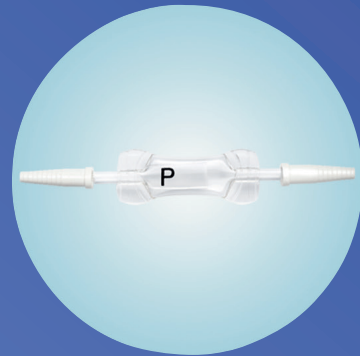


Thoracic drainage systems

PRODUCT CATALOG



primed[®]



Primed[®] 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[®] 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.

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Pleural puncture sets

Pleural effusions, in other words accumulations of air and/or fluids in the pleural cavity between the ribs and pleura, pose a risk of life-threatening impediments of cardiopulmonary functions. A one-off needle puncture for the removal of air or fluid presents an effective treatment possibility.



Areas of use:

- Removal of secretions from the pleural cavity
- Pneumothorax
- Irrigation of the pleural cavity

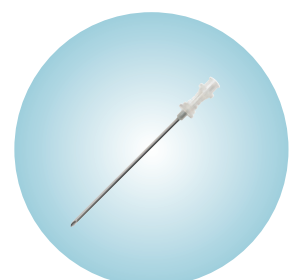
Pleural puncture set



Product features

- Drainage bag 2.000 ml
 - With hose connection (Luer-Lock connector)
 - With scale
- Extension tube with three-way valve
- Syringe (50 ml)
- Puncture needle Ch. 6 (2,1 x 80 mm)

Packaging unit	Article number
25	21105



With 1 puncture needle

Pleural puncture set



Product features

- Drainage bag 2.000 ml
 - With hose connection (Luer-Lock connector)
 - With scale
- Extension tube with three-way valve
- Syringe (50 ml)
- Puncture needle Ch. 3 (1,1 x 80 mm)
- Puncture needle Ch. 5 (1,6 x 80 mm)
- Puncture needle Ch. 6 (2,1 x 80 mm)

Packaging unit	Article number
25	21104



With 3 puncture needles

Pleural puncture set Pleura-safe®



Product features

- Drainage bag 2.000 ml with hose connection and outlet
- Radiopaque catheter (Ch.8) with integrated puncture needle (14G, 170mm) and automatic three-way valve
- Syringe (60 ml)
- Safety puncture needle (Veres needle) – blunt tip as long as no pressure is applied

Packaging unit	Article number
20	70155

Easy handling thanks to confusion-proof three-way-valve

Very safe (3 safety valves, – on puncture needle, catheter and three-way-valve)

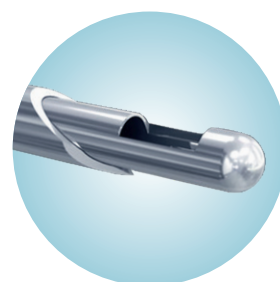
Automatic three-way-valve makes **switch-overs unnecessary**. Effusion can be aspirated with the catheter and transferred into the drainage bag simply by pressing the syringe.

Color indicator on puncture needle indicates penetration into pleural cavity

Very low risk of injury with **safety puncture needle (Veres needle)**

The system enables **aspiration** both directly via the puncture needle and via the catheter

In the case of recurrent effusions, the catheter can also be left as a 'mini-drain' for a short time, - repeated puncturing is not necessary



Veres needle

Drainage bag



Product features

- Drainage bag 2.000 ml
 - With hose connection (Luer-Lock connector)
 - With scale

Packaging unit	Article number
50	21106

OPTILINE® Thoracic Drainage Systems

OPTILINE® thoracic drainage systems are used to drain air, blood and secretions from the pleural and mediastinal cavities. They prevent sucked off air or liquids from reentering the pleural cavity or mediastinum. Thus it is possible to maintain or restore the negative pressure in the pleural space, which is the basis for the adequate expansion of the lungs. Moreover, these systems can avoid heart compression resulting from complications in the pericardium.



Areas of use:

- Tension pneumothorax
- Pneumothorax
- Haemothorax
- Haemopneumothorax
- Chylothorax
- Thoracic empyema
- Postoperatively after thoracic surgery

OPTILINE® Thoracic Drainage Systems

OPTILINE® thoracic drainage systems are classic bottle systems for the application of the tried-and-tested drainage method with underwater seal.

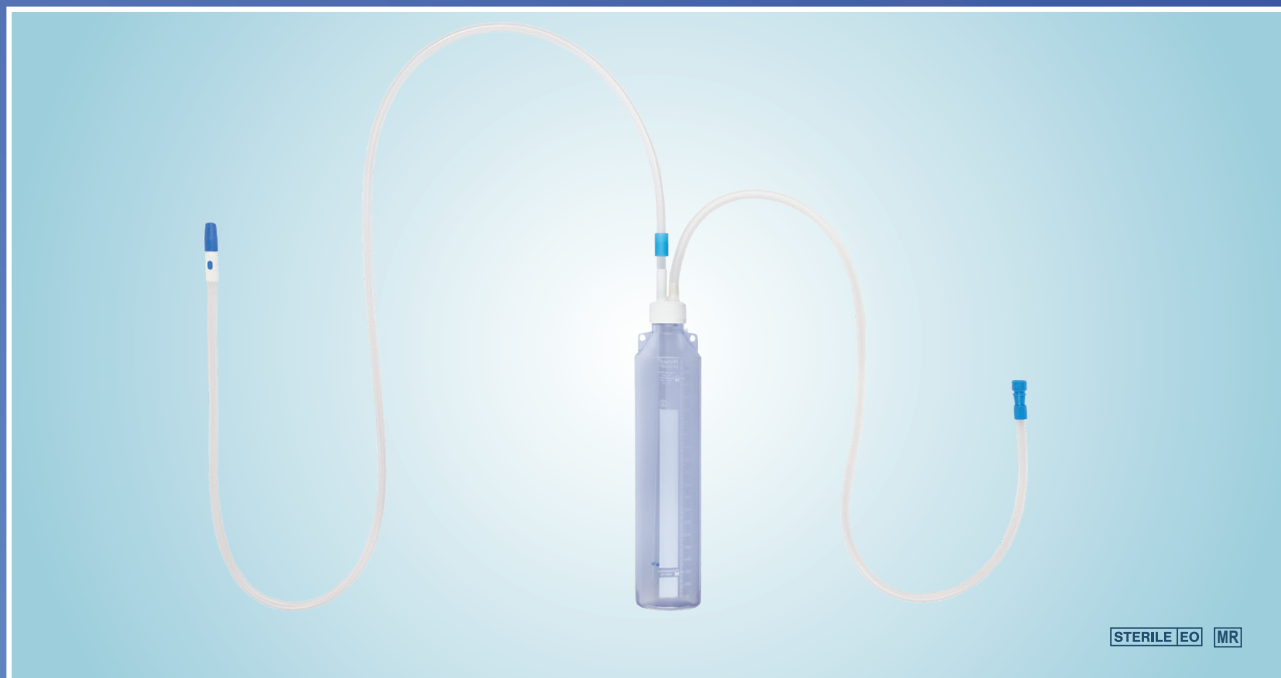
OPTILINE® thoracic drainage systems are always equipped with a 1 m vacuum hose and a 1,50 m patient hose. The standard connector on the patient hose also includes a sampling port for medical checks.

All OPTILINE® thoracic drainage bottles were designed transparent to allow a good view of all the contents and include a labelling strip offering the option of recording parameters relevant to the treatment.

PRODUCT FEATURES:

- EASY TO USE
- VISUAL CONTROL VIA TRANSPARENT THORACIC DRAINAGE BOTTLES
- EXTENSIVE RANGE
- VARIETY OF ACCESSORIES

OPTILINE® Single-bottle set

**Product features**

Water seal and secretion collection in one bottle (1.000 ml)

How the system works

Air, secretions or blood are drained off from the chest cavity by gravity drainage or via an external suction source.

A water seal serves as a non-return valve with low resistance, draining off air from the thorax via a riser pipe immersed in water or saline solution. At the same time this seal prevents the return flow of air to the chest cavity during respiration.

A mark on the riser pipe indicates the immersion depth with the optimal resistance of the water column which may be easily readjusted in case of increased liquid accumulation.

Packaging unit	Article number
15	27105



- * Transparent bottle design to enable optimal visual check



- * Easy handling



- * Labeling strip to take down control data

Double-bottle set

OPTILINE® Double-bottle set

**Product features**

Water seal bottle with lip valve (non-return protection) and a separate secretion collection bottle.

How the system works

Air, secretions or blood are drained off from the chest cavity by gravity drainage or via an external suction source.

This system features a separate collecting bottle for liquids which is located upstream the water seal chamber bottle. This bottle collects the drained off liquids while the air from the chest cavity is led to the water seal chamber bottle. Thus, the water column in the water seal bottle can be kept on a constant level regardless of the amount of drained off liquid, and a continuously low resistance towards the pleural or mediastinal cavity is provided.

The lip valve at the end of the riser pipe is an additional protection which prevents the return flow of liquids from the water seal chamber bottle, even during a temporary loss of the water seal (e.g. during recumbent patient transports). The valve is also a fistula indicator (leak indication).

Packaging unit	Article number
10	27107

Double-bottle set



* Constant vacuum in patient without readjustment

* Drained off liquid is separately visible and measurable



* A lip valve at the water seal chamber prevents the return flow of liquids and is also a leak indicator

* Easy handling

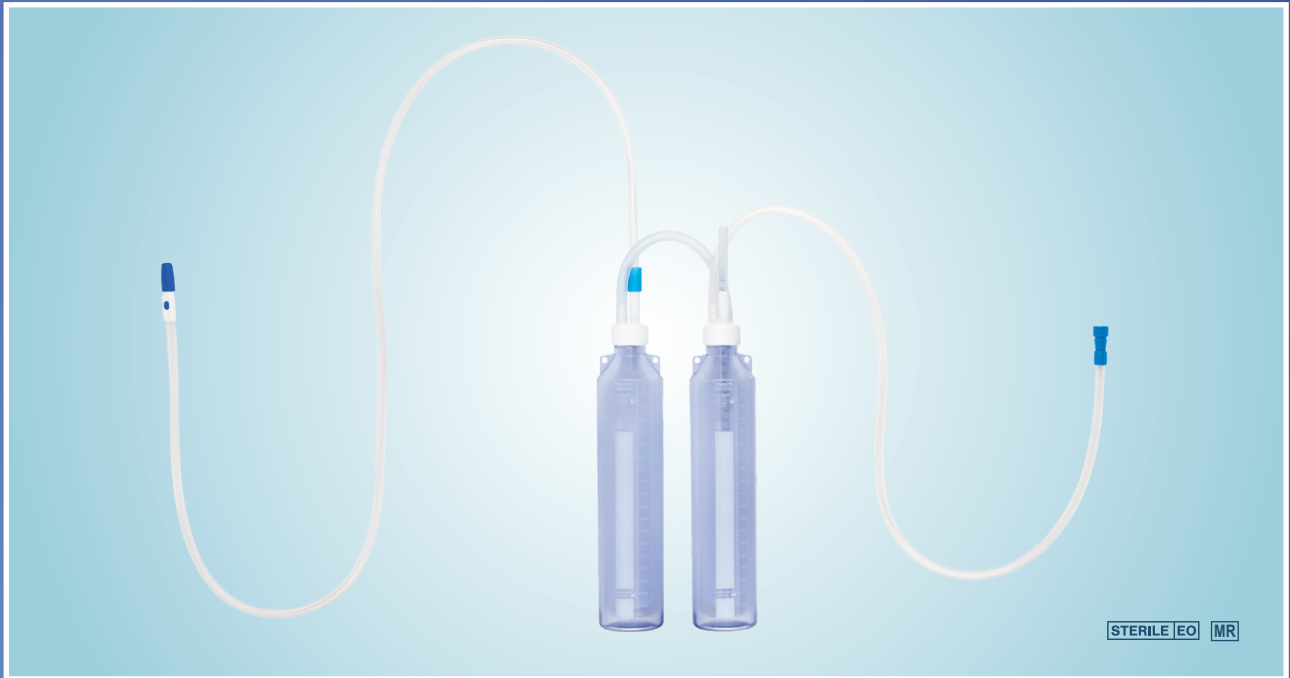


* Transparent bottle design to enable optimal visual check

* Labeling strip to take down control data

Double-bottle set PLUS

OPTILINE® Double-bottle set PLUS

**Product features**

Water seal bottle with lip valve (non-return protection) and suction control and a separate secretion collection bottle.

How the system works

Air, secretions or blood are drained off from the chest cavity by gravity drainage or via an external suction source. This system features a separate bottle which collects the drained off liquids while the drained off air is led to the water seal chamber bottle via a short tube with lip valve. Thus, the water column can be kept on a constant level regardless of the amount of drained off liquid, and a continuously low resistance towards the pleural or mediastinal cavity is provided.

A special advantage of this PLUS model is the additional pressure control which is ensured by a suction control tube. The water seal chamber bottle filled with 925 ml water or saline solution permits only a suction of up to 21 cmH₂O which corresponds to the maximum immersion depth of the water column. A higher setting on the external suction source is balanced by the opening of the suction control tube towards the external air. By moving the scaled suction control tube up and down the suction intensity can be varied and thus be adapted to the patient's requirements. In addition, the tube is equipped with a non-return protection which prevents the splashing out of liquids from the water seal chamber bottle in case of temporary overpressure (e.g. coughing of the patient).

The connecting tube to the secretion collecting bottle features also a lip valve which prevents the return flow of liquids from the water seal chamber bottle, even during a temporary loss of the water seal (e.g. during patient transports). The valve is also a fistula indicator (leak indication).

Packaging unit	Article number
10	27109

Double-bottle set PLUS



* Constant vacuum in patient without readjustment

* Suction regulation for pressure control (exceeding of determined max. pressure excluded)



* Drained off liquid is separately visible and measurable

* A lip valve at the water seal chamber prevents the return flow of liquids and is also a leak indicator

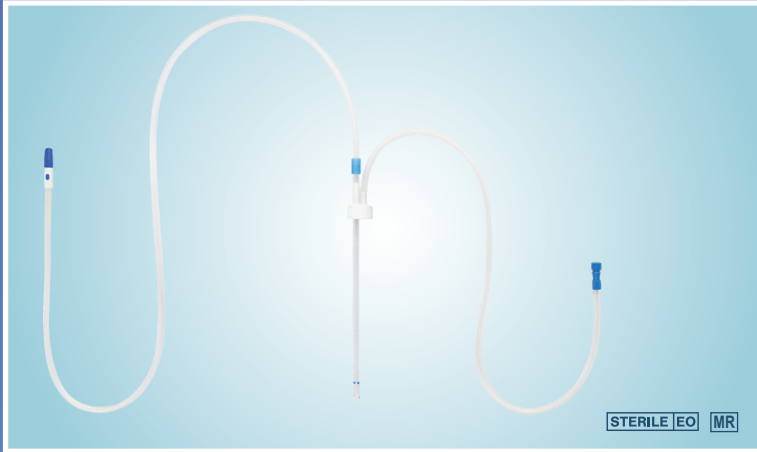


* Easy handling

* Transparent bottle design to enable optimal visual check

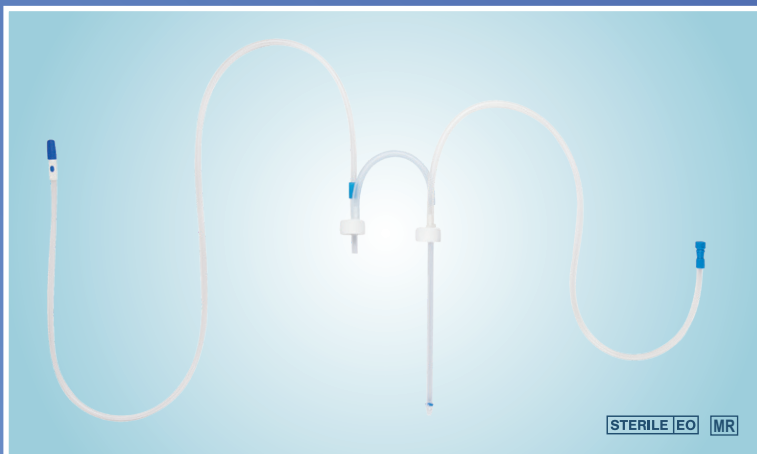
* Labeling strip to take down control data

OPTILINE® Hose systems



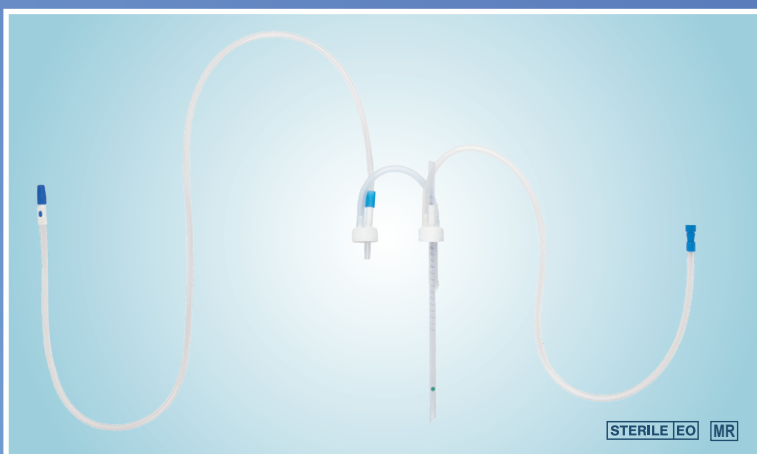
Standard Single-bottle hose system

Packaging unit	Article number
15	27104



Double-bottle hose system
with lip valve

Packaging unit	Article number
10	27106



Double-bottle hose system PLUS
with lip valve

Packaging unit	Article number
10	27108

OPTILINE® Thoracic drainage bottles



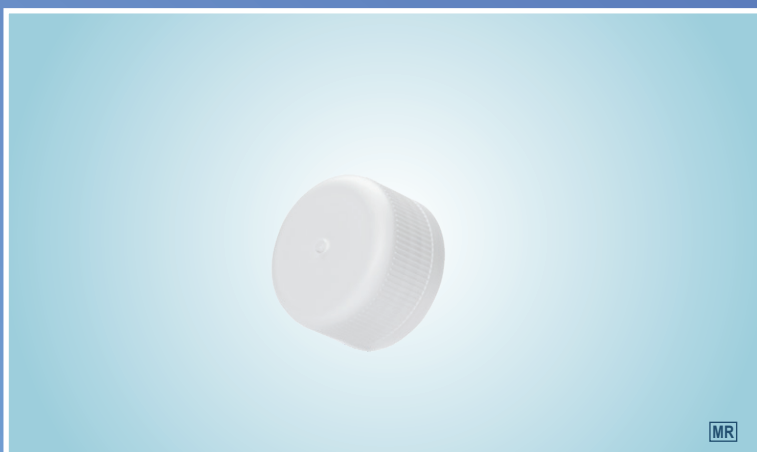
Thoracic drainage bottle 1.000 ml

Packaging unit	Article number
25	27100



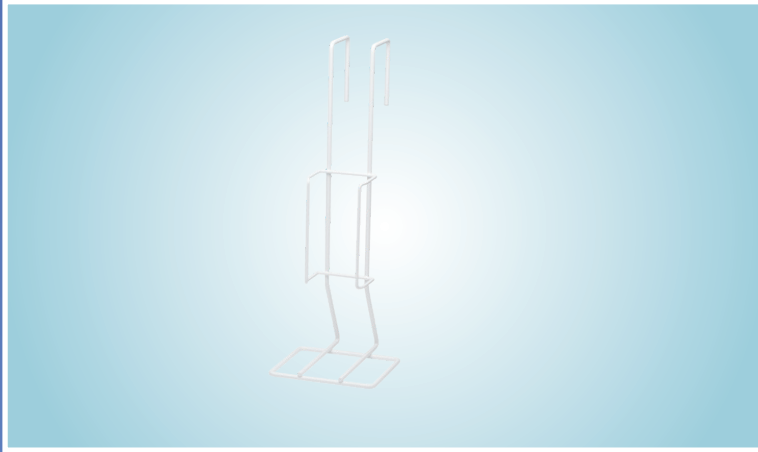
Thoracic drainage bottle 3.000 ml

Packaging unit	Article number
10	27101

Cap
for Thoracic drainage bottles

Packaging unit	Article number
25	27102

OPTILINE® bottle holder



bottle holder for single-bottle set
(1.000 ml)

Packaging unit	Article number
10	27112



bottle holder for single-bottle set
(3.000 ml)

Packaging unit	Article number
10	27115



bottle holder for double-bottle set
(2 x 1.000 ml)

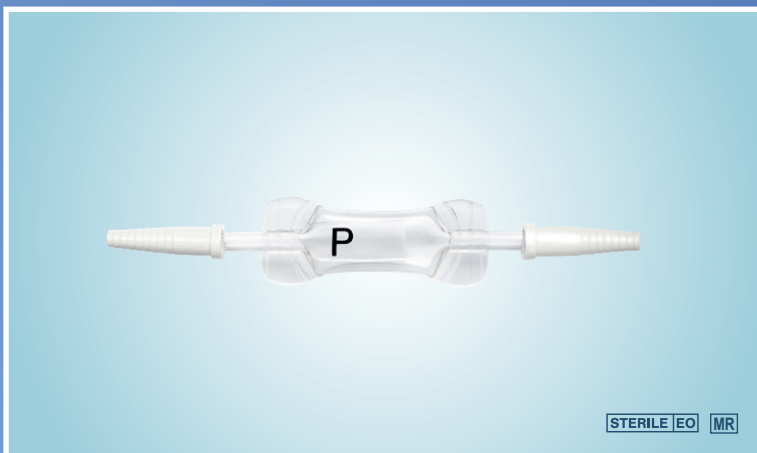
Packaging unit	Article number
10	27113

OPTILINE® Accessories



Thoracic drainage bag
(1.000 ml)

Packaging unit	Article number
25	27121



Heimlich valve

Packaging unit	Article number
20	27116

Thoracic and Trocar catheters

In conjunction with thoracic drainage systems, various thoracic and trocar catheters can be used for effective drainage.



Thoracic catheters



Product features

- 6 offset-mounted and elliptical lateral eyes guarantee safe and patient-friendly drainage
- With atraumatic tip
- Thermosensitive material
- With X-ray contrast strip for position control
- With length markings for exact positioning
- Available in straight or curved shape
- Suitable for several days of application

Ch.	Length	Shape	Packaging unit	Article number
Ch. 16	455 mm	Straight	10	21050
Ch. 20	455 mm	Straight	10	21047
Ch. 24	455 mm	Straight	10	21041
Ch. 28	455 mm	Straight	10	21042
Ch. 32	455 mm	Straight	10	21043
Ch. 36	455 mm	Straight	10	21048

Ch.	Length	Shape	Packaging unit	Article number
Ch. 20	120 + 335 mm	Curved	10	21076
Ch. 24	120 + 335 mm	Curved	10	21044
Ch. 28	120 + 335 mm	Curved	10	21045
Ch. 32	120 + 335 mm	Curved	10	21046
Ch. 36	120 + 335 mm	Curved	10	21049

Silicone thoracic catheter



Product features

- Highly flexible material properties
- High tissue tolerance
- Mit atraumatischer Spitze
- Thermosensitive material
- With X-ray contrast stip for position control
- 6 lateral elliptical openings for safe and patient-friendly drainage.
- With length markings for exact positioning
- Available in straight or curved shape
- The distal end is cut in an oblique, wave-like way for better connection to the thoracic drainage system
- Suitable for several days of application

Ch.	Length	Shape	Packaging unit	Article number
Ch. 20	520 mm	Straigth	10	24150
Ch. 24	520 mm	Straigth	10	24152
Ch. 28	520 mm	Straigth	10	24154
Ch. 32	520 mm	Straigth	10	24156
Ch. 36	520 mm	Straigth	10	24158

Ch.	Length	Shape	Packaging unit	Article number
Ch. 20	120 + 335 mm	Curved	10	24151
Ch. 24	120 + 335 mm	Curved	10	24153
Ch. 28	120 + 335 mm	Curved	10	24155
Ch. 32	120 + 335 mm	Curved	10	24157
Ch. 36	120 + 335 mm	Curved	10	24159

Trocar catheters

Product features

- High resistance to kinking ensures easy insertion
- The distal tip is shaped in such a way that the tissue can be pushed apart without causing any injury to nerves or blood vessels.
- With X-ray contrast strip on a distal tip, which generates contrast, for optimal position control.
- With length markings for exact positioning
- 3 offset-mounted and elliptical lateral eyes facilitate safe, patient-friendly drainage.
- The pointed end of the trocar, which is made of metal, is fixed to a plastic mount to ensure safe handling

Ch.	Length	Packaging unit	Article number
Ch. 10	203 mm	10	21057
Ch. 12	233 mm	10	21058
Ch. 16	238 mm	10	21059
Ch. 20	412 mm	10	21053
Ch. 24	410 mm	10	21051
Ch. 28	411 mm	10	21052
Ch. 32	412 mm	10	21054

STERILE EO Sterilised with ethylene oxide

MR MR Safe

Ch. Charrière, French scale = Unit indicating the external diameter of drains (1 Ch. = $\frac{1}{3}$ mm)

Manufacturer

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Revision status: 01/2020-10-15