 x 30 mm)
- 3 PLV films (290 x 216 mm)

PU/SU	REF
1 set	24442



PLV fistula adapter set 3/45 Plus

- 2 PLV fistulae adapters 3/45 (height = 30 mm, inner diameter = 45 mm)
- 1 PLV wound foam (large-pored, anthracite, 240 x 310 x 30 mm)
- 3 PLV films (290 x 216 mm)

Plus additionally:

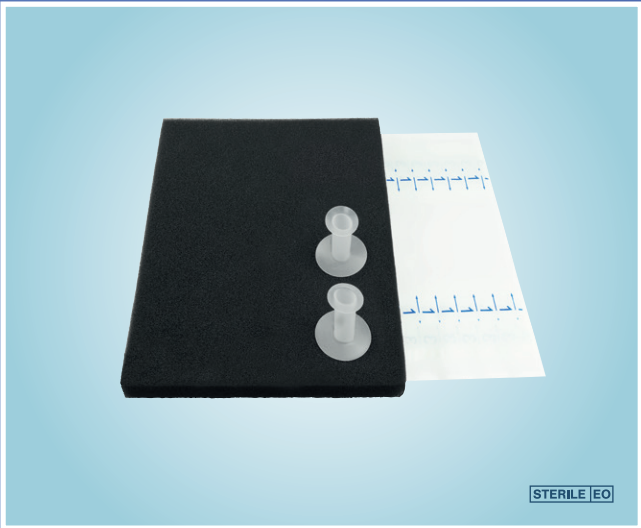
- 2 PLV silicone wound dressings (200 x 300 mm)

PU/SU	REF
1 set	24445

PLV fistula adapter  
sets 6/15

PLV fistula adapter set 6/15 & 6/15 Plus

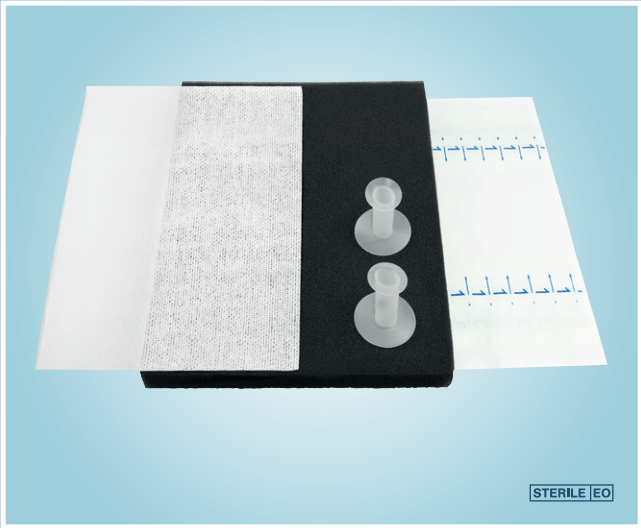
In combination with the vacuum therapy, the use of the fistula adapter presents a practicable and time-saving option for treating enteroatmospheric fistulae.



PLV fistula adapter set 6/15

- 2 PLV fistulae adapters 6/15 (height = 60 mm, inner diameter = 15 mm)
- 1 PLV wound foam (large-pored, anthracite, 240 x 310 x 30 mm)
- 3 PLV films (290 x 216 mm)

PU/SU	REF
1 set	24441



PLV fistula adapter set 6/15 Plus

- 2 PLV fistulae adapters 6/15 (height = 60 mm, inner diameter = 15 mm)
- 1 PLV wound foam (large-pored, anthracite, 240 x 310 x 30 mm)
- 3 PLV films (290 x 216 mm)

Plus additionally:

- 2 PLV silicone wound dressings (200 x 300 mm)

PU/SU	REF
1 set	24444

PLV wound foams

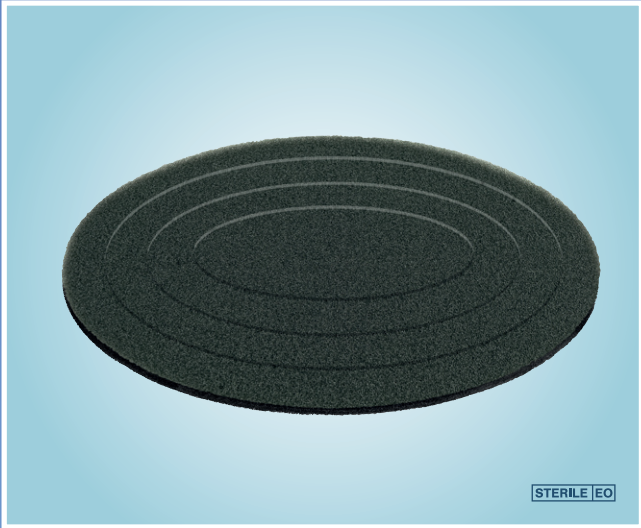
PLV wound foams are special foams for the medical treatment of large wounds. They are available in different sizes.



PLV wound foam, large-pored

- Anthracite
- Large-pored
- Square shape

Measurements	PU/SU	REF
260 x 160 x 10 mm	10/10	24401
260 x 160 x 30 mm	10/10	24403
240 x 310 x 10 mm	10/10	24405
240 x 310 x 30 mm	10/10	24407
120 x 160 x 10 mm	10/10	24431
120 x 160 x 30 mm	10/10	24432
120 x 80 x 10 mm	10/10	24435
120 x 80 x 30 mm	10/10	24436



PLV abdominal wound foam, large-pored

- Especially suited to use in the abdomen
- Anthracite
- Large-pored
- Oval shape
- With prepunched incisions for rapid cutting to sizes

Measurements	PU/SU	REF
400 x 260 x 15 mm	2/2	24434



PLV ports

PLV ports should be used in combination with a PLV fistula adapter set , a PLV ProVac set or PLV wound foams. They allow connection to a vacuum pump and generation of a vacuum.



PLV PORT SOFT

- Especially soft drainage port
- With connecting tube without connector (length= 1250 mm)

PU/SU	REF
1/10	24420



PLV PORT SOFT

- Especially soft drainage port
- With connecting tube without connector (length = 2000 mm)
- With grid clamp
- With large lock connector

PU/SU	REF
1/10	24430



PLV film

PLV films can be used in conjunction with PLV fistula adapter sets, PLV ProVac sets or PLV wound foams.



PLV film

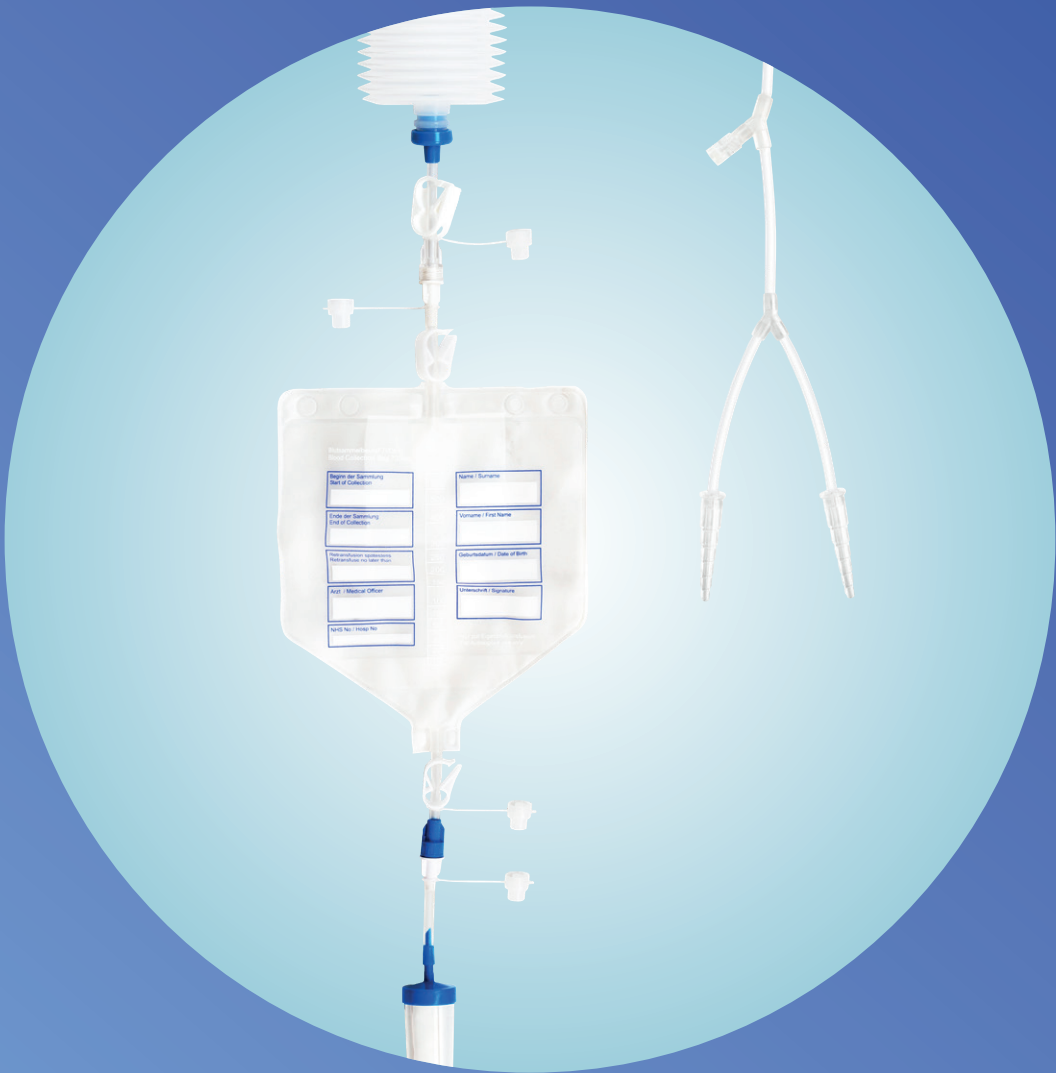
- 330 x 260 mm
- Transparent

PU/SU	REF
1/10	24421

**PRI-AUTOTRANS**  
**Autologous blood**  
**transfusion**

**PRI-AUTOTRANS**

**PRI-AUTOTRANS is a closed system for autologous blood transfusions. With the help of PRI-AUTOTRANS, the blood collected during aseptic operations may be reinfused directly back to the patient.**

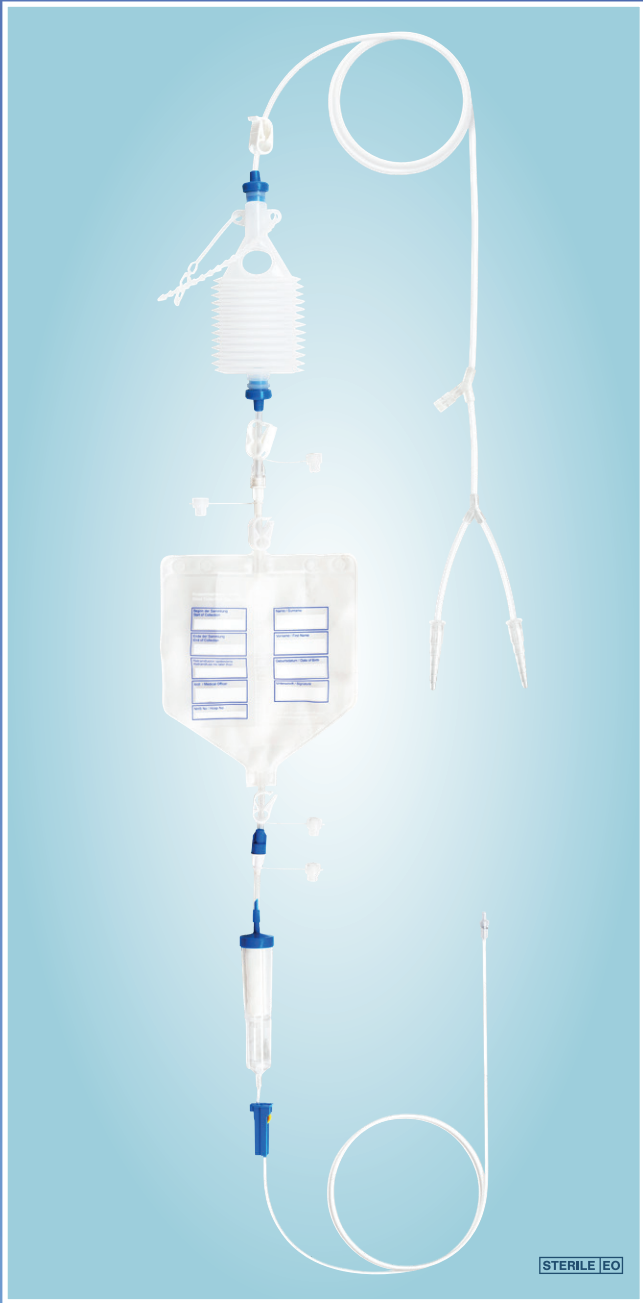


**Technical data**

- **SAVE bellows 250 ml with non-return valve**
- **Autotransfusion bag: 700 ml**
- **Blood filter: 10 µm / 40 µm**
- **Universal connector for 8-18 Ch. drains**

Autologous blood transfusion system

Closed low-vacuum system for the postoperative direct autologous trans-  
fusion (ABT) of blood.



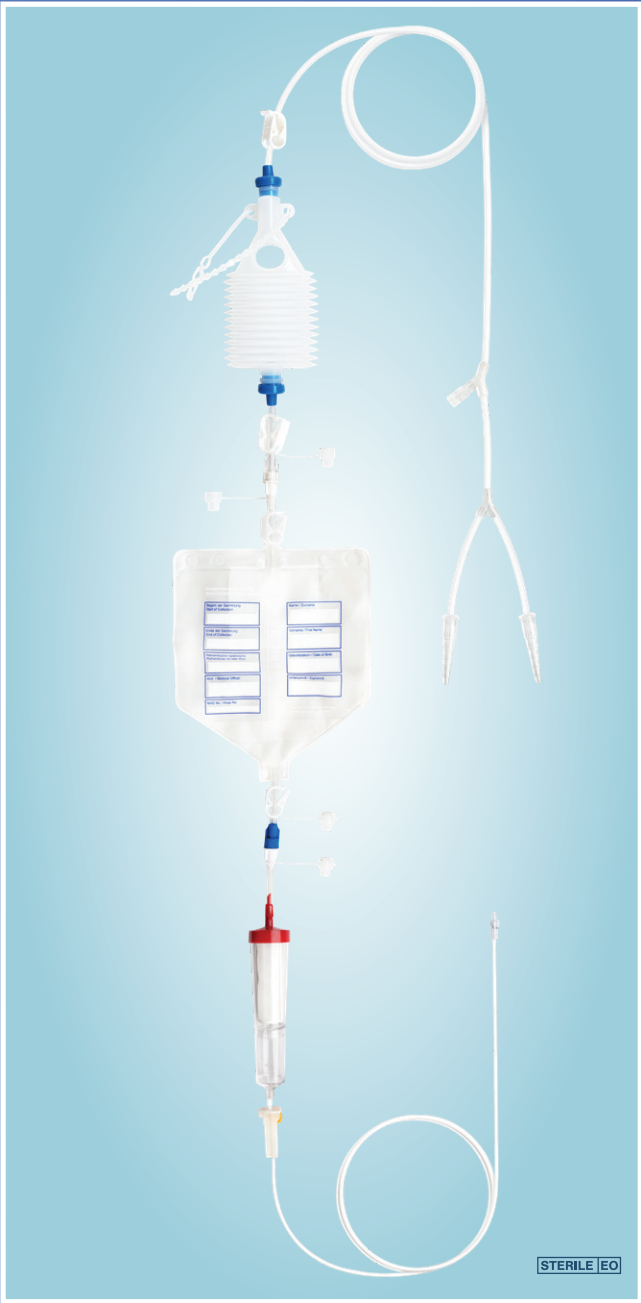
Product features

- Connecting tube with slide clamp, injection port and 2 universal connectors
- SAVE bellows
  - Volume = 250 ml
  - With non-return valve to avoid secretion backflow
- Autotransfusion bag 700 ml
- Blood filter 10 µm
- Connecting tube with Large lock connector

Blood filter	Connections	PU/SU	REF
10 µm	2 universal connectors	1/10	<b>21990</b>

Autologous blood transfusion system

Closed low-vacuum system for the postoperative direct autologous trans-  
fusion (ABT) of blood.



Product features

- Connecting tube with slide clamp, injection port and 2 universal connectors
- SAVE bellows
  - Volume = 250 ml
  - With non-return valve to avoid secretion backflow
- Autotransfusion bag 700 ml
- Blood filter 40 µm
- Connecting tube with Large lock connector

Blood filter	Connections	PU/SU	REF
40 µm	2 universal connectors	1/10	<b>21996</b>

Accessories



Blood collection bag

- 700 ml
- With integrated non-return valve
- With large lock connector

Size	PU/SU	REF
700 ml	1/10	21992



Pictograms /explanations

STERILE EO

Sterilised with ethylene oxide

PU/SU

Packaging unit / shipping unit

REF

Reference number

Ch..

French scale = Unit indicating the  
External diameter of drains ( 1 Ch. = ⅓ mm)

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Diameter

## Manufacturer

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