

# AIRWAY

# MANAGEMENT



# MEDICAL PRODUCTS FOR

# TRACHEOSTOMISED AND

# LARYNGECTOMISED PATIENTS

ANDREAS FAHL MEDIZINTECHNIK-VERTRIEB GMBH

#### "Airway Management"

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# CONTENTS

1. Company Profile	5
2. Tracheal suction devices & accessories	. 8
3. Inhalation / air humidification	18
4. Ventilation / oxygen	25
5. Tracheostomy tubes	29
6. Voice Prostheses / tracheostoma valves	. 108
7. Tube accessories	120
8. Cleaning and care of tubes	137
9. Tracheostoma cleaning and care	144
10. Tracheostoma protection	147
11. Speech aids / voice amplifiers	170
12. Emergency aids	172
13. Airway Management Products for children	175





# **COMPANY PROFILE**



We are pleased to introduce the Andreas Fahl Medizintechnik-Vertrieb GmbH, a key provider for products and solutions for airway management and respiratory care – particularly for tracheostomy and laryngectomy management.

As a manufacturer of medical products and a specialist in tracheostomy care, we have been a reliable partner for patients, clinics, nursing institutions and health care providers in German-speaking markets for nearly two decades. The increasing international demand for highquality medical devices and a comprehensive product range has led in recent years to an ever growing network of international customers and distribution partners.

#### In the patient's service since 1992

The Andreas Fahl Medizintechnik-Vertrieb GmbH company was founded in 1992 by the wholesale and export merchant Andreas Fahl and converted to a limited liability company in 1995. The company focused initially on wholesale and retail sales of medical devices, medical products and accessories, especially marketing of products for tracheostomy and laryngectomy patients. The range rapidly extended to include the products of all well-known international manufacturers.

#### Development, manufacture, distribution

The years of experience in sales soon led to the development and manufacture of our own products in collaboration with specialist production companies so to reflect our customers' wishes and suggestions promptly and in an optimised manner.

#### Contractual partnership with all central care facilities

Furthermore, the direct care of patients by our highly specialised sales representatives, all of whom are certified nursing professionals and medical technicians, along with the contractual partnership with about 150 health insurance companies in Germany enables us to develop products that meet the actual needs of patients, nursing staff and doctors.





# **COMPANY PROFILE**



Headquarter Cologne



Berlin



Munich



Vienna







#### High innovation dynamic, complete care

The resulting innovation dynamic is reflected, for example, in the development of seven different tracheostomy cannula lines within just a few years. Along with this, there is a large number of special accessories, such as HME filters, speaking valves, dressings, cannula neckstraps and products for voice rehabilitation.

For home ventilation and home care, in Germany we also provide equipment and devices for suction, inhalation, oxygen therapy and air humidification.

Despite the high proportion of our own products, we continue to offer a wide variety of products from other leading manufacturers, in order to ensure comprehensive patient care and also to provide the greatest possible choice of aids at the same time.

With this philosophy, we have succeeded in becoming one of the leading specialist suppliers of products for tracheostomy and laryngectomy patients in Germany.

#### International branch

The first foreign branch was founded in Austria, in 2003, thus underpinning the international orientation.

#### Our services for you

The following services are at the centre of our business focus:

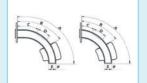
- Development and manufacturing of products for airway management and rehabilitation
- Quality assurance: DIN EN ISO 9001:2008 and DIN EN ISO 13485:2003 & AC:2007
- International sales
- Marketing of products also from other well-known international manufacturers
- Customised products according to individual patient specifications
- Repair and reprocessing of technical devices
- Qualified advice, care and training in our training centre in Cologne and in our company premises in Berlin, Munich, Vienna or at your premises
- Fast delivery of products ex stock

# **COMPANY PROFILE**











#### **Quality assurance**

The satisfaction and safety of our customers are our top priorities.

Our company therefore has its own quality management and quality assurance system in accordance with the DIN EN ISO 9001:2008 and DIN EN ISO 13485:2003 & AC:2007 standards and in accordance with Annex II of the European Medical Devices Directive 93/42/EEC. Accordingly, procurement, development, manufacture and sales are inspected and certified at yearly intervals by a notified body.

A central component of these standards is continuous measurement and evaluation of customer satisfaction, obtained, for instance, in the framework of visit reports, feedback analysis and detailed care documentation.

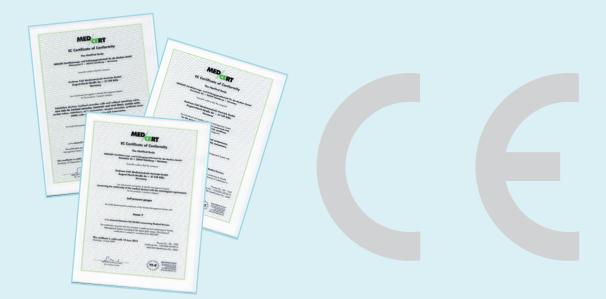
#### High growth dynamic

Today, the Andreas Fahl Medizintechnik-Vertrieb GmbH is a growing and greatly expanding and dynamic company with more than 150 employees.

#### Our mission is:

Your partner for airway management and rehabilitation for tracheostomy and laryngectomy

We look forward to working with you.



# TRACHEAL SUCTION DEVICES

#### **OPERATION AND CARE INSTRUCTIONS**





Equipment trolley with tracheal suction device and wall attachment/rail attachment



Tracheal suction device Tracheofirst<sup>®</sup> with add-on-kit (Special accessories)



Tracheal suction device Tracheominor®



Flexible compact light from add-on-kit

Tracheal suction devices are an important aid for the care after a laryngectomy or tracheotomy/tracheostomy. After surgery, patients generally experience increased secretion. This places a great strain on the respiratory system, leading to irritation and coughing. A tracheal suction device is an important aid, helping to remove secretions from the respiratory tract.

The tracheal suction device is also a great help in other situations. For example, respiratory diseases may also cause problems. In such cases, the tracheal suction device facilitates breathing by relieving the tracheostoma from excessive bronchial secretions.

Before using a tracheal suction device, please note the instructions included in the respective device's instruction manual. Suction takes place through sterile stoma catheters, which we offer in various sizes and types.

# TIPS FOR HANDLING AND CARE

Most suction devices are suction pumps, they are powered by an electrical swing-piston pump. During operation, the pump generates a vacuum in the tube system and secretion container, which enables fluids or secretions to be removed by suction through a stoma catheter. The fluid is collected in the secretion container. The basic equipment of most suction devices includes a mechanical overflow protection (e.g., on the interior of the secretion container lid). This prevents the accidental suction of secretions into the pump head. In many devices, a controller can be used to set the suction vacuum, and therefore the pressure with which liquids are suctioned. The end vacuum, and thereby the suction power, can also be regulated using a hose connector ("Fingertip").

In addition, a bacterial filter prevents the ingress of bacteria or liquids into the inside of the device. Essential distinguishing criteria in suction pumps are:

- Suction power (litres per minute)
- Capacity of the secretion container
- Mains power / battery operation
- Size and weight of the device.

# TRACHEOFIRST® SUCTION DEVICE



Tracheal suction device Tracheofirst<sup>®</sup> with add-on-kit (Special accessories)



Tracheal suction device Tracheofirst®

#### Tracheofirst<sup>®</sup> suction device scope of delivery

- 1 basic unit
- 1 secretion glass, 1 |
- 1 silicone suction tube, 1.30 m long
- 1 silicone connection tube, 28 cm long
- 1 hose connector/Fingertip
- 5 bacterial filter discs
- 1 rinsing container, 0.25 I with lid
- 1 mains power cable
- 1 operating instruction

#### **Specifications:**

Free air flow (suction power):	26.5 l/min.
Vacuum:	up to 0.8 bar
Power supply:	230 V, 50/60 Hz
Power consumption:	65 W
Power cable:	2 m
Secretion glass:	11
Dimensions:	206 x 362 x 174 mm
Weight:	4.0 kg

The Tracheofirst<sup>®</sup> is a small suction device, whose easy operation and great reliability of the membrane aggregate enables its use in the most variable medical areas of application.

Due to its particularly powerful aggregate, the suction device can be used in hospitals, medical practices, as well as in home care.

The robust aggregate, enables fast and controlled vacuum generation, is particularly effective for the suction of very thick secretions and for increased secretion production. A vacuum gauge and fine-tuner are integrated into the housing. They enable the vacuum to be monitored and regulated at all times.

At the same time, the handy polystyrene housing is a protective holder for the 1 I secretion glass. The rounded shape of the Tracheofirst<sup>®</sup> tracheal suction device makes it exceptionally easy to clean. The reliable, maintenance-free membrane aggregate has a suction power of 26.5 I/min and a maximum vacuum of up to 0.8 bar. The suction device has a 1.30 m long silicone suction tube, as well as a sterile tube connector/Fingertip for the connection of the sterile suction catheters (tracheostoma catheters). The silicone connection tube is 28 cm long and connects the suction device's secretion container lid to the suction port that leads to the pump.

To prevent accidental suction of secretion into the aggregate, the Tracheofirst<sup>®</sup> tracheal suction device has a mechanical overflow safety device, as standard.

In addition, the Tracheofirst<sup>®</sup> tracheal suction device's secretion container lid contains an integrated bacterial filter housing. The filter housing can be opened with a simple rotary motion in order to replace the bacterial filter disc.

The filter prevents bacteria and particles from entering the device, as well as largely preventing liquids from being sucked into the aggregate, providing an additional reliable overflow protection.

We provide a special add-on-kit as a special accessory for the Tracheofirst<sup>®</sup> suction device, which facilitates suction for tracheostomised and laryngectomised patients.

A plastic secretion container with a fill volume of 1.25 l is also available as a special accessory.

Order information:	Tracheofirst <sup>®</sup> suction device, 26.5   suction power	REF 65000
	FAHL® Add-on-kit for suction devices	REF 65500
	<b>FAHL® Silicone suction tube</b> , 1.30 m	REF 60500
	FAHL® Silicone connection tube, 28 cm	REF 60510
	FAHL <sup>®</sup> Plastic secretion container, 1.25	REF 65700
	FAHL <sup>®</sup> Bacterial filter discs, pack of 25	REF 65800
	FAHL® Hose connector/Fingertip, sterile, pack of 10	REF 60700
	FAHL® "Standard" tube and filter set	REF 60410
	<ul> <li>FAHL® Plastic secretion container, 1.25 I</li> <li>FAHL® Bacterial filter discs, pack of 25</li> <li>FAHL® Hose connector/Fingertip, sterile, pack of 10</li> </ul>	REF 6570 REF 6580 REF 6070

# TRACHEOLINO® SUCTION DEVICE







#### Tracheolino<sup>®</sup> suction device scope of delivery

- 1 basic unit with plastic secretion container, 800 ml
- 1 secretion container lid
- 1 silicone suction tube, 1.30 m long
- 1 hose connector/Fingertip, sterile
- 1 step connector
- 1 bacterial filter for Tracheolino®
- 1 power cable

#### **Specifications:**

Free air flow (suction power):	16 l/min
Max. vacuum:	- 80 kPa / to 0.8 bar
Secretion container:	800 ml
Suction tube: Length:	1.3 m;
	Diameter: 6 mm
Nominal mains power:	230 V
Voltage frequency:	50/60 Hz
Dimensions (H x W x D):	250 x 255 x 180 mm
Weight: approx.	3.5 kg

#### Order information:

- Tracheolino<sup>®</sup> suction device
- FAHL<sup>®</sup> step connector (7 x 11 mm)
   FAHL<sup>®</sup> Bacterial filter for Tracheolino<sup>®</sup>
- FAHL® Silicone suction tube, 1.30 m
- FAHL® Hose connector/Fingertip, sterile, pack of 10

The Tracheolino<sup>®</sup> tracheal suction device is a suction device that performs well at home and in the clinic, for patients with normal levels of secretion production.

It is small, light and has a robust aggregate. The rounded shape of the Tracheolino® tracheal suction device makes it exceptionally easy to clean. The suction device has a practical carrying handle, which can be folded back. The design of the device supports the excellent stability of the Tracheolino® suction device.

The electric swing-piston pump provides a suction power of 16 l/min and a maximum vacuum of up to 0.8 bar. During operation, the pump generates a vacuum in the tube system and secretion container, which enables fluids or secretions to be removed quickly and reliably by suction.



The fluid is collected in the secretion container, with a capacity of approx. 800 ml. The device's suction power can be adjusted continuously using the vacuum gauge and finetuner on the front of the device's main unit. A mechanical overflow safety device, located

in the secretion container lid, prevents the accidental suction of secretions into the pump head.



In addition, a bacterial filter prevents the ingress of bacteria or liquids into the aggregate space. The bacterial filter is located in the lid of the secretion container and is easy to exchange. The compact design enables the secretion container to be connected

directly to the pump housing without awkward tubing and simplifies the cleaning and care of the device.



The underside of the Tracheolino® has a condensation trap to enable quick visual inspection of any possible soiling. Dampness and possible discolouration of the plastic viewing window may indicate over-suction.

A tube holder, located on the side of the Tracheolino<sup>®</sup>, enables the suction tube to be attached. Great value was placed on effortless operation and easy maintenance during the design of the Tracheolino<sup>®</sup>.

REF	62000
REF	62000-3
REF	62000-5
REF	60500

# FAHL® BACTERIAL FILTER FOR TRACHEOLINO®



In the Tracheolino<sup>®</sup> suction device, a bacterial filter has been integrated into the secretion container's lid. To replace the filter, the secretion container must be removed from the Tracheolino<sup>®</sup>: Pull the secretion container horizontally from the device and then horizontally push it on the bacterial filter.

The filter prevents bacteria and particles from entering the device, as well as preventing liquids from being sucked into the aggregate providing an additional reliable overflow protection.

The filter has an important function and should therefore be checked regularly and replaced:

The Tracheolino<sup>®</sup> bacterial filter is a disposable product intended for single patient use and should be replaced at the latest after 14 days of operating the Tracheolino<sup>®</sup>. This item is supplied in a packing unit of 10.

Order information:

FAHL® Bacterial filter for Tracheolino®, pack of 10

# TRACHEOPORT® SUCTION DEVICE

#### WITH BATTERY

REF 62000-5







The Tracheoport<sup>®</sup> suction device is a particularly practical and powerful battery-operated small suction device for medical use.

The device is composed of three units and has a robust, plastic housing. The central part forms the main unit.

On the left and right, secretion containers and rinsing containers can be plugged into the main unit. The compatible system simplifies the cleaning and maintenance of the device. The holder with the rinsing container can be removed easily if it is briefly not required.

The Tracheoport<sup>®</sup> is a portable, mains power-independent suction device, with a suction power of approx. 22 I/min. The practical handle and low weight of the device, at approx. 2.8 kg, enables easy transport and use of the suction device outside of home, e.g., when travelling.

The device is powered by an electric swing-piston pump. During operation, the pump generates a vacuum in the tube system and secretion container, which enables fluids or secretions to be quickly and reliably removed by suction. The fluid is collected in the secretion container made of robust plastic with a capacity of approx. 0.5 I.

A mechanical overflow safety device, located in the interior of the secretion container lid, prevents the accidental suction of secretion into the pump head.

The vacuum gauge and controller are located in the main unit of the Tracheoport<sup>®</sup> and enable fine-tuning of the end vacuum and thereby the suction power. It can also be controlled using the hose connector/Fingertip. In addition, a bacterial filter prevents the ingress of bacteria or liquids into the aggregate space. The bacterial filter is located in the lid of the secretion container and is easy to exchange.

The rinsing container, which also has a capacity of approx. 0.5 I, enables the suction tube to be rinsed with clean water again, after the end of suction, in order to prevent any remaining secretions from staying in the tube until the next use of the suction device.

# TRACHEOPORT® SUCTION DEVICE

#### Tracheoport<sup>®</sup> suction device scope of delivery

- 1 basic unit with plastic secretion container, 0.5
- 1 plastic rinsing container, 0.5 l
- 1 silicone suction tube, 1.30 m long
- 1 silicone connection tube, 28 cm long
- 1 hose connector/Fingertip, sterile
- 1 bacterial filter
- 1 mirror

Or

- 1 lamp (can be integrated) with flexible swivel arm
- 1 battery charger
- 1 shoulder bag
- 1 operating instruction

#### **Specifications:**

Free air flow (suction power):	22 l/min
Max. vacuum:	- 72 kPa (–720 mbar,
	540 mm Hg)
Secretion container:	0.5 l
Suction tube:	Length: 1.3 m;
	Diameter: 6 mm
Nominal mains power:	230 V (battery charger)
Voltage frequency:	50 Hz (battery charger)
Power consumption:	approx. 24 W
Battery:	12 V, 1200 mAh
Dimensions (H x W x D):	262 x 284 x 106 mm
Weight:	approx. 2.8 kg
Operating time:	max. 25 minutes

The sealing plug in the lid of the rinsing container serves as a holder for the suction tube. It also enables a mirror to be attached at various angles, to make the insertion of the stoma catheter into the tracheostoma, and thereby the suction, easier.

The light, which can be integrated into the device and is equipped with a flexible swivel arm, also facilitates suction, through the option of targeted lighting of the tracheostoma.

To charge the battery, the included battery charger, is plugged into the socket of the Tracheoport<sup>®</sup> and connected to the mains power. Charging an empty battery takes approx. 1-2 hours. With a fully charged battery, the Tracheoport<sup>®</sup> suction device can be operated for approx. 25 minutes, independent of mains power. In addition, it is also possible to operate the Tracheoport<sup>®</sup> at 12 Volts in a car using a car adapter set (available as a special accessory).

Also available as a special accessory is a holder for the receptal container, which extends the range of application of this portable suction device.

During the design of the Tracheoport<sup>®</sup>, great value was placed on effortless operation and easy maintenance.





Special accessories: Holder for receptal container

rder information:	Tracheoport <sup>®</sup> suction device	REF 63500
	FAHL® Car connection cable for Tracheoport®	REF 63510
	FAHL® Bacterial filter for Tracheoport®, pack of 10	REF 63700
	Tracheoport® tube and filter set	REF 60430
	FAHL <sup>®</sup> Silicone suction tube, 1.30 m	REF 60500
	FAHL <sup>®</sup> Silicone connection tube, 28 cm	REF 60510
	FAHL® Hose connector/Fingertip, sterile, pack of 10	REF 60700
	FAHL <sup>®</sup> Holder for Receptal container	REF 63550

# FAHL® CAR CONNECTION CABLE FOR TRACHEOPORT®



The portable, battery-operated Tracheoport<sup>®</sup> suction device also provides the option of operation at 12 Volts in a car, using a car adapter set.

This ensures the proper functioning of the suction device while travelling by car, should the battery run down with no way to recharge it.

**Order information:** > FAHL<sup>®</sup> Car connection cable for Tracheoport<sup>®</sup>

# FAHL® BACTERIAL FILTER FOR TRACHEOPORT®



The lid of the secretion container of the Tracheoport<sup>®</sup> tracheal suction device contains a bacterial filter, which prevents the ingress of bacteria or liquids into the aggregate space. The bacterial filter is easy to exchange. Because of its important function, it should be checked and exchanged at regular intervals.

A wet and/or soiled filter must be exchanged immediately in order to prevent impairment of the device's function. The bacterial filter for the Tracheoport<sup>®</sup> suction device is supplied in a packing unit of 10.

#### **Order information:** > FAHL<sup>®</sup> Bacterial filter for Tracheoport<sup>®</sup>, pack of 10

# FAHL® SILICONE SUCTION TUBE FOR SUCTION DEVICES



The suction tube for suction devices is made of silicone and is 1.30 m long. It is suitable for multiple use.

The suction tube is attached to the suction device and transports the secretion fluids, pumped through the sterile stoma catheter, on to the secretion container.

Order information: FAHL® Silicone suction tube for suction devices, 1.30 m

# FAHL® SILICONE CONNECTION TUBE FOR SUCTION DEVICES

The silicone connection tube is 28 cm long and connects the suction device's secretion container lid to the suction port that leads to the pump. It is suitable for multiple use.

Order information: > FAHL® Silicone connection tube for suction devices, 28 cm

### FAHL® SUCTION TUBE FOR SUCTION DEVICES

The flexible suction tube, with a smooth surface, is made of soft plastic and is suitable for most commonly used suction devices. The suction tube transports the secretion fluid, pumped through the sterile stoma catheter, on to the secretion container. The funnel-shaped attachment forms the connection to the suction device.

At the other end of the suction tube is a hose connector/Fingertip, which enables the suction tube to be connected to the stoma catheter. The Fingertip also enables the suction device's suction power to be controlled.

The suction tube is 1.30 m long and is intended for single use. The packing unit contains 20 pieces, each suction tube in individual, sterile packaging.

**Order information:** > FAHL<sup>®</sup> Suction tube for suction devices, 1.30 m, sterile, for single use, pack of 20

13

**REF 60505** 

**REF 63700** 

28 CM

REF 60510

1.30 M, STERILE

# FAHL® CONNECTION TUBE FOR SUCTION DEVICES



The plastic connection tube is 30 cm long and connects the suction device's secretion container lid with the suction port that leads to the pump.

The connection tube is intended for single use. This item is supplied in a packing unit of 40, with each connection tube in individual, sterile packaging.

**Order information:** > FAHL<sup>®</sup> Connection tube for suction devices, 30 cm, sterile, for single use, pack of 40

# FAHL<sup>®</sup> HOSE CONNECTOR/FINGERTIP

STERILE

REF 60516



The Fingertip is used to connect the suction device's suction tube to the sterile stoma catheter. The Fingertip is composed of a conically tapering tube made of plastic, with a diameter that reduces towards the tip.

This makes the Fingertip variably applicable for different Charriere sizes (CH) of stoma catheters. In the middle of the Fingertip is the so-called auxiliary air valve, which can be closed with a plug.

The Fingertip also enables the suction device's end vacuum and thereby its suction power to be controlled. With a closed auxiliary air valve, pressure builds up in the tube system and suction can start. With an open auxiliary air valve, the suction process is halted.

Regulation is simplified by the fact that the auxiliary air valve can be closed even without a plug by using a finger. This enables the suction to be adjusted quickly and as required.

The packing unit contains 10 or 100 pieces, with every Fingertip in individual, sterile packaging.

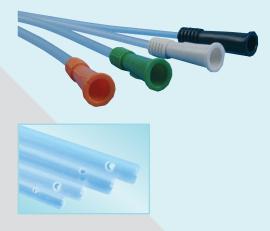
 Order information:
 FAHL® Hose connector/Fingertip, sterile, pack of 10

 FAHL® Hose connector/Fingertip, sterile, pack of 100

REF 60700 REF 60700-100

# FAHL® TRACHEOSTOMA CATHETER – SHORT

#### STERILE



This aid is a special version of catheter for neck breathers. The tracheostoma catheters are made of a flexible, transparent plastic. The particularly soft material is ideal for suction in the sensitive trachea. In contrast to conventional suction catheters with a length of approx. 50 to 51 cm, the tracheostoma catheters are only 25 cm long, which makes them easier to insert into the neck opening. Short versions of tracheostoma catheters have a central opening as well as two lateral openings ("eyes") at the catheter tip. This arrangement has the advantage that the catheter stays flexible and does not adhere to the trachea even when large amounts of secretions and encrustations are produced. Short versions of tracheostoma catheters enable ideal suction of the trachea and are available in the sizes CH 8 to CH 16. A packing unit contains 200 individually packaged, sterile tracheostoma catheters.

Size chart for tracheostoma catheter – short				
Size	O.D. mm	Length cm	Colour code	REF
CH 8	2.7	25	blue	68100-08
CH 10	3.3	25	black	68100-10
CH 12	4.0	25	white	68100-12
CH 14	4.7	25	green	68100-14
CH 16	5.3	25	orange	68100
Sizing information:				

**O.D.** = outer diameter of the catheter at the catheter tip

Order information: > FAHL® Tracheostoma catheter – short, sterile, pack of 200 – Please specify size!

# **TRACHFLOW® SHUNT CATHETER**



These special Trachflow<sup>®</sup> shunt catheters enable the targeted suction of voice prostheses. They are made of flexible, transparent plastic and are particularly easy to handle due to their length of approx. 10 cm. The tracheal secretions are removed quickly and reliably from the tracheostoma through the central suction opening at the catheter tip.

Trachflow<sup>®</sup> shunt catheters for users of voice prostheses are intended for single use. This item is supplied in sterile, single-use packaging in a packing unit of 50 pieces.

Size chart for Trachflow <sup>®</sup> shunt catheter for users of voice prostheses				
Size	O.D. mm	Length cm	Colour code	REF
CH 8	2.7	10	blue	68800-08
CH 10	3.3	10	black	68800-10
CH 14	4.7	10	green	68800-14
Sizing information: O.D. = outer diameter of the cathe	eter at the catheter tip			
<b>Order information</b>	🗈 🕨 Trachflow® shunt	catheter for voice prosthesis user	rs, sterile,	<b>REF 68800</b>

pack of 50 - Please specify size!

# FAHL<sup>®</sup> STOMA CATHETER

#### **STERILE**



Stoma catheters for the suction of tracheal secretions are made of flexible, transparent plastic and, for reasons of hygiene, are intended for single use only. Stoma catheters are supplied in soft quality with a central opening and 2 lateral openings ("eyes") at the catheter tip. This has the advantage that the catheter stays flexible and does not adhere to the trachea even when larger amounts of encrustations are produced.

Stoma catheters are available in the sizes CH 6 to CH 18. The length of the catheter is approx. 50 cm. By default, unless otherwise requested, we supply the sizes CH 16 or CH 14. A packing unit contains 100 individually packaged stoma catheters. There is a coloured connector at the end of the stoma catheter. This is where the hose connector/ Fingertip is attached and thereby connected to the suction tube of the suction device.

For suction, the stoma catheter is carefully inserted into the tracheostoma. During insertion, the Fingertip stays open to release the suction pressure and prevent the catheter from adhering. Only once the desired depth has been reached the Fingertip should be closed with a finger and suction can be started.

#### Size chart for stoma catheters

Size	O.D. mm	Length cm	Colour code	REF
CH 6	2.0	50	light green	68000-06
CH 8	2.7	50	blue	68000-08
CH 10	3.3	50	black	68000-10
CH 12	4.0	50	white	68000-12
CH 14	4.7	50	green	68000-14
CH 16	5.3	50	orange	68000-16
CH 18	6.0	50	red	68000-18

15

Sizing information: O.D. = outer diameter of the catheter at the catheter tip

Order information: **FAHL®** Stoma catheter, sterile, pack of 100 - Please specify size! **REF 68000** 

TRACHEAL SUCTION EVICES & ACCESSORIES

# TRACHFLOW® SUCTION CATHETER

The Trachflow<sup>®</sup> suction catheter is an atraumatic catheter for the suction of tracheal secretions. It is made of a particularly soft, flexible and transparent plastic, which is ideal for suction in the sensitive trachea. Despite high flexibility, the catheter made from medical PVC is sufficiently stable that it will not bend or kink during suction.

The 4 lateral openings (eyes) at the catheter tip prevent the catheter from adhering inside the trachea. The Trachflow® suction catheter has an atraumatically rounded catheter tip, which prevents injury to the trachea. An even suction of the secretion is achieved by the airflow generated around the bulge at the catheter

#### tip.

The catheters are intended for single use and are packaged in individual, sterile packaging. The Trachflow® suction catheters are supplied in a sturdy cardboard box. The packaging features an integrated hanging strap, which enables it to be attached e.g., to the standard rail of an equipment trolley. This provides quick and comfortable access to the suction catheters, as well as hygienic storage.

The Trachflow<sup>®</sup> suction catheter is available in two different versions, a standard length version of 50 cm and a 25 cm version, named Trachflow<sup>®</sup> short. The short version enables quick and simple insertion of the catheter into the tracheostoma. The Trachflow<sup>®</sup> short and Trachflow<sup>®</sup> suction catheters are available in five different sizes, i.e., CH 08 to CH 16. A packing unit contains 50 pieces in individual and sterile packaging.

Lateral opening at th	ne
catheter tip	



Trachflow<sup>®</sup> suction catheter in sturdy cardboard packaging, with integrated hanger

Size chart Trachflow <sup>®</sup> suction catheter, short (25 cm)					
Size	O.D. mm	Length cm	Colour code	REF	
CH 8	2.7 mm	25 cm	blue	68600-08	
CH 10	3.3 mm	25 cm	black	68600-10	
CH 12	4.0 mm	25 cm	white	68600-12	
CH 14	4.7 mm	25 cm	green	68600-14	
CH 16	5.3 mm	25 cm	orange	68600-16	

#### Size chart Trachflow® suction catheter standard, long (50 cm)

Size	O.D. mm	Length cm	Colour code	REF
CH 8	2.7 mm	50 cm	blue	68700-08
CH 10	3.3 mm	50 cm	black	68700-10
CH 12	4.0 mm	50 cm	white	68700-12
CH 14	4.7 mm	50 cm	green	68700-14
CH 16	5.3 mm	50 cm	orange	68700-16

#### **Order information:**

Trachflow <sup>®</sup> short, atraumatic suction catheter, sterile,
pack of 50
Trachflow® long, atraumatic suction catheter, sterile.

Trachflow® long, atraumatic suction catheter, sterile,REF 68700pack of 50

# FAHL® SUCTION PIPE WITH STOMA LIGHT



The metal suction pipe was specially developed for users of a voice prosthesis. It enables targeted suction of the voice prosthesis while the stoma light effectively illuminates the tracheostoma. The suction pipe is attached to the suction tube of the suction device with a hose connector/Fingertip.

The solid metal stoma light is batteryoperated and is clipped to the suction pipe. It is also individually available. Batteries for the stoma light are included in the scope of delivery.

The stoma light is switched on and off using the button at one end. It is powered by 2 standard 1.5 Volt AAA batteries, which are included in the scope of delivery.



# INHALATION AND AIR HUMIDIFICATION

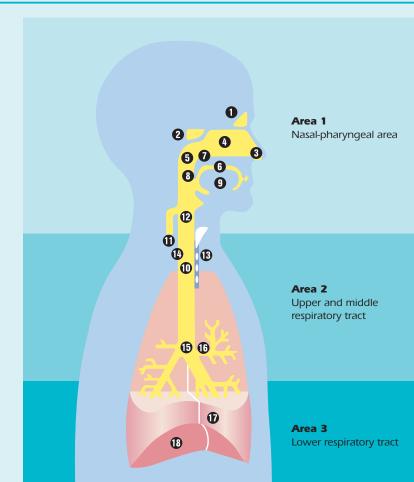


After a laryngectomy or tracheostomy, your breathing will have changed. You now breathe through a tracheostoma. In mouth/nose breathing, the inspired air is naturally kept moist.

After the loss of the natural humidification effects of the mucous membranes a different method is required in order to prevent severe irritation of the mucous membranes. In most cases this type of severe irritation leads to increased secretion, coughing and encrustation. To avoid these consequences, it is essential to inhale regularly and ensure that living areas are kept at a constant air humidity of approx. 55-60%.

# AREAS AFFECTED IN INHALATION

- 1 Sinus frontalis Frontal sinuses
- 2 Sinus sphenoidalis Sphenoid sinus
- **3 Vestibulum nasi** Nasal vestibule
- 4 Conchae nasales Nasal concha
- 5 Pharynx Throat
- 6 Cavum oris proprium Oral cavity
- 7 Palatum durum Hard palate
- 8 Palatum molle Soft palate
- 9 Lingua Tongue
- **10 Trachea** Trachea
- 11 Oesophagus Oesophagus
- 12 Larynx Larynx
- **13 Cartilagines tracheales** Tracheal cartilage rings
- 14 Paries membranaceus Muscular connective tissue back wall of the trachea
- **15 Bronchus principalis** Main bronchi
- **16 Bronchi** Bronchi
- **17 Lobus medius pulmonis** Middle lobe of the lung
- 18 Lobus inferior Inferior lobe



# FAHL® BONITO AIR COMFORT AIR HUMIDIFIER









Physical well-being is influenced by numerous factors. The air humidity in living areas is also relevant. Especially during the heating season, the cold and usually dry outside air, that enters into the living area through the windows, is warmed up. This results in a massive reduction in relative air humidity, which creates an unfavourable climate for people.

Dry respiratory air impairs the absorption of oxygen and its transport



tion are symptoms of a reduced oxygen supply. A further result of dry air is the impairment of the trachea's ability to clean itself. The mucous membranes dry out increasing the likelihood of infections and respiratory diseases. Low air humidity also increases the rate at which the skin loses moisture. It becomes dry, rough and scaly, with a tendency to inflammatory erythema, so-called asteatotic eczema.

to the bloodstream. Fatique, tiredness and loss of concentra-

The Bonito Air Comfort humidifier is a modern and practical steam air humidifier. It consists of an easy-to-clean plastic housing, containing a vaporiser element. This element consists of two electrodes and a vaporising space. Here, the electrical current flows from one electrode to the other, closing the electrical circuit through the water. This heats the water, which is turned into steam, which is released through a small opening and pleasantly and absolutely hygienically humidifies the air in the room. The hygienic humidification is assured by the fact that the boiled water is released as germ-free steam.

The integrated fragrance trough provides the additional option of nebulising essential oils. The fragrance trough is located directly in front of the steam nozzle, so that the fragrance can be picked up by the water vapour. The humidification of the air can be automatically controlled using the included hygrostat. The device is equipped with a practical, retractable handle, which enables the air humidifier to be transported easily. The temperature and humidity of the room can be continuously controlled using a hygrometer. This hygrometer is independent of the device and can be set up anywhere in the room. The hygrometer is not included in the scope of delivery, but is available as a special accessory.

#### **Specifications:**

Room size/volume: Dimensions: Weight: Mains voltage: Power consumption: Vapour output: Water capacity: up to 40 m<sup>2</sup>/100 m<sup>3</sup> 205 x 435 x 220 mm approx. 1.7 kg 230 V/50 Hz 300-500 Watt\* approx. 400-600 g/hour\* 5 litres

\* dependent on water hardness, voltage and fill level

Order information: > FAHL® Bonito Air Comfort humidifier, including hygrostat

# SALUTA®-STANDARD INHALATION DEVICE



Saluta®-Standard inhalation device with steam nebuliser



Saluta®-Standard inhalation device on 5-footed stand (special accessories)

#### Saluta®-Standard inhalation device scope of delivery

- 1 basic unit with 0.7 I capacity and water-level indicator
- 1 steam nebuliser with drain tube (and cotton store)
- 1 nebuliser angle with suction tube
- 1 beaker made of plastic
- 1 steam tube attachment/nebuliser tube
- 1 mouth-nose attachment
- 1 nozzle cleaning pin
- 1 operating instruction

#### **Specifications:**

Capacity:	0.7
Evaporation time:	70/130 min.
Droplet size:	0.5 – 50 µm
Voltage:	230 V
Heating capacity:	225/450 Watt
Weight:	2.5 kg
Dimensions:	25 x 17 x 27 cm

**Order information:** 

Saluta®-Standard inhalation device FAHL® 5-footed stand for Saluta®-Standard inhalation device

The Saluta®-Standard inhalation device is a tried and tested steam inhalation device. In the Saluta®-Standard inhalation device, tap water is heated in the boiler to boiling point and is released as steam.

The layer of steam above the boiling water is referred to as saturated steam. A light overpressure in the boiler forces the steam through a steam nebuliser and relaxed to atmospheric pressure in a nozzle. As the pressure is released, the steam cools down slightly. This provides a source of air at 37° C, with up to 100% moisture saturation.

The inhalation of steam results in optimal humidification of the respiratory tract, which pleasantly prevents irritation of the tracheostoma, soothes breathing difficulties, and ensures gentle healing. The boiling process within the inhalation device ensures that the inhaled steam is free of germs and bacteria.

The Saluta®-Standard inhalation device provides three inhalation methods: steam inhalation without additives, inhalation with water-soluble drugs, and inhalation with essential oils. The device has two heating levels to achieve the ideal results for the different inhalation methods. The Saluta®-Standard inhalator is ideally suited for daily, multiple inhalation. A 5-footed stand with castors is available as a special accessory.

> **REF 55000 REF 55400**

# SALUTA®-PICOLETTE-INHALATION DEVICE



Saluta®-Picolette inhalation device with nebuliser angle and steam pipe attachment (nebuliser tube)

The Saluta<sup>®</sup>-Picolette steam inhalation device is a small, robust steam inhalation device, which can be used for the inhalation of water-soluble drugs or purely for steam inhalation with tap water.

The steam nebuliser (special accessory) provides the option of even finer steam inhalation and the inhalation of essential oils.

In regard to its fields of application, the Saluta®-Picolette steam inhalation device is comparable with the Saluta®-Standard inhalation device. It is, however, designed for a much shorter inhalation time and has a smaller capacity.

Saluta <sup>®</sup> -Picolette inhalation	n device	scope of	delivery
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1 basic unit with a capacity of 0.15 I

- 1 nebuliser angle with suction tube
- 1 beaker made of plastic
- 1 steam tube attachment (nebuliser pipe)
- 1 mouth-nose attachment
- 1 nozzle cleaning pin
- 1 funnel
- 1 plastic carrying case
- 1 operating instruction

#### **Specifications:**

Capacity: Evaporation time: Droplet size: Voltage: Heating capacity: Weight: Dimensions: 0.15 l max. 35 min. 0.5 – 50 µm 230 V 170 Watt 0.6 kg 18 x 8 x 13 cm

Order information: > Saluta®-Picolette steam inhalation device

**REF 54000** 

# FAHL® STEAM NEBULISER



#### FOR SALUTA®-PICOLETTE STEAM INHALATION DEVICE

The steam nebuliser for the Saluta<sup>®</sup>-Picolette steam inhalation device provides the option of even finer steam inhalation and the inhalation of essential oils.

To nebulise essential oils, the wide nebuliser pipe is screwed on centrally. The interior contains a spiral spring, in which a cotton wool ball soaked in essential oils can be placed. The essential oils are surrounded by the steam and nebulised with it.

# **NEBUFIRST® INHALATION DEVICE**



Thanks to its extensive equipment, the robust Nebufirst<sup>®</sup> is your standard device for effective inhalation. The fine aerosol mist enables optimum humidification of the respiratory tract. The easy-to-clean, handy design of the device assures comfortable operation, as well as simple cleaning of the Nebufirst<sup>®</sup>.

# Nebufirst<sup>®</sup> – a new generation of comfortable inhalation devices for your health!

- > The Nebufirst<sup>®</sup>'s powerful aggregate enables optimal inhalation
- The robust quality of the Nebufirst<sup>®</sup> makes it a reliable standard inhalation device for daily use
- A lit on/off switch reliably indicates operation.
- The ergonomic handle, the central air connection as well as the simple to replace (without tools) air filter make the device comfortable and convenient to use.
- The nebuliser can also be used when tilted (45 degrees) and is protected from overflowing
- Inhalation mask, mouthpiece, replacement filter and bag are included in the scope of delivery
- Special accessories for tracheostomised/laryngectomised patients are available.



Nebufirst® inhalation device with inhalation mask



Special accessories for tracheostomised/ laryngectomised



Adapter with tracheostoma mask

Nebufirst® inhalation device scope of delivery:

- 1 Nebufirst<sup>®</sup> basic unit
- 1 power cable
- 1 nebuliser
- 1 air tube
- 1 mouthpiece
- 1 nosepiece
- 1 inhalation mask for adults/children
- 5 filters
- 1 bag

Specifications:	
Power supply:	AC 230 V, 50 Hz
Output current:	0.8 A
Maximum capacity:	13 ml
Aerosol droplet size:	0.5 to 10 µm
Droplet size according	
to MMAD:	4 µm
Housing dimensions:	196 x 170 x 107 mm
Weight:	1.5 kg

Order information:

- Nebufirst<sup>®</sup> inhalation device
   FAHL<sup>®</sup> Tracheostoma mask adapter for Nebufirst<sup>®</sup>/Nebuport<sup>®</sup>
- FAHL<sup>®</sup> Tracheostoma mask

REF 50000 REF 50110 REF 75200

# **NEBUPORT® INHALATION DEVICE**

#### WITH BATTERY



The portable Nebuport<sup>®</sup> can be used for various respiratory disorders. The special battery technology of this compressed air-powered inhalation device enables great freedom, movement and mobility. The Nebuport<sup>®</sup> is distinguished by its reliable performance, low weight and handy, elegant design.

# Nebuport<sup>®</sup> – a new generation of comfortable inhalation devices for your good health!

- Mains and battery operation possible
- The car adapter provides you with greater mobility
- Thanks to the option of directly connecting the nebuliser to the air compressor, it is ready for operation within a few seconds even without an air hose!
- The handy design is not just elegant, the cover of the air connection and the nebuliser also prevents soiling and provides protection during transport
- Established and safe NiMH battery technology ensures inhalation times of up to 60 minutes
- The nebuliser can also be used when tilted (45 degrees) and is protected from overflowing





Nebuport<sup>®</sup> inhalation device with tracheostoma mask (special accessories)



Special accessories for tracheostomised/ laryngectomised



Adapter with tracheostoma mask

<b>Nebuport</b> ®	inhalation	device sco	nne of	deliverv
Nebuport	innalation	uevice sci	JHE UI	uciiveiy

- 1 Nebuport<sup>®</sup> basic unit
- 1 battery pack and power pack
- 1 12V car adapter
- 1 nebuliser
- 1 air tube
- 1 mouthpiece
- 1 nosepiece
- 1 inhalation mask for adults/children
- 5 filters
- 1 bag

Specifications:	
Power supply:	AC 100–240 V, 50–60 Hz, alternatively DC 12 V car adapter
Battery pack:	NiMH 1600 mAH
Max. battery operating time:	approx. 45–60 min.
Maximum capacity:	13 ml
Droplet size according to MMAD:	4 µm
Housing dimensions:	106 x 66 x 166 mm (with battery)
Weight:	395 g (without battery), 721 g (with battery)

Order information:

Nebuport<sup>®</sup> inhalation device

FAHL® Tracheostoma mask adapter for Nebufirst®/Nebuport®
 FAHL® Tracheostoma mask

REF 50100 REF 50110 REF 75200

# FAHL® DRUG NEBULISER

The drug nebuliser is intended for short-term drug treatment, alongside normal inhalation. Breathing the finely nebulised medication provides fast and targeted relief.

The adjustable nozzle enables precise application. The rubber hand pump can be used to create air pressure through which the liquid is nebulised. It is possible to nebulise drugs, drug solutions and salt solutions.

The nebuliser attachment is fixed to the glass container via a screw cap and is easy to open. The brown tint of the glass container protects the contents from unwanted light. It is easy to clean thoroughly. If required, the bottle can be boiled. The drug nebuliser is supplied without contents. Only the treating

physician may select the suitable drug/s or drug solution/s.



(A)

Order information: > FAHL® Drug nebuliser

# FAHL® TRACHEAL POCKET INHALATION DEVICE



The tracheal pocket inhalation device is intended for patients who very quickly experience a feeling of dryness in the trachea or who suffer from severe encrustation.

The tracheal pocket inhalation device enables sterile water, saline or special inhalation mixtures to be nebulised. The liquid is filled into the pocket inhalation device's glass container. The composition of inhalation mixtures should be determined in consultation with the treating physician.

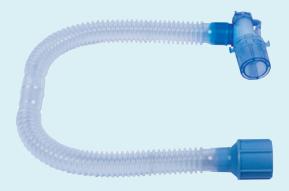
The pump-nebuliser creates a fine spray that can be used to moisten the mucous membranes of the tracheostoma.

The tracheal pocket inhalation device can be carried conveniently in your pocket, enabling inhalation at any time and on route. When special drug treatments are essential, the drug nebuliser is ideal, for the use at home a tracheal inhalation device is recommended.

**Order information:** > FAHL® Tracheal pocket inhalation device

# FAHL® CATHETER MOUNT

#### FLEXIBLE WITH SWIVEL CONNECTOR AND OPENING 40 CM



This latex-free, flexible catheter mount ensures the maximum flexibility of the tube system without kinking the tube. The connection on the device side has an inner diameter of 22 mm. The patient side has a swivel connector with a 15 mm inner diameter. The attachment of the angle piece, with suction opening and cover, also has an inner diameter of 15 mm. The length of the catheter mount is 40 cm.

Order information: FAHL® Catheter mount, flex, swivel connector with opening, 40 cm, pack of 1

**REF 19100** 

# FAHL® CATHETER MOUNT



#### FLEXIBLE WITH SWIVEL CONNECTOR AND OPENING 15 CM

The latex-free, flexible catheter mount ensures the maximum mobility of the tubing system, without bends or kinks. The connection on the device side has an inner diameter of 22 mm. The angle piece is connected to the catheter mount via a swivel connector with a 15 mm inner diameter. On the patient side, the angle piece has a swivel-connector with a 22 mm outer diameter and 15 mm inner diameter.

The length of the catheter mount is 15 cm.

Order information: > FAHL® Catheter mount, flex, swivel connector with opening, 15 cm pack of 1

REF 19110

### FAHL<sup>®</sup> NEBULISER SET

The nebuliser set is a single-patient product and is ideally suited for aerosol inhalation. The nebuliser set can be used at constant power, both vertically and at an angle. It is connected by 22 ID and 22 OD/15 ID connectors.

Order information: > FAHL® Nebuliser set, pack of 1

# HUMIDOBAC® WITH HME

#### **BACTERIAL/VIRAL FILTER**



HumidoBac<sup>®</sup> is a bacterial/viral filter, with HME that assists in the protection of the patient and in the humidification of the air. HumidoBac<sup>®</sup> is e.g., placed between the catheter mount and the Y-piece of the ventilation system.

The HumidoBac<sup>®</sup> filter should be exchanged when necessary, e.g., if a build-up of secretions causes increased resistance, but after 24 hours at the latest.

HumidoBac<sup>®</sup> is intended for single use only. HumidoBac<sup>®</sup> is supplied in sterile, individual packaging. The packing unit contains 50 pieces.



# **HUMIDOBAC®**

VENTILATION

#### **BACTERIAL/VIRAL FILTER**

**REF 46830** 



HumidoBac<sup>®</sup> is a bacterial/viral filter designed to protect the patient. HumidoBac<sup>®</sup> is placed between the catheter mount and the ventilation system. However, HumidoBac<sup>®</sup> can also be used as a filter in certain inhalation devices.

The HumidoBac<sup>®</sup> filter should be exchanged when necessary, e.g., if a build-up of secretions causes increased resistance, but after 24 hours at the latest.

HumidoBac<sup>®</sup> is intended for single use only. HumidoBac<sup>®</sup> is supplied in sterile, individual packaging. The packing unit contains 50 pieces.

Order information: HumidoBac<sup>®</sup> bacterial/viral filter, sterile, pack of 50

# FAHL® OXYGEN CONNECTION TUBE

#### STERILE

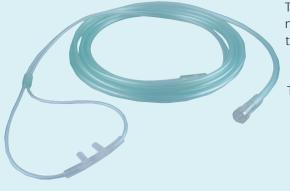
**REF 46831** 

A special connection tube for the combination of e.g., an HME (Heat and Moisture Exchanger) with an external oxygen source. The oxygen connection tube has an inner profile in order to prevent tube deformation. In order to ensure sufficient freedom of movement the connection tube of the CH 14 has a length of 200 cm. The oxygen connection tube is supplied in a sterile package of 50 pieces.

Order information: FAHL® Oxygen connection tube, sterile, with inner profile to prevent tube deformation, pack of 50

# FAHL® NASAL TUBE FOR OXYGEN SUPPLY

#### FOR MOUTH/NASAL BREATHING



The nasal tube for oxygen supply is suitable for use by adults with normal mouth/nose breathing. It is attached to the nostrils and enables the supply of oxygen. The 210 cm long safety tube has the dimensions 3.1 x 6.4 mm and connects the nasal tube with an external oxygen source. The inner profile prevents accidental deformation of the tube. The nasal tube is supplied in a non-sterile packing unit of 50 pieces.

**Order information:** 

FAHL<sup>®</sup> Nasal tube for oxygen supply, pack of 50

**REF 75275** 

**REF 75250** 

# FAHL® OXYGEN MASK FOR NECK BREATHERS



Tracheostomised/laryngectomised patients who no longer wear a tracheostomy tube can use the oxygen mask, made of plastic.

The mask is shield-shaped and is placed over the tracheostoma. The soft material sits comfortably on the skin. An angled pipe is located in the middle of the mask shield. At the opposite end, this tube has a port for the connection of the oxygen tube.

The oxygen mask is tied around the neck with two neck straps and fastened with a press-stud. The oxygen mask enables targeted oxygen therapy for neck breathers.

The oxygen mask is supplied in hygienic, individual packaging. The packing unit contains 10 pieces.

Order information: > FAHL® Oxygen mask for neck breathers, pack of 10

# FAHL® VENTILATION BAG



The silicone ventilation bag is used for the manual ventilation of patients.

The ventilation bag can be attached to tracheostomy tubes or endotracheal tubes via the standardised connectors. For ventilation via a face mask, this is attached to the standard connector. A face mask is not included in the scope of delivery.

To enable hygienic cleaning, the silicone ventilation bag can be autoclaved (up to 134°C), with the exception of the oxygen reservoir bag.

**FAHL® Ventilation bag**, for adults with expiration valve/-attachment, 2500 ml

# EASYPOX<sup>®</sup> PULSE OXIMETER



The Easypox<sup>®</sup> is a portable pulse oximeter for the measurement and monitoring of oxygen saturation and pulse. Its light, compact design enables it to be used in the most variable fields of application:

at home

- in nursing homes
- and in medically used areas (e.g., medical practices)

The clear and colourful display of the oxygen saturation and pulse rate values, as well as the plethysmogram, provides the user with simple and convenient operation.

The clear menu navigation in the Easypox<sup>®</sup> pulse oximeter is easy to understand and, with three control keys, simple to use.

The adjustable alarm limits enable customised monitoring of the patient with subsequent saving of the measured values in the device.

With the help of a USB cable and the accompanying software, the saved data can also be easily transferred to a PC, where it can be viewed, saved and analysed. The accompanying software is included.

The pulse oximeter can be combined with several Easypox<sup>®</sup> sensors, this allows the Easypox<sup>®</sup> sensors for children (as accessory available) to even be used on older children.

Specifications:		
Operating time:	max. 24 hours	
Charging time:	max. 6 hours	
SpO <sub>2</sub> measuring range:	0% to 100%,	
	Resolution 1 %	
SpO <sub>2</sub> accuracy:	70 % to 100 %: ± 2 %	
	Under 70 %	
	not specified	
Pulse frequency	30 to 250 bpm,	
measuring range:	Resolution 1 bpm	
Pulse frequency accuracy:	± 2 bpm or ± 2 %	
	(largest value	
	applies)	
Memory:	Data memory for SpO <sub>2</sub> , pulse rate,	
	Capacity max. 24 h	
Displays:	SpO <sub>2</sub> , pulse rate,	
	plethysmogram, bar-	
	graph, sensor errors,	Easypox <sup>®</sup> pulse oximeter scope of delivery:
	battery status	1 Easypox <sup>®</sup> pulse oximeter
Acoustic signals:	pulse sound, alarm	1 Fingerclip sensor for adults
	limits, sensor errors	1 rechargeable battery (incl. replacement
Data output:	USB interface	rechargeable battery)
Dimensions (HxWxD):	87 x 45 x 22 mm	1 USB connection/recharger cable
Weight:	175 g (with recharge- able battery, without	1 mains plug
	sensor)	1 PC software
	501301	i i e soluvelle

Order information:	Easypox <sup>®</sup> pulse oximeter, complete with accessories	REF 75050
	FAHL® Fingerclip sensor for adults	REF 75050-1
	FAHL® Rechargeable battery	REF 75050-2
	FAHL® USB connection/recharger cable	REF 75050-3
	FAHL® Mains Plug	REF 75050-4
	FAHL® Fingerclip sensor for children	REF 75050-5
	FAHL® PC software	REF 75050-7

# **TRACHEOSTOMY TUBES**









Fenestration in tube



Sieve in tube



1/4 tube radius



1/8 tube radius

#### Tracheostomy tubes:

We provide a diverse range of tracheostomy tubes made from various materials.

This wide range of products is due to the fact that tracheostomy tubes should be ideally matched to the requirements of the individual patient. Your doctor, who individually adjusts the tubes for each patient, can advise you in the selection of your tracheostomy tube.

The tracheostomy tubes made of silver, silicone and medical-grade polymer are available in a variety of versions. The tracheostomy tubes can be roughly divided into two groups, metal tubes and medical-grade polymer tubes. Tracheostomy tubes made of silver belong to the former group. We exclusively supply tracheostomy tubes made of sterling (925) silver. The feature of these tubes is the high strength of the material. Metal tubes are made with thinner walls. This increases the inner diameter and thereby the inner volume of the tube, without changing the outer diameter.

The increased inner volume makes metal tubes superior to thicker medical-grade polymer tubes in their intake capacity. More air can enter and pass through the tube.

The group of medical-grade polymer tracheostomy tubes includes, for example, tubes made of silicone, polyurethane and PVC. Medical-grade polymer tubes are pleasantly light to wear. They are distinguished by the elasticity of the material and their adaptability, ensuring that the trachea is not placed under excessive strain. They also have visual advantages, as the transparent material is relatively inconspicuous in appearance.

Please note that only medical-grade polymer tracheostomy tubes must be used if radiotherapy treatment is to be carried out. The material is x-ray transparent and does not reflect the rays. This prevents any radiation damage, such as may occur due to reflection from metal tracheostomy tubes. If such radiotherapy is not to be carried out, we recommend the use of a silver tracheostomy tube for the post-operative period, due to the optimum airflow. Later on, the use of the lighter and elastic medical-grade polymer tubes is then recommendable.

Because the choice of which tracheostomy tube to use is dependent on distinctly variable factors, it is advisable to have tubes from both groups. The best tube for the respective situation then can be selected.

It is also advisable to have access to tubes of various lengths and diameters. With an ideally matched tracheostomy tube, you can avoid the formation of bruises or granulations in the tracheostoma.

When driving a car, metal tracheostomy tubes, such as the silver tube, should be avoided. These pose a considerable risk of injury in the event of a car accident.

#### Tracheostomy tubes with speaking valve:

Tracheostomy tubes with speaking valves can only be used by tracheostomised patients (patients whose larynx is still present after surgery). Laryngectomised patients are generally not able to use a tracheostomy tube with a speaking valve. The speaking valve closes during expiration and the air flows through a sieve in the outer cannula, into the larynx and then can be used for voice formation.

# SILVERVENT® TRACHEOSTOMY TUBE

#### WITH TWO INNER CANNULAS



RACHEOSTOMY TUBE:

We only supply Silvervent<sup>®</sup> tracheostomy tubes that are made of a conical, seamless tube made of sterling silver. Conical means that the diameter of the tube decreases from the neck flange to the cannula tip. This makes inserting the tracheostomy tube considerably easier.

Silver tracheostomy tubes always contain an inner cannula, so that the entire tracheostomy tube does not have to be exchanged if there is a high production of secretion or encrustation. To briefly ease breathing, the inner cannula can be removed, increasing the capacity of air intake. The advantages of silver tracheostomy tubes can be outlined as follows:

- extremely thin tube walls, enabling a large volume of air to enter, even in small tracheostomy tubes
- antibacterial action due to the smooth surface and problem-free sterilisation of the tube.

By default, the silver tracheostomy tubes have a tube which is bent in a 1/4 radius.

The Silvervent® tracheostomy tube is also available with one inner cannula (see REF 10000)

#### Size chart for Silvervent® tracheostomy tubes

Size	O.D. Tip mm	O.D. neck fla	ange mm I.D. mm	Length mm	REF
0	4.5	6.1	2.5	50	10002-00
1	5.0	6.4	3.0	50	10002-01
2	5.7	6.8	3.7	50	10002-02
3	6.4	7.5	4.4	55	10002-03
4	7.0	8.2	5.0	55	10002-04
5	7.7	9.1	5.7	60	10002-05
6	8.4	9.8	6.4	60	10002-06
7	9.0	10.9	7.0	65	10002-07
8	9.7	11.6	7.7	70	10002-08
9	10.4	12.3	8.4	75	10002-09
10	11.0	13.2	9.0	80	10002-10
11	11.7	13.8	9.7	90	10002-11
12	12.4	14.6	10.4	90	10002-12
13	13.0	15.0	11.0	90	10002-13
14	13.7	15.8	11.7	90	10002-14

Sizing information:

**CO.D.** Tip = Outer diameter of the outer tube at the tip of the cannula · **O.D.** neck flange = Outer diameter behind the neck flange · **I.D.** = Inner diameter at the tip of the cannula **Length** = Length over the outer curve

30

**Order information:** 

 Silvervent<sup>®</sup> tracheostomy tube with two inner cannulas, size 0-14
 Silvervent<sup>®</sup> tracheostomy in the silvervent<sup>®</sup> t Silvervent® tracheostomy tube with one inner cannula, size 1-13

**REF 10002 REF 10000** 

# SILVERVENT® TRACHEOSTOMY TUBE

#### ACCORDING TO JATHO WITH TWO INNER CANNULAS



Unlike standard silver tracheostomy tubes, Jatho cannulas have a tube which is bent in a 1/8 radius; the bend is not as great as in standard tubes, which are bent in a 1/4 radius. Two inner cannulas are included in the scope of delivery.

The Silvervent® tracheostomy tube according to Jatho is also available with one inner cannula (see REF 10300)

#### Size chart for Silvervent® tracheostomy tubes according to Jatho

Size	O.D. Tip mm	O.D. neck fla	ange mm I.D. mm	Length mm	REF
8	9.7	11.6	7.7	70	10302-08
9	10.4	12.3	8.4	75	10302-09
10	11.0	13.2	9.0	80	10302-10
11	11.7	13.8	9.7	90	10302-11
12	12.4	14.6	10.4	90	10302-12

O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve

Order information:	Silvervent® tracheostomy tube according to Jatho, with two inner cannulas, size 8-12	<b>REF 10302</b>
	Silvervent <sup>®</sup> tracheostomy tube according to Jatho, with one inner cannula, size 8-12	<b>REF 10300</b>

# SILVERVENT® TRACHEOSTOMY TUBE

#### WITH A 15 MM CONNECTOR AND AN ADDITIONAL INNER CANNULA



Tracheostomy tubes with a 15 mm connector are intended for patients who must attach an HME (Heat and Moisture Exchanger) to their tubes.

The tracheostomy tube consists of an outer cannula and two inner cannulas, where one of the inner cannulas has an attachment with a 15 mm connector. If the humidification of the inspired air through the attachment of the HME is briefly not desired, the inner cannula can simply be exchanged for an inner cannula without a 15 mm connector.

The Silvervent® tracheostomy tube is also available with one inner cannula (see REF 10500)

size cha	art for Silvervent <sup>2</sup> tra	icneostomy tu	bes with a 15 mm co	nnector	
Size	O.D. Tip mm	O.D. neck fla	inge mm I.D. mm	Length mm	REF
2	5.7	6.8	3.7	50	10502-02
3	6.4	7.5	4.4	55	10502-03
4	7.0	8.2	5.0	55	10502-04
5	7.7	9.1	5.7	60	10502-05
6	8.4	9.8	6.4	60	10502-06
7	9.0	10.9	7.0	65	10502-07
8	9.7	11.6	7.7	70	10502-08
9	10.4	12.3	8.4	75	10502-09
10	11.0	13.2	9.0	80	10502-10
11	11.7	13.8	9.7	90	10502-11
12	12.4	14.6	10.4	90	10502-12
13	13.0	15.0	11.0	90	10502-13

**Order information:** 

Silvervent® tracheostomy tube, with a 15 mm connector and additional inner cannula, size 2-13 REF 10502 **REF 10500** Silvervent® tracheostomy tube, with a 15 mm connector, size 1-13

# SILVERVENT® TRACHEOSTOMY TUBE

#### WITH STERLING SILVER SPEAKING VALVE



Speaking valves made of silver have, as standard, numerous holes in the outer cannula (so-called "sieve") and an oval opening (so-called "fenestration") in the inner cannula. The speaking valve is detachable from the neck flange, it is designed as a sliding valve. A round valve flap closes off the tube during speaking and expiration. On inhaling, the valve is automatically opened by the incoming airflow. If air is not ideally flowing through the larynx, detaching the speaking valve from the tracheostomy tube can prevent the formation of overpressure. A small silver chain secures the speaking valve, ensuring that it does not accidentally fall off.

This tracheostomy tube, with a speaking valve, is also available in custom-made "extra long" and "shortened" versions.

Size chart for Silvervent <sup>®</sup> tracheostomy tube with sterling silver speaking valve								
Size	O.D. Tip mm	O.D. neck fla	nge mm I.D. mm	Length mm	REF			
0	4.5	6.1	2.5	50	20000-00			
1	5.0	6.4	3.0	50	20000-01			
2	5.7	6.8	3.7	50	20000-02			
3	6.4	7.5	4.4	55	20000-03			
4	7.0	8.2	5.0	55	20000-04			
5	7.7	9.1	5.7	60	20000-05			
6	8.4	9.8	6.4	60	20000-06			
7	9.0	10.9	7.0	65	20000-07			
8	9.7	11.6	7.7	70	20000-08			
9	10.4	12.3	8.4	75	20000-09			
10	11.0	13.2	9.0	80	20000-10			
11	11.7	13.8	9.7	90	20000-11			
12	12.4	14.6	10.4	90	20000-12			
13	13.0	15.0	11.0	90	20000-13			
14	13.7	15.8	11.7	90	20000-14			

Order information: > Silvervent® Tracheostomy tube with silver speaking valve, size 0-14

**REF 20000** 

# SILVERVENT® MULTI FUNCTION TRACHEOSTOMY TUBE



This tracheostomy tube, made of silver, is designed for tracheostomised patients and enables many possible fields of application. It consists of three parts, an outer cannula with a sieve, an inner cannula with a fenestration and speaking valve, as well as an additional port for an oxygen supply. In addition, a further inner cannula, with a 15 mm connector for the use of an HME (Heat and Moisture Exchanger), is included in the scope of delivery. The cannula is available in the sizes 2-13.

Size chart for Silvervent <sup>®</sup> multi function tracheostomy tubes								
Size	O.D. Tip mm	O.D. neck fla	nge mm I.D. mm	Length mm	REF			
2	5.7	6.8	3.7	50	20300-02			
3	6.4	7.5	4.4	55	20300-03			
4	7.0	8.2	5.0	55	20300-04			
5	7.7	9.1	5.7	60	20300-05			
6	8.4	9.8	6.4	60	20300-06			
7	9.0	10.9	7.0	65	20300-07			
8	9.7	11.6	7.7	70	20300-08			
9	10.4	12.3	8.4	75	20300-09			
10	11.0	13.2	9.0	80	20300-10			
11	11.7	13.8	9.7	90	20300-11			
12	12.4	14.6	10.4	90	20300-12			
13	13.0	15.0	11.0	90	20300-13			

Order information: > Silvervent<sup>®</sup> multi function tracheostomy tube, size 2-13

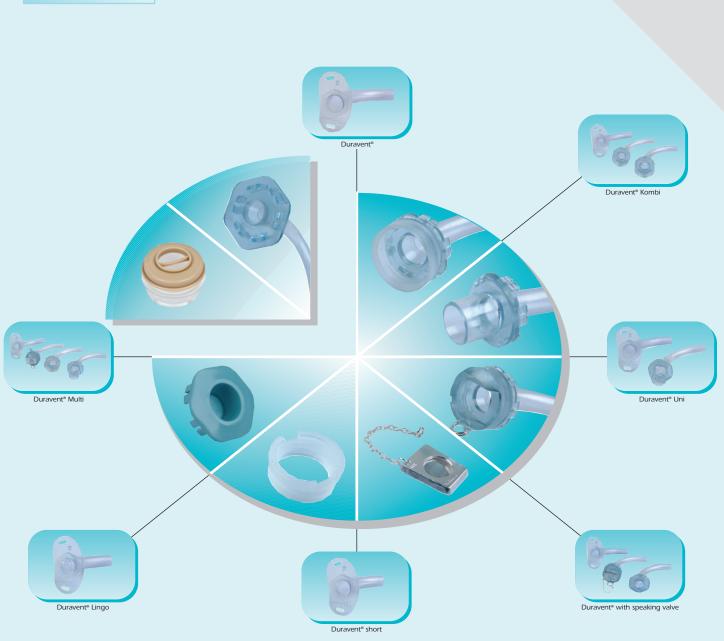
# **DURAVENT® TRACHEOSTOMY TUBES**





The Duravent<sup>®</sup> product line consists of numerous variations of an innovative, user-friendly tracheostomy tube. This enables tailor-made care, taking the individual needs of each patient into account.

The Duravent<sup>®</sup> product line is divided into 7 tracheostomy tube groups, which are further subdivided.



# **DURAVENT® TRACHEOSTOMY TUBES**







**RACHEOSTOMY** 





#### **Specifications**

Duravent<sup>®</sup> tracheostomy tubes are made of a particularly soft, transparent polymer, in medical quality. They are radiolucent and have a lateral X-ray contrast strip, which enables the exact localisation of the tube on the x-ray's. The specially shaped neck flange makes the trachesostomy tube more comfortable to wear because, in contrast to many conventional tracheostomy tubes, it is adjusted to the anatomy of the neck. The fastening eyelets for the tube holder are ergonomically placed, incorporated into the neck flange, so that the tracheostomy tube is not pulled upwards by the tube holder. The neck flange is extremely flexible and therefore prevents bruising reliably.

To make the cannula as comfortable as possible to wear for tracheostomised/laryngectomised patients, a great deal of value was placed on its inconspicuous appearance, particularly low weight, as well as on its thermo sensitive action.

During the development of the Duravent<sup>®</sup> tracheostomy tube, it was very important to us to reduce the thickness of the material, to achieve the largest possible inner diameter, with the same outer diameter and without loss of stability. This means that the inner volume of the Duravent<sup>®</sup> tracheostomy tube could be increased allowing more air to be passed through the tracheostomy tube and into the lungs.

The special Easy Lock hexagonal lock enables fast and secure fixation of the inner cannula in the outer cannula. The inner cannula slides precisely into the predetermined stop position. This makes twisting of the inner cannula against the outer cannula near to impossible. The Easy Lock hexagonal connection also enables the attachment of the SOLO adapter, matched to the Duravent<sup>®</sup> cannulas. This makes it possible for tracheostomy tube wearers who do not use an inner cannula, to use useful filter and valve accessories, together with their Duravent<sup>®</sup> cannula. All tracheostomy tubes are available in a large selection of different sizes and types.

Duravent<sup>®</sup> tracheostomy tubes extra long are, for example, tracheostomy tubes made in special lengths, i.e., the normal or standard length for the respective cannula size is exceeded.

Duravent<sup>®</sup> tracheostomy tubes are supplied in non-sterile, individual packaging.

#### **Product variations**

Aside from the standard versions, the short tubes and the extra long tubes, further product variations are also available. In these product versions, allowances can be made for anatomical conditions, after consultation with the treating physician. The cannulas can, if required, be made to measure, meeting the individual requirements of the patient (shortening of the cannula, size/ length and position of the fenestration and/or sieve, bending). The size specifications are based on the European standard EN ISO 5366-1. The stated size corresponds to the inner diameter of the outer cannula at its narrowest, deepest point (cannula tip), in mm.

34

# DURAVENT® STANDARD TRACHEOSTOMY TUBES



Duravent<sup>®</sup> Standard tracheostomy tubes are supplied without inner cannula or with standard inner cannulas. Standard inner cannulas can be used without any further attachments or can be equipped with the SOLO adapter for Trachinaze<sup>®</sup> Plus filters, to make use of the option of inspired air filtering with the Trachinaze<sup>®</sup> Plus filter system. If standard inner cannulas are to be used without an adapted filter system, we recommend the use of an additional stoma protection product (e.g., stoma protection neckerchief) to prevent the ingress of foreign bodies into the Tracheostoma, humidify and warm the inspired air.

# **DURAVENT® TRACHEOSTOMY TUBE**

#### WITHOUT INNER CANNULA

**REF 11000** 

The Duravent<sup>®</sup> tracheostomy tube only consists of an outer cannula and therefore is supplied without an inner cannula. This tracheostomy tube is designed for patients with limited secretion production and those who only require a tracheostomy tube for a short time period.



This Duravent<sup>®</sup> tracheostomy tube is also available in a special length, the "extra long XL" version. Please note the information in the size chart.

#### Size chart for Duravent® tracheostomy tube without inner cannula

Size	O.D. neck	O.D. Tip	I.D. mm	Length mm	REF Storedard	Length mm	REF
	flange mm	mm	O-cannula	Standard	Standard	extra long XL	extra long XL
3	5.2	3.8	2.7	55	11000-03		
3.5	6.2	4.8	3.6	55	11000-035		
4	7.2	5.8	4.4	55	11000-04		
5	8.4	6.6	5.4	55	11000-05	95	11200-05
6	9.4	7.8	6.2	60	11000-06	95	11200-06
7	10.2	8.8	7.0	65	11000-07	100	11200-07
8	11.2	9.8	8.0	70	11000-08	105	11200-08
9	12.4	11.2	9.0	75	11000-09	105	11200-09
10	13.4	12.2	10.0	85	11000-10	110	11200-10
11	14.4	13.2	11.0	87	11000-11	115	11200-11
12	15.4	14.2	12.0	90	11000-12	120	11200-12
13	16.6	15.2	13.0	90	11000-13	125	11200-13
Sizing informa	tion:						

O-D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula O-cannula = Outer cannula · Length = Length over the outer curve

#### Order information:

Duravent<sup>®</sup> tracheostomy tube without inner cannula,

- size 3-13
- Duravent<sup>®</sup> tracheostomy tube, extra long without inner cannula, size 5-13
   REF 11200

ACHEOSTOMY TUBES

### **DURAVENT® TRACHEOSTOMY TUBE**

#### WITH TWO INNER CANNULAS

This Duravent<sup>®</sup> tracheostomy tube consists of an outer cannula and two inner cannulas. Standard inner cannulas can be used without any further attachments or with the Duravent<sup>®</sup> attachment for Trachinaze<sup>®</sup> Plus filters, to make use of the option of respiratory air filtering with the Trachinaze<sup>®</sup> Plus filter system.

If standard inner cannulas are to be used without an adapted filter system, we recommend the use of an alternative stoma protection, to prevent the entry of foreign bodies into the tracheostoma, humidify and warm the inspired air.



**RACHEOSTOMY** 



This Duravent<sup>®</sup> tracheostomy tube is also available in a special length, the "extra long XL" version.

Additionally we offer this tracheostomy tube with one inner cannula (see REF 11001) and in the "extra long XL" version (see REF 11201). Please note the information in the size chart.

#### Size chart for Duravent® tracheostomy tube with two inner cannulas

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL
3	5.2	3.8	2.7	1.8	55	11002-03		
3.5	6.2	4.8	3.6	2.7	55	11002-035		
4	7.2	5.8	4.4	3.3	55	11002-04		
5	8.4	6.6	5.4	4.3	55	11002-05	95	11202-05
6	9.4	7.8	6.2	4.9	60	11002-06	95	11202-06
7	10.2	8.8	7.0	5.5	65	11002-07	100	11202-07
8	11.2	9.8	8.0	6.5	70	11002-08	105	11202-08
9	12.4	11.2	9.0	7.5	75	11002-09	105	11202-09
10	13.4	12.2	10.0	8.5	85	11002-10	110	11202-10
11	14.4	13.2	11.0	9.5	87	11002-11	115	11202-11
12	15.4	14.2	12.0	10.2	90	11002-12	120	11202-12
13	16.6	15.2	13.0	11.2	90	11002-13	125	11202-13
Sizing inform	nation:							

**O.D. neck flange =** Outer diameter behind the neck flange · **O.D. Tip =** Outer diameter of the outer cannula at the tip of the cannula · **I.D. =** Inner diameter at the tip of the cannula **Ocannula =** Outer cannula · **I.Cannula =** Inner diameter at the tip of the cannula · **I.Cannula =** Inner diameter at the tip of the cannula · **I.Cannula =** Inner diameter at the tip of the cannula · **I.Cannula =** Outer cannula · **I.Cannula =** Inner diameter at the tip of the cannula · **I.Cannula =** Inner diameter at

#### Order information:

- Duravent<sup>®</sup> tracheostomy tube with two inner cannulas, size 3-13
- Duravent® tracheostomy tube extra long with two inner cannulas, size 5-13
- Duravent<sup>®</sup> tracheostomy tube with one inner cannula, size 3-13
  - Duravent<sup>®</sup> tracheostomy tube extra long with one inner cannula, size 5-13

### **DURAVENT® KOMBI TRACHEOSTOMY TUBES**



The name "KOMBI" indicates that the scope of delivery includes at least one inner cannula with a 22 mm combi-adapter.

The 22 mm combi-adapter is a plastic housing, which is connected firmly to the inner cannula. It has an opening with a diameter of 22 mm and is thereby compatible with standard filter and valve systems with a 22 mm adapter. This allows special filters for filtering, humidifying and warming the air to be attached, such as e.g., Laryvox<sup>®</sup>. It is also possible to use tracheostoma valves, such as the Blom-Singer<sup>®</sup> tracheostoma valve and the Extravent<sup>®</sup> speaking valve.

### DURAVENT<sup>®</sup> KOMBI TRACHEOSTOMY TUBE

#### WITH TWO INNER CANNULAS, ONE WITH A 22MM COMBI-ADAPTER

This Duravent<sup>®</sup> tracheostomy tube consists of an outer cannula and two inner cannulas, one of which has a 22 mm combi-adapter. The 22 mm combi-adapter is a plastic housing, which is firmly connected to the inner cannula. It has an opening with a diameter of 22 mm and is thereby compatible with standard filter and valve systems with a 22 mm adapter. This allows special filters for filtering, humidifying and warming the air to be attached, such as Laryvox<sup>®</sup>. It is also possible to use tracheostoma valves, such as the Blom-Singer<sup>®</sup> tracheostoma valve, and the Extravent<sup>®</sup> speaking valve.

This Duravent<sup>®</sup> tracheostomy tube is also available in a special length, the "extra long XL" version. Please note the information in the size chart.

Size ch	Size chart for Duravent <sup>®</sup> tracheostomy tube with two inner cannulas, one with a 22 mm combi-adapter										
Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL			
5	8.4	6.6	5.4	4.3	55	11092-05	95	11292-05			
6	9.4	7.8	6.2	4.9	60	11092-06	95	11292-06			
7	10.2	8.8	7.0	5.5	65	11092-07	100	11292-07			
8	11.2	9.8	8.0	6.5	70	11092-08	105	11292-08			
9	12.4	11.2	9.0	7.5	75	11092-09	105	11292-09			
10	13.4	12.2	10.0	8.5	85	11092-10	110	11292-10			
11	14.4	13.2	11.0	9.5	87	11092-11	115	11292-11			
12	15.4	14.2	12.0	10.2	90	11092-12	120	11292-12			
13	16.6	15.2	13.0	11.2	90	11092-13	125	11292-13			
Sizing inform	mation:										

O-D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula O-cannula = Outer cannula · I-cannula = Inner diameter at the tip of the cannula O-cannula = Outer cannula · I-cannula = Inner diameter at the tip of the cannula O-cannula = Outer cannula · I-cannula = Inner diameter at the tip of the cannula outer cannula · I-cannula = Inner diameter at the tip of the cannula · I-cannula = Inner diameter at the tip of the cannula · I-cannula = Inner diameter at the tip of the cannula · I-cannula = Inner diameter at the tip of the cannula · I-cannula = Inner diameter at the tip of the cannula · I-cannula = Inner diameter at the tip of the cannula · I-cannula = Inner diameter at the tip of the cannula · I-cannula = Inner diameter at the tip of the cannula · I-cannula = Inner diameter at the tip of the cannula · I-cannula = Inner diameter at the tip of the cannula · I-cannula = Inner diameter at the tip of the cannula · I-cannula · I-ca

Order information:

- Duravent® KOMBI tracheostomy tube with two inner cannulas, one with a 22 mm combi-adapter, size 5-13
  - Duravent® KOMBI tracheostomy tube extra long with two inner cannulas, one with a 22 mm combi-adapter, size 5-13

REF	11092
REF	11292

#### WITH TWO INNER CANNULAS WITH 22 MM COMBI-ADAPTER

This Duravent<sup>®</sup> tracheostomy tube consists of an outer cannula and two inner cannulas with 22 mm combi-adapter. The 22 mm combiadapter is a plastic housing, which is firmly connected to the inner cannula. It has an opening with a diameter of 22 mm and is thereby compatible with standard filter and valve systems with a 22 mm adapter. This allows special filters for filtering, humidifying and warming the air to be attached, such as e.g., Laryvox<sup>®</sup>. It is also possible to use tracheostoma valves, such as the Blom-Singer<sup>®</sup> tracheostoma valve, and the Extravent<sup>®</sup> speaking valve.

This Duravent<sup>®</sup> tracheostomy tube is also available in a special length, the "extra long XL" version.

Additionally we offer this tracheostomy tube with one inner cannula (see REF 11081) and in the "extra long XL" version (see REF 11281). Please note the information in the size chart.

#### Size chart for Duravent® KOMBI tracheostomy tube with two inner cannulas

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL
5	8.4	6.6	5.4	4.3	55	11082-05	95	11282-05
6	9.4	7.8	6.2	4.9	60	11082-06	95	11282-06
7	10.2	8.8	7.0	5.5	65	11082-07	100	11282-07
8	11.2	9.8	8.0	6.5	70	11082-08	105	11282-08
9	12.4	11.2	9.0	7.5	75	11082-09	105	11282-09
10	13.4	12.2	10.0	8.5	85	11082-10	110	11282-10
11	14.4	13.2	11.0	9.5	87	11082-11	115	11282-11
12	15.4	14.2	12.0	10.2	90	11082-12	120	11282-12
13	16.6	15.2	13.0	11.2	90	11082-13	125	11282-13

Sizing information:

O-D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula O-cannula = Outer cannula · I-cannula = Inner cannula · Length = Length over the outer curve

Order information:	Duravent <sup>®</sup> KOMBI tracheostomy tube with two inner cannulas, and 22 mm combi-adapter, size 5-13	REF 11082
	Duravent® KOMBI tracheostomy tube extra long with two inner cannulas,	REF 11282
	and 22 mm combi-adapter, size 5-13 Duravent® KOMBI tracheostomy tube with one inner cannula,	REF 11081
	<ul> <li>and 22 mm combi-adapter, size 5-13</li> <li>Duravent® KOMBI tracheostomy tube extra long with one inner cannula, and 22 mm combi-adapter, size 5-13</li> </ul>	REF 11281

### DURAVENT® UNI TRACHEOSTOMY TUBES



The "UNI" description covers tracheostomy tubes whose scope of delivery includes at least one inner cannula with a so-called 15 mm connector, as used in ventilation, which is used here to attach HMEs (Heat and Moisture Exchangers) or speaking valves with a 15 mm standard connection.

### DURAVENT<sup>®</sup> UNI TRACHEOSTOMY TUBE

#### WITH TWO INNER CANNULAS, ONE WITH A 15 MM CONNECTOR



The Duravent<sup>®</sup> UNI tracheostomy tube consists of an outer cannula, two inner cannulas, of which one is equipped with a 15 mm connector (universal attachment). The 15 mm connector enables Heat and Moisture Exchangers (HMEs) or speaking valves, with 15 mm standard-ised connectors, to be attached.

This Duravent<sup>®</sup> tracheostomy tube is also available in a special length, the "extra long XL" version. Please note the information in the size chart.

#### Size chart for Duravent® UNI tracheostomy tube with two inner cannulas,

one with a 15 mm connector Size O.D. neck O.D. Tip I.D. mm I.D. mm Length mm REF Length mm REF Standard Standard extra long XL flange mm mm O-cannula I-cannula extra long XL 5.2 3 3.8 11022-03 2.7 1.8 55 3.5 4.8 3.6 55 11022-035 6.2 2.7 4 7.2 5.8 4.4 3.3 55 11022-04 5 8.4 4.3 55 11022-05 95 11222-05 6.6 5.4 9.4 7.8 4.9 95 6.2 7.0 60 11022-06 11222-06 6 10.2 5.5 11022-07 100 88 65 11222-07 7 11.2 70 11022-08 105 11222-08 8 9.8 8.0 6.5 75 9 174 112 90 75 11022-09 105 11222-09 10 13.4 12.2 10.0 8.5 85 11022-10 110 11222-10 11 14 4 137 110 95 87 11022-11 115 11222-11 12 15.4 14.2 12.0 10.2 90 11022-12 120 11222-12 13 16.6 15.2 13.0 11.2 90 11022-13 125 11222-13 Sizing information:

**O.D. neck flange =** Outer diameter behind the neck flange · **O.D. Tip =** Outer diameter of the outer cannula at the tip of the cannula · **I.D. =** Inner diameter at the tip of the cannula **Ocannula =** Outer cannula - **I.cannula =** Inner cannula · **I.equit =** Length over the outer curve

#### **Order information:**

Duravent® UNI tracheostomy tube with two inner cannulas, one with a 15 mm connector, size 3-13

one with a 15 mm connector, size 5-13

REF 11022 REF 11222 *IRACHEOSTOMY TUBES* 

Duravent<sup>®</sup> UNI tracheostomy tube extra long with two inner cannulas,

### **DURAVENT® UNI TRACHEOSTOMY TUBE**

#### WITH TWO INNER CANNULAS WITH 15 MM CONNECTOR

This Duravent® tracheostomy tube consists of an outer cannula and two inner cannulas with a standardised 15 mm connector (universal attachment). The 15 mm connector enables Heat and Moisture Exchangers (HMEs) or speaking valves with 15 mm standardised connectors, to be attached.



This Duravent® tracheostomy tube is also available in a special length, the "extra long XL" version.

Additionally we offer this tracheostomy tube with one inner cannula (see REF 11011) and in the "extra long XL" version (see REF 11211). Please note the information in the size chart.

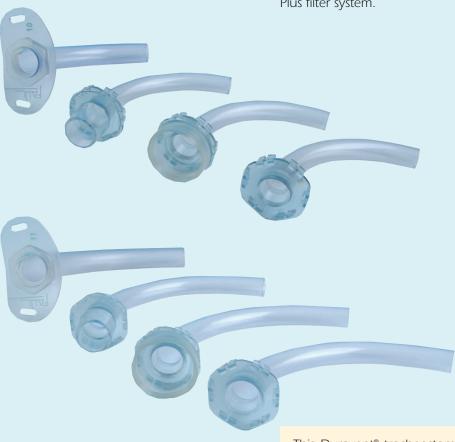
Size chart for Duravent <sup>®</sup> UNI tracheostomy tube with two inner cannulas and 15 mm connector										
Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL		
3	5.2	3.8	2.7	1.8	55	11012-03				
3.5	6.2	4.8	3.6	2.7	55	11012-035				
4	7.2	5.8	4.4	3.3	55	11012-04				
5	8.4	6.6	5.4	4.3	55	11012-05	95	11212-05		
6	9.4	7.8	6.2	4.9	60	11012-06	95	11212-06		
7	10.2	8.8	7.0	5.5	65	11012-07	100	11212-07		
8	11.2	9.8	8.0	6.5	70	11012-08	105	11212-08		
9	12.4	11.2	9.0	7.5	75	11012-09	105	11212-09		
10	13.4	12.2	10.0	8.5	85	11012-10	110	11212-10		
11	14.4	13.2	11.0	9.5	87	11012-11	115	11212-11		
12	15.4	14.2	12.0	10.2	90	11012-12	120	11212-12		
13	16.6	15.2	13.0	11.2	90	11012-13	125	11212-13		

Sizing information: O.D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula O-cannula = Outer cannula · I-cannula = Inner cannula · Length = Length over the outer curve

Order information:	Duravent <sup>®</sup> UNI tracheostomy tube with two inner cannulas and 15 mm connector, size 3-13	REF 11012
	Duravent <sup>®</sup> UNI tracheostomy tube extra long with two inner cannulas	REF 11212
	and 15 mm connector, size 5-13	
	Duravent <sup>®</sup> UNI tracheostomy tube with one inner cannula	REF 11011
	and 15 mm connector, size 3-13	
	Duravent <sup>®</sup> UNI tracheostomy tube extra long with one inner cannula	REF 11211
	and 15 mm connector, size 5-13	

#### DURAVENT® UNI-KOMBI TRACHEOSTOMY TUBE WITH THREE INNER CANNULAS, ONE WITH 15 MM CONNECTOR AND ONE WITH 22 MM COMBI-ADAPTER

The Duravent<sup>®</sup> UNI-KOMBI tracheostomy tube consists of an outer cannula and three inner cannulas, where one of the inner cannulas has an attachment with a 15 mm connector and one is equipped with a 22 mm combi-adapter. Due to the different inner cannulas the Duravent<sup>®</sup> UNI-KOMBI tracheostomy tube can be furnished with many standard filter and valve systems, thus offering great compatibility. On request, the standard inner cannula can be furnished with the Duravent® attachment for Trachinaze® Plus filters to use the Trachinaze® Plus filter system.



This Duravent® tracheostomy tube is also available in a special length, the "extra long XL" version. Please note the information in the size chart.

#### Size chart for Duravent<sup>®</sup> UNI-KOMBI tracheostomy tube with three inner cannulas, 15 mm connector and 22 mm combi-adapter

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL
5	8.4	6.6	5.4	4.3	55	11008-05	95	11208-05
6	9.4	7.8	6.2	4.9	60	11008-06	95	11208-06
7	10.2	8.8	7.0	5.5	65	11008-07	100	11208-07
8	11.2	9.8	8.0	6.5	70	11008-08	105	11208-08
9	12.4	11.2	9.0	7.5	75	11008-09	105	11208-09
10	13.4	12.2	10.0	8.5	85	11008-10	110	11208-10
11	14.4	13.2	11.0	9.5	87	11008-11	115	11208-11
12	15.4	14.2	12.0	10.2	90	11008-12	120	11208-12
13	16.6	15.2	13.0	11.2	90	11008-13	125	11208-13
Sizing infor	mation:							

O-D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula O-cannula = Outer cannula · I-cannula = Inner cannula · Length = Length over the outer curve

#### Order information:

- Duravent<sup>®</sup> UNI-KOMBI tracheostomy tube with three inner cannulas, 15 mm connector and 22 mm combi-adapter, size 5-13

  - Duravent<sup>®</sup> UNI-KOMBI tracheostomy tube extra long,
    - with three inner cannulas, 15 mm connector and 22 mm combi-adapter, size 5-13

**REF 11008** 

**REF 11208** 

RACHEOSTOMY TUBES

### DURAVENT® TRACHEOSTOMY TUBES WITH SPEAKING VALVE







Tracheostomy tubes with speaking valves are tubes that can and may be used exclusively by tracheostomised patients; patients who have retained their larynx. The standard version of the tracheostomy tube with speaking valve consists of an outer cannula and two inner cannulas. In the approximate middle of the outer cannula are several small holes, which are referred to as a sieve. One of the inner cannulas supplied has a speaking valve attachment. This attachment is made of medical-grade polymer and has a mechanism with a valve function, which allows the cannula to be totally closed to the airflow during expiration and speaking. The speaking valve opens on inspiration and air can flow into the tracheostoma. There is an oval opening, the so-called fenestration, in the middle of this inner cannula. The speaking valve attachment is available in two versions:

## Duravent<sup>®</sup> tracheostomy tubes with silver speaking valve

In this version the tracheostomy tube with speaking valve, the speaking valve attachment has a receptor, into which a flat silver valve plate, with a round valve flap, also made of silver, can be inserted. The valve flap is attached with a hinge allowing it to swing freely. On inspiration, the flap opens to allow air to flow in. During expiration and speaking, the flap is pressed against the valve plate by the exhaled airflow and closes the cannula opening creating the seal required for speaking. The valve plate is attached to the inner cannula by a small silver chain, which prevents it from falling off. If required (e.g., during X-ray examinations) the chain can be removed quickly and completely together with the inner cannula from the outer cannula.

## Duravent<sup>®</sup> tracheostomy tubes with silicone speaking valve

In the tracheostomy tube with silicone speaking valve one inner cannula has a detachable valve housing made of plastic. Like in the silver speaking valve, the valve opens on inspiration and is closed again by the expired air, making it possible to speak.







### DURAVENT® TRACHEOSTOMY TUBE WITH SPEAKING VALVE

#### WITH TWO INNER CANNULAS, ONE WITH AN ATTACHABLE SILVER SPEAKING VALVE

This Duravent<sup>®</sup> tracheostomy tube consists of an outer cannula and two inner cannulas, of which one has an attachable silver valve. This version of a tracheostomy tube with speaking valve has a speaking valve attachment with a receptor where a flat silver valve plate, with a round valve flap also made of silver can be inserted. The valve flap is equipped with a hinge, allowing it to swing freely. On inspiration, the cover opens to allow air to flow in. During expiration and speaking the flap is pressed against the valve plate by the exhaled airflow and closes the cannula opening, creating the seal required for speaking. The valve plate is attached to the inner cannula by a small silver chain, which prevents it from falling off. If required (e.g., during X-ray examinations) the inner cannula including the valve plate and chain can be removed completely from the outer cannula. This removes all metal cannula components before radiation.





This Duravent<sup>®</sup> tracheostomy tube is also available in a special length, the "extra long XL" version. Please note the information in the size chart.

### Size chart for Duravent<sup>®</sup> tracheostomy tube with speaking valve, with two inner cannulas, one with an attachable silver speaking valve

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL
3.5	6.2	4.8	3.6	2.7	55	21032-035		
4	7.2	5.8	4.4	3.3	55	21032-04		
5	8.4	6.6	5.4	4.3	55	21032-05	95	21232-05
6	9.4	7.8	6.2	4.9	60	21032-06	95	21232-06
7	10.2	8.8	7.0	5.5	65	21032-07	100	21232-07
8	11.2	9.8	8.0	6.5	70	21032-08	105	21232-08
9	12.4	11.2	9.0	7.5	75	21032-09	105	21232-09
10	13.4	12.2	10.0	8.5	85	21032-10	110	21232-10
11	14.4	13.2	11.0	9.5	87	21032-11	115	21232-11
12	15.4	14.2	12.0	10.2	90	21032-12	120	21232-12
13	16.6	15.2	13.0	11.2	90	21032-13	125	21232-13
Sizina inform	nation:							

Sizing information:

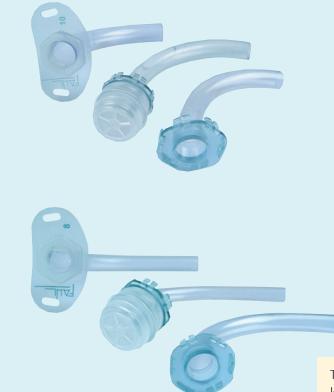
O.D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula O-cannula = Outer cannula · I-cannula = Inner cannula · Length = Length over the outer curve

#### Order information:

- Duravent® tracheostomy tube with speaking valve with two inner cannulas, one with an attachable silver speaking valve, size 3.5-13
- REF 21032
- Duravent® tracheostomy tube with speaking valve extra long with two inner cannulas one with an attachable silver speaking valve, size 5-13
  REF 21232

#### DURAVENT® TRACHEOSTOMY TUBE WITH SPEAKING VALVE WITH TWO INNER CANNULAS, ONE WITH AN ATTACHABLE SILICONE SPEAKING VALVE

This Duravent<sup>®</sup> tracheostomy tube consists of an outer cannula and two inner cannulas, of which one has a silicone speaking valve. The valve flap is attached to the valve housing in such a way that, during inspiration, it opens and air can stream in. During expiration and speaking, the flap is pressed against the valve housing by the expired airflow and closes the cannula opening, creating the seal required for speaking.



RACHEOSTOMY

This Duravent<sup>®</sup> tracheostomy tube is also available in a special length, the "extra long XL" version. Please note the information in the size chart.

## Size chart for Duravent<sup>®</sup> tracheostomy tube with speaking valve, with two inner cannulas, one with an attachable silicone speaking valve

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL
5	8.4	6.6	5.4	4.3	55	21062-05	95	21262-05
6	9.4	7.8	6.2	4.9	60	21062-06	95	21262-06
7	10.2	8.8	7.0	5.5	65	21062-07	100	21262-07
8	11.2	9.8	8.0	6.5	70	21062-08	105	21262-08
9	12.4	11.2	9.0	7.5	75	21062-09	105	21262-09
10	13.4	12.2	10.0	8.5	85	21062-10	110	21262-10
11	14.4	13.2	11.0	9.5	87	21062-11	115	21262-11
12	15.4	14.2	12.0	10.2	90	21062-12	120	21262-12
13	16.6	15.2	13.0	11.2	90	21062-13	125	21262-13
Sizing infor	mation:							

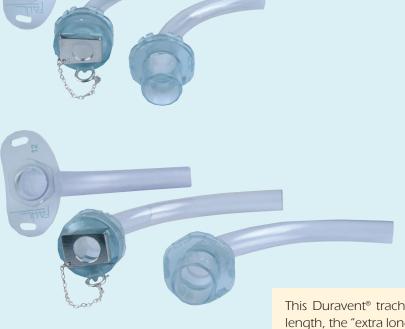
O.D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula O-cannula = Outer cannula · I-cannula = Inner cannula · Length = Length over the outer curve

#### Order information:

- Duravent® tracheostomy tube with speaking valve with two inner cannulas, one with an attachable silicone speaking valve, size 5-13
- REF 21062
- Duravent® tracheostomy tube with speaking valve extra long with two inner cannulas, one with an attachable silicone speaking valve, size 5-13
  REF 21262

#### DURAVENT® UNI TRACHEOSTOMY TUBE WITH SPEAKING VALVE WITH TWO INNER CANNULAS, ONE WITH AN ATTACHABLE SILVER SPEAKING VALVE AND ONE WITH A 15 MM CONNECTOR

This Duravent<sup>®</sup> UNI tracheostomy tube consists of an outer cannula and two inner cannulas, of which one has an attachable silver valve, and one with a 15 mm connector. One of the inner cannulas supplied has a speaking valve attachment made of silver. This attachment has a mechanism with a valve function, which allows the cannula to be totally closed to the airflow during expiration and speaking. The speaking valve opens on inspiration and air can flow into the tracheostoma. There is an oval opening, the so-called fenestration, in the middle of this inner cannula. The second inner cannula has a 15 mm connector, which enables the attachment of Heat and Moisture Exchangers (HMEs).



This Duravent® tracheostomy tube is also available in a special length, the "extra long XL" version. Please note the information in the size chart.

#### Size chart for Duravent<sup>®</sup> UNI tracheostomy tube with speaking valve, with two inner cannulas, one with an attachable silver speaking valve and one with a 15 mm connector

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL
3.5	6.2	4.8	3.6	2.7	55	21042-035		
4	7.2	5.8	4.4	3.3	55	21042-04		
5	8.4	6.6	5.4	4.3	55	21042-05	95	21242-05
6	9.4	7.8	6.2	4.9	60	21042-06	95	21242-06
7	10.2	8.8	7.0	5.5	65	21042-07	100	21242-07
8	11.2	9.8	8.0	6.5	70	21042-08	105	21242-08
9	12.4	11.2	9.0	7.5	75	21042-09	105	21242-09
10	13.4	12.2	10.0	8.5	85	21042-10	110	21242-10
11	14.4	13.2	11.0	9.5	87	21042-11	115	21242-11
12	15.4	14.2	12.0	10.2	90	21042-12	120	21242-12
13	16.6	15.2	13.0	11.2	90	21042-13	125	21242-13

Sizing information:

O.D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula Ocannula = Outer cannula · Icannula = Inner cannula · Length = Length over the outer curve

**Order information:** > Duravent<sup>®</sup> UNI tracheostomy tube with speaking valve

with two inner cannulas, one with an attachable silver speaking valve

- and one with a 15 mm connector, size 3.5-13
- Duravent<sup>®</sup> UNI tracheostomy tube with speaking valve extra long with two inner cannulas, one with an attachable silver speaking valve and one with a 15 mm connector, size 5-13

**REF 21042** 

The Duravent® UNI tracheostomy tube consists of an outer cannula and two inner cannulas, of which one has a silicone speaking valve, and one with a 15 mm connector. This tracheostomy tube has several small holes, in the approximate middle of the outer cannula; this is referred to as a sieve. One of the inner cannulas supplied has a speaking valve attachment made of silicone. This attachment has a mechanism with a valve function, which allows the cannula to be totally closed to the airflow during expiration and speaking. The speaking valve opens on inspiration and air can flow into the tracheostoma. There is an oval opening, the so-called fenestration, in the middle of this inner cannula.

The second inner cannula has a 15 mm connector, which enables the attachment of Heat and Moisture Exchangers (HMEs).

This Duravent® tracheostomy tube is also available in a special length, the "extra long XL" version. Please note the information in the size chart.

#### Size chart for Duravent<sup>®</sup> UNI tracheostomy tube with speaking valve, with two inner cannulas, one with an attachable silicone speaking valve and one with a 15 mm connector

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL
5	8.4	6.6	5.4	4.3	55	21072-05	95	21272-05
6	9.4	7.8	6.2	4.9	60	21072-06	95	21272-06
7	10.2	8.8	7.0	5.5	65	21072-07	100	21272-07
8	11.2	9.8	8.0	6.5	70	21072-08	105	21272-08
9	12.4	11.2	9.0	7.5	75	21072-09	105	21272-09
10	13.4	12.2	10.0	8.5	85	21072-10	110	21272-10
11	14.4	13.2	11.0	9.5	87	21072-11	115	21272-11
12	15.4	14.2	12.0	10.2	90	21072-12	120	21272-12
13	16.6	15.2	13.0	11.2	90	21072-13	125	21272-13

Sizing information:

**RACHEOSTOMY** 

O.D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula O-cannula = Outer cannula · I-cannula = Inner cannula · Length = Length over the outer curve

**Order information:** > Duravent<sup>®</sup> UNI tracheostomy tube with speaking valve

**REF 21072** 

with two inner cannulas, one with an attachable silicone speaking valve and one with a 15 mm connector, size 5-13

Duravent<sup>®</sup> UNI tracheostomy tube with speaking valve extra long with two inner cannulas, one with an attachable silicone speaking valve and one with a 15 mm connector, size 5-13

### DURAVENT® UNI TRACHEOSTOMY TUBE WITH SPEAKING VALVE WITH THREE INNER CANNULAS, ONE WITH AN ATTACHABLE SILVER SPEAKING VALVE AND ONE WITH A 15 MM CONNECTOR

The Duravent<sup>®</sup> UNI tracheostomy tube consists of an outer cannula and three inner cannulas, of which one has an attachable silver valve and one has a 15 mm connector. This tracheostomy tube has several small holes, in the approximate middle of the outer cannula; this is referred to as a sieve. One of the inner cannulas supplied has a speaking valve attachment made of silver. This attachment has a mechanism with a valve function, which allows the cannula to be totally closed to the airflow, during expiration and speaking. The speaking valve opens on inspiration and air can flow into the tracheostoma. There is an oval opening, the so-called fenestration, in the middle of this inner

cannula. Of the remaining inner cannulas, one has a standard attachment and the other is equipped with a standardised 15 mm connector for the adaption of Heat and Moisture Exchangers (HMEs) and further filter systems.

This Duravent® tracheostomy tube is also available in a special length, the "extra long XL" version. Please note the information in the size chart.

#### Size chart for Duravent® UNI tracheostomy tube with speaking valve, with three inner cannulas, one with an attachable silver speaking valve and one with a 15 mm connector

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL
3.5	6.2	4.8	3.6	2.7	55	21043-035		
4	7.2	5.8	4.4	3.3	55	21043-04		
5	8.4	6.6	5.4	4.3	55	21043-05	95	21243-05
6	9.4	7.8	6.2	4.9	60	21043-06	95	21243-06
7	10.2	8.8	7.0	5.5	65	21043-07	100	21243-07
8	11.2	9.8	8.0	6.5	70	21043-08	105	21243-08
9	12.4	11.2	9.0	7.5	75	21043-09	105	21243-09
10	13.4	12.2	10.0	8.5	85	21043-10	110	21243-10
11	14.4	13.2	11.0	9.5	87	21043-11	115	21243-11
12	15.4	14.2	12.0	10.2	90	21043-12	120	21243-12
13	16.6	15.2	13.0	11.2	90	21043-13	125	21243-13

Sizing information:

O.D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula Ocannula = Outer cannula · Icannula = Inner cannula · Length = Length over the outer curve

**Order information:** > Duravent<sup>®</sup> UNI tracheostomy tube with speaking valve

**REF 21043** 

- and one with a 15 mm connector, size 3.5-13
- Duravent<sup>®</sup> UNI tracheostomy tube with speaking valve extra long with three inner cannulas, one with an attachable silver speaking valve and one with a 15 mm connector, size 5-13

47

with three inner cannulas, one with an attachable silver speaking valve

#### DURAVENT<sup>®</sup> UNI TRACHEOSTOMY TUBE WITH SPEAKING VALVE WITH THREE INNER CANNULAS, ONE WITH AN ATTACHABLE SILICONE SPEAKING VALVE AND ONE WITH A 15 MM CONNECTOR

The Duravent® UNI tracheostomy tube consists of an outer cannula and three inner cannulas, of which one has a silicone speaking valve, and one has a 15 mm connector. This tracheostomy tube has several small holes, in the approximate middle of the outer cannula, this is referred to as a sieve. One of the inner cannulas supplied has a speaking valve attachment made of silicone. This attachment has a mechanism with a valve function, which allows the cannula to be totally closed to the airflow during expiration and speaking. The speaking valve opens on inspiration and air can flow into the tracheostoma. There is an oval opening, the so-called fenestration, in the middle of this inner cannula. Of the remaining inner cannulas, one has a standard attachment and the other is equipped with a standardised 15 mm connector, for the adaption of Heat and Moisture Exchangers (HMEs) and further filter systems.

This Duravent® tracheostomy tube is also available in a special length, the "extra long XL" version. Please note the information in the size chart.

#### Size chart for Duravent® UNI tracheostomy tube with speaking valve, with three inner cannulas, one with an attachable silicone speaking valve and one with a 15 mm connector

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL
5	8.4	6.6	5.4	4.3	55	21073-05	95	21273-05
6	9.4	7.8	6.2	4.9	60	21073-06	95	21273-06
7	10.2	8.8	7.0	5.5	65	21073-07	100	21273-07
8	11.2	9.8	8.0	6.5	70	21073-08	105	21273-08
9	12.4	11.2	9.0	7.5	75	21073-09	105	21273-09
10	13.4	12.2	10.0	8.5	85	21073-10	110	21273-10
11	14.4	13.2	11.0	9.5	87	21073-11	115	21273-11
12	15.4	14.2	12.0	10.2	90	21073-12	120	21273-12
13	16.6	15.2	13.0	11.2	90	21073-13	125	21273-13

Sizing information:

**O.D. neck flange =** Outer diameter behind the neck flange · **O.D. Tip =** Outer diameter of the outer cannula at the tip of the cannula · **I.D. =** Inner diameter at the tip of the cannula **Ocannula =** Outer cannula · **I.cannula =** Inner diameter at the tip of the cannula · **I.ca** 

**Order information:** > Duravent<sup>®</sup> UNI tracheostomy tube with speaking valve

and one with a 15 mm connector, size 5-13

- with three inner cannulas, one with an attachable silicone speaking valve and one with a 15 mm connector, size 5-13 Duravent<sup>®</sup> UNI tracheostomy tube with speaking valve extra long
- **REF 21073**

**REF 21273** 

48

with three inner cannulas, one with an attachable silicone speaking valve

#### DURAVENT® KOMBI TRACHEOSTOMY TUBE WITH SPEAKING VALVE WITH THREE INNER CANNULAS. ONE WITH AN ATTACHABLE SILVER SPEAKING VALVE AND ONE FENESTRATED INNER CANNULA WITH 22 MM COMBI-ADAPTER

The Duravent<sup>®</sup> Kombi tracheostomy tube with speaking valve consists of an outer cannula and three inner cannulas, one of which has an attachable silver speaking valve and a fenestrated inner cannula with a 22 mm combi-adapter. This tracheostomy tube has several small holes in the approximate middle of the outer cannula; this is referred to as a sieve. One of the inner cannulas supplied has a speaking valve attachment made of silver. This attachment has a mechanism with a valve function, which allows the cannula to be totally closed to the airflow, during expiration and speaking. The speaking valve opens on inspiration and air can flow into the tracheostoma. There is an oval

opening, the so-called fenestration, in the middle of this inner cannula. The second inner cannula has a 22 mm combi-adapter for filter and valve systems with corresponding dimensions. The third inner cannula has a low profile.

This Duravent® tracheostomy tube is also available in a special length, the "extra long XL" version. Please note the information in the size chart.

#### Size chart for Duravent<sup>®</sup> KOMBI tracheostomy tube with speaking valve, with three inner cannulas, one with an attachable silver speaking valve and one fenestrated inner cannula with a 22 mm combi-adapter

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL
5	8.4	6.6	5.4	4.3	55	21045-05	95	21245-05
6	9.4	7.8	6.2	4.9	60	21045-06	95	21245-06
7	10.2	8.8	7.0	5.5	65	21045-07	100	21245-07
8	11.2	9.8	8.0	6.5	70	21045-08	105	21245-08
9	12.4	11.2	9.0	7.5	75	21045-09	105	21245-09
10	13.4	12.2	10.0	8.5	85	21045-10	110	21245-10
11	14.4	13.2	11.0	9.5	87	21045-11	115	21245-11
12	15.4	14.2	12.0	10.2	90	21045-12	120	21245-12
13	16.6	15.2	13.0	11.2	90	21045-13	125	21245-13

Sizing information:

O-D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula O-cannula = Outer cannula · I-cannula = Inner cannula · Length = Length over the outer curve

**Order information:** > Duravent<sup>®</sup> KOMBI tracheostomy tube with speaking valve

**REF 21045** 

with three inner cannulas, one with an attachable silver speaking valve and one fenestrated inner cannula with a 22 mm combi-adapter, size 5-13 Duravent® KOMBI tracheostomy tube with speaking valve extra long with three inner cannulas, one with an attachable silver speaking valve

and one fenestrated inner cannula with a 22 mm combi-adapter, size 5-13

#### DURAVENT® KOMBI TRACHEOSTOMY TUBE WITH SPEAKING VALVE WITH THREE INNER CANNULAS. ONE WITH AN ATTACHABLE SILICONE SPEAKING VALVE

#### AND ONE FENESTRATED INNER CANNULA WITH 22 MM COMBI-ADAPTER

This Duravent® KOMBI tracheostomy tube consists of an outer cannula and three inner cannulas, of which one has a silicone speaking valve and a fenestrated inner cannula with 22 mm combi-adapter. This tracheostomy tube has several small holes, in the approximate middle of the outer cannula; this is reffered to as a sieve. One of the inner cannulas supplied has a speaking valve attachment made of silicone. This attachment has a mechanism with a valve function, which allows the cannula to be totally closed to the airflow during expiration and speaking. The speaking valve opens on inspiration and air can flow into the tracheostoma. There is an oval opening, the so-called

fenestration, in the middle of this inner cannula. The second inner cannula has a 22 mm combiadapter for filter and valve systems with corresponding dimensions. The third inner cannula has a low profile.

This Duravent® tracheostomy tube is also available in a special length, the "extra long XL" version. Please note the information in the size chart.

#### Size chart for Duravent<sup>®</sup> KOMBI tracheostomy tube with speaking valve, with three inner cannulas, one with an attachable silicone speaking valve and one fenestrated inner cannula with a 22 mm combi-adapter

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL
5	8.4	6.6	5.4	4.3	55	21075-05	95	21275-05
6	9.4	7.8	6.2	4.9	60	21075-06	95	21275-06
7	10.2	8.8	7.0	5.5	65	21075-07	100	21275-07
8	11.2	9.8	8.0	6.5	70	21075-08	105	21275-08
9	12.4	11.2	9.0	7.5	75	21075-09	105	21275-09
10	13.4	12.2	10.0	8.5	85	21075-10	110	21275-10
11	14.4	13.2	11.0	9.5	87	21075-11	115	21275-11
12	15.4	14.2	12.0	10.2	90	21075-12	120	21275-12
13	16.6	15.2	13.0	11.2	90	21075-13	125	21275-13

Sizing information:

O.D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula O-cannula = Outer cannula · I-cannula = Inner cannula · Length = Length over the outer curve

**Order information:** > Duravent<sup>®</sup> KOMBI tracheostomy tube with speaking valve

**REF 21075** 

with three inner cannulas, one with an attachable silicone speaking valve and one fenestrated inner cannula with a 22 mm combi-adapter, size 5-13 Duravent® KOMBI tracheostomy tube with speaking valve extra long with three inner cannulas, one with an attachable silicone speaking valve

and one fenestrated inner cannula with a 22 mm combi-adapter, size 5-13

#### DURAVENT® UNI-KOMBI TRACHEOSTOMY TUBE WITH SPEAKING VALVE WITH THREE INNER CANNULAS. ONE WITH AN ATTACHABLE SILVER SPEAKING VALVE AND ONE WITH A 15 MM CONNECTOR AND A FENESTRATED INNER CANNULA WITH A 22 MM COMBI-ADAPTER

This Duravent<sup>®</sup> tracheostomy tube consists of an outer cannula and three inner cannulas. One inner cannula carries an attachable silver speaking valve, where the safety chain for the silver valve is connected directly to the valve receptor on the inner cannula, making handling very easy. This enables the inner cannula to be removed including the speaking valve so that no interfering metal parts remain on the cannula, e.g., for radiotherapy. A further inner cannula has a 22 mm combi-adapter and is fenestrated. The third inner cannula is equipped with a 15 mm connector, which enables the attachment of 15 mm filter systems (e.g., HMEs) and is not fenestrated.

This Duravent® tracheostomy tube is also available in a special length, the "extra long XL" version. Please note the information in the size chart.

#### Size chart for Duravent® UNI-KOMBI tracheostomy tube with speaking valve, with three inner cannulas, one with an attachable silver speaking valve and one with a 15 mm connector and one fenestrated inner cannula with a 22 mm combi-adapter

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL
5	8.4	6.6	5.4	4.3	55	21069-05	95	21269-05
6	9.4	7.8	6.2	4.9	60	21069-06	95	21269-06
7	10.2	8.8	7.0	5.5	65	21069-07	100	21269-07
8	11.2	9.8	8.0	6.5	70	21069-08	105	21269-08
9	12.4	11.2	9.0	7.5	75	21069-09	105	21269-09
10	13.4	12.2	10.0	8.5	85	21069-10	110	21269-10
11	14.4	13.2	11.0	9.5	87	21069-11	115	21269-11
12	15.4	14.2	12.0	10.2	90	21069-12	120	21269-12
13	16.6	15.2	13.0	11.2	90	21069-13	125	21269-13

Sizing information:

0.D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula  $\textbf{O-cannula} = \textit{Outer cannula} \cdot \textit{I-cannula} = \textit{Inner cannula} \cdot \textit{Length} = \textit{Length over the outer curve}$ 

#### **Order information:** > Duravent<sup>®</sup> UNI-KOMBI tracheostomy tube with speaking valve

#### **REF 21069**

with three inner cannulas, one with an attachable silver speaking valve and one with a 15 mm connector and one fenestrated inner cannula with a 22 mm combi-adapter, size 5-13 Duravent<sup>®</sup> UNI-KOMBI tracheostomy tube with speaking valve extra long

**REF 21269** 

with three inner cannulas, one with an attachable silver speaking valve and one with a 15 mm connector and one fenestrated inner cannula with a 22 mm combi-adapter, size 5-13

### DURAVENT® UNI-KOMBI TRACHEOSTOMY TUBE WITH SPEAKING VALVE WITH THREE INNER CANNULAS. ONE WITH AN ATTACHABLE SILICONE SPEAKING VALVE AND ONE WITH A 15 MM CONNECTOR AND A FENESTRATED INNER CANNULA WITH A 22 MM COMBI-ADAPTER

This Duravent® tracheostomy tube consists of an outer cannula and three inner cannulas. One inner cannula carries an attachable silicone speaking valve. A further inner cannula has a 22 mm combi-adapter and is fenestrated. The 22 mm combi-adapter enables the use of different filter and valve systems with 22 mm adapters. The third inner cannula is equipped with a 15 mm connector, which enables the attachment of e.g., 15 mm filter systems (e.g., HMEs) and is not fenestrated.

This Duravent® tracheostomy tube is also available in a special length, the "extra long XL" version. Please note the information in the size chart.

#### Size chart for Duravent® UNI-KOMBI tracheostomy tube with speaking valve, with three inner cannulas, one with an attachable silicone speaking valve and one with a 15 mm connector and one fenestrated inner cannula with a 22 mm combi-adapter

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL
5	8.4	6.6	5.4	4.3	55	21039-05	95	21239-05
6	9.4	7.8	6.2	4.9	60	21039-06	95	21239-06
7	10.2	8.8	7.0	5.5	65	21039-07	100	21239-07
8	11.2	9.8	8.0	6.5	70	21039-08	105	21239-08
9	12.4	11.2	9.0	7.5	75	21039-09	105	21239-09
10	13.4	12.2	10.0	8.5	85	21039-10	110	21239-10
11	14.4	13.2	11.0	9.5	87	21039-11	115	21239-11
12	15.4	14.2	12.0	10.2	90	21039-12	120	21239-12
13	16.6	15.2	13.0	11.2	90	21039-13	125	21239-13

Sizing information:

O.D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula O-cannula = Outer cannula · I-cannula = Inner cannula · Length = Length over the outer curve

#### **Order information:** > Duravent<sup>®</sup> UNI-KOMBI tracheostomy tube with speaking valve

#### **REF 21039**

with three inner cannulas, one with an attachable silicone speaking valve, one with a 15 mm connector and one fenestrated inner cannula with a 22 mm combi-adapter, size 5-13 Duravent<sup>®</sup> UNI-KOMBI tracheostomy tube with speaking valve extra long

- **REF 21239** with three inner cannulas, one with an attachable silicone speaking valve, one with a
- 15 mm connector and one fenestrated inner cannula with a 22 mm combi-adapter, size 5-13

### DURAVENT® SHORT TRACHEOSTOMY TUBES



A short tracheostomy tube is a tracheostomy tube, in which the outer and, if present, inner cannulas have a length below the standard or normal length.

### **DURAVENT® SHORT TRACHEOSTOMY TUBE**

#### WITHOUT INNER CANNULA



The Duravent<sup>®</sup> short tracheostomy tube is a tracheostomy tube in which the outer cannula has a length below the standard or normal length.

This tracheostomy tube only consists of an outer cannula and does not have an inner cannula.

Size ch	art for Duravent <sup>®</sup> sho	ort tracheost	omy tube without inne	er cannula	
Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	Length mm	REF
8	11.2	9.8	8.0	27	11100-0827
8	11.2	9.8	8.0	44	11100-0844
8	11.2	9.8	8.0	62	11100-0862
9	12.4	11.2	9.0	27	11100-0927
9	12.4	11.2	9.0	44	11100-0944
9	12.4	11.2	9.0	62	11100-0962
10	13.4	12.2	10.0	27	11100-1027
10	13.4	12.2	10.0	44	11100-1044
10	13.4	12.2	10.0	62	11100-1062
11	14.4	13.2	11.0	27	11100-1127
11	14.4	13.2	11.0	44	11100-1144
11	14.4	13.2	11.0	62	11100-1162
12	15.4	14.2	12.0	27	11100-1227
12	15.4	14.2	12.0	44	11100-1244
12	15.4	14.2	12.0	62	11100-1262
13	16.6	15.2	13.0	27	11100-1327
13	16.6	15.2	13.0	44	11100-1344
13	16.6	15.2	13.0	62	11100-1362
Sizing inform	ation				

Sizing information: O.D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula O-cannula = Outer cannula · Length = Length over the outer curve

Order information: Duravent<sup>®</sup> short tracheostomy tube without inner cannula, size 8-13, Length 27/44/62 mm

### DURAVENT® KOMBI SHORT TRACHEOSTOMY TUBE

#### WITH TWO INNER CANNULAS WITH A 22 MM COMBI-ADAPTER

This Duravent® KOMBI short tracheostomy tube consists of an outer cannula and two inner cannulas with a 22 mm combi-adapter. The combi-adapter is a polymer housing, which is firmly connected to the inner cannula. It has an opening with a diameter of 22 mm and is thereby compatible with standard filter and valve systems with a 22 mm adapter. This allows special filters for filtering, humidifying and warming the air to be attached. It is also possible to use tracheostoma valves, such as the Laryvox®, the Blom-Singer® tracheostoma

valve, or the Extravent® speaking valve.

The Duravent® KOMBI short tracheostomy tube is available in two lengths, 44 and 62 mm.



*IRACHEOSTOMY TUBES* 



Size chart for Duravent® KOMBI short tracheostomy tube, with two inner cannulas with a 22 mm combi-adapter										
Size	O.D. neck flang	je mm O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm	REF				
8	11.2	9.8	8.0	6.5	44	11182-0844				
8	11.2	9.8	8.0	6.5	62	11182-0862				
9	12.4	11.2	9.0	7.5	44	11182-0944				
9	12.4	11.2	9.0	7.5	62	11182-0962				
10	13.4	12.2	10.0	8.5	44	11182-1044				
10	13.4	12.2	10.0	8.5	62	11182-1062				
11	14.4	13.2	11.0	9.5	44	11182-1144				
11	14.4	13.2	11.0	9.5	62	11182-1162				
12	15.4	14.2	12.0	10.2	44	11182-1244				
12	15.4	14.2	12.0	10.2	62	11182-1262				
13	16.6	15.2	13.0	11.2	44	11182-1344				
13	16.6	15.2	13.0	11.2	62	11182-1362				

#### Sizing information:

O-D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula O-cannula = Outer cannula · I-cannula = Inner cannula · Length = Length over the outer curve

Order information: > Duravent<sup>®</sup> KOMBI short tracheostomy tube with two inner cannulas, with a 22 mm combi-adapter, size 8-13, length 44/62 mm

### DURAVENT® LINGO SHORT TRACHEOSTOMY TUBES



This is a short tracheostomy tube, which additionally has numerous small holes, the so-called sieve, in the approximate centre of the outer tube. If an inner cannula is present, it has an oval opening, the so-called fenestration, corresponding to the sieve in the outer cannula. Sieved short cannulas are primarily intended for users who, after a laryngectomy, have had a voice prosthesis surgically inserted into a fistula (opening/cavity) between the trachea and oesophagus. In this case the tracheostomy tube is necessary in order to stabilise or keep the tracheostoma open. The sieve in the outer cannula supports the speaking function provided by the voice prosthesis.





### DURAVENT® LINGO SHORT TRACHEOSTOMY TUBE, SIEVED

#### WITHOUT INNER CANNULA

ACHEOSTOMY TUBES



The Duravent<sup>®</sup> LINGO is a short tracheostomy tube, which additionally has numerous small holes, the so-called sieve, in the approximate centre of the outer tube. Sieved short cannulas are primarily intended for users who, after a laryngectomy, have had a voice prosthesis surgically inserted into a fistula (opening/cavity) between the trachea and oesophagus. In this case the tracheostomy tube is necessary in order to stabilise or keep the tracheostoma open. The sieve in the outer cannula supports the speaking function provided by the voice prosthesis.

Size ch	Size chart for Duravent <sup>®</sup> LINGO short tracheostomy tube, sieved, without inner cannula									
Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	Length mm	REF					
8	11.2	9.8	8.0	44	11130-0844					
8	11.2	9.8	8.0	62	11130-0862					
9	12.4	11.2	9.0	44	11130-0944					
9	12.4	11.2	9.0	62	11130-0962					
10	13.4	12.2	10.0	44	11130-1044					
10	13.4	12.2	10.0	62	11130-1062					
11	14.4	13.2	11.0	44	11130-1144					
11	14.4	13.2	11.0	62	11130-1162					
12	15.4	14.2	12.0	44	11130-1244					
12	15.4	14.2	12.0	62	11130-1262					
13	16.6	15.2	13.0	44	11130-1344					
13	16.6	15.2	13.0	62	11130-1362					

#### Sizing information:

O-D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula O-cannula = Outer cannula · Length = Length over the outer curve

55

**Order information:** > Duravent<sup>®</sup> LINGO short tracheostomy tube sieved, without inner cannula, size 8-13, length 44/62 mm

### DURAVENT® LINGO KOMBI SHORT TRACHEOSTOMY TUBE, SIEVED

#### WITH TWO FENESTRATED INNER CANNULAS

The Duravent® LINGO KOMBI short tracheostomy tube consists of an outer cannula and two fenestrated inner cannulas with 22 mm combiadapters. This is a short tracheostomy tube, which additionally has numerous small holes, the so-called sieve, in the approximate centre of the outer tube. Both inner cannulas have an oval opening, the socalled fenestration, corresponding to the sieve in the outer cannula.

> Sieved short cannulas are primarily intended for users who, after a laryngectomy, have had a voice prosthesis surgically inserted into a fistula (opening/cavity) between the trachea and oesophagus. In this case the

tracheostomy tube is necessary in order to stabilise or keep the tracheostoma open. The sieve in the outer cannula supports the speaking function provided by the voice prosthesis.

The 22 mm combi-adapter enables the use of additional filter and valve systems, e.g., Laryvox®.



**RACHEOSTOMY** 



#### Size chart for Duravent® LINGO KOMBI short tracheostomy tube, sieved, with two fenestrated inner cannulas with 22 mm combi-adapters

Size	O.D. nec	k flange mm O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm	REF
8	11.2	9.8	8.0	6.5	44	11185-0844
8	11.2	9.8	8.0	6.5	62	11185-0862
9	12.4	11.2	9.0	7.5	44	11185-0944
9	12.4	11.2	9.0	7.5	62	11185-0962
10	13.4	12.2	10.0	8.5	44	11185-1044
10	13.4	12.2	10.0	8.5	62	11185-1062
11	14.4	13.2	11.0	9.5	44	11185-1144
11	14.4	13.2	11.0	9.5	62	11185-1162
12	15.4	14.2	12.0	10.2	44	11185-1244
12	15.4	14.2	12.0	10.2	62	11185-1262
13	16.6	15.2	13.0	11.2	44	11185-1344
13	16.6	15.2	13.0	11.2	62	11185-1362

Sizing information: O.D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula O-cannula = Outer cannula · I-cannula = Inner cannula · Length = Length over the outer curve

#### **Order information:**

Duravent<sup>®</sup> LINGO KOMBI short tracheostomy tube sieved,

**REF 11185** 

with two fenestrated inner cannulas with 22 mm combi-adapter, size 8-13, length 44/62 mm

### DURAVENT® LINGO UNI-KOMBI, SIEVED with two inner cannulas, one fenestrated CANNULA WITH 15 MM CONNECTOR AND ONE FENESTRATED CANNULA WITH 22 MM COMBI-ADAPTER

This Duravent® tracheostomy tube consists of a sieved outer cannula and two inner cannulas. One inner cannula has a 22 mm combiadapter and is fenestrated. The 22 mm combi-adapter enables the use of different filter and valve systems with 22 mm adapters.

The second fenestrated inner cannula is fitted with a 15 mm connector, which enables the attachment of e.g., 15 mm filter systems (e.g., HMEs).





This Duravent® tracheostomy tube is also available in a special length, the "extra long XL" version. Please note the information in the size chart.

#### Size chart for Duravent® LINGO UNI-KOMBI, sieved, with two inner cannulas, one fenestrated cannula with a 15 mm connector and a fenestrated cannula with a 22 mm combi-adapter

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	REF Standard	Length mm extra long XL	REF extra long XL
5	8.4	6.6	5.4	4.3	55	11072-05	95	11272-05
6	9.4	7.8	6.2	4.9	60	11072-06	95	11272-06
7	10.2	8.8	7.0	5.5	65	11072-07	100	11272-07
8	11.2	9.8	8.0	6.5	70	11072-08	105	11272-08
9	12.4	11.2	9.0	7.5	75	11072-09	105	11272-09
10	13.4	12.2	10.0	8.5	85	11072-10	110	11272-10
11	14.4	13.2	11.0	9.5	87	11072-11	115	11272-11
12	15.4	14.2	12.0	10.2	90	11072-12	120	11272-12
13	16.6	15.2	13.0	11.2	90	11072-13	125	11272-13

Sizing information:

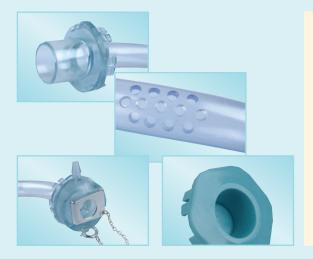
O.D. neck flange = Outer diameter behind the neck flange · O.D. Tip = Outer diameter of the outer cannula at the tip of the cannula · I.D. = Inner diameter at the tip of the cannula Ocannula = Outer cannula · Icannula = Inner cannula · Length = Length over the outer curve

**Order information:** > Duravent<sup>®</sup> LINGO UNI-KOMBI tracheostomy tube sieved,

**REF 11072** 

- with two inner cannulas, a fenestrated inner cannula with a 15 mm connector and a fenestrated inner cannula with a 22 mm combi-adapter, size 5-13 Duravent<sup>®</sup> LINGO UNI-KOMBI tracheostomy tube, extra long, sieved,
  - with two inner cannulas, a fenestrated inner cannula with a 15 mm connector and a fenestrated inner cannula with a 22 mm combi-adapter, size 5-13

### **DURAVENT® MULTI FUNCTION TRACHEOSTOMY TUBE**



The name "MULTI" indicates that this cannula offers various functions and is multi-functionally applicable. The following key characteristics can be mentioned: The inner cannula is equipped with a speaking valve attachment including a silver valve, which enables tracheostomised patients to speak. Furthermore, the speaking valve attachment has an additional port to connect an oxygen supply. This enables the supply of pure oxygen via a respirator. In addition, one inner cannula with a 15 mm connector for the connection of HMEs for the humidification of inspired air, as well as one inner cannula with a 22 mm combi-adapter for the variable attachment of suitable additional products, e.g., tracheostoma valves or filters, is among others, included in the scope of delivery.

#### DURAVENT® MULTI FUNCTION TRACHEOSTOMY TUBE WITH THREE INNER CANNULAS, ONE WITH AN ATTACHABLE SILVER SPEAKING VALVE AND OXYGEN SUPPLY PORT, ONE FENESTRATED INNER CANNULA WITH A 22 MM COMBI-ADAPTER AND ONE WITH A 15 MM CONNECTOR

The Duravent<sup>®</sup> multi function tracheostomy tube consists of an outer cannula and three inner cannulas, one of which has an attachable silver speaking valve and oxygen supply port, a fenestrated inner cannula with a 22 mm combi-adapter and one inner cannula with a 15 mm connector. The name "MULTI" indicates that this cannula offers various functions and is multi-functionally applicable. The following key characteristics can be mentioned: The inner cannula is equipped with

a speaking valve attachment with a silver valve, which enables tracheostomised patients to speak. Furthermore, the speaking valve attachment has an addition-

al port to connect an oxygen supply. This enables the supply of pure oxygen via a respirator. In addition, one inner cannula with a 15 mm connector for the connection of HMEs for the humidification of inspired air, as well as one inner cannula with a 22 mm combi-adapter for the variable attachment of suitable additional products, e.g., tracheostoma valves, is among others, included in the scope of delivery.

Size chart for Duravent<sup>®</sup> multi function tracheostomy tube with speaking valve, with three inner cannulas, one with an attachable silver speaking valve and oxygen supply port, one fenestrated inner cannula with a 22 mm combi-adapter and one with a 15 mm connector

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm	REF
5	8.4	6.6	5.4	4.3	55	21053-05
6	9.4	7.8	6.2	4.9	60	21053-06
7	10.2	8.8	7.0	5.5	65	21053-07
8	11.2	9.8	8.0	6.5	70	21053-08
9	12.4	11.2	9.0	7.5	75	21053-09
10	13.4	12.2	10.0	8.5	85	21053-10
11	14.4	13.2	11.0	9.5	87	21053-11
12	15.4	14.2	12.0	10.2	90	21053-12
13	16.6	15.2	13.0	11.2	90	21053-13
Sizing info	ormation:					

**O.D. neck flange =** Outer diameter behind the neck flange · **O.D. Tip =** Outer diameter of the outer cannula at the tip of the cannula · **I.D. =** Inner diameter at the tip of the cannula **Ocannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Ocannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Ocannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Ocannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Ocannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Ocannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Ocannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Ocannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Ocannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Ocannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Ocannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Oceannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Oceannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Oceannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Oceannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Oceannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula **Oceannula =** Outer cannula - **I.C. =** Inner diameter at the tip of the cannula - **I.C. =** Inner diameter at the tip of the cannula - **I.C. =** Inner diameter at the tip of the cannula - **I.C. =** Inner diameter at the tip of the cannula - **I.C. =** Inner diameter at the tip of the cannula - **I.C. =** Inner diameter at the tip of the cannula - **I.C. =** Inner diameter at the tip of the cannula - **I.C. =** Inner diameter at the tip of the cannula - **I.C. =** Inner diameter at the tip of the cannula - **I.C. =** Inner diameter at the tip of the cannula - **I.C. =** Inner diameter at the tip of t

Order information:

Duravent® multi function tracheostomy tube with three inner cannulas, one with an attachable silver speaking valve and oxygen supply port, one fenestrated inner cannula with a 22 mm combi-adapter and one with a 15 mm connector, size 5-13

### **DURAVENT® ADAPTER SERIES SOLO**



The Duravent<sup>®</sup> SOLO adapter series refers to a range of adapters that have been especially developed for the Easy Lock hexagonal receptors of the Duravent<sup>®</sup> cannulas. The SOLO adapter series increases again the range of application of Duravent<sup>®</sup> tracheostomy tubes.

The adapters Duravent<sup>®</sup> SOLO universal connector (15 mm connector), Duravent<sup>®</sup> SOLO combi-adapter (22 mm combi adapter) and the Duravent<sup>®</sup> decannulation plug are directly attached to the Easy Lock hexagonal connection of the outer cannula. This provides even users who do not use an inner cannula with the option of attaching an effective filter or valve system to their Duravent<sup>®</sup> cannula.

The Duravent<sup>®</sup> SOLO attachment for Trachinaze<sup>®</sup> Plus filters is placed on the standard inner cannula and thereby enables the use of the Trachinaze<sup>®</sup> Plus filter system, in combination with a Duravent<sup>®</sup> cannula.

All SOLO adapters are only to be used in combination with a Duravent<sup>®</sup> tracheostomy tube!

### **DURAVENT® 15 MM CONNECTOR SOLO**

#### FOR HME, FILTER CASSETTES, VALVES

RACHEOSTOMY TUBES



For the attachment of HME's and speaking valves with a standardised 15 mm connector.

Order information: Duravent® 15 mm connector SOLO pack of 5 for sizes 5-13

FOR HME, FILTER CASSETTES, VALVES

### DURAVENT® SOLO COMBI-ADAPTER



Order information: Duravent<sup>®</sup> combi-adapter SOLO pack of 5 for sizes 5-13 REF 11990

**REF 11992** 

59

### DURAVENT® SOLO ATTACHMENT FOR TRACHINAZE® PLUS FILTER

Duravent<sup>®</sup> attachment SOLO for Trachinaze<sup>®</sup> Plus filter,



The Duravent<sup>®</sup> SOLO attachment for Trachinaze<sup>®</sup> Plus filters provides the option of a simple way to combine a Trachinaze<sup>®</sup> Plus filter with a Duravent<sup>®</sup> inner cannula to ensure the optimal conditioning of inspired air, depending on the current use and requirements. The filter elements are easy to insert into the adapter and equally easy to remove. It is very convenient, as the entire system, including the attachment, can be used relatively inconspicuously. The Duravent<sup>®</sup> SOLO attachment for Trachinaze<sup>®</sup> Plus filters provides an alternative for patients who wish to use the Trachinaze<sup>®</sup> Plus filter system but poorly tolerate adhesive dressings.

pack of 5 for sizes 5-13

REF 11991

### DURAVENT® SOLO SILICONE SPEAKING VALVE



The Duravent<sup>®</sup> SOLO silicone speaking valve represents an alternative to conventional silver speaking valves and can be used by tracheostomised patients with an intact larynx. It is simply attached to the inner cannula of the Duravent<sup>®</sup> tracheostomy tube. Like the silver speaking valve, the valve flap opens on inspiration. The expired airflow causes the valve to close, which enables speech.



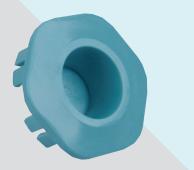
In a second model (REF 21991), the silicone speaking valve can also be combined with the Duravent<sup>®</sup> KOMBI (22 mm combi-adapter) and UNI (15 mm connector) adapter models.

#### Order information:

Order information:

 Duravent<sup>®</sup> silicone speaking valve SOLO
 Duravent<sup>®</sup> silicone speaking valve SOLO for 15 mm connectors and 22 mm combi-adapters REF 21990 REF 21991

### **DURAVENT® DECANNULATION PLUG**



Decannulation plugs are required when tracheostomised patients, with retained larynx, are to be weaned off their tracheostomy tubes. With the help of the decannulation plug, the air supply through the tracheostoma is, under medical supervision, blocked, for a certain period. The patient is then required to breathe naturally through the nose/mouth, for this period of time. Because natural breathing is strenuous after a tracheostomy, the patient has to become accustomed to normal breathing again, step-by-step. The Duravent<sup>®</sup> decannulation plug helps to enable the accurate and controlled blocking of the Duravent<sup>®</sup> cannulas.

Order information: Duravent<sup>®</sup> decannulation plug pack of 5 for sizes 5-13

### LARYNGOTEC® SILICONE TUBE



The Laryngotec<sup>®</sup> silicone tube is made of soft and flexible silicone for laryngectomised patients with a voice prosthesis and tracheostomised patients.

A feature of the Laryngotec<sup>®</sup> silicone tube is the specially shaped neck flange, it is tailored to the anatomy of the neck. The specially rounded cannula tip prevents irritation of the mucous membranes in the trachea. There are two lateral eyelets on the neck flange of the Laryngotec<sup>®</sup> laryngectomy tube for the attachment of a tube holder.

The standard version of the Laryngotec<sup>®</sup> silicone tube is recommendable if a normal tracheostomy tube is no longer required but needed to stabilise the tracheostoma.

The Laryngotec<sup>®</sup> laryngectomy tube is available in various sizes and lengths and is supplied in sterile packaging.



Size chart for Laryngotec <sup>®</sup> silicone tube											
Size	O.D. Tip mm	O.D. neck flange mm	I.D. mm	Length mm	Length middle radius mm	REF					
9	12.4	12.4	9.4	44	36	14120-0944					
9	12.4	12.4	9.4	62	55	14120-0962					
9	12.4	12.4	9.4	75	65	14120-0975					
10	13.4	13.4	10.4	44	36	14120-1044					
10	13.4	13.4	10.4	62	55	14120-1062					
10	13.4	13.4	10.4	85	75	14120-1085					
11	14.4	14.4	11.4	44	36	14120-1144					
11	14.4	14.4	11.4	62	55	14120-1162					
11	14.4	14.4	11.4	87	76	14120-1187					
12	15.4	15.4	12.4	44	36	14120-1244					
12	15.4	15.4	12.4	62	55	14120-1262					
12	15.4	15.4	12.4	90	77	14120-1290					

Sizing information:

**DOD.** Tip = Outer diameter of the outer tube at the tip of the cannula · **O.D. neck flange** = Outer diameter behind the neck flange · **I.D.** = Inner diameter at the tip of the cannula **Length** = Length over the outer curve · **Length of mean radius** = Length on midline, from flange to tip

Order information:

Laryngotec<sup>®</sup> silicone tube, sterile, size 9-12

**REF 14120** 

RACHEOSTOMY TUBES

61

### LARYNGOTEC® KOMBI SILICONE TUBE



The Laryngotec<sup>®</sup> KOMBI laryngectomy tube is made of soft and flexible silicone for laryngectomised patients with a voice prosthesis and tracheostomised patients.

A feature of the Laryngotec® KOMBI silicone tube is the specially shaped neck flange, it is tailored to the anatomy of the neck. The specially rounded cannula tip prevents irritation of the mucous membranes in the trachea. There are two lateral eyelets on the neck flange of the Laryngotec® KOMBI silicone laryngectomy tube for the attachment of a tube holder.

The Laryngotec® KOMBI model has a 22 mm combi-adapter at the neck flange. It is thereby compatible with standard filter and valve systems with a 22 mm adapter. This allows special filters for filtering, humidifying and warming the air to be attached.

The Laryngotec® KOMBI silicone tube is available in various sizes and lengths and is supplied in sterile packaging.







Size chart for Laryngotec <sup>®</sup> KOMBI silicone tube with 22 mm combi-adapter							
O.D. Tip mm	O.D. neck flange mm	I.D. mm	Length mm	Length middle radius mm	REF		
10.2	10.2	7.2	44	38	14920-0744		
10.2	10.2	7.2	62	54	14920-0762		
10.2	10.2	7.2	65	56	14920-0765		
11.2	11.2	8.2	44	38	14920-0844		
11.2	11.2	8.2	62	54	14920-0862		
11.2	11.2	8.2	70	61	14920-0870		
12.4	12.4	9.4	44	36	14920-0944		
12.4	12.4	9.4	62	55	14920-0962		
12.4	12.4	9.4	75	65	14920-0975		
13.4	13.4	10.4	44	36	14920-1044		
13.4	13.4	10.4	62	55	14920-1062		
13.4	13.4	10.4	85	75	14920-1085		
14.4	14.4	11.4	44	36	14920-1144		
14.4	14.4	11.4	62	55	14920-1162		
14.4	14.4	11.4	87	76	14920-1187		
15.4	15.4	12.4	44	36	14920-1244		
15.4	15.4	12.4	62	55	14920-1262		
15.4	15.4	12.4	90	77	14920-1290		
16.6	16.6	13.0	44	37	14920-1344		
16.6	16.6	13.0	62	55	14920-1362		
16.6	16.6	13.0	90	77	14920-1390		
	O.D. Tip mm 10.2 10.2 11.2 11.2 11.2 11.2 12.4 12.4 12.4 13.4 13.4 13.4 14.4 14.4 14.4 15.4 15.4 15.4 15.4 16.6 16.6 16.6	O.D. Tip mm         O.D. neck flange mm           10.2         10.2           10.2         10.2           10.2         10.2           10.2         10.2           11.2         11.2           11.2         11.2           11.2         11.2           11.2         11.2           12.4         12.4           12.4         12.4           13.4         13.4           13.4         13.4           13.4         13.4           15.4         15.4           15.4         15.4           15.4         15.4           16.6         16.6	O.D. Tip mmO.D. neck flange mmI.D. mm10.210.27.210.210.27.210.210.27.211.211.28.211.211.28.211.211.28.211.211.28.212.412.49.412.412.49.413.413.410.413.413.410.414.414.411.415.415.412.415.415.412.415.415.412.415.415.412.415.415.412.415.415.412.415.415.412.415.415.412.415.415.412.415.415.412.415.415.412.415.415.412.415.415.412.415.415.412.415.415.412.415.415.412.415.415.412.415.415.412.415.415.413.016.616.613.016.616.613.0	O.D. Tip mm         O.D. neck flange mm         I.D. mm         Length mm           10.2         10.2         7.2         44           10.2         10.2         7.2         62           10.2         10.2         7.2         65           11.2         11.2         8.2         44           11.2         11.2         8.2         62           11.2         11.2         8.2         62           11.2         11.2         8.2         70           12.4         12.4         9.4         44           12.4         12.4         9.4         44           13.4         13.4         10.4         44           13.4         13.4         10.4         85           14.4         14.4         11.4         87           15.4         15.4         12.4         44           14.4         14.4         11.4         87           15.4         15.4         12.4         44           14.4         14.4         11.4         87           15.4         15.4         12.4         44           15.4         15.4         12.4         90           16.6<	O.D. Tip mmO.D. neck flange mmI.D. mmLength mmLength middle radius mm10.210.27.2443810.210.27.2655610.210.27.2655611.211.28.2443811.211.28.2625411.211.28.2625411.211.28.2706112.412.49.4443612.412.49.4443613.413.410.4443613.413.410.4443613.413.410.4625513.413.410.4857514.414.411.4625515.415.412.4443615.415.412.4443615.415.412.4443615.415.412.4443615.415.412.4443615.415.412.4443615.415.412.4443615.415.412.4443615.415.412.4443615.415.412.4443615.415.412.4443615.415.412.4443615.415.412.45516.616.613.0 <t< td=""></t<>		

#### Sizing information:

**DOD.** Tip = Outer diameter of the outer tube at the tip of the cannula · **O.D. neck flange** = Outer diameter behind the neck flange · **I.D.** = Inner diameter at the tip of the cannula **Length** = Length over the outer curve · **Length of mean radius** = Length on midline, from flange to tip

Order information: Laryngotec<sup>®</sup> KOMBI silicone tube with a 22 mm combi-adapter sterile, size 7-13

### LARYNGOTEC® KOMBI CLIP SILICONE TUBE



The Laryngotec<sup>®</sup> KOMBI CLIP silicone laryngectomy tube is made of soft and flexible silicone for laryngectomised patients with a voice prosthesis and for tracheostomised patients.

A feature of the Laryngotec<sup>®</sup> KOMBI CLIP silicone laryngectomy tube is the transparent, bulging ring below the neck flange, which enables the use of adhesive plates. The specially rounded cannula tip prevents irritation of the mucous membranes in the trachea.

The Laryngotec<sup>®</sup> KOMBI CLIP model has a 22 mm combi-adapter at the neck flange. It is thereby compatible with standard filter and valve systems with a 22 mm adapter. This allows special filters for filtering, humidifying and warming the air to be attached.

The Laryngotec<sup>®</sup> KOMBI CLIP silicone tube is available in various sizes and lengths and is supplied in sterile packaging.





Size chart for Laryngotec <sup>®</sup> KOMBI CLIP silicone tube with a 22 mm combi-adapter and ring						
Size	O.D. Tip mm	O.D. neck flange mm	I.D. mm	Length mm	Length middle radius mm	REF
7	10.2	10.2	7.2	44	38	14830-0744
7	10.2	10.2	7.2	62	54	14830-0762
7	10.2	10.2	7.2	65	56	14830-0765
8	11.2	11.2	8.2	44	38	14830-0844
8	11.2	11.2	8.2	62	54	14830-0862
8	11.2	11.2	8.2	70	61	14830-0870
9	12.4	12.4	9.4	44	36	14830-0944
9	12.4	12.4	9.4	62	55	14830-0962
9	12.4	12.4	9.4	75	65	14830-0975
10	13.4	13.4	10.4	44	36	14830-1044
10	13.4	13.4	10.4	62	55	14830-1062
10	13.4	13.4	10.4	85	75	14830-1085
11	14.4	14.4	11.4	44	36	14830-1144
11	14.4	14.4	11.4	62	55	14830-1162
11	14.4	14.4	11.4	87	76	14830-1187
12	15.4	15.4	12.4	44	36	14830-1244
12	15.4	15.4	12.4	62	55	14830-1262
12	15.4	15.4	12.4	90	77	14830-1290
13	16.6	16.6	13.0	44	37	14830-1344
13	16.6	16.6	13.0	62	55	14830-1362
13	16.6	16.6	13.0	90	77	14830-1390
Sizing inform	ation					

Sizing information: O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve · Length of mean radius = Length on midline, from flange to tip

#### Order information: Laryngotec<sup>®</sup> KOMBI CLIP silicone tube with a 22 mm combi-adapter and ring, sterile, size 7-13

**REF 14830** 

### WITH A 22 MM COMBI-ADAPTER AND RING

#### LARYNGOTEC<sup>®</sup> LINGO KOMBI CLIP SILICONE TUBE, SIEVED WITH A 22 MM COMBI-ADAPTER AND RING

The Laryngotec<sup>®</sup> LINGO KOMBI CLIP silicone laryngectomy tube is made of soft and flexible silicone for laryngectomised patients with voice prostheses and for tracheostomised patients.

A feature of the Laryngotec<sup>®</sup> LINGO KOMBI CLIP silicone laryngectomy tube is the transparent, bulging ring below the neck flange, which enables the use of adhesive plates. The specially rounded cannula tip prevents irritation of the mucous membranes in the trachea.

The Laryngotec<sup>®</sup> LINGO KOMBI CLIP model has a 22 mm combiadapter at the neck flange. It is thereby compatible with standard filter and valve systems with a 22 mm adapter. This allows special filters for filtering, humidifying and warming the air to be attached.

In addition, there are numerous small holes, the so-called sieve, in the cannula tube in order to allow the inspired air required for speaking to flow in. Tracheostoma valves/speaking valves can also be simply and easily used.

The Laryngotec<sup>®</sup> LINGO KOMBI CLIP silicone tube is available in various sizes and lengths and is supplied in sterile packaging.

## Size chart for Laryngotec<sup>®</sup> LINGO KOMBI CLIP silicone tube, sieved, with a 22 mm combi-adapter and ring

Size	O.D. Tip mm	O.D. neck flange mm	I.D. mm	Length mm	Length middle radius mm	REF
7	10.2	10.2	7.2	44	38	14820-0744
7	10.2	10.2	7.2	62	54	14820-0762
7	10.2	10.2	7.2	65	56	14820-0765
8	11.2	11.2	8.2	44	38	14820-0844
8	11.2	11.2	8.2	62	54	14820-0862
8	11.2	11.2	8.2	70	61	14820-0870
9	12.4	12.4	9.4	44	36	14820-0944
9	12.4	12.4	9.4	62	55	14820-0962
9	12.4	12.4	9.4	75	65	14820-0975
10	13.4	13.4	10.4	44	36	14820-1044
10	13.4	13.4	10.4	62	55	14820-1062
10	13.4	13.4	10.4	85	75	14820-1085
11	14.4	14.4	11.4	44	36	14820-1144
11	14.4	14.4	11.4	62	55	14820-1162
11	14.4	14.4	11.4	87	76	14820-1187
12	15.4	15.4	12.4	44	36	14820-1244
12	15.4	15.4	12.4	62	55	14820-1262
12	15.4	15.4	12.4	90	77	14820-1290
13	16.6	16.6	13.0	44	37	14820-1344
13	16.6	16.6	13.0	62	55	14820-1362
13	16.6	16.6	13.0	90	77	14820-1390

#### Sizing information:

**O.D.** Tip = Outer diameter of the outer tube at the tip of the cannula · **O.D. neck flange** = Outer diameter behind the neck flange · **I.D.** = Inner diameter at the tip of the cannula **Length** = Length over the outer curve · **Length of mean radius** = Length on midline, from flange to tip

Order information: Laryngotec<sup>®</sup> LINGO KOMBI CLIP silicone tube, sieved, with a 22 mm combi-adapter and ring, sterile, size 7-13 REF 14820



RACHEOSTOMY TUBE

### LARYNGOTEC® LINGO SILICONE TUBE, SIEVED



The Laryngotec® LINGO silicone laryngectomy tube is made of soft and flexible silicone.

A feature of the Laryngotec<sup>®</sup> LINGO is the especially shaped neck flange, tailored to the anatomy of the neck. The particularly rounded cannula tip prevents irritation of the mucous membranes in the trachea. There are two lateral eyelets on the neck flange of the Laryngotec<sup>®</sup> LINGO silicone tube for the attachment of a tube holder.

The Laryngotec<sup>®</sup> LINGO version, has numerous small holes approximately in the centre of the cannula, in a specific arrangement forming the so-called sieve. Tracheostomised and laryngectomised patients using voice prostheses can use these silicone laryngectomy tubes. The cannula opening is closed with a finger to generate the voice.

The Laryngotec® LINGO silicone tube is available in various sizes and lengths and is supplied in sterile packaging.





Size chart for Laryngotec <sup>®</sup> LINGO silicone tube, sieved								
Size	O.D. Tip mm	O.D. neck flange mm	I.D. mm	Length mm	Length middle radius mm	REF		
9	12.4	12.4	9.4	44	36	14220-0944		
9	12.4	12.4	9.4	62	55	14220-0962		
9	12.4	12.4	9.4	75	65	14220-0975		
10	13.4	13.4	10.4	44	36	14220-1044		
10	13.4	13.4	10.4	62	55	14220-1062		
10	13.4	13.4	10.4	85	75	14220-1085		
11	14.4	14.4	11.4	44	36	14220-1144		
11	14.4	14.4	11.4	62	55	14220-1162		
11	14.4	14.4	11.4	87	76	14220-1187		
12	15.4	15.4	12.4	44	36	14220-1244		
12	15.4	15.4	12.4	62	55	14220-1262		
12 Sizing inform:	15.4	15.4	12.4	90	77	14220-1290		

Sizing information: O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve · Length of mean radius = Length on midline, from flange to tip

Order information:

Laryngotec<sup>®</sup> LINGO silicone tube, sieved, sterile, size 9-12

**REF 14220** 

*IRACHEOSTOMY TUBES* 

### LARYNGOTEC® LINGO KOMBI SILICONE TUBE, SIEVED WITH 22 MM COMBI-ADAPTER



RACHEOSTOMY TUBES



The Laryngotec<sup>®</sup> LINGO KOMBI silicone laryngectomy tube is made of soft and flexible silicone for laryngectomised patients with a voice prosthesis and tracheostomised patients.

A feature of the Laryngotec® LINGO KOMBI silicone tube is the especially shaped neck flange, tailored to the anatomy of the neck. The particularly rounded cannula tip prevents irritation of the mucous membranes in the trachea. There are two lateral eyelets on the neck flange of the Laryngotec® LINGO KOMBI silicone laryngectomy tube for the attachment of a tube holder.

The Laryngotec<sup>®</sup> LINGO KOMBI model has a 22 mm combi-adapter at the neck flange. It is thereby compatible with standard filter and valve systems with a 22 mm connector. This allows special filters for filtering, humidifying and warming the air to be attached. In addition, there are numerous small holes, the so-called sieve, in the cannula tube in order to allow the inspired air required for speaking to flow in. Tracheostoma valves/speaking valves can also be simply and easily used.

The Laryngotec® LINGO KOMBI silicone tube is available in various sizes and lengths and is supplied in sterile packaging.

Size chart for Laryngotec <sup>®</sup> LINGO KOMBI silicone tube, sieved, with 22 mm combi-adapter							
Size	O.D. Tip mm	O.D. neck flange mm	I.D. mm	Length mm	Length middle radius mm	REF	
7	10.2	10.2	7.2	44	38	14720-0744	
7	10.2	10.2	7.2	62	54	14720-0762	
7	10.2	10.2	7.2	65	56	14720-0765	
8	11.2	11.2	8.2	44	38	14720-0844	
8	11.2	11.2	8.2	62	54	14720-0862	
8	11.2	11.2	8.2	70	61	14720-0870	
9	12.4	12.4	9.4	44	36	14720-0944	
9	12.4	12.4	9.4	62	55	14720-0962	
9	12.4	12.4	9.4	75	65	14720-0975	
10	13.4	13.4	10.4	44	36	14720-1044	
10	13.4	13.4	10.4	62	55	14720-1062	
10	13.4	13.4	10.4	85	75	14720-1085	
11	14.4	14.4	11.4	44	36	14720-1144	
11	14.4	14.4	11.4	62	55	14720-1162	
11	14.4	14.4	11.4	87	76	14720-1187	
12	15.4	15.4	12.4	44	36	14720-1244	
12	15.4	15.4	12.4	62	55	14720-1262	
12	15.4	15.4	12.4	90	77	14720-1290	
13	16.6	16.6	13.0	44	37	14720-1344	
13	16.6	16.6	13.0	62	55	14720-1362	
13	16.6	16.6	13.0	90	77	14720-1390	

#### Sizing information:

**CO.D.** Tip = Outer diameter of the outer tube at the tip of the cannula · **O.D. neck flange** = Outer diameter behind the neck flange · **I.D.** = Inner diameter at the tip of the cannula **Length** = Length over the outer curve · **Length of mean radius** = Length on midline, from flange to tip

Order information: Laryngotec<sup>®</sup> LINGO KOMBI silicone tube, sieved, with a 22 mm combi-adapter, sterile, size 7-13

### LARYNGOTEC® LINGO KOMBI CUT SILICONE TUBE, WITH A SLIT

RACHEOSTOMY TUBES



The Laryngotec<sup>®</sup> silicone laryngectomy tube is made of soft and flexible silicone for laryngectomised patients with a voice prosthesis.

A feature of the Laryngotec<sup>®</sup> LINGO KOMBI CUT is the especially shaped neck flange, tailored to the anatomy of the neck. The particularly rounded cannula tip prevents irritation of the mucous membranes in the trachea. There are two lateral evelets on the neck flange of the Laryngotec<sup>®</sup> LINGO KOMBI CUT silicone tube for the attachment of a tube holder.

The Laryngotec<sup>®</sup> LINGO KOMBI CUT silicone laryngectomy tube with a slit was developed specially in case of problems during the use of the cannula in combination with a voice prosthesis. The width of the slit is based on the outer dimensions of the voice prosthesis, so that the cannula can glide past the voice prosthesis when inserted. This special design prevents the voice prosthesis from being moved accidentally.

The Laryngotec® LINGO KOMBI CUT model has a 22 mm combiadapter at the neck flange. It is thereby compatible with standard filter and valve systems with a 22 mm adapter. This allows special filters for filtering, humidifying and warming the air to be attached.

The Laryngotec<sup>®</sup> LINGO KOMBI CUT silicone tube is available in various sizes and is supplied in sterile packaging.



Size cha	rt for Laryngo	otec <sup>®</sup> LINGO KOMB	I CUT silico	one tube, with	a slit, with a 22 mm co	mbi-adapter
Size	O.D. Tip mm	O.D. neck flange mm	I.D. mm	Length mm	Length middle radius mm	REF
7	10.2	10.2	7.2	62	55	14725-0762
8	11.2	11.2	8.2	62	55	14725-0862
9	12.4	12.4	9.4	62	55	14725-0962
10	13.4	13.4	10.4	62	55	14725-1062
11	14.4	14.4	11.4	62	55	14725-1162
12	15.4	15.4	12.4	62	55	14725-1262
13 Sizing inform	16.6	16.6	13.0	62	55	14725-1362

O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. Tip = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve · Length of mean radius = Length on midline, from flange to tip

Order information: Laryngotec<sup>®</sup> LINGO KOMBI CUT silicone tube, with a slit and a 22 mm combi-adapter, sterile, size 7-13

### LARYNGOTEC® STOMA BUTTON



The Laryngotec<sup>®</sup> Stoma Button is designed to keep the tracheostoma open. This particularly short tracheostoma tube is made of flexible silicone. The rounded cannula end ensures a gentle insertion into the trachea; injuries to the trachea are avoided. The Stoma Button is ideally suited for patients who otherwise no longer need a tracheostomy tube. The shape of the Laryngotec<sup>®</sup> Stoma Button is optimally matched to the tracheostoma.

The fastening eyelets for a tube holder on the Laryngotec<sup>®</sup> stoma button are fitted at a specific angle so that minimum pressure is placed on the button, making it comfortable for the patient to wear. At the same time, the position and stability of the button in the tracheostoma is optimised.

The Laryngotec<sup>®</sup> Stoma Button is also available without fastening eyelets.

The Laryngotec<sup>®</sup> Stoma Button is supplied in individual sterile packaging.

Various sizes and lengths are available.

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Size chart for the Laryngotec <sup>®</sup> Stoma Button							
Size	Version	O.D. neck flange mm	I.D. mm	Length mm	REF	<b>REF</b> without eyelets	
8	standard	11.0	8.0	22	15900-08	15905-08	
8	short	11.0	8.0	15	15910-08	15915-08	
9	standard	12.0	9.0	22	15900-09	15905-09	
9	short	12.0	9.0	15	15910-09	15915-09	
10	standard	13.0	10.0	22	15900-10	15905-10	
10	short	13.0	10.0	15	15910-10	15915-10	
11	standard	14.0	11.0	22	15900-11	15905-11	
11	short	14.0	11.0	15	15910-11	15915-11	
12	standard	15.0	12.0	22	15900-12	15905-12	
12	short	15.0	12.0	15	15910-12	15915-12	
Sizing infor	mation:						

O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula · Length = Shaft length

der information:	Laryngotec <sup>®</sup> Stoma Button, size 8-12	REF 15900
	<ul> <li>Laryngotec<sup>®</sup> Stoma Button, short. size 8-12</li> </ul>	REF 15910
	Laryngotec <sup>®</sup> Stoma Button,	REF 15905
	without fastening eyelets, size 8-12 Laryngotec <sup>®</sup> Stoma Button,	REF 15915
	short, without fastening eyelets, size 8-12	

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### LARYNGOTEC® KOMBI STOMA BUTTON



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The Laryngotec<sup>®</sup> Kombi Stoma Button, made of flexible silicone, helps to keep the tracheostoma open and is ideally suited for patients who otherwise no longer need a tracheostomy tube.

The fastening eyelets for a tube holder on the Laryngotec<sup>®</sup> Kombi Stoma Button are fitted at a specific angle so that minimum pressure is placed on the button, making it comfortable for the patient to wear. At the same time, the position and stability of the button in the tracheostoma is optimised.

The 22 mm combi-adapter enables the connection of compatible accessories with a standardised 22 mm adapter, e.g., for the use of special filters and tracheostoma valves.

The Laryngotec<sup>®</sup> Stoma Button is also available without fastening eyelets.

The Laryngotec<sup>®</sup> Kombi Stoma Button is supplied in individual, sterile packaging.

It is available in various sizes and lengths.



shaft length 🇩

Size	Version	O.D. neck flange mm	I.D. mm	Length mm	REF	<b>REF</b> without eyelets
8	standard	11.0	8.0	22	15950-08	15955-08
8	short	11.0	8.0	15	15960-08	15965-08
9	standard	12.0	9.0	22	15950-09	15955-09
9	short	12.0	9.0	15	15960-09	15965-09
10	standard	13.0	10.0	22	15950-10	15955-10
10	short	13.0	10.0	15	15960-10	15965-10
11	standard	14.0	11.0	22	15950-11	15955-11
11	short	14.0	11.0	15	15960-11	15965-11
12	standard	15.0	12.0	22	15950-12	15955-12
12	short	15.0	12.0	15	15960-12	15965-12

 Order information:
 Laryngotec® Kombi Stoma Button,<br/>size 8-12
 REF 15950

 Laryngotec® Kombi Stoma Button,<br/>short, size 8-12
 REF 15960

 Laryngotec® Kombi Stoma Button,<br/>without fastening eyelets, size 8-12
 REF 15955

 Laryngotec® Kombi Stoma Button,<br/>without fastening eyelets, size 8-12
 REF 15955

 Laryngotec® Kombi Stoma Button,<br/>without fastening eyelets, size 8-12
 REF 15955

### DURACUFF® TRACHEOSTOMY TUBES WITH LOW-PRESSURE CUFF











Duracuff<sup>®</sup> tracheostomy tubes with a low-pressure cuff are made of medical grade polymer and are pleasantly flexible. Duracuff<sup>®</sup> tracheostomy tubes have a very soft, anatomically shaped neck flange to prevent the cannula placing pressure on the skin. The very thin walls of the tubes ensure a maximum airflow. The material used is thermosensitive and reaches its ideal properties at body temperature. Due to the high degree of flexibility and the stated material characteristics, the Duracuff<sup>®</sup> tracheostomy tubes adapt very well to the shape of the trachea and thereby ensure a comfortable fit.

An X-ray contrast strip, running laterally in the tracheostomy tube, enables radiological visualisation to check the position in the tracheostoma. The high volume/low-pressure (hv/lp) cuff, with very thin walls and large volume, can be filled through a one-way valve and securely seals the cannula to the trachea wall. This prevents the accidental aspiration of secretions. The soft cuff fits snugly into the trachea and ensures a reliable seal, even with a low inflation pressure. The cuff's pilot line is integrated into the outer cannula, achieving a rounded and smooth outer shape. This prevents additional irritation of the mucous membranes. This cannula stands out through its easy handling and comfortable use. Duracuff® tracheostomy tubes are single-patient products; available in different versions and supplied in sterile (sterilised with ethylene oxide) packaging. Duracuff® tracheostomy tubes are indicated if a seal between the cannula and tracheal wall is required. Oversized cannulas are primarily required in deep tracheal stenoses. The offer of a medium-length version of the Duracuff® tracheostomy tubes with low-pressure cuff expands the options for the prevention, or possible emergency treatment of intratracheal bruising.

Aside from the standard versions, Duracuff<sup>®</sup> tracheostomy tubes are also available as custom-made product versions after consultation with the treating physician. In these adapted cannulas, individual anatomical features can be regarded.

In tracheostomy tubes with low-pressure cuff, air must only be supplied using a special filling device (e.g., cuff pressure gauge REF 19500), which enables controlled and measurable inflation of the cuff. A syringe is not suitable for blocking as the use of a syringe presents the risk of over-inflating the cuff leading to injury of the trachea's mucous membranes. Furthermore, this can seriously damage or even destroy the cuff!

#### DURACUFF® UNI TRACHEOSTOMY TUBE WITH LOW-PRESSURE CUFF WITHOUT INNER CANNULA, WITH A 15 MM SWIVEL CONNECTOR

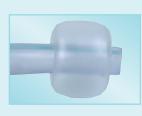
In the Duracuff<sup>®</sup> UNI tracheostomy tubes, each cannula is equipped with a 15 mm connector. In this version of the Duracuff<sup>®</sup> tracheostomy tube, a 15 mm swivel connector is located directly on the outer cannula's neck flange. This enables Heat and Moisture Exchangers (HMEs) to be attached to this adapter. The swivel connector also minimises any possible tractive forces from adapted tube systems preventing irritation of the mucous membranes.

The scope of delivery also includes an obturator (insertion aid).

The Duracuff<sup>®</sup> tracheostomy tubes are supplied in sterile packaging.







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This Duracuff<sup>®</sup> tracheostomy tube is also available in two special lengths, "medium length" and "extra long XL". Please note the information in the size chart.

#### Size chart for DURACUFF® UNI tracheostomy tubes with low-pressure cuff

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm	Length mm Standard	Length mm medium	Length mm extra long XL
7	10.2	8.8	7.0	65	75	100
8	11.2	9.8	8.0	70	80	105
9	12.4	11.2	9.0	75	85	105
10	13.4	12.2	10.0	85	95	110
11	14.4	13.2	11.0	87	97	115
12	15.4	14.2	12.0	90	100	120

Sizing information: O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve

Order information:	DURACUFF® UNI tracheostomy tube with low-pressure cuff, sterile, without inner cannula, with 15 mm swivel connector	
	size 7-12	REF 13000
	size 7-12 medium length	REF 13100
	size 7-12 extra long	REF 13200
	When ordering, please state the size after the item number!	

#### DURACUFF® UNI TRACHEOSTOMY TUBE WITH LOW-PRESSURE CUFF WITH TWO INNER CANNULAS, ONE WITH A 15 MM SWIVEL CONNECTOR ONE WITH A 15 MM CONNECTOR

In these Duracuff<sup>®</sup> UNI tracheostomy tubes, the inner cannulas are each equipped with a standardised 15 mm connector. This enables Heat and Moisture Exchangers (HMEs) to be attached to this connector.

One inner cannula has a 15 mm swivel connector. The swivel connector minimises any possible tractive forces from adapted tube systems preventing irritation of the mucous membranes.

The scope of delivery also includes the Duracuff<sup>®</sup> Clip adapter, for locking the inner cannula with a 15 mm swivel connector for mechanical ventilation, as well as an obturator (insertion aid).

The Duracuff® tracheostomy tubes are supplied in sterile packaging.









This Duracuff<sup>®</sup> tracheostomy tube is also available in two special lengths, "medium length" and "extra long XL". Please note the information in the size chart.

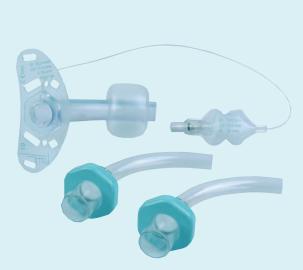
# Size chart for DURACUFF<sup>®</sup> UNI tracheostomy tubes with low-pressure cuff with two inner cannulas, one with a 15 mm swivel connector and one with a 15 mm connector

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	Length mm medium	Length mm extra long XL	
7	10.2	8.8	7.0	5.5	65	75	100	
8	11.2	9.8	8.0	6.5	70	80	105	
9	12.4	11.2	9.0	7.5	75	85	105	
10	13.4	12.2	10.0	8.5	85	95	110	
11	14.4	13.2	11.0	9.5	87	97	115	
12	15.4	14.2	12.0	10.2	90	100	120	
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Sizing information: O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve

Order information:	<b>DURACUFF® UNI tracheostomy tube with low-pressure cuff</b> , sterile, with two inner cannulas,	
	one with a 15 mm swivel connector and one with a 15 mm connector	
	size 7-12	REF 13002
	size 7-12 medium length	REF 13102
	size 7-12 extra long	REF 13202
	When ordering, please state the size after the item number!	

### DURACUFF® UNI TRACHEOSTOMY TUBE WITH LOW-PRESSURE CUFF WITH TWO INNER CANNULAS, WITH 15 MM SWIVEL CONNECTOR



In this Duracuff<sup>®</sup> UNI tracheostomy tube, the inner cannulas are each equipped with a standardised 15 mm connector. This enables Heat and Moisture Exchangers (HMEs) to be attached to this adapter. Both inner cannulas have a 15 mm swivel connector. The swivel connector also minimises any possible tractive forces from adapted tube systems preventing irritation of the mucous membranes. The Duracuff® tracheostomy tubes are supplied in sterile packaging.

The scope of delivery also includes the Duracuff<sup>®</sup> Clip adapter for locking the inner cannula with a 15 mm swivel connector for mechanical ventilation, as well as an obturator (insertion aid)







This Duracuff® tracheostomy tube is also available in two special lengths, "medium length" and "extra long XL". Please note the information in the size chart.

#### Size chart for DURACUFF® UNI tracheostomy tubes with low-pressure cuff with two inner cannulas, with 15 mm swivel connector

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	Length mm medium	Length mm extra long XL
7	10.2	8.8	7.0	5.5	65	75	100
8	11.2	9.8	8.0	6.5	70	80	105
9	12.4	11.2	9.0	7.5	75	85	105
10	13.4	12.2	10.0	8.5	85	95	110
11	14.4	13.2	11.0	9.5	87	97	115
12	15.4	14.2	12.0	10.2	90	100	120

Sizing information: O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve

Order information:	DURACUFF® UNI tracheostomy tube with low-pressure cuff, sterile, with two inner cannulas, with 15 mm swivel connector	
	size 7-12	REF 13003
	size 7-12 medium length	REF 13103
	size 7-12 extra long	REF 13203
	When ordering, please state the size after the item number!	

### DURACUFF® LINGO TRACHEOSTOMY TUBE WITH LOW-PRESSURE CUFF SIEVED, WITH TWO INNER CANNULAS, ONE WITH A 15 MM SWIVEL CONNECTOR AND A FENESTRATED INNER CANNULA WITH 15 MM CONNECTOR



The Duracuff® LINGO is a tracheostomy tube that can be used by tracheostomised patients. In order to be able to use the speaking function of the Duracuff® tracheostomy tube, an additional speaking valve, which can be attached to the 15 mm connector on the inner cannula, is required.

The Duracuff® LINGO tracheostomy tube is supplied with 2 inner cannulas, one with a 15 mm swivel connector and a fenestrated inner cannula with a 15 mm connector.

The scope of delivery also includes the Duracuff® Clip adapter for locking the inner cannula with a 15 mm swivel connector for mechanical ventilation, as well as an obturator (insertion aid).

The Duracuff<sup>®</sup> tracheostomy tubes are supplied in sterile packaging.





This Duracuff® tracheostomy tube is also available in two special lengths, "medium length" and "extra long XL". Please note the information in the size chart.

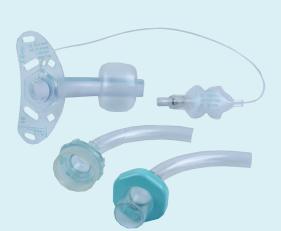
#### Size chart for DURACUFF® LINGO tracheostomy tubes with low-pressure cuff

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	Length mm medium	Length mm extra long XL
7	10.2	8.8	7.0	5.5	65	75	100
8	11.2	9.8	8.0	6.5	70	80	105
9	12.4	11.2	9.0	7.5	75	85	105
10	13.4	12.2	10.0	8.5	85	95	110
11	14.4	13.2	11.0	9.5	87	97	115
12	15.4	14.2	12.0	10.2	90	100	120

Sizing information: O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve

Order information: > DURACUFF® LINGO tracheostomy tube with low-pressure cuff, sterile, sieved, with two inner cannulas, one with a 15 mm swivel connector and a fenestrated inner cannula with a 15 mm connector size 7-12 **REF 13022** size 7-12 medium length **REF 13122** size 7-12 extra long **REF 13222** When ordering, please state the size after the item number!

### DURACUFF® KOMBI TRACHEOSTOMY TUBE WITH LOW-PRESSURE CUFF sieved, with two inner cannulas, one fenestrated cannula with a 22 mm combi-adapter and an inner cannula with a 15 mm swivel connector



The Duracuff<sup>®</sup> KOMBI is a tracheostomy tube that can be used by patients who have been tracheostomised with an intact larynx.

The Duracuff<sup>®</sup> KOMBI is a sieved tracheostomy tube and supplied with 2 inner cannulas. One of these is fenestrated and has a 22 mm combiadapter; the other inner cannula is equipped with a 15 mm swivel connector.

The 22 mm combi-adapter enables the connection of compatible accessories with a standardised 22 mm adapter, e.g., for the use of special filters and tracheostoma valves. The inner cannula with a 15 mm connector is used when, for example, the inspired air is to be conditioned using an HME (Heat and Moisture Exchanger).

The scope of delivery also includes the Duracuff<sup>®</sup> Clip adapter for locking the inner cannula with a 15 mm swivel connector for mechanical ventilation, as well as an obturator (insertion aid). The Duracuff<sup>®</sup> tracheostomy tubes are supplied in sterile packaging.





This Duracuff<sup>®</sup> tracheostomy tube is also available in two special lengths, "medium length" and "extra long XL". Please note the information in the size chart.

#### Size chart for DURACUFF® KOMBI tracheostomy tubes with low-pressure cuff

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	Length mm medium	Length mm extra long XL
7	10.2	8.8	7.0	5.5	65	75	100
8	11.2	9.8	8.0	6.5	70	80	105
9	12.4	11.2	9.0	7.5	75	85	105
10	13.4	12.2	10.0	8.5	85	95	110
11	14.4	13.2	11.0	9.5	87	97	115
12	15.4	14.2	12.0	10.2	90	100	120

Sizing information:

**CO.D.** Tip = Outer diameter of the outer tube at the tip of the cannula · **O.D.** Tip = Outer diameter behind the neck flange · **I.D.** = Inner diameter at the tip of the cannula **Length** = Length over the outer curve

 Order information:
 DURACUFF® KOMBI tracheostomy tube with low-pressure cuff, sterile, sieved, with two inner cannulas, one with a fenestrated 22 mm combi-adapter, and an inner cannula with a 15 mm swivel connector size 7-12 size 7-12 medium length size 7-12 medium length size 7-12 extra long
 REF 13072 REF 13172 REF 13172 REF 13272

 When ordering, please state the size after the item number!
 REF 13272

### DURACUFF<sup>®</sup> SUCTION TRACHEOSTOMY TUBE WITH LOW-PRESSURE CUFF WITH A SUCTION LINE AND TWO INNER CANNULAS, ONE WITH A 15 MM SWIVEL CONNECTOR AND ONE WITH A 15 MM CONNECTOR

The Duracuff<sup>®</sup> SUCTION with suction line is a blockable tracheostomy tube, which offers the option of removing secretions collected above the low-pressure cuff from the trachea through a separate hose line. The fine hose line is on the outer cannula and can be connected to an external suction line. The suction line is incorporated into the outer cannula that it does not stand out and therefore does not lead to additional irritation of the tracheal wall. The standard Duracuff® SUC-TION is supplied with two inner cannulas with 15 mm connector,

one of which has a swivel connector.

Suction can be carried out using a suction line with vacuum regulator or the attached disposable syringe. Suction accessories can be adapted safely using the suction nozzle or Luer connection supplied.

The scope of delivery also includes the Duracuff® Clip adapter for locking the inner cannula with a 15 mm swivel connector, for mechanical ventilation, as well as an obturator (insertion aid).

The Duracuff® Suction tracheostomy tube with low-pressure cuff is supplied in sterile packaging.







This Duracuff® tracheostomy tube is also available in two special lengths, "medium length" and "extra long XL". Please note the information in the size chart.

#### Size chart for DURACUFF® Suction tracheostomy tubes with low-pressure cuff

				- <b>-</b>			
Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	Length mm medium	Length mm extra long XL
7	10.2	8.8	7.0	5.5	65	75	100
8	11.2	9.8	8.0	6.5	70	80	105
9	12.4	11.2	9.0	7.5	75	85	105
10	13.4	12.2	10.0	8.5	85	95	110
11	14.4	13.2	11.0	9.5	87	97	115
12	15.4	14.2	12.0	10.2	90	100	120

Sizing information:

**CO.D.** Tip = Outer diameter of the outer tube at the tip of the cannula · **O.D. neck flange** = Outer diameter behind the neck flange · **I.D.** = Inner diameter at the tip of the cannula **Length** = Length over the outer curve

Order information: > DURACUFF® SUCTION tracheostomy tube with low-pressure cuff, sterile, with suction line and two inner cannulas, one with a 15 mm swivel connector and one with a 15 mm connector size 7-12 **REF 13032** size 7-12 medium length **REF 13132** size 7-12 extra long **REF 13232** When ordering, please state the size after the item number!

# DURACUFF® TRACHEOSTOMY TUBES WITH LOW-PRESSURE CUFF – SPEAKING VERSIONS







Duracuff<sup>®</sup> tracheostomy tubes with speaking valve are used after a tracheostomy with a complete or partially retained larynx and enable the user to speak. Duracuff<sup>®</sup> tracheostomy tubes with lowpressure cuff and speaking valve are available with a silicone speaking valve. The silicone valve is simply attached to the Duracuff<sup>®</sup> Standard inner cannula. Similar to conventional silver speaking valves, in the silicone speaking valve, a flap opens on inspiration allowing air to flow in. The exhaled airflow causes the valve flap to close, thereby enabling the formation of speech.

Tracheostomy tubes with speaking valves must not be used on any account by laryngectomised patients, as this could lead to serious complications, even suffocation! Features of Duracuff<sup>®</sup> tracheostomy tubes with speaking valve:

Conscious patients can be provided with speaking versions of the Duracuff<sup>®</sup> tracheostomy tubes with low-pressure cuff, in order to give them a means of communication. Due to the comparatively long time use of blocked cannulas, it must be ensured that the cannula's fenestration is not blocked by granulation tissues, encrustations or mucous. The cannula may need to be replaced after a relatively short time.

Inner cannulas with red connector show that the cannula is fenestrated.

#### DURACUFF<sup>®</sup> PHONE TRACHEOSTOMY TUBE WITH SPEAKING VALVE AND LOW-PRESSURE CUFF SIEVED, WITH TWO INNER CANNULAS, ONE WITH SIEVED, WITH TWO INNER CANNULAS, ONE WITH A 15 MM SWIVEL CONNECTOR AND ONE WITH A SILICONE SPEAKING VALVE



Duracuff® PHONE is the speaking version of the Duracuff® tracheostomy tube with low-pressure cuff.

We supply the Duracuff® PHONE with two inner cannulas, one equipped with a 15 mm swivel connector, and the other with a silicone speaking valve. The silicone speaking valve is detachable and can be attached to the standard attachment of the inner cannula by simply putting it over the housing ring.

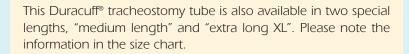
The scope of delivery also includes the Duracuff® Clip adapter for locking the inner cannula with a 15 mm swivel connector for mechanical ventilation, as well as an obturator (insertion aid).

The Duracuff® tracheostomy tubes are supplied in sterile packaging.









#### Size chart for DURACUFF® PHONE tracheostomy tube with low-pressure cuff

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	Length mm medium	Length mm extra long XL
7	10.2	8.8	7.0	5.5	65	75	100
8	11.2	9.8	8.0	6.5	70	80	105
9	12.4	11.2	9.0	7.5	75	85	105
10	13.4	12.2	10.0	8.5	85	95	110
11	14.4	13.2	11.0	9.5	87	97	115
12	15.4	14.2	12.0	10.2	90	100	120

Sizing information: O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve

Order information: ▶ DURACUFF® PHONE tracheostomy tube with speaking valve and low-pressure cuff, sterile, sieved, with two inner cannulas, one with a 15 mm swivel connector and one with a silicone speaking valve size 7-12 **REF 13012** size 7-12 medium length **REF 13112** size 7-12 extra long **REF 13212** When ordering, please state the size after the item number!

#### DURACUFF<sup>®</sup> SUCTIONVOICE TRACHEOSTOMY TUBE WITH LOW-PRESSURE CUFF WITH SUCTION WITH SUCTION LINE AND TWO INNER CANNULAS, ONE WITH A 15 MM SWIVEL CONNECTOR AND ONE WITH A SILICONE SPEAKING VALVE



Duracuff<sup>®</sup> SUCTIONVOICE is the speaking version of the Duracuff<sup>®</sup> SUCTION. It combines the properties of a blockable Duracuff® tracheostomy tube with speaking valve, with the option of secretion suction.

We supply the Duracuff® SUCTIONVOICE with two inner cannulas, one equipped with a 15 mm swivel connector and the other with a silicone speaking valve.

The equipment with suction nozzle and Luer connection enables the adaptation of the suction accessories, so that suction can optionally be carried out using a syringe or suction line.

The scope of delivery also includes the Duracuff® Clip adapter for locking the inner cannula with a 15 mm swivel connector for mechanical ventilation, as well as an obturator (insertion aid).

The Duracuff<sup>®</sup> tracheostomy tubes are supplied in sterile packaging.









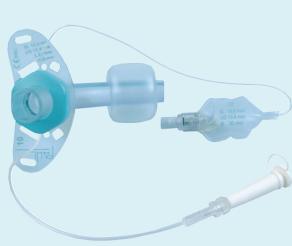
This Duracuff<sup>®</sup> tracheostomy tube is also available in two special lengths, "medium length" and "extra long XL". Please note the information in the size chart.

Size cl	Size chart for DURACUFF <sup>®</sup> SUCTIONVOICE tracheostomy tube with low-pressure cuff								
Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	Length mm medium	Length mm extra long XL		
7	10.2	8.8	7.0	5.5	65	75	100		
8	11.2	9.8	8.0	6.5	70	80	105		
9	12.4	11.2	9.0	7.5	75	85	105		
10	13.4	12.2	10.0	8.5	85	95	110		
11	14.4	13.2	11.0	9.5	87	97	115		
12	15.4	14.2	12.0	10.2	90	100	120		
Sizing info	mation:								

**CO.D.** Tip = Outer diameter of the outer tube at the tip of the cannula · **O.D. neck flange** = Outer diameter behind the neck flange · **I.D.** = Inner diameter at the tip of the cannula **Length** = Length over the outer curve

Order information: ▶ DURACUFF® SUCTIONVOICE tracheostomy tube with low-pressure cuff, sterile, with suction line and two inner cannulas, one with a 15 mm swivel connector and one with a silicone speaking valve size 7-12 **REF 13042** size 7-12 medium length **REF 13142** size 7-12 extra long **REF 13242** When ordering, please state the size after the item number!

### DURACUFF® SUCTION UNI TRACHEOSTOMY TUBE WITH LOW-PRESSURE CUFF WITH SUCT WITH SUCTION LINE, WITHOUT INNER CANNULA



The Duracuff® SUCTION UNI tracheostomy tube with suction line is a blockable tracheostomy tube, which offers the option of removing secretions collected above the low-pressure cuff from the trachea, through a separate hose. For this, the outer cannula contains a fine hose, which can be connected to an external suction device. The hose is incorporated into the outer cannula that it does not stand out and therefore does not lead to additional irritation of the tracheal wall.

Suction can be carried out using a suction line with vacuum regulator, or the attached disposable syringe. Suction accessories can be adapted safely using the suction nozzle or Luer connection supplied.

The Duracuff® SUCTION UNI tracheostomy tube with low-pressure cuff is supplied in sterile packaging.



This Duracuff® tracheostomy tube is also available in two special lengths, "medium length" and "extra long XL". Please note the information in the size chart.

Size cha	art for DURACUFF		NI tracheosto	omy tube wit	h low-pressure	cuff, without	inner cannula
Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	Length mm medium	Length mm extra long XL
7	10.2	8.8	7.0	5.5	65	75	100
8	11.2	9.8	8.0	6.5	70	80	105
9	12.4	11.2	9.0	7.5	75	85	105
10	13.4	12.2	10.0	8.5	85	95	110
11	14.4	13.2	11.0	9.5	87	97	115
12	15.4	14.2	12.0	10.2	90	100	120
Sizing inform	nation:						

Sizing information: O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve

Order information:	DURACUFF® SUCTION UNI tracheostomy tube with low-pressure cuff, sterile, with suction line, without inner cannula	
	size 7-12	<b>REF 13040</b>
	size 7-12 medium length	REF 13140
	size 7-12 extra long	REF 13240
	When ordering, please state the size after the item number!	

## **DURACUFF® CLIP**

#### ADAPTER FOR LOCKING THE INNER CANNULA, WITH 15 MM SWIVEL CONNECTOR



The Duracuff<sup>®</sup> Clip for locking the inner cannula with 15 mm swivel connector enables the fixation of the inner cannula, so that Duracuff<sup>®</sup> tracheostomy tubes with inner cannula with 15 mm swivel connector can also be used during the mechanical ventilation of a patient.

The Duracuff<sup>®</sup> Clip for locking the inner cannula with a 15 mm swivel connector can be used for all Duracuff<sup>®</sup> tracheostomy tubes with an inner cannula with a 15 mm swivel connector when patients are mechanically ventilated!

The Duracuff<sup>®</sup> Clip is attached to the Duracuff<sup>®</sup> tracheostomy tube before starting mechanical ventilation. It secures the inner cannula via the lock with the outer cannula and prevents the inner cannula from accidentally detaching.

The Duracuff<sup>®</sup> Clip is included in the scope of delivery of all Duracuff<sup>®</sup> tracheostomy tubes that contain an inner cannula with 15 mm swivel connector. To ensure a seamless supply, we recommend that you keep at least one second Clip. For repeat orders, the Duracuff<sup>®</sup> Clip is supplied in individual, hygienic packaging.



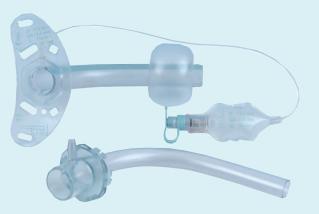


# DURACUFF® O2 TRACHEOSTOMY TUBE WITH LOW-PRESSURE CUFF WITH ONE INNER CANNULA WITH OXYGEN SUPPLY PORT AND 15 MM CONNECTOR

The DURACUFF® O<sub>2</sub> tracheostomy tube with low-pressure cuff and inner cannula, with 15 mm connector and oxygen supply port provides the option of an additional oxygen supply. It is designed for patients who can breathe spontaneously but show insufficient blood oxygen saturation during normal breathing and therefore require an additional oxygen supply. The oxygen is supplied via a thin supply tube (special accessory), which is connected to the inner cannula port; its free end can be connected to an external oxygen source via a special connection.

The scope of delivery also includes an obturator (insertion aid).

The Duracuff® tracheostomy tubes are supplied in sterile packaging.





This Duracuff® tracheostomy tube is also available in two special lengths, "medium length" and "extra long XL". Please note the information in the size chart.

#### Size chart for DURACUFF® O<sub>2</sub> tracheostomy tube with low-pressure cuff

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm Standard	Length mm medium	Length mm extra long XL
7	10.2	8.8	7.0	5.5	65	75	100
8	11.2	9.8	8.0	6.5	70	80	105
9	12.4	11.2	9.0	7.5	75	85	105
10	13.4	12.2	10.0	8.5	85	95	110
11	14.4	13.2	11.0	9.5	87	97	115
12	15.4	14.2	12.0	10.2	90	100	120

Sizing information: O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve

Order information:	DURACUFF® O <sub>2</sub> tracheostomy tube with low-pressure cuff, sterile, with one inner cannula with oxygen supply port and 15 mm connector	
	size 7-12	REF 13051
	size 7-12 medium length	REF 13151
	size 7-12 extra long	REF 13251
	When ordering, please state the size after the item number!	

## **DURATWIX® TRACHEOSTOMY TUBES**















The Duratwix<sup>®</sup> product line is an innovative development of tracheostomy tubes. The Duratwix<sup>®</sup> tracheostomy tube series was designed according to modular design principles, the tubes are compatible with different adapters/accessories and inner cannulas can be separately re-ordered, according to the tube version. The blockable version of Duratwix<sup>®</sup> tracheostomy tubes have a low pressure cuff; it is made of soft, medical –grade polymer (latex free) and is pleasantly flexible.

The anatomically shaped neck flange makes the cannula more comfortable to wear because it is adjusted to the shape of the neck. The neck flange is very soft and therefore prevents bruising. Furthermore, the ball joint between the neck flange and the tracheostomy tube enables free movement of the neck flange in all directions. This not only means horizontally and vertically, but also diagonally. This has the advantage for the user that the neck flange can adapt flexibly to body movements without causing the cannula to move, which aims to provide a stabilising effect and avoid pressure and bruising of the mucous membranes.

The fastening eyelets for the tube holder are placed ergonomically into the neck flange so that the tractive forces on the tracheostomy tube are evenly distributed and an optimal fixation is possible.

As a further approach in the problem of possible irritations of the mucous membranes of the trachea, the tracheostomy tubes were manufactured in such a way that the cannulas are very smooth. The surface is comfortably smooth and glides easily.

An innovative locking mechanism has been integrated in the Duratwix<sup>®</sup> tracheostomy tubes with inner cannulas. The inner cannula is securely fixed into the outer cannula with only a slight rotary motion and with little pressure.

In the Duratwix<sup>®</sup> LINGO version, the holes of the sieve were placed horizontally and graded in the outer tube. This special version of the sieve provides the individual holes with a greater edge surface. Secretions from the tracheostoma only migrate through the outer cannula with difficulty and slowly, which reduces the risk of aspiration. The ergonomically shaped low-pressure cuff of the Duratwix<sup>®</sup> tracheostomy tube versions, with very thin walls, can be filled through a one-way valve and securely seals the cannula to the trachea wall. The accidental aspiration of secretions is prevented. The soft cuff fits snugly into the trachea and ensures a reliable seal, even with low inflation pressure.

The cuff's pilot line is integrated into the outer cannula, achieving an almost flush, smooth outer shape. This prevents additional irritation of the mucous membranes. This cannula stands out through its easy handling and comfortable use. Duratwix<sup>®</sup> tracheostomy tubes are single-patient products, available in different versions and are supplied in individual, sterile packaging. Duratwix<sup>®</sup> tracheostomy tubes with cuff are indicated if a seal between the cannula and tracheal wall is required.

This Duratwix<sup>®</sup> tracheostomy tube is available in two lengths, a standard and a short version, which provides an additional option for the prevention or possible treatment of intratracheal bruises. For the shorter versions of the Duratwix<sup>®</sup> tracheostomy tube, the label of the neck flange is kept in a turquoise shade, for the standard version the shade is black, providing a distinguishing feature. Additionally, the tubes of the short inner cannulas are coloured. As a further feature, the fenestrated Duratwix<sup>®</sup> inner cannulas have a turquoise connector, so that even when a Duratwix<sup>®</sup> tracheostomy tube is in use, it is instantly possible to distinguish the inner cannulas, with reference to the fenestration. Closed inner cannulas continue to have a white connector. Please note the information in the size chart.

## DURATWIX® UNI CUFF TRACHEOSTOMY TUBE

WITH LOW-PRESSURE CUFF, WITHOUT INNER CANNULA, WITH 15 MM CONNECTOR

In the Duratwix® UNI CUFF tracheostomy tubes with low-pressure cuff, the cannulas are each equipped with a 15 mm connector. In this version of the Duratwix<sup>®</sup> tracheostomy tube, a 15 mm connector is located directly on the outer cannula. This enables Heat and Moisture Exchangers (HMEs) with 15 mm connectors, to be attached to the adapter.

Duratwix<sup>®</sup> tracheostomy tubes without inner cannula are particularly soft and are therefore very comfortable to wear.

An insertion aid (obturator) and a tube holder are included in the scope of delivery.

The Duratwix<sup>®</sup> tracheostomy tubes are supplied in sterile packaging.



This Duratwix® tracheostomy tube is available in two lengths, a standard and a short version. The label on the neck flange of the short tube is turquoise. Please note the information in the size chart.

Size chart for DURATWIX <sup>®</sup> UNI CUFF tracheostomy tube with low-pressure cuff								
Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm	Length mm Standard	REF	Length mm short	REF	
7	11.9	10.8	7.0	82	19601-07	72	19602-07	
8	12.5	11.4	8.0	85	19601-08	75	19602-08	
9	13.7	12.5	9.0	88	19601-09	78	19602-09	
10	15.0	13.8	10.0	91	19601-10	81	19602-10	
Sizing infor	mation:							

**O.D.** Tip = Outer diameter of the outer tube at the tip of the cannula · **O.D. neck flange** = Outer diameter behind the neck flange · **I.D.** = Inner diameter at the tip of the cannula Length = Length over the outer curve

Order information: > DURATWIX® UNI CUFF tracheostomy tube with low-pressure cuff, sterile, without inner cannula, with 15 mm connector size 7-10 standard size 7-10 short When ordering, please state the size after the item number!

**REF 19601 REF 19602** 

RACHEOSTOMY TUBES





## DURATWIX<sup>®</sup> UNI CUFF TRACHEOSTOMY TUBE

#### WITH LOW-PRESSURE CUFF, WITH TWO INNER CANNULAS, ONE WITH A 15 MM SWIVEL CONNECTOR AND ONE WITH A 15 MM CONNECTOR



In the Duratwix<sup>®</sup> UNI CUFF tracheostomy tubes with low-pressure cuff, the scope of delivery includes two inner cannulas, one with a 15 mm swivel connector and one inner cannula with a 15 mm connector as a universal attachment.

This enables Heat and Moisture Exchangers (HMEs) with 15 mm connectors, to be attached to the adapter.

- One inner cannula has a 15 mm swivel connector. The swivel connector also minimises any possible tractive forces from adapted tube systems, preventing irritation of the mucous membranes in the trachea.
  - An insertion aid (obturator) and a tube holder are included in the scope of delivery.

The Duratwix<sup>®</sup> tracheostomy tubes are supplied in sterile pack-

aging.







This Duratwix<sup>®</sup> tracheostomy tube is available in two lengths, a standard and a short version. The label and the inner cannulas of the short version are turquoise. Please note the information in the size chart.

Size chart for DURATWIX <sup>®</sup> UNI CUFF tracheostomy tube with low-pressure cuff										
Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm	Length mm Standard	REF	Length mm short	REF			
7	11.9	10.8	7.0	82	19611-07	72	19612-07			
8	12.5	11.4	8.0	85	19611-08	75	19612-08			
9	13.7	12.5	9.0	88	19611-09	78	19612-09			
10	15.0	13.8	10.0	91	19611-10	81	19612-10			
Sizing infor	mation:									

Sizing information: O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve

#### Order information:

DURATWIX® UNI CUFF tracheostomy tube with low-pressure cuff, sterile, with two inner cannulas, one with a 15 mm swivel connector and one with a 15 mm connector **REF 19611** size 7-10 standard size 7-10 short **REF 19612** When ordering, please state the size after the item number!

## DURATWIX® LINGO CUFF TRACHEOSTOMY TUBE, SIEVED

WITH LOW PRESSURE CUFF, WITH TWO INNER CANNULAS, ONE WITH A

15 MM SWIVEL CONNECTOR AND A FENESTRATED INNER CANNULA WITH 15 MM CONNECTOR



The Duratwix<sup>®</sup> LINGO is a tracheostomy tube with low-pressure cuff that can be used by tracheostomised patients. In order to be able to use the speaking function of the Duratwix<sup>®</sup> tracheostomy tube, an additional speaking valve, which can be attached to the 15 mm connector on the fenestrated inner cannulas, is required. An additional replacement fenestrated inner cannula with speaking valve (REF 19841/19842) is also available.

- This speaking valve can be ordered separately if required.
  - The Duratwix<sup>®</sup> LINGO tracheostomy tube is supplied with 2 inner cannulas, one with a 15 mm swivel connector and a fenestrated inner cannula with a 15 mm connector.

The swivel connector also minimises any possible tractive forces from adapted tube systems, preventing irritation of the mucous membranes in the trachea.

An insertion aid (obturator), a decannulation plug and a tube holder are included in the scope of delivery.

> The Duratwix<sup>®</sup> tracheostomy tubes are supplied in sterile packaging.



This Duratwix<sup>®</sup> tracheostomy tube is available in two lengths, a standard and a short version. The fenestrated inner cannulas have a turquoise connector, the short version has turquoise inner cannulas and label. Please note the information in the size chart.

Size chart for DURATWIX® LINGO CUFF tracheostomy tube with low-pressure cuff, sieved									
Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm	Length mm Standard	REF	Length mm short	REF		
7	11.9	10.8	7.0	82	19661-07	72	19662-07		
8	12.5	11.4	8.0	85	19661-08	75	19662-08		
9	13.7	12.5	9.0	88	19661-09	78	19662-09		
10	15.0	13.8	10.0	91	19661-10	81	19662-10		
Sizing infor	rmation:								

O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve

Order information: > DURATWIX® LINGO CUFF tracheostomy tube with low-pressure cuff, sieved, sterile, with two inner cannulas, one with a 15 mm swivel connector and a fenestrated inner cannula with a 15 mm connector **REF 19661** size 7-10 standard size 7-10 short **REF 19662** When ordering, please state the size after the item number!

## DURATWIX® LINGO TRACHEOSTOMY TUBE, SIEVED

#### WITHOUT INNER CANNULA, WITH 15 MM CONNECTOR



The Duratwix<sup>®</sup> LINGO is a tracheostomy tube that can be used by tracheostomised patients. In this version of the Duratwix<sup>®</sup> tracheostomy tube, a 15 mm connector is located directly on the outer cannula. This enables Heat and Moisture Exchangers (HMEs) or speaking valves, with standardised 15 mm connectors, to be attached to the adapter.

In order to be able to use the speaking function of the Duratwix<sup>®</sup> tracheostomy tube an additional speaking valve (e.g., Humidophone® type 15 REF 46485, Combiphon® REF 27131), which can be attached to the 15 mm connector on the inner cannulas, is required.

This speaking valve can be ordered separately if required.

An insertion aid (obturator) and a tube holder are included in the scope of delivery.

The Duratwix<sup>®</sup> tracheostomy tubes are supplied in sterile packaging.



This Duratwix<sup>®</sup> tracheostomy tube is available in two lengths, a standard and a short version. Both connectors are turquoise indicating, the sieve and the short tube has a turquoise label. Please note the information in the size chart.

Size chart for DURATWIX <sup>®</sup> LINGO tracheostomy tube, sieved										
Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm	Length mm Standard	REF	Length mm short	REF			
7	11.9	10.8	7.0	82	19271-07	72	19272-07			
8	12.5	11.4	8.0	85	19271-08	75	19272-08			
9	13.7	12.5	9.0	88	19271-09	78	19272-09			
10	15.0	13.8	10.0	91	19271-10	81	19272-10			

Sizing information:

O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve

Order information: > DURATWIX® LINGO tracheostomy tube, sieved, sterile, without inner cannula, with 15 mm connector size 7-10 standard size 7-10 short When ordering, please state the size after the item number!

**REF 19271 REF 19272**  TRACHEOSTOMY TUBES

## DURATWIX® LINGO TRACHEOSTOMY TUBE, SIEVED

#### WITH TWO INNER CANNULAS, ONE WITH A 15 MM SWIVEL CONNECTOR AND A FENESTRATED INNER CANNULA WITH 15 MM CONNECTOR

The Duratwix<sup>®</sup> LINGO is a tracheostomy tube that can be used by tracheostomised patients. In order to be able to use the speaking function of the Duratwix® tracheostomy tube, an additional speaking valve, which can be attached to the 15 mm connector on the inner cannulas or an additional replacement fenestrated inner cannula with speaking valve (REF 19841/19842) is required. These items may, if required, be ordered separately.

The swivel connector also minimises any possible tractive forces from adapted tube systems, preventing irritation of the mucous membranes in the trachea.

The Duratwix<sup>®</sup> LINGO tracheostomy tube is supplied with 2 inner cannulas, one with a 15 mm swivel connector and a fenestrated inner cannula with a 15 mm connector.

An insertion aid (obturator), a decannulation plug and a tube holder are included in the scope of delivery.

> The Duratwix<sup>®</sup> tracheostomy tubes are supplied in sterile packaging.

This Duratwix® tracheostomy tube is available in two lengths, a standard and a short version. The sieved inner cannulas have turquoise connectors, short cannulas and label are also turquoise. Please note the information in the size chart.

#### Size chart for DURATWIX® LINGO tracheostomy tube, sieved

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm	Length mm Standard	REF	Length mm short	REF
7	11.9	10.8	7.0	82	19261-07	72	19262-07
8	12.5	11.4	8.0	85	19261-08	75	19262-08
9	13.7	12.5	9.0	88	19261-09	78	19262-09
10	15.0	13.8	10.0	91	19261-10	81	19262-10

Sizing information:

O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve

Order information: > DURATWIX® LINGO tracheostomy tube, sieved, sterile, with two inner cannulas, one with a 15 mm swivel connector and a fenestrated inner cannula with a 15 mm connector **REF 19261** size 7-10 standard size 7-10 short **REF 19262** When ordering, please state the size after the item number!



## DURATWIX® UNI TRACHEOSTOMY TUBE

#### WITH TWO INNER CANNULAS, ONE WITH A 15 MM SWIVEL CONNECTOR AND ONE WITH A 15 MM CONNECTOR

In this Duratwix<sup>®</sup> UNI tracheostomy tube, each of the inner cannulas are equipped with a standardised 15 mm connector. This adapter enables HMEs (Heat and Moisture Exchangers) or speaking valves, with standardised 15 mm connectors, to be attached.

One inner cannula has a 15 mm swivel connector. The swivel connector also minimises any possible tractive forces from adapted tube systems, preventing irritation of the mucous membranes.

- An insertion aid (obturator) and a tube holder are included in the scope of delivery.
  - The Duratwix<sup>®</sup> tracheostomy tubes are supplied in sterile packaging.



ID 9,0 mm OD 13,7 mm



This Duratwix® tracheostomy tube is available in two lengths, a standard and a short version. The short version has turquoise inner cannulas and label.Please note the information in the size chart.

Size chart for DURATWIX <sup>®</sup> UNI tracheostomy tube										
Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm	Length mm Standard	REF	Length mm short	REF			
7	11.9	10.8	7.0	82	19211-07	72	19212-07			
8	12.5	11.4	8.0	85	19211-08	75	19212-08			
9	13.7	12.5	9.0	88	19211-09	78	19212-09			
10	15.0	13.8	10.0	91	19211-10	81	19212-10			

Sizing information:

**O.D. Tip =** Outer diameter of the outer tube at the tip of the cannula · **O.D. neck flange =** Outer diameter behind the neck flange · **I.D. =** Inner diameter at the tip of the cannula **Length =** Length over the outer curve

#### Order information:

DURATWIX® UNI tracheostomy tube, sterile, with two inner cannulas, one with a 15 mm swivel connector and one with a 15 mm connector size 7-10 standard size 7-10 short When ordering, please state the size after the item number!

**REF 19211 REF 19212** 

## DURATWIX® UNI TRACHEOSTOMY TUBE



#### WITHOUT INNER CANNULA WITH 15 MM CONNECTOR

In the Duratwix<sup>®</sup> UNI tracheostomy tube, the cannula is equipped with a standardised 15 mm connector, which is directly attached to the outer cannula. This enables Heat and Moisture Exchangers (HMEs) or speaking valves, with 15 mm connectors to be attached to this adapter.

An insertion aid (obturator) and a tube holder are included in the scope of delivery.

The Duratwix<sup>®</sup> tracheostomy tubes are supplied in sterile packaging.





*<b>RACHEOSTOMY TUBES* 



This Duratwix® tracheostomy tube is available in two lengths, a standard and a short version with turquoise label. Please note the information in the size chart.

:	Size chart for DURATWIX <sup>®</sup> UNI tracheostomy tube										
	Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm	Length mm Standard	REF	Length mm short	REF			
	7	11.9	10.8	7.0	82	19201-07	72	19202-07			
	8	12.5	11.4	8.0	85	19201-08	75	19202-08			
	9	13.7	12.5	9.0	88	19201-09	78	19202-09			
	10	15.0	13.8	10.0	91	19201-10	81	19202-10			
	lining informat	ion									

Sizing information: O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve

Order information: > DURATWIX<sup>®</sup> UNI tracheostomy tube, sterile, without inner cannula, with 15 mm connector size 7-10 standard size 7-10 short When ordering, please state the size after the item number!

**REF 19201 REF 19202** 

## **DURATWIX® REPLACEMENT INNER CANNULA**



The Duratwix<sup>®</sup> replacement inner cannula is an inner cannula without an adapter or 15 mm connector.

It can be used with all tracheostomy tubes of the Duratwix<sup>®</sup> series.

The Duratwix® replacement inner cannulas are supplied in sterile packaging.



LOW PROFILE

Order information:	DURATWIX® replacement inner cannula low profile,	
	pack of 3, sterile	
	size 7-10 standard	REF 19801
	size 7-10 short	<b>REF 19802</b>
	When ordering, please state the size after the item number!	

## DURATWIX® UNI REPLACEMENT INNER CANNULA

WITH 15 MM CONNECTOR



Ο

The Duratwix<sup>®</sup> replacement inner cannula is an inner cannula, equipped with a 15 mm connector.

It can be used with all tracheostomy tubes of the Duratwix<sup>®</sup> series.

This enables Heat and Moisture Exchangers (HMEs) or ventilation tubes to be attached to this adapter.

The Duratwix® replacement inner cannulas are supplied in sterile packaging.



Order information: > DURATWIX<sup>®</sup> UNI replacement inner cannula, with 15 mm connector, pack of 3, sterile size 7-10 standard size 7-10 short When ordering, please state the size after the item number!

**REF 19811 REF 19812** 

## DURATWIX® UNI REPLACEMENT INNER CANNULA WITH 15 MM SWIVEL CONNECTOR



The Duratwix<sup>®</sup> UNI replacement inner cannula is an inner cannula, equipped with a 15 mm swivel connector.

It can be used with all tracheostomy tubes in the Duratwix<sup>®</sup> series.

The swivel connector also minimises any possible tractive forces from adapted tube systems, preventing irritation of the mucous membranes in the trachea.

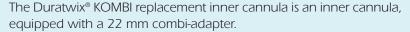
This enables Heat and Moisture Exchangers (HMEs) or ventilation tubes to be attached to this adapter.

The Duratwix® replacement inner cannulas are supplied in sterile packaging.



Order information:	DURATWIX® UNI replacement inner cannula, with 15 mm swivel connector,	
	pack of 3, sterile	
	size 7-10 standard	REF 19821
	size 7-10 short	REF 19822
	When ordering, please state the size after the item number!	

## DURATWIX® KOMBI REPLACEMENT INNER CANNULA with 22 MM COMBI-ADAPTER



It can be used with all tracheostomy tubes in the Duratwix<sup>®</sup> series.

The combi-adapter enables the connection of compatible accessories with a standardised 22 mm combi-adapter, e.g., for the use of special filters e.g., HumidoTwin® or standard HMEs.

The Duratwix® replacement inner cannulas are supplied in sterile packaging.

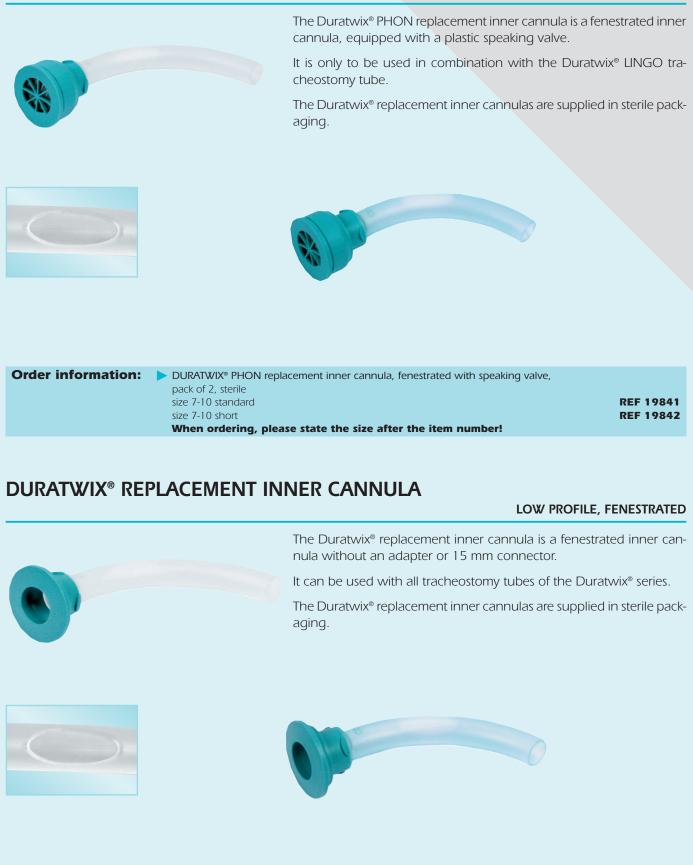


Order information: > DURATWIX® KOMBI replacement inner cannula, with 22 mm combi-adapter, pack of 3, sterile size 7-10 standard size 7-10 short When ordering, please state the size after the item number!

**REF 19831 REF 19832** 

## DURATWIX® PHON REPLACEMENT INNER CANNULA

#### FENESTRATED WITH SPEAKING VALVE



 Order information:
 DURATWIX® replacement inner cannula low profile, fenestrated, pack of 3, sterile size 7-10 standard size 7-10 short
 REF 19851

 When ordering, please state the size after the item number!
 REF 19852

## **DURATWIX® UNI REPLACEMENT INNER CANNULA**

#### FENESTRATED WITH 15 MM CONNECTOR

The Duratwix<sup>®</sup> replacement inner cannula is a fenestrated inner cannula, equipped with a 15 mm connector.

It can be used with all tracheostomy tubes of the Duratwix<sup>®</sup> series.

This enables Heat and Moisture Exchangers (HMEs) or speaking valves to be attached to this adapter.

The Duratwix® replacement inner cannulas are supplied in sterile packaging.



RACHEOSTOMY TUBES



sterile
standard REF 19861
short REF 19862 rdering, please state the size after the item number!
5

## DURATWIX® UNI REPLACEMENT INNER CANNULA

#### FENESTRATED WITH 15 MM SWIVEL CONNECTOR



The Duratwix<sup>®</sup> UNI replacement inner cannula is a fenestrated inner cannula, equipped with a 15 mm swivel connector.

It can be used with all tracheostomy tubes of the Duratwix® series.

The swivel connector also minimises any possible tractive forces from adapted tube systems, preventing irritation of the mucous membranes.

This enables Heat and Moisture Exchangers (HMEs) or speaking valves to be attached to this adapter.

The Duratwix<sup>®</sup> replacement inner cannulas are supplied in sterile packaging.



Order information:

DURATWIX<sup>®</sup> UNI replacement inner cannula, fenestrated with 15 mm swivel connector, pack of 3, sterile size 7-10 standard size 7-10 short
 When ordering, please state the size after the item number!

REF 19871 REF 19872

## DURATWIX® KOMBI REPLACEMENT INNER CANNULA

#### FENESTRATED WITH 22 MM COMBI-ADAPTER

The Duratwix<sup>®</sup> KOMBI replacement inner cannula is a fenestrated inner cannula, equipped with a 22 mm combi-adapter.

It can be used with all tracheostomy tubes in the Duratwix<sup>®</sup> series.

The combi-adapter enables the connection of compatible accessories with a standardised 22 mm combi-adapter, e.g., for the use of special filters e.g., HumidoTwin<sup>®</sup>, standard HMEs for voice prosthesis users, or the HUMIDOPHONE<sup>®</sup> speaking valve with filter function, specially developed for tracheostomised patients.

The Duratwix<sup>®</sup> replacement inner cannulas are supplied in sterile packaging.



RACHEOSTOMY TUBES

Order information:	DURATWIX® KOMBI replacement inner cannula, fenestrated with 22 mm combi-adapter,	
	pack of 3, sterile	
	size 7-10 standard	REF 19881
	size 7-10 short	REF 19882
	When ordering, please state the size after the item number!	

## DURATWIX<sup>®</sup> 22 MM COMBI-ADAPTER SOLO



The Duratwix<sup>®</sup> combi-adapter solo is an adapter with a 22 mm ring. This adapter can be fixed to the outer cannula, without an inner cannula.

It can be used with all tracheostomy tubes from the Duratwix® series.

The combi-adapter enables the connection of compatible accessories with a standardised 22 mm connection, e.g., for the use of special filters e.g., HumidoTwin<sup>®</sup>, standard HMEs for voice prosthesis users or the HUMIDOPHONE<sup>®</sup> speaking valve with filter function, specially developed for tracheostomised patients.

The Duratwix® combi-adapters are supplied in sterile packaging.

## DURATWIX® UNI 15 MM SWIVEL CONNECTOR SOLO



This Duratwix<sup>®</sup> UNI attachment is a 15 mm swivel connector. This adapter can be fixed to the outer cannula, without an inner cannula.

It can be used with all tracheostomy tubes of the Duratwix<sup>®</sup> series.

This enables Heat and Moisture Exchangers (HMEs) or speaking valves to be attached to this adapter.

The Duratwix<sup>®</sup> swivel connectors are supplied in sterile packaging.

Order information: DURATWIX® UNI 15 mm swivel connector solo, pack of 3, sterile

**REF 19807** 

## **DURATWIX® UNI 15 MM STANDARD CONNECTOR SOLO**



This Duratwix<sup>®</sup> UNI attachment is a standard 15 mm connector. This adapter can be fixed to the outer cannula, without an inner cannula.

This enables Heat and Moisture Exchangers (HMEs) or speaking valves to be attached to this adapter.

It can be used with all tracheostomy tubes of the Duratwix<sup>®</sup> series.

The Duratwix<sup>®</sup> 15 mm standard connectors are supplied in sterile packaging.

Order information: DURATWIX® UNI 15 mm standard connector solo, pack of 3, sterile

**REF 19806** 

## **DURATWIX® DECANNULATION PLUG**

Decannulation plugs are required when tracheostomised patients, with retained larynx, are to be weaned off their tracheostomy tubes. With the aid of the decannulation plug, the air supply through the tracheostoma is, under medical supervision, blocked for a certain period. The patient is then required to breathe naturally through the nose/mouth, for this period of time. Because natural breathing is strenuous after a tracheostomy, the patient has to become accustomed to normal breathing again, step-by-step. This is helped by the Duratwix<sup>®</sup> decannulation plug, which enables the accurate and controlled blocking of the Duratwix<sup>®</sup> cannulas.

The Duratwix<sup>®</sup> decannulation plug is only to be used for the Duratwix<sup>®</sup> LINGO series; the outer cannula must be sieved.

The Duratwix<sup>®</sup> decannulation plugs are supplied in sterile packaging.

Order information: DURATWIX® decannulation plug, pack of 5, sterile

## **TRACHEOTEC® TRACHEOSTOMY TUBE**

#### WITHOUT INNER CANNULA

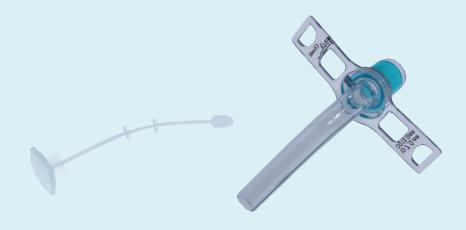


The Tracheotec<sup>®</sup> tracheostomy tubes are made of soft, transparent medical-grade polymer. The Tracheotec<sup>®</sup> tracheostomy tube consists only of an outer cannula.

The Tracheotec<sup>®</sup> tracheostomy tubes are equipped with standardised 15 mm swivel connectors. This enables the attachment of Heat and Moisture Exchangers (HMEs).

An X-ray contrast strip, running laterally in the cannula tube, enables radiological visualisation to check the position in the tracheostoma.

Tracheotec<sup>®</sup> tracheostomy tubes are single-patient products and are supplied in individual, sterile packaging (sterilised with ethylene oxide).



Size chart for TRACHEOTEC <sup>®</sup> tracheostomy tube without inner cannula										
Size	O.D. Tip mm	O.D. neck flange mm	I.D. mm	Length mm (Midline)	Length mm (Outer curve)	REF				
3	4.7	4.7	3.0	43.7	47.2	18560-03				
3.5	5.3	5.3	3.5	46.7	50.6	18560-035				
4	6.0	6.0	4.0	52.7	57.1	18560-04				
4.5	6.7	6.7	4.5	52.7	57.7	18560-045				
5	7.3	7.3	5.0	55.7	61.1	18560-05				
5.5	8.0	8.0	5.5	57.7	63.6	18560-055				
6	8.7	8.7	6.0	60.7	67.1	18560-06				
6.5	9.3	9.3	6.5	66.7	73.5	18560-065				
7	10.0	10.0	7.0	69.6	77.0	18560-07				
7.5	10.7	10.7	7.5	73.6	81.5	18560-075				
8	11.3	11.3	8.0	79.5	87.9	18560-08				
8.5	12.0	12.0	8.5	81.5	90.4	18560-085				
9	12.7	12.7	9.0	85.5	94.9	18560-09				
10	14.0	14.0	10.0	95.0	105.3	18560-10				
Sizing informa	ition:									

**DOD.** Tip = Outer diameter of the outer tube at the tip of the cannula · **O.D. neck flange** = Outer diameter behind the neck flange · **I.D.** = Inner diameter at the tip of the cannula **Length** = Length over the midline/outer curve

Order information:

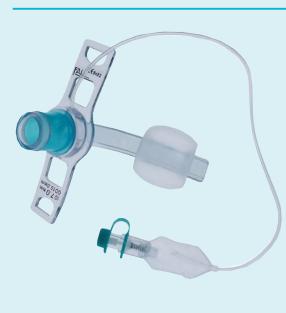
TRACHEOTEC<sup>®</sup> tracheostomy tube, without inner cannula,

sterile, size 3-10

When ordering, please state the size after the item number!

## TRACHEOTEC® UNI TRACHEOSTOMY TUBE

#### WITH LOW-PRESSURE CUFF, WITHOUT INNER CANNULA



**RACHEOSTOMY** 

The Tracheotec® UNI tracheostomy tube consists only of an outer cannula, with low-pressure cuff.

The low-pressure cuff can be filled through a one-way valve and securely seals the cannula to the tracheal wall. The accidental swallowing of secretions is prevented. The cuff's pilot line is integrated into the outer cannula, achieving a rounded and smooth outer shape. This prevents additional irritation of the mucous membranes.

In these Tracheotec<sup>®</sup> UNI tracheostomy tubes, the cannulas are each equipped with a standard 15-mm swivel connector. This enables the attachment of Heat and Moisture Exchangers (HMEs) with a 15 mm connector.

The Tracheotec® tracheostomy tubes are made of soft, transparent medical-grade polymer.

An X-ray contrast strip, running laterally in the cannula tube, enables radiological visualisation to check the position in the tracheostoma.

Tracheotec® tracheostomy tubes are single-patient products and are supplied in individual, sterile packaging (sterilised with ethylene oxide).

#### Size chart for TRACHEOTEC® UNI tracheostomy tubes with low-pressure cuff

Size	O.D. Tip mm	O.D. neck flange mm	I.D. mm	Length mm (Midline)	Length mm (Outer curve)	REF
5	7.3	7.3	5.0	55.7	61.1	18920-05
5.5	8.0	8.0	5.5	57.7	63.6	18920-055
6	8.7	8.7	6.0	60.7	67.1	18920-06
6.5	9.3	9.3	6.5	66.7	73.5	18920-065
7	10.0	10.0	7.0	69.6	77.0	18920-07
7.5	10.7	10.7	7.5	73.6	81.5	18920-075
8	11.3	11.3	8.0	79.5	87.9	18920-08
8.5	12.0	12.0	8.5	81.5	90.4	18920-085
9	12.7	12.7	9.0	85.5	94.9	18920-09
10	14.0	14.0	10.0	95.0	105.3	18920-10

Sizing information: O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the midline/outer curve

**Order information:** TRACHEOTEC® UNI tracheostomy tube with low pressure cuff, without inner cannula, sterile, size 5-10 When ordering, please state the size after the item number!

## TRACHEOTEC® SUCTION TRACHEOSTOMY TUBE

## IUBE WITH LOW-PRESSURE CUFF WITH SUCTION LINE, WITHOUT INNER CANNULA



The Tracheotec<sup>®</sup> SUCTION with suction line is a blockable tracheostomy tube, which offers the option of removing secretions collected above the low-pressure cuff from the trachea through a special suction line. For this, a fine tube is integrated into the outer cannula. This suction line is incorporated into the outer cannula, it does not stand out and therefore does not lead to additional irritation of the tracheal wall. A disposable syringe is included in the scope of delivery for the suction of secretions.

Tracheotec<sup>®</sup> tracheostomy tubes are single-patient products and are supplied in individual, sterile packaging (sterilised with ethylene oxide).



#### Size chart for TRACHEOTEC® SUCTION tracheostomy tubes with low-pressure cuff

Size	O.D. Tip mm	O.D. neck flange mm	I.D. mm	Length mm (Midline)	Length mm (Outer curve)	REF
5	7.3	7.3	5.0	55.7	61.1	18930-05
5.5	8.0	8.0	5.5	57.7	63.6	18930-055
6	8.7	8.7	6.0	60.7	67.1	18930-06
6.5	9.3	9.3	6.5	66.7	73.5	18930-065
7	10.0	10.0	7.0	69.6	77.0	18930-07
7.5	10.7	10.7	7.5	73.6	81.5	18930-075
8	11.3	11.3	8.0	79.5	87.9	18930-08
8.5	12.0	12.0	8.5	81.5	90.4	18930-085
9	12.7	12.7	9.0	85.5	94.9	18930-09

Sizing information:

**CO.D.** Tip = Outer diameter of the outer tube at the tip of the cannula · **O.D.** Tip = Outer diameter behind the neck flange · **I.D.** = Inner diameter at the tip of the cannula **Length** = Length over the midline/outer curve

#### Order information:

TRACHEOTEC® SUCTION tracheostomy tube with low-pressure cuff, with suction line, without inner cannula, sterile, size 5-9 When ordering, please state the size after the item number!

## SPIRAFLEX® TRACHEOSTOMY TUBE WITH LOW-PRESSURE CUFF

#### WITH 15-MM CONNECTOR



The Spiraflex<sup>®</sup> cannula is fully flexible and adapts to every change of position of the tracheostoma. This prevents bruising. The integrated metal spiral reinforcement ensures that the shape of the Spiraflex<sup>®</sup> cannula remains stable. At the same time, the metal spiral acts as an X-ray contrast. A 15-mm connector enables the use of HMEs and the connection to a ventilation device. The Spiraflex<sup>®</sup> cannula with low-pressure cuff is blockable. The cannula is sealed against the tracheal wall inside the tracheostoma by inflating the cuff, which prevents air from

flowing past. Choking on secretion fluids running along the side of the cannula is also largely prevented. The Spiraflex<sup>®</sup> cannula is equipped with an adjustable neck flange, which allows the height of the neck flange on the cannula tube to be varied. This allows the length of the cannula in the tracheostoma to be individually adjusted.

The scope of delivery includes the Spiraflex<sup>®</sup> tracheostomy tube with low-pressure cuff and pilot balloon, obturator (insertion aid) and a tube holder.

Spiraflex® tubes are supplied in individual, sterile packaging.



**RACHEOSTOMY** 





#### Size chart for Spiraflex<sup>®</sup> tracheostomy tube with low-pressure cuff

Size	O.D. Tip mm	O.D. neck flange mm	I.D. mm	Length mm	REF
7	10.4	10.4	7.0	adjustable to 69	17503-07
8	11.4	11.4	8.0	adjustable to 96	17503-08
9	12.4	12.4	9.0	adjustable to 122	17503-09
10	13.4	13.4	10.0	adjustable to 122	17503-10
11	14.4	14.4	11.0	adjustable to 123	17503-11

Sizing information:

**O.D.** Tip = Outer diameter of the outer tube at the tip of the cannula · **O.D. neck flange** = Outer diameter behind the neck flange · **I.D.** = Inner diameter at the tip of the cannula **Length** = Length over the outer curve

Order information: Spiraflex® tracheostomy tube with low-pressure cuff, with 15-mm connector, sterile, size 7-11

## SPIRAFLEX® TRACHEOSTOMY TUBE WITHOUT CUFF

WITH 15-MM CONNECTOR

RACHEOSTOMY TUBES



This Spiraflex® tracheostomy tube with integrated metal spiral reinforcement retains good dimensional stability, despite great flexibility. This tracheostomy tube has not got an inflatable cuff. The neck flange is adjustable and can be fixed to the cannula with a screw.

The scope of delivery includes the Spiraflex® tracheostomy tube, obturator (insertion aid) and a tube holder.

Spiraflex<sup>®</sup> tubes are supplied in individual, sterile packaging.





Size cha	rt for Spiraflex® tr	acheostomy tube wit	hout cuff		
Size	O.D. Tip mm	O.D. neck flange mm	I.D. mm	Length mm	REF
7	10.4	10.4	7.0	adjustable to 69	17504-07
8	11.4	11.4	8.0	adjustable to 96	17504-08
9	12.4	12.4	9.0	adjustable to 122	17504-09
10	13.4	13.4	10.0	adjustable to 122	17504-10
11	14.4	14.4	11.0	adjustable to 123	17504-11
and the second second second	•				

Sizing information: O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the outer curve

101

**Order information:** Spiraflex<sup>®</sup> tracheostomy tube without cuff, with 15-mm connector, sterile, size 7-11

Cuff pressure gauges are used to adjust and monitor the cuff pressure of tracheostomy tubes with a cuff. Particularly in intensive care, these devices enable the constant and precise monitoring of the cuff pressure of tracheostomy tubes and endotracheal tubes in patients receiving artificial ventilation.

In tracheostomy tubes with low-pressure cuff, air must only be supplied using a special filling device (e.g., cuff pressure gauge REF 19500), which enables controlled and measurable inflation of the cuff. A syringe is not suitable for blocking, as the use of a syringe presents the risk of over-inflating the cuff leading to injury of the trachea's mucous membranes.

Furthermore, this can seriously damage or even destroy the cuff!

The cuff pressure gauge with its 50 mm diameter scale is suited for blocking and checking pressure in tracheostomy tubes with a highvolume low-pressure cuff. It prevents, as far as possible, the formation of pressure necroses in the trachea. The device combines a "blocking syringe" with a manometer and thereby enables simple handling. It is easy to detect overpressure caused by diffusion of the anaesthetic gases and correct these with a lateral release button. The cuff pressure gauge is supplied with the connection tube and fixing hook. The con-

nection tube can also be supplied separately.

## FAHL<sup>®</sup> CUFF PRESSURE GAUGE

RACHEOSTOMY TUBE



Order information: 
FAHL® Cuff pressure gauge
FAHL® Connection tube for cuff pressure gauge

REF 19500 REF 19501

## HUMIDOPHONE® SPEAKING VALVE WITH AN HME FILTER





Humidophone<sup>®</sup> is a compact speaking valve with an HME (Heat and Moisture Exchanger). The Humidophone<sup>®</sup> filters the air during inspiration. The housing contains an open-pored polyurethane foam with hygroscopic characteristics, creating an additional humidification effect. The filter is located in front of the speaking valve flap, i.e. on the patient side. The Humidophone<sup>®</sup> speaking valve with HME filter is designed for the adaptation to a 22 mm connector ring, e.g., Duravent<sup>®</sup>/Duracuff<sup>®</sup> 22 mm combi-adapter, base plate/adhesive plates. This makes Humidophone<sup>®</sup> perfectly suited for use in combination with Duravent<sup>®</sup>, Duracuff<sup>®</sup> and Duratwix<sup>®</sup> tracheostomy tubes, as well as other tube systems. The Humidophone<sup>®</sup> speaking valve enables tracheostomised patients with an intact larynx to speak.

As a variant, the Humidophone<sup>®</sup> speaking valve with HME filter is also available as the Humidophone<sup>®</sup> type 15 speaking valve with HME filter. In this model, the speaking valve is designed for the adaptation to a 15 mm connector, e.g., Duravent<sup>®</sup>/Duracuff<sup>®</sup> Uni/Duratwix<sup>®</sup>.

The Humidophone<sup>®</sup> speaking valves with filter function are supplied in individual, hygienic packaging, in a packing unit of 50 pieces.

The Humidophone<sup>®</sup> speaking valve is intended for single use only. The use in combination with further humidification or nebuliser aids through inhalation devices is not recommended!

Order information:	Humidophone® speaking valve with HME filter, pack of 50	REF 46480
	<ul> <li>Humidophone<sup>®</sup> type 15 speaking valve with HME filter, pack of 50</li> </ul>	REF 46485

## HUMIDOPHONE® PLUS SPEAKING VALVE WITH HME FILTER SKIN-COLOURED













Order information:

Humidophone<sup>®</sup> Plus speaking valve with HME filter,

 multiadapter for the connection to 15 mm and 22 mm systems, skin-coloured, pack of 30
 Humidophone® Plus O<sub>2</sub> speaking valve with HME filter and oxygen supply port, multiadapter for the connection to 15 mm and 22 mm systems, skin-coloured, pack of 30 REF 46487 REF 46489

Humidophone<sup>®</sup> Plus is a compact speaking valve with HME filter. The Humidophone<sup>®</sup> Plus filters the air during inspiration. The housing contains an open-pored polyurethane foam with hygroscopic characteristics creating an additional humidification effect. The filter is located in front of the speaking valve flap, i.e. on the patient side. The Humidophone<sup>®</sup> Plus speaking valve with HME filter is designed for the adapta tion to 15 mm connectors or 22 mm connector rings, e.g., Duravent<sup>®</sup>/ Duracuff<sup>®</sup> 15 mm connector or 22 mm combi-adapter, base plates/ adhesive plates. This makes Humidophone<sup>®</sup> Plus perfectly suited for use in combination with Duravent<sup>®</sup>, Duracuff<sup>®</sup> and Duratwix<sup>®</sup> tracheostomy tubes, as well as other tube systems. The Humidophone<sup>®</sup> Plus speaking valve enables tracheostomised patients with an intact larynx to speak.

The Humidophone® Plus is equipped with an optimised valve function, which enables easier speech formation. An inconspicuous appearance in a skin-coloured design provides a further advantage. The special feature of this speaking valve is the basic position of the valve membrane. It is closed and is briefly opened during inspiration. This makes the increased pressure for closing the valve, otherwise required to form speech, unnecessary. The system is less visible and, at the same time, offers greater comfort to the patient.

Additionally the Humidophone<sup>®</sup> Plus O<sub>2</sub> speaking valve can be offered with lateral ISO port plug-in connection (5 mm), enabling a connection to an oxygen device, if required.

The Humidophone<sup>®</sup> Plus speaking valves with HME filter are supplied in individual, hygienic packaging, in a packing unit of 30 pieces.

The Humidophone<sup>®</sup> Plus speaking valve is intended for single use only. The use in combination with further humidification or nebuliser aids through inhalation devices is not recommended!

## **COMBIPHON® SPEAKING VALVE**

#### TRANSPARENT





Combiphon<sup>®</sup> is a compact, transparent speaking valve with a silicone membrane. The Combiphon<sup>®</sup> speaking valve enables tracheostomised patients with an intact larynx to speak. The special feature of this speaking valve is the basic position of the valve membrane. It is closed and is briefly opened during inspiration. This makes the increased pressure for closing the valve, otherwise required to form speech, unnecessary. It is simply attached to either a 15-mm connector or 22 mm combiadapter of e.g., the Duravent<sup>®</sup>/Duracuff<sup>®</sup>/Duratwix<sup>®</sup> tracheostomy tubes. This makes the Combiphon<sup>®</sup> speaking valve perfectly suited for use in combination with fenestrated/sieved Duravent<sup>®</sup>, Duracuff<sup>®</sup> and Duratwix<sup>®</sup> tracheostomy tubes, as well as other tube systems. Like in the Duravent<sup>®</sup> silicone speaking valve, the valve flap opens on inspiration. The exhaled airflow causes the valve to close, which enables speech. The transparent valve housing offers an unobtrusive appearance.

The Combiphon<sup>®</sup>  $O_2$  speaking valve, has a lateral port (ISO plug-in connection 5 mm), which enables the connection to an oxygen device, if required.

**The use on laryngectomised patients is contraindicated.** The Combiphon<sup>®</sup> speaking valve is supplied in individual, sterile packaging. The Combiphon<sup>®</sup> speaking valve is a single-patient product.





ter for 15 mm connectors and 22 mm combi-adapters, pack of 1	Order information:
on® O <sub>2</sub> speaking valve, transparent, REF 27132 en supply port, pack of 1	
on <sup>®</sup> O <sub>2</sub> speaking valve, transparent, RE	

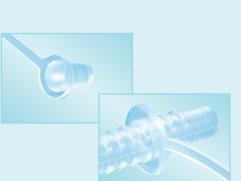
TRACHEOSTOMY TUBES

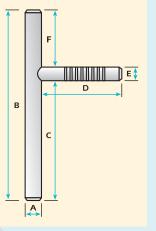
The tracheal T-Tube is used to splint and hold the trachea open after reconstruction due to tracheal and subglottal (lying under the vocal folds) stenoses (constrictions), while maintaining breathing through the larynx, mouth and nose.

The T-shaped tube, made of medical-grade silicone, ensures good tissue compatibility. The ends of the T-Tube are especially rounded and therefore atraumatic. The T-Tube is made from a single piece so that there are no joints. This guarantees a high degree of safety during use.

The cannula sticking out of the tracheostoma can be closed off if necessary with the sealing plug. The sealing plug is located on a spacer ring, which can be adjusted in height.

The T-Tube is available in different sizes and lengths.





Size chart for T-Tube							
Size	Α	В	С	D	E	F	REF
8	8	118.5	63	45	6.5	49	27502-08
9	9	133.0	75	63	8.0	50	27502-09
10	10	133.0	75	63	8.0	50	27502-10
11	11	134.0	75	63	9.0	50	27502-11
12	12	161.0	75	48	11.0	75	27502-12
13	13	161.0	100	63	11.0	50	27502-13
14	14	161.0	100	63	11.0	50	27502-14

 Sizing information:

 B / C / D / F = Length in mm according to diagram

 A / E
 = Outer diameter in mm according to diagram

Order information: > FAHL® T-Tube, Size 8-14

## FAHL® TRACHEO-SAFE PLACE HOLDER









Tracheo-Safe is a tracheostoma place holder, made of soft silicone, which is inserted into the tracheostoma and can be applied for various indications. The Tracheo-Safe place holder consists of a cannula that, at its lower end, runs into an elongated half-tube, adjusted to match the trachea. This half-tube fits anatomically against the wall of the trachea and is therefore gentle on the tracheal mucous membranes. On the cannula is a neck flange with two lateral openings, for the attachment of a tube holder. This securely fixes the place holder in the tracheostoma and prevents it sliding into the trachea. The neck flange is variable and can be adjusted into different positions on the cannula so that the space between the skin/trachea and the neck flange can be individually determined.

A detachable sealing plug is located at the upper end of the place holder, which sticks out of the tracheostoma. This enables the tracheostoma to be sealed, e.g., when weaning a patient off the tracheostomy after long-term ventilation. By removing the plug, it is possible to suction tracheal secretions through the cannula.

The Tracheo-Safe place holder gently holds the tracheostoma open and helps to secure the airways.

Tracheo-Safe is available in two different lengths:

- Design C with 45 mm length
- Design P with 70 mm length.

The Tracheo-Safe place holder is supplied in sterile packaging and is intended for single use. The packing unit contains of 6 pieces.

**Order information:** 

FAHL® Tracheo-Safe C place holder, 45 mm length, sterile, Pack of 6

Pack of 6

**REF 20895 REF 20898** 

107

## **BLOM-SINGER® CLASSIC INDWELLING VOICE PROSTHESIS**





Blom-Singer® dilator



Blom-Singer® flushing device

The Blom-Singer<sup>®</sup> Classic indwelling voice prosthesis, made of medical silicone, is an indwelling prosthesis, which sits in an operatively created fistula (surgically opened punction between trachea and oesophagus) and enables patients to speak after larynx surgery. The Blom-Singer<sup>®</sup> Classic indwelling voice prosthesis features a special valve system and minimum required pressure is needed, i.e., the air flows through the prosthesis glides into the fistula more easily, and the insertion, from the front through the tracheostoma is facilitated. The voice prosthesis is inserted and exchanged by a physician.

The Blom-Singer<sup>®</sup> Classic indwelling voice prosthesis is supplied together with the following accessories: 1 insertion aid, 1 special cleaning brush, 1 flushing device and 2 gel caps<sup>11</sup>. The Blom-Singer<sup>®</sup> Classic indwelling voice prosthesis is available in different sizes (4-20) and two different diameters, 5.4 mm and 6.8 mm (16 Fr. und 20 Fr.).

The Blom-Singer<sup>®</sup> dilator-sizer for voice prosthesis holds the stent open while the prosthesis is changed. The dilator is available in two sizes. With this new design, the dilator can also be used as a sizer (measuring instrument). The size 18 Fr. is suitable for all 16 Fr. prostheses. The size 22 Fr. dilator should be used for the 20 Fr. prostheses (e.g., including the indwelling low-pressure voice prosthesis).

The Blom-Singer<sup>®</sup> flushing device enables easy and gentle cleaning of the voice prosthesis. The flushing device is filled with water and placed on the voice prosthesis. The jet of water rinses out any deposits, e.g., secretions stuck in the prosthesis.

Additionally, the Blom-Singer<sup>®</sup> Classic voice prosthesis is available in a sterile version for primary application in an adapted form: The shape of the retaining flange on the voice prosthesis was adjusted in order to simplify especially the handling and primary application. This sterile version is available in the shaft thicknesses 16 and 20 Fr., at lengths (= sizes) between 8-14 mm.

Size chart for Blom-Singer <sup>®</sup> Classic indwelling voice prosthesis							
Size	Shaft-thickness Ø mm in 16 Fr.	Shaft-thickness Ø mm in 20 Fr.	Length mm	REF 16 Fr.	REF 20 Fr.	REF 16 Fr. sterile	REF 20 Fr. sterile
4	5.4	_	4	28606-04	28600-04		
6	5.4	6.8	6	28606-06	28600-06		
8	5.4	6.8	8	28606-08	28600-08	28603-08	28604-08
10	5.4	6.8	10	28606-10	28600-10	28603-10	28604-10
12	5.4	6.8	12	28606-12	28600-12	28603-12	28604-12
14	5.4	6.8	14	28606-14	28600-14	28603-14	28604-14
16	5.4	-	16	28606-16	28600-16		
18	5.4	6.8	18	28606-18	28600-18		
20	5.4	-	20	28606-20	28600-20		
22	5.4	6.8	22	28606-22	28600-22		

<sup>1)</sup> Subject to alterations.

<b>Order information:</b>	Blom-Singer® Classic Indwelling voice prosthesis, 16 Fr.	REF 28606
	Blom-Singer <sup>®</sup> Classic Indwelling voice prosthesis, 20 Fr.	<b>REF 28600</b>
	Blom-Singer® Classic Indwelling voice prosthesis, sterile, 16 Fr.	REF 28603
	Blom-Singer <sup>®</sup> Classic Indwelling voice prosthesis, sterile, 20 Fr.	REF 28604
	Blom-Singer <sup>®</sup> dilator-sizer, 18 Fr.	REF 28551
	Blom-Singer <sup>®</sup> dilator-sizer, 22 Fr.	REF 28552
	Blom-Singer® Replacement gel caps, 16 Fr.	REF 28614
	Blom-Singer® Replacement gel caps, 20 Fr.	REF 28611

### **BLOM-SINGER® ADVANTAGE INDWELLING VOICE PROSTHESIS**



The Blom-Singer<sup>®</sup> Advantage indwelling voice prosthesis is inserted into a surgically created punction (shunt) between the trachea and oesophagus. The voice prosthesis is inserted by a physician and may only be exchanged by a physician.

The insertion of the Blom-Singer<sup>®</sup> Advantage indwelling voice prosthesis is considerably facilitated by first folding the valve into a gel-capsule.

The features of the Blom-Singer<sup>®</sup> Advantage voice prosthesis are the particularly stable materials and its durability. The silicone valve contains silver oxide, a substance that prevents fungal growth. Therefore, the material is better protected from Candida infection. This enables the changing intervals of the voice prosthesis to be lengthened.

The Advantage voice prosthesis channels the inspired air from the trachea, to the oesophagus, so that voice sounds can be generated and prevents liquids entering the trachea from the oesophagus during swallowing.

The Blom-Singer<sup>®</sup> Advantage indwelling voice prosthesis is supplied with the following accessories: 1 insertion aid, 1 special cleaning brush, 1 flushing device and 2 gel caps<sup>11</sup>. The Advantage voice prosthesis is available in the shaft thicknesses 16 Fr. and 20 Fr., and each in the sizes (= length in mm) 4, 6, 8, 10, 12, 14, 16, 18, 20 and 22 mm. The Blom-Singer<sup>®</sup> Advantage voice prosthesis is supplied in individual, hygienic packaging.

Size chart for Blom-Singer <sup>®</sup> Advantage Indwelling Voice prosthesis					
Size	Shaft-thickness Ø mm in 16 Fr.	Shaft-thickness Ø mm in 20 Fr.	Length mm	REF 16 Fr.	REF 20 Fr.
4	5.4	6.8	4	28416-04	28430-04
6	5.4	6.8	6	28416-06	28430-06
8	5.4	6.8	8	28416-08	28430-08
10	5.4	6.8	10	28416-10	28430-10
12	5.4	6.8	12	28416-12	28430-12
14	5.4	6.8	14	28416-14	28430-14
16	5.4	6.8	16	28416-16	28430-16
18	5.4	6.8	18	28416-18	28430-18
20	5.4	6.8	20	28416-20	28430-20
22	5.4	6.8	22	28416-22	28430-22

<sup>1)</sup> Subject to alterations.

Blom-Singer<sup>®</sup> Advantage Indwelling voice prosthesis, 16 Fr.
 Blom-Singer<sup>®</sup> Advantage Indwelling voice prosthesis, 20 Fr.

**Order information:** 

REF 28416 REF 28430

#### BLOM-SINGER<sup>®</sup> DUAL VALVE™ INDWELLING VOICE PROSTHESIS



The Blom-Singer<sup>®</sup> Dual Valve<sup>™</sup> indwelling voice prosthesis, made of medical grade silicone, is an indwelling prosthesis, which sits in an operatively created fistula (surgically opened puncture between trachea and oesophagus) and enables patients to speak after laryngectomy surgery. The Blom-Singer<sup>®</sup> Dual Valve<sup>™</sup> indwelling voice prosthesis features a special dual valve system and minimum required pressure is needed, i.e., the air flows through the prosthesis with little resistance.

The new Blom-Singer<sup>®</sup> Dual Valve<sup>™</sup> indwelling voice prosthesis has been improved, leading to significant benefits for the patient.

In case the main valve fails due to a Candida infection (yeast) the second valve is intact, helping to prevent any leakage.

The features of the Blom-Singer<sup>®</sup> Dual Valve<sup>™</sup> indwelling voice prosthesis are the particularly biocompatible materials and its durability. The silicone valve contains silver oxide, a substance that inhibits fungal growth. Therefore, the material is better protected from Candida infection. This enables the changing intervals of the voice prosthesis to be lengthened.

The Blom-Singer<sup>®</sup> valves with silver oxide have been shown to reduce the need of antifungal agents.

The Dual Valve<sup>™</sup> indwelling voice prosthesis channels the inspired air from the trachea, to the oesophagus, so that voice sounds can be generated and prevents liquids entering the trachea from the oesophagus during swallowing.

Included in the scope of delivery is the new pop-through insertion system, helping the clinician identify the correct placement of the voice prosthesis.

The Blom-Singer<sup>®</sup> Dual Valve<sup>™</sup> indwelling voice prosthesis is supplied together with the following accessories: 1 insertion aid, 1 special cleaning brush, 1 flushing device<sup>11</sup>. The Blom-Singer<sup>®</sup> Dual Valve<sup>™</sup> indwelling voice prosthesis is available in a shaft-thickness of 20 Fr. and in different sizes (= length in mm) 6, 8, 10, 12 and 14.

The Blom-Singer<sup>®</sup> Dual Valve<sup>™</sup> voice prosthesis is supplied in individual, hygienic packaging.

Size chart for Blom-Singer® Dual Valve ™ Indwelling Voice prosthesis			
Size	Shaft-thickness Ø mm	Length mm	REF
6	6.8	6	28320-06
8	6.8	8	28320-08
10	6.8	10	28320-10
12	6.8	12	28320-12
14	6.8	14	28320-14

<sup>1)</sup> Subject to alterations.

## **BLOM-SINGER® DUCKBILL VOICE PROSTHESIS**



The Blom-Singer<sup>®</sup> Duckbill voice prosthesis (shunt valve) sits in an operatively created fistula (surgically opened puncture between trachea and oesophagus) and enables patients to speak after larynx surgery.

The Blom-Singer<sup>®</sup> Duckbill voice prosthesis can, after receiving professional instruction, be changed by the patient himself/herself.

The Blom-Singer<sup>®</sup> Duckbill voice prosthesis is available in different sizes (= length in mm) (6-28 mm), with a uniform shaft-thickness of 16 Fr. (Ø 5.4 mm).

The Blom-Singer<sup>®</sup> Duckbill voice prosthesis is supplied in individual, hygienic packaging. An insertion aid is also included in the scope of delivery.

Size chart for Blom-Singer <sup>®</sup> Duckbill Voice prosthesis			
Size	Shaft-thickness Ø mm	Length mm	REF
6	5.4	6	28760-06
8	5.4	8	28760-08
10	5.4	10	28760-10
12	5.4	12	28760-12
14	5.4	14	28760-14
18	5.4	18	28760-18
22	5.4	22	28760-22
25	5.4	25	28760-25
28	5.4	28	28760-28

**Order information:** > Blom-Singer® Duckbill Voice prosthesis, 16 Fr.

**REF 28760** 

#### **BLOM-SINGER® LOW-PRESSURE VOICE PROSTHESIS**

The Blom-Singer<sup>®</sup> Low-Pressure voice prosthesis (shunt valve), made of medical silicone, is an indwelling prosthesis, which sits in an operatively created fistula (surgically opened puncture between trachea and oesophagus) and enables patients to speak after larynx surgery.

The feature of the Blom-Singer<sup>®</sup> Low-Pressure voice prosthesis is a special valve system where minimal pressure is required, i.e., the air flows through the prosthesis with little resistance. Through the application of a gel cap, the voice prosthesis glides easily into the fistula, when inserted from the front, through the tracheostoma.

The Blom-Singer<sup>®</sup> Low-Pressure voice prosthesis can, after receiving professional instructions, be changed by the patients themselves.

The Blom-Singer<sup>®</sup> Low-Pressure voice prosthesis is available in two different diameters: 16 Fr. and 20 Fr.

The Blom-Singer<sup>®</sup> Low-Pressure voice prosthesis is supplied in individual, hygienic packaging.

Size chart for Blom-Singer <sup>®</sup> Low-Pressure Voice prosthesis					
Size	Shaft-thickness Ø mm in 16 Fr.	Shaft-thickness Ø mm in 20 Fr.	Length mm	REF 16 Fr.	REF 20 Fr.
6	5.4	6.8	6	28705-06	28700-06
8	5.4	6.8	8	28705-08	28700-08
10	5.4	6.8	10	28705-10	28700-10
12	5.4	6.8	12	28705-12	28700-12
14	5.4	6.8	14	28705-14	28700-14
18	5.4	6.8	18	28705-18	28700-18
22	5.4	6.8	22	28705-22	28700-22
25	5.4	6.8	25	28705-25	28700-25
28	5.4	_	28	28705-28	

111

<sup>1)</sup> Subject to alterations.

Order information:

2.Start

Blom-Singer<sup>®</sup> Low-Pressure voice prosthesis, 16 Fr.
 Blom-Singer<sup>®</sup> Low-Pressure voice prosthesis, 20 Fr.

REF 28705 REF 28700

## **BLOM-SINGER® SPECIAL CLEANING BRUSH FOR VOICE PROSTHESES**

The special Blom-Singer<sup>®</sup> cleaning brush enables targeted cleaning of the voice prosthesis. Adhering secretions, which clog the valve and can thereby impair its function, are removed gently and effectively.

The special design of the brush prevents it from penetrating too deep into the voice prosthesis and reduces the risk of accidental damage.

> The T-shaped end of the special cleaning brush acts as a special protection in case of an accidental slip of the brush into the trachea.

The Blom-Singer<sup>®</sup> special cleaning brush is supplied non-sterile, in a pack of 3.

Order information:	Blom-Singer® Cleaning brush for voice prostheses,	REF 28755
	small, 4–8 mm, pack of 3 Blom-Singer® Cleaning brush for voice prostheses,	REF 28756
	<ul> <li>medium, 10–16 mm, pack of 3</li> <li>Blom-Singer<sup>®</sup> Cleaning brush for voice prostheses, large, 18–22 mm, pack of 3</li> </ul>	REF 28757

#### **BLOM-SINGER® PLUG INSERT**

The Blom-Singer<sup>®</sup> Plug Insert is a plug that is inserted into the valve opening of a Blom-Singer<sup>®</sup> voice prosthesis.

It is designed for temporary, short-term application if the voice prosthesis no longer works properly and a change of the valve is not immediately possible.

The plug insert can be helpful in, e.g., sudden leaks in the valve and prevents chocking when eating or drinking.

The rear of the plug insert is equipped with a safety flange, which is designed to prevent the plug from sliding into the trachea, if it accidentally falls off.

The Blom-Singer<sup>®</sup> plug insert can be supplied in two different shaft-thicknesses for voice prostheses, sizes 16 Fr. and 20 Fr. This product is supplied in individual, hygienic packaging.



Security shield

Order information:

Blom-Singer<sup>®</sup> Plug Insert, 20 Fr. Blom-Singer<sup>®</sup> Plug Insert, 16 Fr. REF 28752 REF 28753

## **BLOM-SINGER® INDWELLING VALVED INSERT**



The Blom-Singer<sup>®</sup> Indwelling Valved Insert is a plug that is inserted into the valve of a Blom-Singer<sup>®</sup> voice prosthesis, and can temporarily seal a leak.

This is only suitable for the Blom-Singer<sup>®</sup> Classic voice prosthesis with a shaft-thickness of 20 Fr. and from a length of 8 mm.

A retaining flange is also integrated into the product.

The Plug is designed for temporary, short-term application, if the voice prosthesis no longer works properly and a change of the valve is not immediately possible.

The plug can be helpful in, e.g., sudden leaks in the valve and prevents chocking when eating or drinking.

Speaking is possible when the plug is used!

The plug is supplied in hygienic, individual packaging.

**Order information:** > Blom-Singer<sup>®</sup> Indwelling Valved Insert

## TRACHEOSTOMA VALVES







Tracheostoma valves facilitate speaking for laryngectomised patients, with a voice prosthesis. This provides voice prosthesis wearers with the option of speaking without using their fingers. The tracheostoma no longer needs to be closed with the finger in order to seal off the tracheostoma, which is necessary for speaking. In fact, a special valve automatically closes the air opening, channels the airflow through the voice prosthesis, and further into the throat and mouth area. During breathing, the valve stays open and thereby enables the supply of air.

A tracheostoma valve also has advantages as far as hygiene is concerned, as the user's fingers no longer has to come into close contact with the tracheostoma and any possible leaking secretions.

Tracheostoma valves are available in various versions. Products which are attached to special tracheostomy tubes and stoma-buttons are available. Other tracheostoma valves are attached to the tracheostoma with adhesive retaining plates. In some of the tracheostoma valves additional filters can be used, which enable the heat and moisture exchange of the inspired air.

#### DURAVENT® ADJUSTABLE SPEAKING VALVE



**Order information:** 

 Duravent® adjustable speaking valve LOW RESISTANCE (transparent) with attachment SOLO, pack of 1
 Duravent® adjustable speaking valve NORMAL RESISTANCE (blue) with attachment SOLO, pack of 1

REF 21981

**REF 21980** 

#### DURAVENT® SPEAKING VALVE

#### KOMBI LOW RESISTANCE

The Duravent<sup>®</sup> speaking valve KOMBI LOW RESISTANCE is a variable speaking valve for patients with a partially or fully intact larynx, as well as voice prosthesis users after a laryngectomy. The LOW RESISTANCE version, with a transparent appearance, is an adjustable speaking valve, which only requires a relatively small amount of pressure, in order to close it.

The Duravent<sup>®</sup> adjustable speaking valve NORMAL RESISTANCE is a variable speaking valve for patients with a partially or fully intact larynx, as well as voice prosthesis users after a laryngectomy. The LOW RESIST-ANCE version is an adjustable speaking valve, which only requires a relatively small amount of pressure, in order to close it. An integrated rotation mechanism, which enables the regulation of the inflowing air, allows the Duravent<sup>®</sup> adjustable speaking valve to be adjusted to the

The scope of delivery also includes the Duravent<sup>®</sup> SOLO attachment

patient's individual requirements.

for the Trachinaze® Plus filter.

An integrated rotation mechanism, which enables the regulation of the inflowing air, allows the Duravent<sup>®</sup> KOMBI speaking valve to be adjusted to the patient's individual requirements.

The integrated 22 mm combi-adapter enables the attachment of filter cassettes, e.g., Laryvox<sup>®</sup> HME filter cassettes or HumidoTwin<sup>®</sup>; this provides the option of using this speaking valve in combination with the characteristic warming, humidification and filtering functions of an HME.



Order information: Duravent® speaking valve KOMBI LOW RESISTANCE, pack of 1 REF 21982

#### WITH SOLO ATTACHMENT

# BLOM-SINGER® ADJUSTABLE TRACHEOSTOMA VALVE II (ATSV II) STARTER KIT WITH HUMIDIFILTER CAP

The Blom-Singer<sup>®</sup> tracheostoma valve II enables many laryngectomised patients, who have been surgically provided with a so-called voice prosthesis to speak without using their fingers. Closing the tracheostoma opening with the finger is redundant. The airflow is regulated through the tracheostoma valve. During normal inspiration and expiration, the valve is open. The airflow reaches the trachea. During speaking, the expiration pressure increases, which closes the valve. The expired air is diverted over the voice prosthesis and used for speaking.

The tracheostoma valve is attached to the tracheostoma using a special housing ring and adhesive discs. The valve itself can easily be removed from the housing at any time. In combination with special foam filters, the tracheostoma valve can also be used as a Heat and Moisture Exchanger (HME). The conditioned, i.e. warmed, humidified and filtered inspired air has a positive effect on the mucous membranes of the tracheostoma. The use of the filter supports the function of the lungs. Secretion production, coughing and encrustations are reduced.

## Blom-Singer® Tracheostoma – Scope of delivery Valve II starter kit (Valve kit)\*

- 1 tracheostoma valve II, BE 8025 H
- 2 standard Tracheostoma valve housing
- 1 multipack of tape discs with and without foam core (tape and foam discs) standard size
- 5 Blom-Singer<sup>®</sup> True Seal<sup>™</sup> base plate with housing, self-adhesive
- 1 bottle Blom-Singer<sup>®</sup> silicone adhesive (brush on silicone skin adhesive)
- filter system consisting of:
   HumidiFilter cap,
   pack foam filter, pack of 7
- \* Scope of delivery subject to alterations.

Order information:

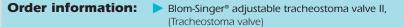
Blom-Singer® tracheostoma valve II starter kit (Valve kit)

REF 29510

#### **BLOM-SINGER® ADJUSTABLE TRACHEOSTOMA VALVE II**

116

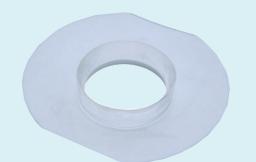
The Blom-Singer<sup>®</sup> adjustable tracheostoma valve II is also supplied singly (solo), in the manufacturer's original packaging. The valve consists of two parts, the valve body and a detachable valve attachment.



#### **BLOM-SINGER® TRACHEOSTOMA VALVE HOUSING**

FOR TRACHEOSTOMA VALVE

FOR TRACHEOSTOMA VALVE



The valve housing, in the shape of a flexible plastic plate, is an accessory for the Blom-Singer<sup>®</sup> valve system. The tracheostoma valve is attached to the tracheostoma using this housing ring and tape discs. The valve itself can be removed easily from the housing at any time.

The valve housing is supplied in two different sizes, standard or large and in a version made of PVC.

The TruSeal<sup>™</sup> version, a self-adhesive valve housing, is also available.

Order information:	Blom-Singer® Tracheostoma valve housing standard	REF 29600-01
	Blom-Singer® Tracheostoma valve housing large	REF 29600-02
	Blom-Singer® Tracheostoma valve housing standard, PVC	REF 29600-03
	Blom-Singer® Tracheostoma valve housing large, PVC	REF 29600-04
	Blom-Singer <sup>®</sup> TruSeal <sup>™</sup> adhesive housing, pack of 30	REF 44800

#### **BLOM-SINGER® FOAM FILTER**



The foam filter is an accessory for the Blom-Singer<sup>®</sup> valve system. In combination with these special foam filters, the tracheostoma valve can also be used as a Heat and Moisture Exchanger (HME). The conditioned, i.e. warmed, humidified and filtered inspired air has a positive effect on the mucous membranes of the tracheostoma. The use of the filter supports the function of the lungs. Secretion production, coughing and encrustations are reduced. The foam filters with lateral slits are only suitable for the Blom-Singer<sup>®</sup> tracheostoma valve.

The Blom-Singer<sup>®</sup> replacement filters, made of foam, are intended for single use only. They are placed into the filter cap.

Order information: Blom-Singer® ATSV II HumidiFilter Cap Foam filters,		REF 29610
pack of 30 <ul> <li>Blom-Singer® ATSV II HumidiFilter Cap and</li> </ul>		REF 29620
7 foam filters		

#### **BLOM-SINGER® SILICONE ADHESIVE**

**Order information:** > Blom-Singer<sup>®</sup> silicone adhesive

The skin-compatible Blom-Singer<sup>®</sup> silicone adhesive increases the adhesive power of tape discs (e.g., tape discs or foam discs) from the Blom-Singer<sup>®</sup> tracheostoma valve system.

A brush is integrated into the screw-lid, to enable effortless application of the adhesive.

117

## **BLOM-SINGER® TAPE DISCS**

#### FOR TRACHEOSTOMA VALVE



These tape discs belong to the Blom-Singer<sup>®</sup> valve system and, together with a special housing ring, the Blom-Singer<sup>®</sup> valve housing, they serve as a fixation of the tracheostoma valve. The tape discs are adhesive on both sides and have a protective paper, which can be pulled off easily. The tape disc is first attached to the underside of the valve housing (plastic plate). The valve housing, with tape disc, is subsequently applied to the tracheostoma, after removing the second protective paper. The Blom-Singer<sup>®</sup> tracheostoma valve is then placed into the middle of the valve housing

The Blom-Singer<sup>®</sup> tape discs are intended for single use only and available in two sizes, standard and large.

Alternatively, the tape discs are available in a thin and heavy duty version. The thin tape discs are distinguished by their adhesive power and gentleness to the skin.

Order information:	Blom-Singer® Regular Tape Discs, standard, pack of 30	REF 29700-01
	Blom-Singer® Regular Tape Discs, large, pack of 30	REF 29700-02
	Blom-Singer® Thin Tape Discs, standard, pack of 30	REF 29700-03
	Blom-Singer® Thin Tape Discs, large, pack of 30	REF 29700-04
	Blom-Singer® Heavy Duty Tape Discs, standard, pack of 30	REF 29700-05
	Blom-Singer® Heavy Duty Tape Discs, large_pack of 30	REF 29700-06

#### **BLOM-SINGER® FOAM DISCS**

#### FOR TRACHEOSTOMA VALVE

These tape discs belong to the Blom-Singer® valve system and, together with a special housing ring, the Blom-Singer® valve housing, they serve as a fixation of the tracheostoma valve. The foam discs are filled with foam and adhesive on both sides. The adhesive areas have a protective paper, which can easily be pulled off. The tape disc is first attached to the underside of the valve housing (plastic plate). The valve housing, with tape disc, is subsequently applied to the tracheostoma, after removing the second protective paper. The Blom-Singer® tracheostoma valve is then placed into the middle of the valve housing. The foam discs flexibly and softly cushion the valve housing against the skin.

The Blom-Singer<sup>®</sup> foam discs are intended for single use only and available in two sizes, standard and large.

Alternatively, the foam discs are available in a thin version. These tape discs are somewhat thinner and are distinguished by their adhesive power and gentleness to the skin.

Order information:	Blom-Singer® Regular Foam Discs, standard, pack of 30	REF 29900-01
	Blom-Singer® Regular Foam Discs, large,	REF 29900-02
	pack of 30 <ul> <li>Blom-Singer® Thin Foam Discs, standard,</li> </ul>	REF 29900-03
	pack of 30 Blom-Singer® Thin Foam Discs, large,	REF 29900-04
	pack of 30	

#### EXTRAVENT® SPEAKING VALVE



The Extravent<sup>®</sup> speaking valve is a product, with which the seal of the tracheostoma, required for speaking by voice prosthesis users and tracheostomised patients, is created.

The advantage of this speaking valve is the patented and already proven system of the remote control of the valve using a tube line.

The Extravent<sup>®</sup> speaking valve is exclusively applicable as a combination product, i.e. the product cannot be used independently, only together with an additional product. Here, the speaking valve is inserted into the holder of a special tape disc or adhesive plaster (base plate). The following aids are suitable as combination products:

- Base plates
- Laryngotec<sup>®</sup> silicone tube
- Blom-Singer<sup>®</sup> base plates
- Laryngotec<sup>®</sup> stoma button

The Extravent<sup>®</sup> speaking valve consists of a plastic housing, in which three ribs, in a star-shaped arrangement, and a highly elastic, three-part membrane, are integrated. A thin, silicone connection/supply tube, which can be invisibly hidden under the user's clothing leads from the housing to a balloon-shaped pressure generator. This pressure generator can be operated with one hand and enables the supply of air.

The pressure generated is squeezed and held to close the speaking valve during the speech phase. The air now reaches the three-part silicone membrane, which inflates and bulges towards the middle. The membrane clings to the ribs in a star-shaped arrangement and creates an airtight closure of the entire cross-section. After the speech phase, simply let go of the pressure generator. The membrane will lie flat against the housing wall again, freeing the entire opening of the speaking valve for breathing.

The feature of the Extravent<sup>®</sup> speaking valve is the soundless closure of the tracheostoma, with inconspicuous and hygienic operation of the valve. The special design of the membrane enables a maximum opening cross-section, with, at the same time, a particularly low profile housing and therefore inconspicuous appearance.

The Extravent<sup>®</sup> speaking valve is particularly light and is attractive in its comfortable application options. The Extravent<sup>®</sup> speaking valve is available in two versions, a speaking valve with stoma filter port, as well as a speaking valve without stoma filter port.

The Extravent<sup>®</sup> speaking valve with stoma filter port enables the additional use of stoma filters, e.g., from the PROVOX<sup>®</sup> stoma filter system. The filter is simply plugged onto the port and securely engages with the housing of the Extravent<sup>®</sup> speaking valve. This enables the inspired air to be filtered, humidified and warmed.

The Extravent<sup>®</sup> speaking valve is supplied in individual, non-sterile packaging.



Extravent<sup>®</sup> speaking valve open



Extravent® speaking valve closed

Order information: 

 Extravent<sup>®</sup> speaking valve with stoma filter port
 Extravent<sup>®</sup> speaking valve without stoma filter port

## TUBE ACCESSORIES





We have assembled an extensive range of tracheostomy tube accessories for you. A tube holder is indispensable for securely fixing the tube in the tracheostoma. Tube holders are available in a large selection and should be matched to the tracheostomy tube, as far as possible. We provide tube holders for single and multiple use, in differing material qualities and fastening techniques.

Different versions of tracheal compresses are available, to absorb tracheal secretions and to cushion the neck flange against the skin. The compresses have a circular hole through which the cannula can be passed and are also available with an additional slit, for fast compress changing.

#### KACLIP® TUBE HOLDER



#### KACLIP® CLEAR TUBE HOLDER

#### TRANSPARENT WITH PLASTIC HOOKS



This is an approximately 1 cm wide, elastic tube holder, which ensures the secure fit of your tracheostomy tube. Two plastic hooks are attached to both ends of the tube holder for the fixation of the tracheostomy tube.

The unobtrusive design provides the patient with increased comfort as the transparent KACLIP<sup>®</sup> Clear tube holder adapts well to the neck and is thereby barely recognisable.

The hooks are simply hooked into the lateral eyelets of the neck flange. The tube holder can be adjusted for neck widths of approx. 29 cm to 52 cm.

You should ensure that it does not fit too tightly. You will achieve ideal comfort when there is still around 1 cm of space between the neck and the tube holder.

The tube holder is supplied in hygienic individual packaging.

#### Order information: KACLIP® Clear tube holder, transparent, with plastic hook, pack of 1

#### SUPRAFIX® FOAM TUBE HOLDER



The SUPRAFIX<sup>®</sup> foam tube holder enables a secure and comfortable fixation of the tracheostomy tube. It consists of an approx. 3 cm wide foam strap surrounded by soft, non-woven fabric. The fastening straps are elastic and equipped with an adjustable clip making the length of the tube holder variable.

The foam tube holder is available with a hook or adherent fastener. In the version with adherent fastener, the ends of the tube holder have thin adherent strips, which are threaded through the eyelets of the neck flange, in order to fix the cannula. This fastener method is particularly suitable for the use on non-metal cannulas as it enables fixation while being gentle to the material.

The tube holder is supplied in hygienic individual packaging.

Order information:       > SUPRAFIX® foam tube holder with hook         > SUPRAFIX® foam tube holder with adherent fastener         > SUPRAFIX® foam tube holder with adherent fastener, for children         > SUPRAFIX® foam tube holder with hook, for children	REF 32300 REF 32500 REF 32510 REF 32310
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## **OPTIFLAUSCH® TUBE HOLDER**



The Optiflausch<sup>®</sup> tube holder enables the secure fixation of tracheostomy tubes. Optiflausch<sup>®</sup> is distinguished by its high degree of comfort. Optiflausch<sup>®</sup> consists of a light foam core, which is surrounded by a skin-friendly non-woven fabric. The materials used are comfortably soft. The stretch-fabric allows coughing reflexes and guarantees a snug fit.

The tube holder is wrapped around the neck and the adherent fastener enables it to be easily and quickly adjusted to the desired neck size. At both ends of the Optiflausch<sup>®</sup> tube holder, thin adherent strips are attached, these are threaded through the eyelets of the neck flange. For fastening, the adherent strips are turned over and fixed to the fluffy side of the tube holder. If the tube holder is too long, it can be shortened to the desired length by cutting it. This ensures a secure fit of the tracheostomy tube.

The Optiflausch<sup>®</sup> tube holder is available in white. The tube holder is approx. 4 mm thick and 2.5 cm wide.

Optiflausch<sup>®</sup> is intended for single use only. The Optiflausch<sup>®</sup> tube holder is supplied in individual, hygienic packaging.

Alternatively, the Optiflausch<sup>®</sup> tube holder is available with plastic hooks, which is particularly suited for fast attachment to the tracheostomy tube. Two packing units are available, with either a single piece or 100 pieces.

information:	Optifiausch® tube holder with adherent fastener, pack of 1	REF 32550
	Optifiausch® tube holder with adherent fastener, pack of 100	REF 32550-100
	Optifiausch® tube holder with plastic hook, pack of 1	REF 32551
	Optifiausch® tube holder with plastic hook, pack of 100	REF 32551-100
	Optiflausch® tube holder with adherent fastener, for children pack of 1	REF 32555

#### **OPTIFLAUSCH® SLIM TUBE HOLDER**

The Optiflausch<sup>®</sup> Slim tube holder has, in contrast to the standard version, only a width of 1.7 cm. The neck size regulator is variable and the adherent fastener enables it to be easily and quickly adjusted to the desired neck size.

The Optiflausch<sup>®</sup> Slim tube holder is available in white. A variation of the Optiflausch<sup>®</sup> Slim tube holder, especially for children and designed for smaller neck sizes, is also available.

Optiflausch<sup>®</sup> Slim is intended for single use only.

Optiflausch<sup>®</sup> Slim tube holders are supplied in hygienic, individual packaging.

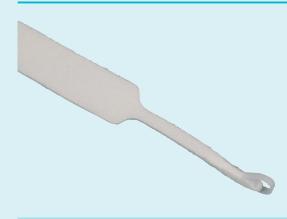
Order information: Optiflausch® Slim tube holder with adherent fastener, white
 Optiflausch® Slim tube holder with adherent fastener for children, white

REF 32552 REF 32557



Order i

#### **NECKFIX® TUBE HOLDER**



The design of the Neckfix<sup>®</sup> tube holder enables the secure fixation of the tracheostomy tube.

The tube holder is pleasantly soft and flexible. It can be adjusted to different neck sizes. A skin-friendly non-woven fabric surrounds the light foam core of the tube holder.

Fastening straps made of adherent are located at the ends of the tube holder. This enables fast fixing of the tube holder to the neck flange.

The tube holder is supplied in hygienic individual packaging.

Order information: > Neckfix<sup>®</sup> tube holder

#### **NECKFIX® TUBE HOLDER – DUO**



The design of the Neckfix<sup>®</sup> Duo tube holder enables the secure fixation of the tracheostomy tube.

The two-part tube holder is pleasantly soft and flexible. It can be adjusted to different neck sizes. A skin-friendly non-woven fabric surrounds the light foam core of the tube holder.

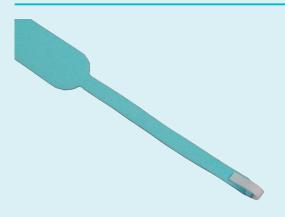
Fastening straps made of adherent are located at the ends of the tube holder. This enables fast fixing of the tube holder to the neck flange.

The tube holder is supplied in hygienic individual packaging.

Order information: > Neckfix® Duo tube holder

**REF 32620** 

#### **NECKFIX® TUBE HOLDER – BLUE**



The design of the Neckfix<sup>®</sup> Blue tube holder enables the secure fixation of the tracheostomy tube.

The tube holder is pleasantly soft and flexible. It can be adjusted to different neck sizes. A skin-friendly non-woven fabric surrounds the light foam core of the tube holder.

Fastening straps made of adherent are located at the ends of the tube holder. This enables fast fixing of the tube holder to the neck flange.

The tube holder is supplied in hygienic individual packaging.

123

**Order information:** > Neckfix<sup>®</sup> Blue tube holder

#### FAHL® TRACHEAL COMPRESS

#### ALUMINIUM COATED



The tracheal compress is a compress, made of non-woven fabric, for tracheostomy tube users in the size 8 x 10 cm. The relatively light non-woven underlay is aluminium coated on one side. The tracheal compress absorbs tracheal secretions and acts as a cushion between the skin and neck flange. The silver-grey satin side of the tracheal compress consists of a non-woven viscose fabric, with finely aluminium coated fibres. This smooth surface is indifferent to secretions and does not stick to the skin.

The tracheostomy tube is pushed through the opening in the tracheal compress, with the aluminium coated side on the skin. The compress is intended for single use only and should, for reasons of hygiene, be changed as soon as it is saturated, and after every cannula change.

A version with an additional slit, for fast changing of compresses, is available. The cannula does not have to be removed beforehand.

The tracheal compress is supplied in non-sterile, hygienic packaging.

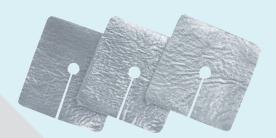
Order information: 

FAHL<sup>®</sup> Tracheal compress, 8 x 10 cm, pack of 10
FAHL<sup>®</sup> Tracheal compress, 8 x 10 cm, pack of 100
FAHL<sup>®</sup> Tracheal compress, with a slit, 8 x 10 cm, pack of 10

REF 30000 REF 30010 REF 30030

#### FAHL® TRACHEAL COMPRESS WITH A SLIT

#### ALUMINIUM COATED, STERILE



The tracheal compress is a compress, made of non-woven fabric, for tracheostomy tube users, available in two sizes 8 x 9 cm and 8 x 10 cm both with a slit. The slit enables a fast changing of compresses and the cannula does not have to be removed beforehand. The relatively light non-woven underlay is aluminium coated on one side. The tracheal compress absorbs tracheal secretions and acts as a cushion between the skin and neck flange.

The silver-grey satin side of the tracheal compress consists of a nonwoven viscose fabric, with finely aluminium coated fibres. This smooth surface is indifferent to secretions and does not stick to the skin.

The tracheostomy tube is pushed through the opening in the tracheal compress, with the aluminium coated side on the skin. The compress is intended for single use only and should, for reasons of hygiene, be changed as soon as it is saturated, and after every cannula change.

The tracheal compress is supplied in sterile, individual packaging. The packing unit contains 50 pieces.

Order information: FAHL® Tracheal compress with a slit, sterile, 8 x 9 cm, pack of 50 FAHL® Tracheal compress with a slit, sterile, 8 x 10 cm, pack of 50

#### SENSOTRACH<sup>®</sup> UNO TRACHEAL COMPRESS





The SensoTrach<sup>®</sup> UNO tracheal compress is single-layered, comfortably soft and absorbent. Its surfaces are lint-free. The SensoTrach<sup>®</sup> UNO is suitable for tracheostomy tube users with light secretion production.

Through a special shape, the SensoTrach<sup>®</sup> UNO, with its smooth surface, perfectly adapts to the anatomy of the neck/tracheostoma, softly and securely cushions the neck flange against the skin and thereby ensures the highest comfort.

There are two variants available to choose from, the tracheal compress without a slit is intended for a renewal of the compress, with exchange of the tracheostomy tube. The compress with a slit is designed for comfortable compress changing without a change of tube. For normal and heavier secretions, the use of the absorbent SensoTrach<sup>®</sup> DUO tracheal compress or SensoTrach<sup>®</sup> 3-Plus tracheal compress is recommended.

The SensoTrach<sup>®</sup> UNO is supplied in non-sterile, hygienic packaging. The packing unit contains 10 pieces.

**Order information:** 

SensoTrach<sup>®</sup> UNO Tracheal compress, 9 x 9.8 cm, pack of 10

SensoTrach<sup>®</sup> UNO Tracheal compress, with a slit,

9 x 9.8 cm, pack of 10

#### SENSOTRACH® DUO TRACHEAL COMPRESS







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The SensoTrach<sup>®</sup> DUO tracheal compress for tracheostomy tube users consists of two compress layers of equal thickness, fixed together. The double-layered SensoTrach<sup>®</sup> DUO is suitable for tracheostomy tube users with normal secretion production. The front and rear side are covered with a transparent layer, which prevents the compress from sticking to the skin and enables particularly gentle changing of compress. In addition, the compress quickly absorbs secretions from the skin between the stoma and the tube. This keeps the skin dry and warm. To aid identification, the skin-side of the compress has a green thread. With its special shape, the SensoTrach<sup>®</sup> DUO tracheal compress fits the neck area perfectly.

The SensoTrach<sup>®</sup> DUO tracheal compress gently and securely cushions the cannula against the stoma and the skin and gives it a stable fit. It also meets the very highest demands on function, aesthetics and comfort. SensoTrach<sup>®</sup> DUO tracheal compresses are also available in a version with a slit and with aluminium coating.

In the version with a slit, the compress has an additional slit above the circular opening for the tracheostomy tube, which enables the user to change the compress, without having to remove the cannula from the tracheostoma. This is an enormous advantage, particularly when secretion is heavy or in situations when a cannula change is difficult. The slit is made in such a way, that the compress is largely prevented from slipping, even when saturated.

The SensoTrach<sup>®</sup> DUO is supplied in non-sterile, hygienic packaging. The packing unit contains 10 pieces.

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		9 x 9.8 cm, pack of 10

SensoTrach<sup>®</sup> DUO tracheal compress, with a slit, 9 x 9.8 cm, pack of 10 REF 30608

#### 125

**REF 30520** 

## SENSOTRACH® DUO ALU TRACHEAL COMPRESS





The SensoTrach® DUO ALU compress is a high quality, especially absorbent and dimensionally stable tracheal compress, which has an aluminium coating on one side. The metallic coating prevents sticking, due to blood and secretions, to the skin. The double-layered Senso-Trach<sup>®</sup> DUO ALU is suitable for tracheostomy tube users with normal and heavy secretion production. Due to the strength of its materials, the SensoTrach® DUO ALU remains smooth and stable even when saturated

To aid identification, the skin-side of the compress has a green thread. With its special shape, the SensoTrach® DUO ALU tracheal compress fits the neck area perfectly.

The SensoTrach® DUO ALU tracheal compress gently and securely cushions the cannula against the stoma and the skin and gives it a stable fit. It also meets the very highest demands on function, aesthetics and comfort.

SensoTrach® DUO ALU tracheal compresses are also available in a version with a slit

The SensoTrach® DUO ALU is supplied in non-sterile, hygienic packaging. The packing unit contains 10 pieces.

Order information:	SensoTrach® DUO ALU tracheal compress,	REF 30662
	<ul> <li>9 x 9.8 cm, pack of 10</li> <li>SensoTrach<sup>®</sup> DUO ALU tracheal compress, with a slit, 9 x 9.8 cm, pack of 10</li> </ul>	REF 30663

#### SENSOTRACH® 3-PLUS TRACHEAL COMPRESS



The SensoTrach® 3-Plus is a special compress and is suitable for tracheostomy tube users with normal and heavy secretion production.

The coating of the upper and lower side of the compress increases its comfort when worn. The side away from the skin has a special moisture-repellent, white coating, which prevents saturation of the compress and thereby provides excellent protection for clothing.

On the patient side, a transparent coating ensures comfortable wearing. SensoTrach<sup>®</sup> 3-Plus softly and gently cushions the tracheostomy tube against the skin and the stoma. To aid identification, the skin-side of the compress has a green thread.

A variation of the Tracheoskin<sup>®</sup> compress is available, with an additional slit, so that a change of compress is possible without changing cannulas.

This item is supplied in non-sterile, hygienic packaging. The packing unit contains 10 pieces.

**Order information:** 

SensoTrach® 3-Plus tracheal compress, 9 x 9.8 cm, pack of 10 SensoTrach® 3-Plus tracheal compress, with a slit, 9 x 9.8 cm, pack of 10

**REF 30770 REF 30780** 

#### **1-KAM® TRACHEAL COMPRESS**





The 1-KAM<sup>®</sup> tracheal compress is comfortably soft and absorbent. Its surfaces are lint-free.

The 1-KAM® tracheal compress is primarily designed for care in the clinic and during inpatient treatment, where frequent cannula and compress changes are necessary. However, patients with low secretion levels and whenever a lighter cannula underlay is required or desired can also use these compresses, at home.

There are two variants available to choose from: The tracheal compress without a slit, it is intended for a renewal of the compress, with exchange of the tracheostomy tube. The compress with a slit is designed for comfortable compress renewal without a change of tube.

The 1-KAM<sup>®</sup> tracheal compress retains its shape, even when wet, and provides the user with secure protection for clothing.

The 1-KAM® tracheal compress is supplied in non-sterile, hygienic packaging.

Order information:	1-KAM <sup>®</sup> tracheal compress, 9 x 9.8 cm, pack of 10
	1-KAM <sup>®</sup> tracheal compress, with a slit, 9 x 9.8 cm, pack of 10

REF 30400 REF 30500

#### **1-KAM® ZIP COMPRESS**



1-KAM<sup>®</sup> Zip compresses are comfortable to wear, even when the compress is already loaded with secretion. The special, jigsaw-shaped zip prevents the compress from slipping off the cannula, without sacrificing the convenience of easy compress changes, even when lying down. The non-woven fabric used, reliably absorbs secretions and ensures that the skin underneath remains dry.

This compress is supplied in non-sterile packaging, in a pack of 10.

#### **1-KAM® ALULINE**



The 1-KAM<sup>®</sup> Aluline is a soft, relatively light tracheal compress, which has an aluminium coating on one side. The material is lint-free and absorbent, and intended for users with moderate to normal secretion, who only wish a thin tube cushion.

A hole for the tracheostomy tube is located in the upper third of the compress. Aside from the hole, there are also additional star-shaped slits, making the diameter variable and therefore suitable for different cannula sizes.

The metallic coating prevents sticking, due to blood and secretions, to the skin. The non-woven fabric of the compress has hydrophobic (water-repellent) properties, so that the release of moisture to the outside is hindered.

The 1-KAM<sup>®</sup> Aluline is distinguished by the high strength of its materials. The aluminium coated non-woven fabric stays smooth, stable and does not fray, when saturated.

There are two variants available to choose from, a tracheal compress with a slit and one without a slit.

The 1-KAM® Aluline with a slit has an offset slit opening, which enables convenient compress changes, without having to remove the cannula from the tracheostoma. The special arrangement of the slit prevents, as far as possible, the compress from slipping off the cannula, even when wet.

The 1-KAM<sup>®</sup> Aluline is supplied in non-sterile, hygienic packaging.

Order information:	1-KAM <sup>®</sup> Aluline,
	9 x 9.8 cm, pack of 10
	> 1-KAM <sup>®</sup> Aluline, with a slit,
	9 x 9.8 cm, pack of 10

REF 30450

#### **1-KAM ALULINE® ZIP COMPRESS**



1-KAM Aluline<sup>®</sup> Zip compresses have an aluminium coating on one side, which prevents the adhesion of blood and secretions.

The unique, jigsaw-shaped zip prevents the compress from slipping off the cannula, without sacrificing the convenience of easy compress changes, even when lying down. The non-woven fabric used, reliably absorbs secretions and ensures that the skin underneath remains dry.

The 1-KAM Aluline<sup>®</sup> Zip compress is supplied in non-sterile, hygienic packaging.



Order information: > 1-KAM Aluline® Zip compress, 9 x 9.8 cm, pack of 10 REF 30551

128

#### 2-KAM<sup>®</sup> TRACHEAL COMPRESS



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The 2-KAM<sup>®</sup> double-chamber tracheal compress for tracheostomy tube users consists of 2 compress bodies of different thicknesses, fixed together, and made of different non-woven fabrics. The front compress body, very quickly and reliably absorbs secretions, which leak straight from the cannula. Its surface is reinforced and therefore washable without pilling. The 2-KAM<sup>®</sup> double-chamber tracheal compress is an excellent clothing protection. The rear compress body, close to the skin, is especially soft. It quickly absorbs secretions from the skin between the stoma and the tube. This keeps the skin dry and warm. A damp cavity cannot form between the compress and the skin.

The 2-KAM® tracheal compress gently and securely cushions the cannula against the stoma and the skin, it gives a stable fit. It constantly keeps its shape and position and does not agglutinate, even during heaviest secretion. It also meets the very highest demands on function, aesthetics and comfort.

The 2-KAM<sup>®</sup> double-chamber tracheal compress is two products in one, a high-quality compress + a secure clothing protection.

The 2-KAM<sup>®</sup> double-chamber tracheal compress is also available in a version with a slit. Here, the compress body has a slit above the circular opening for the tracheostomy tube, which enables the user to change the compress, without removing the cannula from the tracheostoma. This is an enormous advantage, particularly when secretion is heavy or in situations when a cannula change is difficult.

The slit is made in such a way, that the compress is largely prevented from slipping, even when saturated.

The 2-KAM<sup>®</sup> double-chamber tracheal compress is supplied in non-sterile, hygienic packaging.

For sterile care of a sore tracheostoma, we also provide the 2-KAM<sup>®</sup> double-chamber tracheal compress in sterile, individual packaging. The packing unit contains 100 pieces.

Order information:	2-KAM® tracheal compress,	REF 30600
	9 x 9.8 cm, pack of 10 2-KAM® tracheal compress, with a slit,	REF 30601
	9 x 9.8 cm, pack of 10 2-KAM® tracheal compress, sterile,	REF 30605
	9 x 9.8 cm, pack of 100 2-KAM <sup>®</sup> tracheal compress, <b>sterile</b> , with a slit,	REF 30606
	9 x 9.8 cm, pack of 100	
	2-KAM® tracheal compress, Mini, 7.2 x 6 cm, pack of 20	REF 30631

#### 2-KAM<sup>®</sup> ZIP COMPRESS



2-KAM<sup>®</sup> Zip compresses are especially absorbent and are comfortable to wear, even when the compress is already loaded with secretion. The unique, jigsaw-shaped zip prevents the compress from slipping off the cannula, without sacrificing the convenience of easy compress changes, even when lying down. The 2-layered non-woven fabric, reliably absorbs secretions and ensures that the skin underneath remains dry.



The 2-KAM Aluline<sup>®</sup> is a two-body tracheal compress, made of comfortably soft, lint-free and absorbent material. A hole for the tracheostomy tube is located in the upper third of the compress. Aside from the hole, there are also additional star-shaped slits, making the diameter variable and therefore suitable for different cannula sizes.

One side of the compress has an aluminium coating, which prevents sticking, due to blood and secretions, to the skin and, at the same time, has hydrophobic (water-repellent) properties.

The 2-KAM Aluline<sup>®</sup> is distinguished by the high strength of its materials. The aluminium coated non-woven fabric stays smooth, stable and does not fray, when saturated.

This compress is suitable for tracheostomy tube users with normal and heavy secretions and provides good protection for clothing. The compress gently and securely cushions the cannula against the stoma and the skin, it gives it a stable fit.

There are two variants available to choose from, a tracheal compress with a slit and one without a slit.

The 2-KAM Aluline<sup>®</sup> with a slit has an offset slit opening, which enables convenient compress changes, without having to remove the cannula from the tracheostoma. The special arrangement of the slit prevents, as far as possible, the compress from slipping off the cannula, even when wet.

The 2-KAM Aluline<sup>®</sup> is supplied in non-sterile, hygienic packaging.

Order information:	2-KAM Aluline®,
	9 x 9.8 cm, pack of 10
	> 2-KAM Aluline <sup>®</sup> , with a sli
	9 x 9.8 cm, pack of 10

REF 30650

REF 30660

#### 2-KAM ALULINE® ZIP COMPRESS



2-KAM Aluline<sup>®</sup> Zip compresses have an aluminium coating on one side, which prevents the adhesion of blood and secretions.

The unique, jigsaw-shaped zip prevents the compress from slipping off the cannula, without sacrificing the convenience of easy compress changes, even when lying down.

The 2-layer non-woven fabric reliably absorbs secretions and ensures that the skin underneath remains dry.

The 2-KAM Aluline® Zip compress is supplied in non-sterile, hygienic packaging.

Order information: > 2-KAM Aluline® Zip compress, 9 x 9.8 cm, pack of 10

#### TRACHEOSKIN® COMPRESS

#### **ONE-SIDE SKIN-COLOURED**



Tracheoskin® is a double-layered tracheal compress, skin-coloured on one side, which, due to its shape, adapts excellently to the neck area. The combination of the anatomical shape and skin-typical colour ensures that the tracheal compress can barely be seen or felt. Tracheo skin<sup>®</sup> consists of two compress bodies, fixed together, which quickly and reliably absorb any secretions. The rear compress body, near to the skin, is especially soft and ensures that the skin is kept dry and warm, by quickly absorbing secretions. The Tracheoskin<sup>®</sup> tracheal compress has a hole for the tracheostomy tube to be passed through. A variation of the Tracheoskin<sup>®</sup> compress is available, with an additional slit

The practical slit in the Tracheoskin<sup>®</sup> enables convenient and quick changing of the compress, without the need to remove the tracheostomy tube beforehand.

The Tracheoskin<sup>®</sup> compress is supplied in non-sterile, hygienic packaging. The packing unit contains 10 pieces.



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ler information:	Tracheoskin®, compress, double-layered,	REF 30670
	one side skin-coloured, 9 x 9.8 cm, pack of 10	
	Tracheoskin <sup>®</sup> compress, with a slit, double-layered,	REF 30671
	one side skin-coloured, 9 x 9.8 cm, pack of 10	

#### **TRACHEOSKIN® ZIP COMPRESS**

#### **ONE-SIDE SKIN-COLOURED**



Tracheoskin®ZIP is a double-layered tracheal compress with a zip slit, skin-coloured on one side, which, due to its shape, adapts excellently to the neck area. The combination of the anatomical shape and skintypical colour, ensures that the tracheal compress can barely be seen or felt. Tracheoskin® ZIP consists of two compress bodies, fixed together, which quickly and reliably absorb any secretions. Because of the innovative, jigsaw-shaped zip, this tracheal compress always stays securely in position. The rear compress body, near to the skin, is especially soft and ensures that the skin is kept dry and warm, by quickly absorbing secretions.

The practical zip in the Tracheoskin® ZIP compress enables convenient and quick changing of the compress, without the need to remove the tracheostomy tube beforehand. Even larger amounts of secretions are safely absorbed. The compress sits securely on the cannula, even when wet.

The Tracheoskin<sup>®</sup> ZIP compress is supplied in non-sterile, hygienic packaging. The packing unit contains 10 pieces.



**Order information:** Tracheoskin<sup>®</sup>, ZIP compress, double-layered, one side skin-coloured, 9 x 9.8 cm, pack of 10

#### 131

## 2-KAM<sup>®</sup> POCKET TRACHEAL COMPRESS

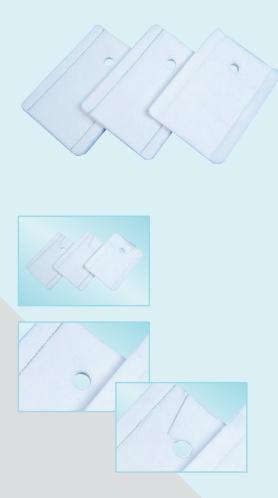


The 2-KAM<sup>®</sup> Pocket tracheal compress is a variant of the conventional 2-KAM<sup>®</sup> compress. It consists of two full, large-format non-woven compresses, with a third, half-layer additionally sewn on to the front, in the shape of a pocket. The pocket acts as a reservoir for secretions, which drip out of the cannula, in order to prevent the compress from being soaked, even in very high levels of secretion. Next to the central hole for the insertion of the cannula, is an additional slit, this enables a fast change of compresses. The cannula does not need to be removed from the tracheostoma for changing the compress.

The 2-KAM<sup>®</sup> Pocket tracheal compresses are supplied in a hygienic pack of 10.

Order information: > 2-KAM<sup>®</sup> Pocket tracheal compress, with a slit, 9 x 14 cm, Pack of 10 REF 30680

## **3-KAM® TRACHEAL COMPRESS**



The 3-KAM® tracheal compress offers an especially large absorbent volume, through the chamber-system design of 3 layers of non-woven fabric, in the format 10 x 14 cm. The chamber system of the intercombined layers, has the advantage that the layer nearest to the body absorbs the tracheal secretions immediately and completely, keeping the skin dry. The middle non-woven fabric layer enables any excess liquid from the layer nearest to the body to be absorbed, but at the same time, also absorbs any secretions leaking from the cannula. The upper layer of non-woven fabric, away from the skin, has water-repellent properties. The special coating prevents the saturation of the compress and thereby provides secure protection for clothing. This means that additional aids, such as a tracheal Billroth bib, do not have to be stored in advance. An opening for the tracheostomy tube, with starshaped, transverse slits, is located in the upper third of the 3-KAM® tracheal compress. This makes the diameter of the hole adjustable to the largest possible cannula diameter. Next to the opening are two lateral outlets, to let a tube holder through. This enables a stable fixation of the tracheostomy tube.

There are two variants available to choose from, a tracheal compress with a slit and one without a slit.

In the version with an additional slit, a change of compress, without removing the cannula from the tracheostoma beforehand, is possible. The slit is not straight, but offset, so that the compress cannot slip from the cannula so easily. The 3-KAM® tracheal compress is supplied in non-sterile, hygienic packaging.

For a sore tracheostoma or increased risk of infection, sterile wound care may be necessary. The 3-KAM<sup>®</sup> tracheal compress, with or without an additional slit, is therefore also available in sterile, individual packaging.

Order information:		REF 30700
	10 x 14 cm, pack of 10	
	3-KAM® tracheal compress, with a slit,	<b>REF 30701</b>
	10 x 14 cm, pack of 10	
	> 3-KAM <sup>®</sup> tracheal compress, sterile,	<b>REF 30705</b>
	10 x 14 cm, pack of 50	
	> 3-KAM <sup>®</sup> tracheal compress, <b>sterile</b> , with a slit,	<b>REF 30706</b>
	10 x 14 cm, pack of 50	

#### SENSOFOAM® TRACHEAL FOAM COMPRESS



The Sensofoam<sup>®</sup> compress is a high-grade compress for tracheostomy tube users. It is distinguished by its high absorbency.

The Sensofoam<sup>®</sup> compress is made of multiple layers; the skincoloured, breathable top layer prevents the saturation of the compress. The absorbent foam quickly and surely soaks up secretions.

In addition, the adhesion/agglutination with the skin is prevented. This allows the compresses to be removed easily. The Sensofoam<sup>®</sup> compress causes little irritation and is therefore especially suitable for the application on a sore tracheostoma.

The foamy material is especially soft and comfortable to wear. The Sensofoam<sup>®</sup> compress softly and securely cushions the tracheostomy tube against the skin and prevents bruising. At the same time, this stabilises the fit of the tracheostomy tube in the tracheostoma.

A hole for the tracheostomy tube is located in the middle of the compress. There is also a slit, which enables quick changes of the compress. The cannula can stay in the tracheostoma and does not need to be removed before changing the compress. Especially for children, we offer the Sensofoam® in a smaller format.

As a further product variant, the Sensofoam<sup>®</sup> foam tracheal compress is available in an adapted shape, as the Sensofoam® Pad. The Sensofoam<sup>®</sup> Pad is based on the anatomical shape of the neck flange.

An additional variant is Sensofoam® NEO, this foam compress is for children and similar to Sensofoam® Pad. It is in total smaller, the hole is designed for smaller cannula sizes and is not central, it has been moved towards the bottom, taking special anatomical consideration

The Sensofoam<sup>®</sup> compress is intended for single use and is supplied in sterile, individual packaging, in a box of 10.

Order information:	Sensofoam <sup>®</sup> tracheal foam compress, with a slit, 10 x 9 x 0.5 cm, sterile, pack of 10	<b>REF 30860</b>
	Sensofoam <sup>®</sup> tracheal foam compress, with a slit, small,	REF 30861
	<ul> <li>6.5 x 6.5 x 0.5 cm, sterile, pack of 10</li> <li>Sensofoam<sup>®</sup> PAD, tracheal foam compress,</li> <li>sterile, pack of 10</li> </ul>	REF 30862
	sterile, pack of 10 Sensofoam® NEO, tracheal foam compress, sterile, pack of 10	REF 30863

133

## FAHL® TRACHEAL BILLROTH BIB

The tracheal Billroth bib is worn over the tracheal compress and prevents, due to its secretion-repellent surface, the saturation of the compress.

This aid was specially developed for tracheostomy tube users, who suffer from heavy secretion after surgery. The tracheal Billroth bib reinforces the compress to the outside and thereby offers additional protection for your clothing.

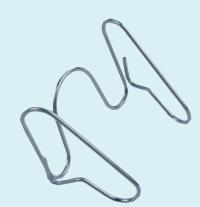
The corners of the Billroth bib are especially rounded, so that wearing it does not cause unpleasant skin irritations.

The tracheal Billroth bib can, if required, be wiped with a gauze compress.

This item is supplied in non-sterile, hygienic packaging.

**Order information:** FAHL<sup>®</sup> Tracheal Billroth bib, 8 x 10 cm, pack of 10

### FAHL® CANNULA SPACER



The cannula spacer prevents, when using tracheostoma protection, the blocking of the opening of the cannula, resulting in breathing difficulties.

The stainless steel spacer is pushed onto the neck flange and thereby ensures the necessary spacing between the cannula opening and, for example, a stoma protection neckerchief or a stoma protection bib.

The spacer is dimensionally stable and resistant to cleaning.



**Order information:** > FAHL<sup>®</sup> Cannula spacer

#### FAHL® TRACHEAL DILATOR

The tracheal dilator enables the dilation of the tracheostoma in tracheostomised and laryngectomised patients. Inserting the tracheostomy tube is considerably easier through the dilated tracheostoma, as a "contraction" of the tracheostoma, especially in unstable openings, is prevented.

The tracheal dilator is made of stainless steel. The tips of the tracheal dilator are specially shaped and rounded, minimising the risk of injury when inserting it into the tracheostoma. Due to the special design, the three spreadable wings, it enables an even opening in all directions of the tracheostoma during cannula changing. When pressing the handles together it opens the tracheostomy tube considerably easier.

The tracheal dilator should always be close to hand for a fast cannula change.

The tracheal dilator is also indispensable in emergencies, in order to secure the airway.

A smaller version for children is also available (see REF 35501).



Order information: FAHL® Tracheal dilator FAHL® Tracheal dilator for children REF 35500 REF 35501

#### **OSTOMADAPT®**



Ostomadapt<sup>®</sup> is an aid for tracheostomy tube users. A gel-filled ring softly cushions the tracheostomy tube against the skin and regulates pressure. The gel ring is available in different widths, namely with 7, 10 and 15 ml filling. Ostomadapt<sup>®</sup> is simply pushed over the cannula before the insertion of the tracheostomy tube. The cannula cushion is fixed without glue and is therefore particularly kind to the skin.

Ostomadapt<sup>®</sup> is very flexible and adaptable. The gel ring enables a good seal between the tracheostomy tube and the skin, even with an irregular stoma, preventing air from flowing past at the side. In this respect, Ostomadapt<sup>®</sup> is particularly suited for users of a voice prosthesis.

At the same time, the fit of the tracheostomy tube in the tracheostoma is stabilised.

The plastic cover of the gel ring is washable, so that Ostomadapt<sup>®</sup> can be used more than once.

This item is supplied in a packing unit of 2 pieces. Ostomadapt<sup>®</sup> is available in the sizes 8, 9, 10 and 12. The sizes correspond to the size specifications of a silicone tube (see "tracheostomy tube size overview").

## ENZISPUT TRACHEOSTOMA DEVICE FOR SECRETION DRAINAGE





Enzisput tracheostoma device for secretion drainage with HME and tracheostomy tube



Enzisput tracheostoma device for secretion drainage with attached HME



Secretion drainage system

The Enzisput tracheostoma device for secretion drainage is intended for tracheostomised/laryngectomised patients, who breathe spontaneously via the tracheostoma.

The Enzisput tracheostoma device for secretion drainage is a patented product, which consists of a plastic housing with a number of connectors/outlet tubes. These connectors enable the draining of tracheal secretions, as well as the additional application of humidifiers, HMEs, for filtering, humidifying and warming the inspired air.

Increased secretions can be the result of various conditions and often occurs in patients with head injuries. Heavy secretion can lead to impairment of breathing and oxygen supply. The use of the Enzisput tracheostoma device for secretion drainage can considerably reduce such disturbances of spontaneous breathing.

The Enzisput tracheostoma device for secretion drainage acts like a switch in which a piston, driven by the patient's in and out-flowing breath, drains secretions through the secretion drainage tube (available as a special accessory), into the secretion container.

Through this regulated secretion drainage, the Enzisput prevents an accumulation of secretions and ensures an unimpaired air supply. The functional efficiency of HMEs is also positively influenced, as the HME is not clogged with secretions so quickly. The HME's filter medium stays open-pored for longer, so that the amount of HMEs used is greatly reduced.

There are also distinct advantages in terms of hygiene: The Enzisput tracheostoma device for secretion drainage prevents an uncontrolled escape of secretions into the surroundings and thereby improves the patient's hygienic situation. The largely closed drainage of the secretions reduces the risk of infection for relatives and nursing staff.

The advantages of the Enzisput tracheostoma device for secretion drainage at a glance:

- prevents excessive secretion collection in the tracheostomy tube and the tracheostoma
- prevents the uncontrolled escape of secretions into the surroundings
- reduces the blocking of HMEs during heavy secretion

The Enzisput tracheostoma device for secretion drainage is a medical device for single use only. After this, the Enzisput should be exchanged. The same applies for the secretion-diversion tube and the secretion container of the secretion drainage system (accessories).

The Enzisput tracheostoma device for secretion drainage is not suitable for patients who are being ventilated and must not be connected to a ventilation device!

This product is supplied in hygienic, individual packaging, without accessories. The packing unit contains 30 pieces.

#### Order information:

 Enzisput for secretion drainage, pack of 30
 Secretion drainage system, consisting of 1 secretion drainage tube, 1 secretion bag, pack of 30 REF 36001-30 REF 36004-30

#### **CLEANING AND CARE OF TUBES**







For reasons of hygiene and to avoid the risk of infection, you should thoroughly clean your tracheostomy tubes at least twice a day, more often during heavier secretion production. Our range of medical supplies offers a variety of cleaning devices for gentle and hygienic cleaning, disinfection and preparation of tracheostomy tubes.

Great care should be taken when handling tracheostomy tubes, especially when cleaning the tube with a cannula-cleaning brush. Should sharp edges or even cracks ever appear on a tracheostomy tube, on no account use it again, as this could lead to injuries of the mucous membranes in the trachea.

Constant checking prevents danger!

#### FAHL® CANNULA-CLEANING SET OPTIBRUSH®



The cannula-cleaning powder (400 g box) is supplied, together with the cannula-cleaning box and 10 Optibrush<sup>®</sup> cannula-cleaning brushes of various sizes, in a practical set.

This provides you with the most important aids for a quick, thorough and material-friendly cleaning of tracheostomy tubes.

Please note the cleaning instructions in the User's Manual!

Order information: FAHL® Cannula-cleaning set Optibrush® with 10 Optibrush® cannula-cleaning brushes

## FAHL® CANNULA-CLEANING TUB WITH SIEVE INSERT



The cannula-cleaning tub, made of plastic, has a diameter of 10 cm and a practical sieve insert.

The sieve insert can be removed from the box and enables the tracheostomy tube to be carefully dipped into the cleaning solution. Per cleaning bath, only one tracheostomy tube, consisting of an inner and outer cannula, should be placed into the sieve insert of the cannulacleaning box, to avoid damage and to exclude confusion later, when assembling the tube.

Following the cleaning bath, the cannula can be thoroughly rinsed off under running water in the sieve insert.

#### **Order information:** > FAHL<sup>®</sup> Cannula-cleaning tub with sieve insert

**REF 31200** 

# DF TUBES

## FAHL® CANNULA-CLEANING POWDER



The cannula-cleaning powder is intended to prepare a cleaning solution for tracheostomy tubes. This cleaning solution enables fast and intensive cleaning. One measuring spoon of cleaning powder is required per cleaning bath. The measuring spoon is already in the tub. The measured amount of cleaning powder is placed in the cannulacleaning tub (REF 31200) and filled up with lukewarm water. The cleaning solution created is suitable for the removal of blood and secretion remainders on tracheostomy tubes. This cleaning process is especially thorough and gentle to the material. Please note the cleaning instructions in the User's Manual!

The cannula-cleaning powder is supplied in a tub with 400 g contents. The robust container has a double lid, providing a reliable seal.



#### **OPTIBRUSH® CANNULA-CLEANING BRUSH**

The design of the Optibrush<sup>®</sup> cannula-cleaning brush shows a number of distinct advantages, in comparison to conventional cannula-cleaning brushes.

The Optibrush<sup>®</sup> cannula-cleaning brush is approx. 21 cm long in total. It consists of a plastic handle and a brush part.

An outstanding feature of this item is that the bristles are attached to a stainless steel wire, which is twisted, no sharp edges remain in the area of the bristles. This prevents the sensitive cannula material from being scratched. A further feature is that the brush extends from the tip of the brush to the handle. This means, that the entire wire netting is surrounded by protective bristles, this considerably facilitates cleaning, and provides additional protection from damaging the tracheostomy tube. The bristles are made of extremely stable and soft nylon.

The Optibrush<sup>®</sup> cannula-cleaning brush is particularly recommendable for the cleaning of extra long tracheostomy tubes, as the brush part, with a length of 13 cm, can fill the entire cannula tube.

The Optibrush<sup>®</sup> cannula-cleaning brush is available in eleven different sizes, with a diameter of 4 - 14 mm at the brush tip.

The packing unit contains 10 pieces.

Order information:	Optibrush® cannula-cleaning brush, 4 mm, pack of 10	REF 31850-04
	Optibrush <sup>®</sup> cannula-cleaning brush, 5 mm, pack of 10	REF 31850-05
	Optibrush <sup>®</sup> cannula-cleaning brush, 6 mm, pack of 10	REF 31850-06
	Optibrush <sup>®</sup> cannula-cleaning brush, 7 mm, pack of 10	REF 31850-07
	Optibrush <sup>®</sup> cannula-cleaning brush, 8 mm, pack of 10	REF 31850-08
	<ul> <li>Optibrush<sup>®</sup> cannula-cleaning brush, 9 mm, pack of 10</li> </ul>	REF 31850-09
	Optibrush <sup>®</sup> cannula-cleaning brush, 10 mm, pack of 10	REF 31850-10
	Optibrush <sup>®</sup> cannula-cleaning brush, 11 mm, pack of 10	REF 31850-11
	Optibrush <sup>®</sup> cannula-cleaning brush, 12 mm, pack of 10	REF 31850-12
	<ul> <li>Optibrush<sup>®</sup> cannula-cleaning brush, 13 mm, pack of 10</li> </ul>	REF 31850-13
	Optibrush <sup>®</sup> cannula-cleaning brush, 14 mm, pack of 10	REF 31850-14



#### CANNULA-CLEANING BRUSH WITH FIBRE TOP

The Optibrush® Plus cannula-cleaning brush with fibre top is an addition to our range. It features an extremely flexible wire netting and has sturdy, soft nylon bristles that extend from the tip of the brush to the handle, as usual in our Optibrush® cannula-cleaning brushes. The main feature of the newest version of our Optibrush® cannula-cleaning brushes is the brush tip, which is surrounded by a fibre top. The fibre

top is especially wipe-active and its absorbent fabric fibres ensure effective and gentle cannula cleaning. The core of the Optibrush® Plus cannula-cleaning brush with fibre top, made of stainless steel wire, can be individually adapted to the tracheostomy tube, which makes the cleaning process substantially easier. Damage or scratching of the sensitive cannula material can be largely avoided using the Optibrush® Plus cannula-cleaning brush with fibre top.

In spite of this, you should continue to take great care in the handling of tracheostomy tubes, especially during the cleaning process. Because of this, you should always attempt to remove debris from your cannula with our special cannula-cleaning powder, within a wetcleaning process. Mechanical cleaning with the brush should always be the second option, as they place greater strain on the cannula material than a cleaning solution. Should additional cleaning with the cannula-cleaning brush become necessary, please note that the cannula-cleaning brush should always be inserted from the cannula tip, into the tube. Little force should be used during the cleaning process itself.

The Optibrush<sup>®</sup> Plus cannula-cleaning brushes with fibre top are available in ten different sizes, with diameters from 5 to 14 mm at the brush area.

A packing unit contains 10 pieces.

Order information:	Optibrush <sup>®</sup> Plus cannula-cleaning brush with fibre top, 5 mm, pack of 10	REF 31855-05
	Optibrush <sup>®</sup> Plus cannula-cleaning brush with fibre top, 6 mm, pack of 10	REF 31855-06
	Optibrush® Plus cannula-cleaning brush with fibre top, 7 mm, pack of 10	REF 31855-07
	Optibrush® Plus cannula-cleaning brush with fibre top, 8 mm, pack of 10	REF 31855-08
	Optibrush <sup>®</sup> Plus cannula-cleaning brush with fibre top, 9 mm, pack of 10	REF 31855-09
	Optibrush® Plus cannula-cleaning brush with fibre top, 10 mm, pack of 10	REF 31855-10
	Optibrush <sup>®</sup> Plus cannula-cleaning brush with fibre top, 11 mm, pack of 10	REF 31855-11
	Optibrush <sup>®</sup> Plus cannula-cleaning brush with fibre top, 12 mm, pack of 10	REF 31855-12
	Optibrush <sup>®</sup> Plus cannula-cleaning brush with fibre top, 13 mm, pack of 10	REF 31855-13
	Optibrush® Plus cannula-cleaning brush with fibre top, 14 mm, pack of 10	REF 31855-14



## **OPTIBRUSH® BASIC**

#### CANNULA-CLEANING BRUSH WITH WOOL TUFTS

A special feature of the Optibrush<sup>®</sup> Basic is the dense and approx. 1 cm wide wool tuft at the brush tip. This wool tuft, made of soft fabric fibres, surrounds the wire structure like a protective layer and thereby largely prevents damage or scratches to the sensitive material during clean-

ing. The wool tuft is highly absorbent and wipe-active, so that even tightly adhering secretions can be effectively absorbed and removed.

The brush should be bent into the appropriate shape before using it for the first time.

The Optibrush<sup>®</sup> Basic cannula-cleaning brush with wool tufts is available in different sizes, with a diameter of 6, 8, 10, 12 and 14 mm at the brush tip.

The packing unit contains 10 pieces.

Order information:	Optibrush® Basic cannula-cleaning brush with wool tufts, 6 mm, pack of 10	REF 31800-06
	<ul> <li>Optibrush<sup>®</sup> Basic cannula-cleaning brush with wool tufts, 8 mm, pack of 10</li> </ul>	REF 31800-08
	Optibrush® Basic cannula-cleaning brush with wool tufts, 10 mm, pack of 10	REF 31800-10
	Optibrush® Basic cannula-cleaning brush with wool tufts, 12 mm, pack of 10	REF 31800-12
	Optibrush <sup>®</sup> Basic cannula-cleaning brush with wool tufts, 14 mm, pack of 10	REF 31800-14

## FAHL® CLEANING SWABS FOR TRACHEOSTOMY TUBES/VOICE PROSTHESES



The cleaning swab is a flexible plastic stick, which has a foamlike, especially absorbent cap, made of polyurethane foam firmly attached to one end.

This product is especially well suited for the gentle cleaning of tracheostomy tubes made of soft polymer material or voice prostheses.

The cleaning swab is available in two versions, one with a bulbous cap "large", for cleaning cannulas, and a slim foam cap "small", for cleaning voice prostheses and tracheostomy tubes with a small diameter, such as tracheostomy tubes for children.

The cleaning swab is a product for single use only.

This product is supplied in hygienic, non-sterile packaging.



Cleaning swab for tracheostomy tubes, large

Order information:

FAHL® Cleaning swabs for tracheostomy tubes and voice prostheses, small, pack of 50
 FAHL® Cleaning swabs for tracheostomy tubes, large, pack of 50

CLEANING AND CA

**REF 31910** 

#### FAHL® STOMA OIL



Stoma oil is a colourless, neutral oil and serves as a lubricant for tracheostomy tubes. You should not use creams or other lubricants, as these could possibly damage the cannula material and irritate the mucous membranes unnecessarily.

Carefully rub a few drops of stoma oil onto the outer tube of your tracheostomy tube. You will notice that it is clearly easier and more comfortable to insert.

Stoma oil is also ideally suited as a care product for non-metal tracheostomy tubes. When using tracheostomy tubes with inner cannulas, stoma oil is wiped onto the outer surface of the dry inner cannula, after thorough cleaning. The lubricant film facilitates the assembling of the inner and outer cannulas and prevents them from sticking and damaging the material.

Stoma oil is harmless and has been tested for its compatibility.

The glass bottle has a dropper, which enables sparing dosage of the oil, so that the 100 ml bottle can last a long time.

Order information: > FAHL<sup>®</sup> Stoma oil, 100 ml

## **OPTIFLUID® STOMA OIL TOWEL**

# The Optifluid<sup>®</sup> stoma oil towel does not drip or fluff and guarantees hygienic lubrication of the cannula.

A dosage of 4 ml of the stoma oil is bound in a soft, skin-friendly nonwoven towel, approx.  $13.5 \times 20$  cm in size. This provides the optimum amount of stoma oil, in a practical way, and prevents overdoses.

The tracheostomy tube is rubbed with the towel, lubricating it. The resulting effect should, on the one hand, enable easier insertion/gliding of the tracheostomy tube into the surgically created opening, the tracheostoma. On the other hand, this type of application is recommendable for non-metal tracheostomy tubes, to avoid the outer and inner cannulas of sticking together after cleaning.

The Optifluid<sup>®</sup> stoma oil towel is in a hygienic and practical individual packaging and is intended for single use only.

This special dosage form makes the Optifluid<sup>®</sup> stoma oil towel ideal for travelling.



Order information: > Optifluid® Stoma oil wipe, (200 ml) pack of 50 REF 31550

**REF 31500** 

50 X 4 ML

## FAHL® TRACHEAL GAUZE COMPRESS



The tracheal gauze compress consists of an 8-layered, especially breathable non-woven fabric and helps in the care and cleaning of the tracheostoma. The gauze-compress enables gentle, hygienic and, above all, lint-free skin cleansing.

The tracheal gauze compress is especially suitable for coughing out tracheal secretions. The secretions can be quickly and reliably caught and wiped away. The gauze compress is also well suited for the lubrication of tracheostomy tubes with stoma oil. For reasons of hygiene, the compress should only be used once.

The tracheal gauze compress is non-sterile and available in two sizes. The packing unit contains 100 pieces.



Order information:

FAHL® Tracheal gauze compress, 8-fold, 10 x 10 cm,
pack of 100
FAHL® Tracheal gauze compress, 8-fold, 5 x 5 cm,
pack of 100

REF 30200 REF 30201

#### FAHL® TRACHEAL NON-WOVEN COMPRESS



Non-woven compresses, like the gauze compresses, helps in the care and cleaning of the tracheostoma. They consist of a 4-layered, soft and lint-free non-woven fabric, which is particularly absorbent and gentle to the skin.

The tracheal non-woven compress is supplied in non-sterile, hygienic packaging.

The packing unit contains 100 pieces.



Order information: FAHL® Tracheal non-woven compress, 4-fold, pack of 100

143

## TRACHEOSTOMA CLEANING AND CARE



Various products are also available for the cleaning and care of tracheostomas. These are, for example, special cleaning wipes, which are essential if using adhesive filter systems, for filtering, warming and humidifying the inspired air.

#### FAHL® STOMA CLEANING WIPES



The stoma cleaning wipe is a disposable wipe, which is soaked in a mild cleaning lotion, made of natural, herbal ingredients.

Stoma cleaning wipes are ideal for the cleaning and care of the sensitive skin around the tracheostoma. Excessive skin oils and dirt particles are gently removed from the skin with the soft and lint-free wipe. The remainders of skin adhesives can also be removed with this special cleaning wipe.

Stoma cleaning wipes are well suited for the preparatory care of the skin, when using aids such as Tracheostoma-Fix and adhesive filters and retaining plates, e.g., Trachinaze<sup>®</sup>. They are packaged individually and hygienically and therefore remain moist.

The stoma cleaning wipes are a useful and recommendable aid, especially on warm summer days and for use when travelling.

This item is supplied in a bag of 50.

Order information: FAHL® Stoma cleaning wipes, pack of 50

A-REINIGUNGSTU

REF 33200

#### FAHL® STOMA CLEANING WIPES IN DISPENSER

Our practical stoma cleansing wipes are also available in a dispenser box with 60 wipes, for home use.

The wipes can be removed easily and hygienically one by one from the dispenser. A lid prevents the wipes from drying out.

Order information: FAHL® Stoma cleaning wipes in dispenser box, container with 60 wipes

### **OPTICLEAR® ADHESIVE REMOVER**



Opticlear<sup>®</sup> is a special wipe for tracheostomised patients, to remove skin adhesives of all types. The non-woven cleaning wipe, soaked in an alcohol-based cleaning solution, is particularly large, moist and touch-proof. Remnants of adhesives are quickly and gently removed from the skin and absorbed. Opticlear<sup>®</sup> is therefore especially suitable for skin cleaning after the use of adhesive plates and filter retaining plates.

Opticlear<sup>®</sup> is intended for single and external use only.

Opticlear<sup>®</sup> is supplied in a pack of 50, with every wipe in individual, hygienic packaging.

### Order information:

Opticlear<sup>®</sup> adhesive remover, pack of 50 **REF 33500** 

### **OPTIGARD® SKIN PROTECTION FILM**



Optigard<sup>®</sup> is a special wipe for the preparatory skin care when using tape discs and retaining plates from filter systems for neck breathers, as well as skin adhesives of all types.

Optigard<sup>®</sup> helps to protect against skin irritations, which can be caused by skin adhesives.

The relevant area of skin is firstly cleaned as normal, and subsequently carefully wiped with the Optigard<sup>®</sup> special wipe. The skin is covered with a thin film, which dries after a few seconds. When changing a plate, the film does not necessarily need to be removed, but it can be washed off with cleaning lotion and water.

At the same time, Optigard<sup>®</sup> increases the adhesive power of the skin adhesive.

Optigard® is intended for single and external use only.

Optigard<sup>®</sup> is supplied in a packing unit of 50, with every wipe in individual, hygienic packaging.

145

# FAHL® ENCRUSTATION TWEEZERS



If you suffer from severe encrustation formation, the encrustation tweezers, made of robust stainless steel, can help you to care for your tracheostoma. The encrustations of tough secretions can be quickly and safely gripped and removed from the tracheostoma. The rounded tips of the encrustation tweezers enable gentle operation and minimise the risk of injury.

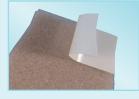
The encrustation tweezers are angled, so that you have a clear view of the tracheostoma, in front of the mirror.

However, discuss the exact handling with your physician before use in order to exclude any risk of injury.

### TRACHEOSTOMA PROTECTION















The tracheostoma reacts particularly sensitive to all outside influences. It is therefore important to consider the protection of the tracheostoma with special care.

Because, after a laryngectomy or tracheostomy, you no longer breathe through the mouth and nose, but through the tracheostoma, some of the body's natural protective functions are also lost.

Specifically, this refers to the humidification, warming and filtering of the inspired air. The lack of these protective mechanisms could damage your health. For example, a chilled trachea can often lead to damage of the mucous membranes in the tracheostoma. The mucous membranes perform such important tasks as the transport of fluids and the movement of foreign bodies out of the airways, into the upper tracheostoma area, where they can be coughed up. The drying out of the mucous membranes leads to irritations and increased secretion, partially with the formation of encrustations.

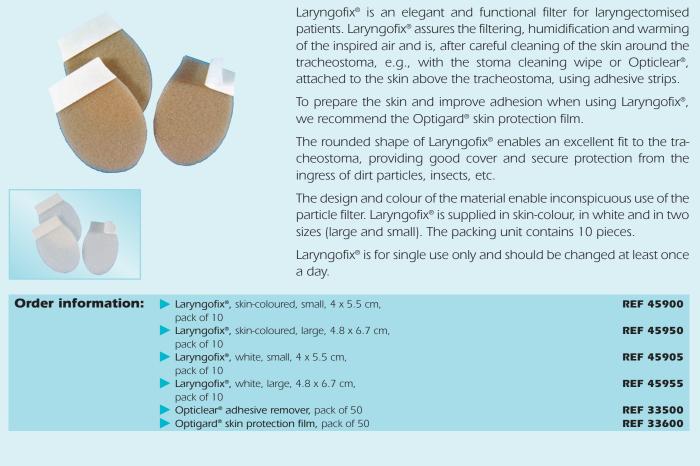
The tracheostoma protection aids replace the necessary protective mechanisms. On the one hand, they protect the tracheostoma from the cold and drying out; on the other hand, they prevent the ingress of dirt particles and catch leaking secretions.

Without a tracheostoma protection, the inspired air would enter the tracheostoma cold and unbraked. Specific protection items provide a barrier, reducing the speed of the airflow, warming and humidifying the air.

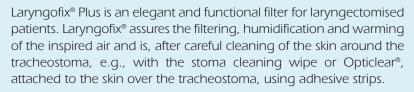
At the same time, tracheostoma protection items provide visual protection and with it, a certain degree of security.

Our tracheostoma protection aids combine aesthetics with comfort. Particularly our neckerchiefs and scarves are offered in fashionable, attractive designs. Please refer to our colour sample card for colours and patterns.

# **LARYNGOFIX®**



### LARYNGOFIX® PLUS



To prepare the skin and improve adhesion when using Laryngofix<sup>®</sup> Plus, we recommend the Optigard<sup>®</sup> skin protection film.

The skin-friendly medical adhesive strip enables daily use of Laryngofix<sup>®</sup> Plus. This is attached with two strips, in the upper and lower area, and ensures particularly stable fixing of the tracheostoma protection over the tracheostoma. Despite this, Laryngofix<sup>®</sup> Plus can still easily be loosened at the lower adhesive strip, in order to e.g., enable coughing.

The rounded shape of Laryngofix<sup>®</sup> Plus enables an excellent fit to the tracheostoma, providing good cover and secure protection from the ingress of dirt particles, insects, etc.

The design and colour of the skin-coloured material enable inconspicuous use of the particle filter. Laryngofix<sup>®</sup> Plus is supplied in two sizes (large and small). The packing unit contains 10 pieces.

Laryngofix<sup>®</sup> Plus is for single use only and should be changed at least once a day.

Order information:	Laryngofix <sup>®</sup> Plus, skin-coloured, small, 4 x 5.5 cm pack of 10	REF 45902
	<ul> <li>Laryngofix<sup>®</sup> Plus skin-coloured, large, 4.8 x 6.7 cm pack of 10</li> </ul>	REF 45952
	<ul> <li>Opticlear® adhesive remover, pack of 50</li> <li>Optigard® skin protection film, pack of 50</li> </ul>	REF 33500 REF 33600
		KEI 55000



148

# TRACHEOSTOMA-FIX®



Tracheostoma-Fix<sup>®</sup> is a popular tracheostoma protection made of foam, which, after careful cleaning of the tracheostoma with Opticlear<sup>®</sup> or the stoma cleaning wipe, is stuck over the neck opening. The breathable fabric ensures optimal filtering and humidification of the inspired air and is intended for single use only.

The skin-friendly medical adhesive strip enables daily use of the Tracheostoma-Fix<sup>®</sup>. It is also suitable for wearing under a stoma protection neckerchief.

Please note that the Tracheostoma-Fix<sup>®</sup> can only be worn with restrictions over a tracheostomy tube.

To prepare the skin and improve adhesion when using Tracheostoma-Fix<sup>®</sup>, we recommend the Optigard<sup>®</sup> skin protection film.

Tracheostoma-Fix<sup>®</sup> is available in skin-colour, white and in five different sizes. A version with a thickness of 5 mm is also available. The packing unit contains 10 pieces.



<b>Order information:</b>	Tracheostoma-Fix®, skin-coloured, 6 x 6.5 cm, pack of 10	<b>REF 45000</b>
	Tracheostoma-Fix <sup>®</sup> , skin-coloured, 7 x 7.5 cm, pack of 10	REF 45100
	Tracheostoma-Fix <sup>®</sup> , skin-coloured, 7 x 7.5 cm, 5 mm thick, pack of 10	REF 45101
	Tracheostoma-Fix <sup>®</sup> , white, 5.5 x 6 cm, pack of 10	REF 45200
	Tracheostoma-Fix®, white, 7 x 7 cm, pack of 10	REF 45300
	Tracheostoma-Fix <sup>®</sup> , skin-coloured, 5.5 x 6 cm, pack of 10	REF 45400
	Tracheostoma-Fix®, skin-coloured, 7 x 7 cm, pack of 10	REF 45500
	<b>Tracheostoma-Fix® mini</b> , skin-coloured, 3.8 x 6.3 cm, pack of 10	REF 45310
	Opticlear® adhesive remover, pack of 50	REF 33500
	Optigard <sup>®</sup> skin protection film, pack of 50	REF 33600

### **TRACHEOSTOMA-FIX® PLUS**



Tracheostoma-Fix® Plus is a tracheostoma protection, which, after careful cleaning of the tracheostoma with Opticlear® or the stoma cleaning wipe, is stuck over the neck opening. The 3 mm thick fabric is breathable and very kind to the skin. Tracheostoma-Fix® Plus ensures optimal filtering and humidification of the inspired air and is intended for single use only.

The skin-friendly medical adhesive strip enables daily use of Tracheostoma-Fix® Plus. This is attached with two horizontal strips, in the upper and lower area, and ensures particularly stable fixing of the tracheostoma protection over the tracheostoma. Despite this, Tracheostoma-Fix® Plus can still easily be loosened at the lower adhesive strip, in order to e.g., enable coughing.

Please note that Tracheostoma-Fix<sup>®</sup> Plus can only be worn with restrictions over a tracheostomy tube. Tracheostoma-Fix<sup>®</sup> Plus is supplied in the sizes 7 x 7 cm and 5.5 x 6 cm, skin-coloured. The packing unit contains 10 pieces.

Order information:	Tracheostoma-Fix <sup>®</sup> Plus, skin-coloured, 7 x 7 cm, pack of 10	REF 45510
	Tracheostoma-Fix <sup>®</sup> Plus, skin-coloured, 5.5 x 6 cm, pack of 10	REF 45505
	Opticlear® adhesive remover, pack of 50	REF 33500
	Optigard <sup>®</sup> skin protection film, pack of 50	REF 33600

### **DELTANEX® BIB**







The approx. 12 x 12.5 cm large Deltanex<sup>®</sup> bib is a multi-functional product for neck breathers.

It combines tracheostoma protection and filter system in an ideal way and is particularly suitable for anyone who does not tolerate adhesive filters, e.g., Tracheostoma-Fix, on the skin.

The Deltanex<sup>®</sup> bib is worn over the tracheostoma and attached around the neck with two neck straps, made of cotton. The Deltanex<sup>®</sup> bib contains a foam insert, which filters, warms and humidifies the inspired air. The foam insert is made of a special, skinfriendly and tested material called Hydrolox<sup>®</sup>. Dust, dirt, insects and other foreign bodies are filtered and effectively kept away from the tracheostoma.

The foam insert is surrounded by a net cover. This cover, made of 100% cotton, is comfortably soft and absorbent. It offers additional protection against wind and cold and keeps the tracheostoma warm. The absorbent material reliably absorbs moisture, keeping the skin around the tracheostoma dry. The special design of the bib ensures that breathing is not impaired, even when wet.

The materials used have been tested for their mode of action and skin compatibility and guarantee great stability, even with multiple use.

The Deltanex<sup>®</sup> bib reduces the risk of breathing difficulties, caused by cold, dry and unfiltered air.

The neck straps are attached to the adherent strip of the bib and can be used repeatedly.

The ends of the neck straps have elements of adherent, with which the bib is closed. Due to its particularly elastic material, the Deltanex<sup>®</sup> bib can be adjusted to different neck sizes. The special system, with bib and separate neck straps, makes the handling considerably easier. The user can first wrap the neck strap loosely around the neck and then pull the fastener to the front, in order to close the adherent fastener. The bib can then be attached from the front, by simply pressing the adherent strip onto the neck strap. This avoids the laborious fastening of the bib behind the head. The fastening system provides considerable relief, particularly for users who, due to surgery, suffer from limited freedom of movement in the shoulder and arm region.

The Deltanex<sup>®</sup> bib is supplied in a pack of 10. Two neck straps are also included in the scope of delivery. These can also be ordered separately.

Order information:

 Deltanex<sup>®</sup> bib, 12 x 12.5 cm, pack of 10 and 2 neck straps
 Deltanex<sup>®</sup> neck straps,

pack of 2

REF 41900 REF 41910

### **BUCHANAN® BIB**



The Buchanan<sup>®</sup> bib is a protective bib for neck breathers. It is similar in design and function to the Deltanex<sup>®</sup> bib. The special foam insert ensures effective filtering, warming and humidification of the inspired air.

The difference to the Deltanex<sup>®</sup> bib is in the size and fastening method. The Buchanan<sup>®</sup> bib is larger than the Deltanex<sup>®</sup> bib and is attached using fabric straps that are wrapped around the neck and tied in a knot. The neck straps are extra long and therefore suitable for every neck size.

The Buchanan<sup>®</sup> bib reduces the risk of breathing difficulties, caused by cold, dry and unfiltered air. It is washable and, for reasons of hygiene, should be changed daily. The Buchanan<sup>®</sup> bib is available in two sizes:

- Large 21 x 19 cm
- Small 15 x 12 cm

The packing unit contains 10 pieces, with each bib in individual, hygienic packaging.



Buchanan® bib, small

Order information:	<ul> <li>Buchanan<sup>®</sup> bib, large, 21 x 19 cm, pack of 10</li> <li>Buchanan<sup>®</sup> bib, small, 15 x 12 cm, pack of 10</li> </ul>	REF 41700 REF 41800

# FAHL® STOMA PROTECTION NECKERCHIEF

#### WITH ADHERENT FASTENER



The stoma protection neckerchief is tied around the neck using an approx. 1 cm wide cotton strap. The neckerchief lies over the tracheostoma. The centrally incorporated insert, made of multiple layers of fine mesh fabric, warms, humidifies and, at the same time, filters the air.

The stoma protection neckerchief prevents the ingress of foreign bodies, e.g., dust and insects, into the tracheostoma and reliably catches escaping tracheal secretions.

The stoma protection neckerchief is equipped with an adjustment clip on the fixing strap, which enables the adjustment to different neck sizes. It is attached using an adherent fastener.

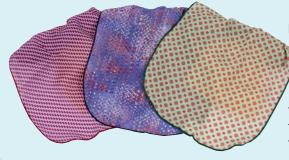
The stoma protection neckerchief is available in many colours and patterns, matching your wardrobe. Stoma protection neckerchiefs are available in different fabric qualities, from normal to highly air-permeable. Please note the information on our colour sample card.

Stoma protection neckerchiefs are washable and do not lose their shape. For reasons of hygiene, they should be changed daily.



### FAHL<sup>®</sup> STOMA PROTECTION SCARF

#### WITH ADHERENT FASTENER



The tracheostoma protection scarf combines aesthetics with comfort.

It is tied around the neck like a neckerchief and fastened at the front, under the upper fabric part, with an adherent fastener.

The adherent fastener can be shortened to the appropriate length, using scissors, if it is too long.

The neckerchief's fabric flap contains an insert made of Diolen tulle. This insert is specially folded and lies directly over the tracheostoma. The Diolen layer warms, humidifies and, at the same time, filters the air.

Once you have adjusted the stoma protection scarf to your neck size, simply turn the upper fabric part over the adherent strip. The fastener is then invisible and the stoma protection scarf can, especially at the back of the neck, be worn comfortably; without causing excessive irritation to the skin.

The stoma protection scarf is available in many colours and patterns, matching your wardrobe. It is also available in different fabric qualities, from high air-permeability to standard air-permeability. For further information, please refer to our colour sample card for tracheostoma protection.





# FAHL® STOMA PROTECTION NECKERCHIEFS/SCARVES EXCERPT FROM COLOUR SAMPLE CARD (SELECTION)

	-			- <b>I</b>	
S/T 1		S/T 2		S/T 3	
▲ white	IV	▲ black	IV	mottled silver-grey	IV
S/T 4		S/T 9		S/T 10	
▲ beige	IV	▲ dark blue	IV	▲ light blue	IV
S/T 15		S/T 16		S/T 18	
<ul> <li>dark blue with white polka dots</li> </ul>	I	black with white polka dots	111	Bordeaux red	I
S/T 25		S/Т 32		S/T 34	
▲ dark brown	0	▲ lilac	IV	▲ mid-blue	IV
S/T 41		S/T 42		S/T 43	
▲ light blue	IV	▲ dark blue denim-look	IV	▲ Bordeaux	IV
S/T 44		S/T 45		S/T 46	
▲ light blue denim-look	IV	▲ cream	IV	▲ purple	IV
S/T 47		S/T 48		S/T 49	
▲ dove blue	IV	▲ orange	IV	▲ pink	IV
S/T 50		<u>S/T51</u>		S/T52	
▲ light yellow	IV	A apricot	IV	▲ sand-beige	IV
S/T 53		<u>S/T 54</u>		<u>S/T55</u>	
▲ black denim-look	IV	▲ mint	IV	▲ green-beige	IV
S/T 56		S/T 57		S/T 58	
▲ white with structure	IV	▲ vanilla	IV	▲ maize yellow	IV
S/T 59		S/T 60		S/T 61	
▲ praline	IV	▲ olive brown	IV	▲ dark lilac	IV
S/T 62		<u>S/T 63</u>		S/T 64	
▲ spring green	IV	▲ light pink	IV	▲ rust brown	IV

Further information can also be found on the colour sample card

### FAHL® STOMA PROTECTION BIB

#### 3, 5, 8 AND 12 LAYERS



The stoma protection bib covers and protects the tracheostoma of neck breathers. The multiple layers of fine mash fabric (Diolen tulle)

of the particularly air-permeable bib ensure that the inspired air is warmed, humidified and, at the same time, filtered.

Stoma protection bibs reliably absorb escaping tracheal secretions and provide effective protection from the ingress of foreign bodies, e.g., dust and insects.

The stoma protection bib is available in the following thick-

3-layers, 5-layers, 8-layers and 12-layers.

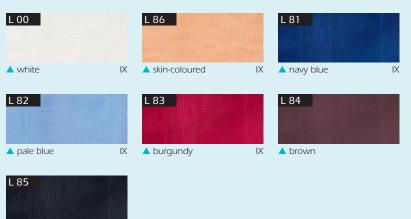
This enables optimal coordination with each seasonal climate.

The stoma protection bib is fastened with an adherent fastener, sewn onto the fixing strap.

An additional adjustment element enables the neck width to be individually set to a size between 34 cm and 46 cm. This simplifies handling and provides a comfortable fit. The fastener is located at the side of the bib and is therefore easily accessible, at any time.

Stoma protection bibs are washable and can be used numerous times. For reasons of hygiene, they should be changed daily.

When ordering the stoma protection bib, please also specify the corresponding colour no. for stoma protection bibs (see also: colour sample card). If no colour is specified, we will supply the stoma protection bib in white.



Extract from colour sample card (selection):

IX



#### Order information: FAHL® Stoma protection bib, 3-layered **REF 40100** FAHL® Stoma protection bib, 5-layered **REF 40200 REF 40300** FAHL® Stoma protection bib, 8-layered FAHL® Stoma protection bib, 12-layered **REF 40400** Please additionally specify colour no. when ordering (see pullout/colour sample card)!

black

# FEMTEX® STOMA PROTECTION NECKERCHIEF



The Femtex<sup>®</sup> stoma protection neckerchief is designed to cover the tracheostoma and offers a relatively small and attractive stoma cover, which is particularly advantageous for women.

At the same time, the Femtex<sup>®</sup> stoma protection neckerchief fulfils all the requirements of good stoma protection, such as filtering, humidifying and warming the inspired air.

The air no longer streams unbraked into the tracheostoma, but reaches the trachea in a conditioned state and at a slower speed. The ingress of foreign bodies, such as dust and insects, is effectively prevented.

The Femtex<sup>®</sup> stoma protection neckerchief has an insert, made of multiple layers of fine mesh fabric, which effectively absorbs and binds tracheal secretions.

The Femtex<sup>®</sup> stoma protection neckerchief consists throughout of a soft, breathable fabric. The neckerchief is produced in a format of 8 x 14 cm and is attractively rounded.

The neck straps are equipped with an adjustment clip, which allows adjustment to neck sizes of approx. 37 to 42 cm. There are two plastic hooks at the ends of the neck straps, which can be locked together and thereby enable quick fastening.

The Femtex<sup>®</sup> stoma protection neckerchief is available in various colours and patterns.

The Femtex® stoma protection neckerchief is washable and suitable for multiple use. This product is supplied in hygienic, individual packaging.

Order information:

Femtex® stoma protection neckerchief Please additionally specify colour no. when ordering (see colour sample card)! REF 42001

### FAHL® STOMA PROTECTION NECKERCHIEF EASY IN TRIANGULAR SHAPE FOR KNOTTING



The stoma protection neckerchief Easy is intended to cover the tracheostoma and prevents the air entering the tracheostoma unprotected. The ingress of dust, insects, etc. is reliably prevented. The Easy neckerchief contains an insert, made of multiple layers of fine mesh fabric, which filters, warms and humidifies the inspired air. At the same time, escaping tracheal secretions are reliably absorbed.

The stoma protection neckerchief Easy is cut in the shape of a fashionable triangular neckerchief and is available in various colours and patterns. The neckerchief is fastened by knotting the tips at the back of the neck.

The stoma protection neckerchief Easy is washable at 30 °C and suitable for multiple use. The product is supplied in hygienic individual packaging.

 Order information:
 FAHL® Stoma protection neckerchief Easy
 RE

 Please additionally specify colour no. when ordering (see colour sample card)!
 RE

# FAHL® KNITTED STOMA PROTECTION

#### TURTLENECK



The stoma protection turtleneck, made of soft cotton yarn, is worn over the tracheostoma. The stoma protection turtleneck is available in many colours, matching your wardrobe. The incorporated insert, made of multiple layers of fine mesh fabric, warms, humidifies and, at the same time, filters the air. The stoma protection turtleneck prevents the ingress of foreign bodies, e.g., dust and insects, into the tracheostoma and reliably catches escaping tracheal secretions.

The stoma protection turtleneck is closed with an adherent fastener, which must still be sewn to the ends, according to your neck size. The elastic cuff ensures a good fit and makes it comfortable to wear.

The warming knitted material is particularly suitable for wearing in cold weather and protects the tracheostoma from chills.

The knitted stoma protection turtleneck is available in many colours, matching your wardrobe. Please select your desired colour from the picture opposite or from the colour sample card.

Alternatively, the stoma protection turtleneck is also available in a somewhat lighter version, made of skin-friendly, smooth cotton jersey (see REF 43001).

Order information: 
FAHL® Stoma protection turtleneck
REF 4
Please additionally specify colour no. when ordering (see pullout/colour sample card)!

### TRACHEOTEX® KNITTED STOMA PROTECTION

#### TURTLENECK

**REF 43000** 



The Tracheotex<sup>®</sup> stoma protection turtleneck provides a fabric protection for neck breathers. The Tracheotex<sup>®</sup> turtleneck consists of a knitted bib with a sewn-on standing collar. A protective insert, made of Diolen tulle and specially folded, is sewn into the front of the turtleneck. This protective insert, which lies over the tracheostoma, filters, humidifies and warms the inspired air. Dust, dirt, insects and other foreign bodies are effectively kept away from the tracheostoma.

The protective insert, made of Diolen tulle, catches any escaping secretions. The coarsely woven structure of the protection guarantees sufficient air supply at all times.

The advantage of the Tracheotex<sup>®</sup> turtleneck, compared to conventional protective turtlenecks, is the circular, elastic round neck, which makes a fastener system unnecessary. The elasticity of the Tracheotex® turtleneck is assured by the use of especially stretchy cotton yarn and elastic threads. An elastic band, additionally sewn into the standing collar, ensures great elasticity, and thereby easy pulling over the head and adjustment to different neck sizes. At the same time, this guarantees a close fit to the neck. The soft, knitted fabric makes it comfortable to wear and prevents chafing, as there are no points of friction. The Tracheotex<sup>®</sup> turtleneck is designed so that the knitted bib extends to the shoulder and back area and is thereby able to find grip under a shirt or jacket. At the same time, this prevents slipping, so that the tracheostoma is optimally protected at all times. Alternatively, the Tracheotex<sup>®</sup> stoma protection turtleneck, made of light cotton jersey, is also available (see REF 43301). The Tracheotex® turtleneck is available in many colours, matching your wardrobe. Please select your desired colour from the picture below or from the colour sample card.

# FAHL® STOMA PROTECTION / TRACHEOTEX® KNITTED STOMA PROTECTION TURTLENECK EXTRACT FROM COLOUR SAMPLE CARD (SELECTION)

R 50		R 51		R 54	
▲ white	III	▲ off-white	III	▲ salmon	
R 55		R 56		R 58	
		The second s			
▲ ochre yellow	III	▲ light grey	III	A dark brown	III
R 60		R 61		R 62	
		· · · · · · · · · · · · · · · · · · ·		100000000000000000	
▲ cobalt blue		▲ navy		▲ black	
	00.50				
R 63		R 64		R 65	
sand	Ш	▲ light yellow	Ш	▲ orange-red	III
R 67		R 68	al and	R 70	
▲ mottled khaki		▲ mottled beige		▲ light blue	
		Thould beige			
R 71	and the second se	R 72		R 74	
					T
▲ mottled anthracite		▲ mottled blue-grey		▲ turquoise	

Further information can also be found on the colour sample card

# FAHL® COTTON JERSEY STOMA PROTECTION



The stoma protection turtleneck, made of smooth cotton jersey, is especially air-permeable and kind to the skin. Heavy sweating is avoided. The stoma protection turtleneck, made of smooth cotton jersey, is pleasantly light and does not show up under clothing.

The stoma protection turtleneck is worn over the tracheostoma. The stoma protection turtleneck is available in many colours, matching your wardrobe. The incorporated insert, made of multiple layers of fine mesh fabric, warms, humidifies and, at the same time, filters the air. The stoma protection turtleneck prevents the ingress of foreign bodies, e.g., dust and insects, into the tracheostoma and reliably catches escaping tracheal secretions.

The stoma protection turtleneck is closed with an adherent fastener, which must still be sewn to the ends, according to your neck size. The neck straps themselves are elastic, which makes them comfortable to wear and ensures a good fit.

 Order information:
 FAHL® Stoma protection turtleneck made of cotton jersey
 REF 43001

 Please additionally specify colour no. when ordering (see pullout/colour sample card)!

### **TRACHEOTEX® COTTON JERSEY STOMA PROTECTION**

#### TURTLENECK



The Tracheotex<sup>®</sup> stoma protection turtleneck, made of soft cotton jersey, is especially air-permeable and kind to the skin. Heavy sweating is avoided.

The Tracheotex<sup>®</sup> stoma protection turtleneck, made of cotton jersey, is pleasantly light and does not show up under clothing.

The standing collar is elastic throughout and therefore, extremely stretchy. This provides a comfortable fit and adjusts to different neck sizes.

Because of the special and proven design of the Tracheotex® protection turtleneck, there is no need for a fastener system. The turtleneck is simply pulled over the head and reliably fulfils the functions of filtering, humidifying and warming the inspired air.

The Tracheotex<sup>®</sup> stoma protection turtleneck, made of cotton jersey, is available in various colours. Please note the information on our current colour sample card.



### FAHL® STOMA PROTECTION / TRACHEOTEX® STOMA PROTECTION TURTLENECK MADE OF COTTON JERSEY EXTRACT FROM COLOUR SAMPLE CARD (SELECTION)

R 900		R 901		R 902	
▲ white	11	▲ natural	"	▲ light blue	
R 903		R 904		R 905	
▲ royal blue	11	▲ navy		▲ black	
R 906		R 907		<u>R 908</u>	
▲ wine red	11	▲ olive green		▲ light yellow	II
R 909		R 910		R 911	
▲ pink	II	▲ orange	II	▲ mottled grey	
R 912		R 913		R 914	
▲ red	Ш	▲ light blue	Ш	▲ dark brown	Ш



TRACHEOSTOMA PROTECTION

# THE FUNCTION OF HME FILTER CASSETTES





The HME (Heat-Moisture-Exchanger) filter cassettes, for heat and moisture exchange, condition the air, improve the quality of speech and are simple to use, independent of whether the patients use a voice prosthesis or not.

A tracheostomy leads to a loss of mouth/nose breathing, this means that the filtering, warming and humidification of the air has to happen in a different way. To prevent irritation of the airways, due to dry air, dust or harmful substances contained in the air, a filter is required. After surgery, tracheostomised/laryngectomised patients frequently suffer from increased production of mucous and coughing. These symptoms can impair speech rehabilitation and breathing. The regular use of HME filter cassettes with Heat and Moisture Exchangers alleviates the symptoms and increases the quality of life.

#### Comfortable stoma closure

The valve of the HME filter cassettes facilitates speaking for laryngectomised patients with a voice prosthesis. The stoma is closed for speaking with the simple touch of a finger, even through clothing. As soon as the finger is removed, the valve automatically opens.

#### Inconspicuous and easy to operate

Thanks to their low profile and operation through the clothing, the HME filter cassettes are very inconspicuous. The filter cassette is fixed exactly over the tracheostoma, in a special adhesive plate either with holder, or in a tracheostomy tube with a 22 mm combi-adapter. The HME filter cassette securely engages with the holder/adapter, but can be quickly removed at any time. This facilitates coughing and the care of the tracheostoma. The design of the filter cassette prevents secretions from reaching the patient's fingers or clothing.

# TRACHEOSTOMA PROTECTION

### LARYVOX<sup>®</sup> O<sub>2</sub> HME FILTER CASSETTE

The Laryvox<sup>®</sup> O<sub>2</sub> HME filter has laterally fitted an oxygen port (ISO port plug-in 5mm) enabling the supply of oxygen when using an HME. The Laryvox<sup>®</sup> O<sub>2</sub> HME filter is designed for the adaptation to 15 mm connectors or 22 mm connector rings, e.g., Duravent<sup>®</sup>/Duracuff<sup>®</sup>/ Duratwix<sup>®</sup> 15 mm connector or 22 mm combi-adapter or base plates/ adhesive plates.

The filter cassette has a foam filter, which is integrated into a sturdy plastic housing.

Laryvox<sup>®</sup>  $O_2$  HME filter cassettes reduce the formation of viscous secretions in the trachea and infections; they filter the air and thereby prevent the ingress of particles into the patient's airways.

The filter cassette can be easily and quickly closed with a finger, and enables laryngectomised patients, with a voice prosthesis, to speak.

Laryvox°  $\mathrm{O}_2$  is available with an unobtrusive appearance, with a skin-coloured lid.

REF 49802

# LARYVOX® HME FILTER CASSETTE



The Laryvox<sup>®</sup> HME filter cassette has a foam filter, which is integrated into a sturdy plastic housing.

The plastic housing is compatible with all common 22 mm combiadapter systems (such as Duravent<sup>®</sup> KOMBI) or adhesive plates with holder, for sticking over the tracheostoma.

Laryvox<sup>®</sup> HME filter cassettes reduce the formation of viscous secretions in the trachea and infections; they filter the air and thereby prevent the ingress of particles into the patient's airways.

The filter cassette can be easily and quickly closed with a finger, and enables laryngectomised patients, with a voice prosthesis, to speak.

Laryvox<sup>®</sup> is available with an unobtrusive appearance, with a skincoloured lid.

**Order information:** > Laryvox<sup>®</sup>, HME filter cassette, skin-coloured, pack of 30

**REF 49800** 

### **BLOM-SINGER® HME CARTRIDGE**





The Blom-Singer<sup>®</sup> HME cartridge consists of a transparent plastic housing, with integrated HME filter and Easy Touch<sup>™</sup> Speech Button. Also integrated into the housing is the Mucus Shield Occluder, which is designed to prevent secretions from coming into contact with the foam of the HME filter. It also prevents secretions from reaching the patient's fingers or clothing.

Thanks to their low profile and operation through the clothing, the HME filter cassette is very inconspicuous. The simple handling of the filter cassette facilitates the mounting exactly over the stoma, coughing and the care of the stoma. The HME filter cassette can simply be attached to the tracheostoma, with the aid of any base plate or tracheostomy tube with a 22 mm combi-adapter. The Blom-Singer® HME cartridge itself can be easily removed from the 22 mm retaining ring at any time, and facilitates the exchange for the patient.

The Blom-Singer<sup>®</sup> HME system enables laryngectomised patients, who have been surgically provided with a voice prosthesis (shunt valve), to speak.

The Easy Touch<sup>™</sup> Speech Button, when closed, enables speech; when open, it enables breathing. With light finger pressure on the Easy Touch<sup>™</sup> Speech Button, the patient is able to switch between the two positions; the valve even reacts if the patient does not press exactly on the centre of the housing, facilitating day-to-day use.

A special feature is the additional lateral ventilation slits in the housing, which enable an optimal air supply, even when covered by clothing/ tracheostoma protection.

In combination with the special foam filter insert, the Blom-Singer® HME filter cassette is, at the same time, a Heat and Moisture Exchanger. The conditioned, i.e. warmed, humidified and filtered inspired air has a positive effect on the mucous membranes of the tracheostoma. The filter increases the respiratory resistance and thereby supports the function of the lungs. Secretion production, coughing and encrustations are reduced.

#### **Order information:**

▶ Blom-Singer® HME System Heat and Moisture Exchange cartridge (BE 1055EZ), pack of 30
 ▶ Blom-Singer® HME filter cassettes 7-day trial kit (BE 1055EZS), with 7 Blom-Singer®
 REF 44556
 TruSeal™ adhesive housing standard and 7 HME cartridges

## BLOM-SINGER<sup>®</sup> TRUSEAL<sup>™</sup> ADHESIVE HOUSING



The transparent adhesive housing (TruSeal™) consist of a thin, adhesive, non-woven cloth with a centrally integrated plastic holder, with a 22 mm opening and are applied over the tracheostoma like a selfadhesive tape disc. The plate has been perforated, for better breathability.

The Blom-Singer<sup>®</sup> TruSeal<sup>™</sup> adhesive housing, in the standard version, offers an oval shape with one-sided release aid.

The compact, self-adhesive Blom-Singer® TruSeal™ adhesive housing can be combined/fixed with the following products: e.g., shower guard, smelling aid, tracheostoma valves and HME systems.

The Blom-Singer<sup>®</sup> TruSeal<sup>™</sup> adhesive housing are supplied in individual, hygienic packaging. The packing unit contains 30 pieces.

Order information: ► Blom-Singer® TruSeal<sup>™</sup> adhesive housing, standard, pack of 30

**REF 44800** 

### BLOM-SINGER<sup>®</sup> TRUSEAL<sup>™</sup> CONTOUR ADHESIVE HOUSING



The transparent adhesive housing (TruSeal™) consist of a thin, adhesive, non-woven cloth with a centrally integrated plastic holder, with a 22 mm opening and are applied over the tracheostoma like a selfadhesive plate. The plate is perforated, for better breathability. The different versions enable the base plates to cover tracheostomas of various sizes.

The Blom-Singer<sup>®</sup> TruSeal<sup>™</sup> Contour adhesive housing are especially flexible and light to wear, with the advantage that the base plate can hereby adapt even better to the skin surface/anatomy.

The Blom-Singer<sup>®</sup> adhesive housing are offered as disposable items and are available in various shapes:

- Round (round shape)
- Oval (round base shape with release aid on two sides)
- Standard (oval shape with one-sided release aid)

The compact, self-adhesive Blom-Singer® TruSeal™ Contour adhesive housing can be combined/fixed with the following products: e.g., shower guard, smelling aid, tracheostoma valves and HME systems.

The Blom-Singer<sup>®</sup> TruSeal<sup>™</sup> Contour adhesive housing are supplied in individual, hygienic packaging. The packing unit contains 30 pieces.

Order information:	Blom-Singer <sup>®</sup> TruSeal <sup>™</sup> contour adhesive housing, round, pack of 30	REF 44801
	Blom-Singer® TruSeal™ contour adhesive housing, oval, pack of 30	REF 44802
	Blom-Singer® TruSeal™ contour adhesive housing, standard, pack of 30	REF 44803

### **BLOM-SINGER® HUMIDIFILTER STARTER KIT**

The Blom-Singer<sup>®</sup> HumidiFilter is a Heat and Moisture Exchanger (HME) for laryngectomised patients.

This filter system consists of a transparent adhesive housing (TruSeal™), made of thin, flexible plastic, which is applied over the tracheostoma like a self-adhesive plate, as well as a filter holder and exchangeable foam filters. The adhesive housing is generously sized and covers the breathing opening well. The filter holder is attached centrally in the adhesive housing's attachment ring and can be used multiply.

> The filter holder creates a flexible system, which enables the use of other aids, e.g., the tracheostoma valve and the Blom-Singer<sup>®</sup> shower guard.

The foam filter is inserted into the filter holder and ensures the humidification, warming and filtering of

the inspired air. At the same time, the air moisture is kept back, so that permanent humidification of the trachea is possible. This prevents the mucous membranes of the trachea from drying out and lowers the susceptibility to infections.

Blom-Singer<sup>®</sup> TruSeal<sup>™</sup> adhesive housing and HumidiFilter foam filter





HumidiFilter Blom-Singer® Filter holder

#### Scope of Delivery HumidiFilter Blom-Singer<sup>®</sup> starter kit

- 1 pack Blom-Singer<sup>®</sup> TruSeal<sup>™</sup> adhesive housing, self-adhesive (7 pieces)
- 1 HumidiFilter filter holder

Or

1 pack HumidFilter foam filter (7 pieces)

rder information:	<ul> <li>Blom-Singer<sup>®</sup> HumidiFilter starter kit</li> <li>Blom-Singer<sup>®</sup> HumidiFilter filter holder, single</li> <li>Blom-Singer<sup>®</sup> HumidiFilter foam filter, pack of 30</li> </ul>	REF 44500 REF 44600 REF 44700
	▶ Blom-Singer® TruSeal™ adhesive housing standard, pack of 30	REF 44800

163

# FAHL® SEALING PLUG FOR ADHESIVE PLATES/BASE PLATES



The sealing plug for adhesive plates/base plates is required when tracheostomised patients, with retained larynx, are to be weaned off their tracheostomy tubes.

With the aid of the sealing plug, the air supply through the tracheostoma is blocked, under medical supervision, for a certain period. The patient is required to breathe naturally through the nose/mouth, for this period of time. Because natural breathing is fairly strenuous after a tracheostomy, the patient must become accustomed to normal breathing again, step-by-step.

The sealing plug for adhesive plates/base plates helps by enabling precise and controlled blockage when using adhesive plates/base plates with 22 mm combi-adapters.

REF 48910

### FAHL® ADAPTER FOR BASE PLATES

The adapter for base plates enables the attachment of special aids with 15 mm connector on a base plate (adhesive housing) or a KOMBI tracheostomy tube with a 22 mm combi-adapter.

This enables the use of, e.g., HMEs, without having to wear a tracheostomy tube with 15-mm connector.

The adapter for base plates is supplied in individual, non-sterile packaging.

# HEAT AND MOISTURE EXCHANGER (HME)









### **HUMIDOTRACH®**



The HME is used for the optimal conditioning of the inspired air. It is attached to a tracheostomy tube with a 15 mm connector. This humidifies, warms and, at the same time, filters the inspired air. This prevents, as far as possible, the formation of encrustations.

Regular use of the HME helps during heavy secretion production, as the humidification of the mucous membranes in the trachea reduces the production of secretions.

During the first period of use, the HME must be exchanged several times a day, depending on the secretion production. After a longer period of use, in which the HME was regularly used, the production of secretions will even out to a low level. Then, the HMEs only need to be changed once per day.

We supply HMEs in a variety of versions, with or without overpressure valve, with or without oxygen supply ports, as well as with paper or foam filter.

Special HMEs for children and infants are also available. Please also refer to the information in the chapter Airway Management Devices for children.

#### HME WITH OVERPRESSURE VALVE

**REF 46450** 

REF 46450-30 REF 46320

This Heat and Moisture Exchanger for tracheostomised patients has a foam filter, which is integrated into a sturdy plastic housing. The plastic housing is designed in a grid shape, to enable the greatest amount of air to enter. HumidoTrach<sup>®</sup> is equipped with a central, standardised opening, which enables the attachment onto the 15-mm connector of the tracheostomy tube. The HME filters, warms and humidifies the inspired air.

In addition, the lid of the housing contains an overpressure valve. This enables the coughing out of secretions, even without removing the HME.

A port on the side of the HumidoTrach<sup>®</sup> HME housing enables the connection to an oxygen supply.

A special oxygen connection tube, for the connection of an oxygen device, is available as a special accessory. This connection tube has a special inner profile, to prevent kinking of the tube during oxygen supply.

HumidoTrach® is a disposable product and should be exchanged every 24 hours, at the latest.

HumidoTrach<sup>®</sup> is supplied in individual hygienic packaging, in a box of 30 or 50.

### Order information:

HumidoTrach<sup>®</sup>, HME, pack of 50
 HumidoTrach<sup>®</sup>, HME, pack of 30
 FAHL<sup>®</sup> Oxygen connection tube, for HME, with inner profile to prevent tube deformation, CH 14, 200 cm long, sterile, pack of 50

TRACH

# **HUMIDOTWIN®**

#### HME WITH OVERPRESSURE VALVE



The HumidoTwin<sup>®</sup> is an HME (Heat and Moisture Exchanger) with filter function, for spontaneously breathing patients. It filters, warms and humidifies the inspired air.

The use of an HME reduces the drying out of the mucous membranes in the tracheostoma and regulates the production of secretions, which prevents encrustations.

The housing contains an open-pored polyurethane sponge with hygroscopic characteristics. The HumidoTwin<sup>®</sup> is very compact, unobtrusive and light, and is very comfortable to wear. The HumidoTwin<sup>®</sup> HME's functional multi-adapter has both a standardised, central opening for the attachment onto a tracheostomy tube with 15 mm connector, and a 22 mm connector ring. This makes HumidoTwin<sup>®</sup> perfectly suited for use with Duravent<sup>®</sup> or Duratwix<sup>®</sup> tracheostomy tubes, as well as other tube systems. The cover element of the HumidoTwin<sup>®</sup> is also equipped with a safety-overpressure valve, with star-shaped slits, so that coughing does not cause problems. The advantages of the HumidoTwin<sup>®</sup> at a glance:

compact design

- very light, only 1.9 g
- > multi-adapter for connection to 15 mm and 22 mm systems
- > overpressure valve
- easy operation

The HumidoTwin<sup>®</sup> HME is supplied in individual, hygienic packaging, in a packing unit of 50 pieces. The HumidoTwin<sup>®</sup> HME is intended for single use only and should be replaced after 24 hours, at the latest.

The use in combination with additional humidification or nebulising through inhalation devices is not recommended!

Order information: HumidoTwin®, HME, pack of 50

REF 46460

# TRACHEOSTOMA PROTECTION

# HUMIDOSTOM<sup>®</sup> JUNIOR

#### HME FOR CHILDREN

Humidostom<sup>®</sup> Junior is a Heat and Moisture Exchanger, especially for children. They help to filter, warm and humidify the inspired air. The Humidostom<sup>®</sup> Junior HME consists of a foam filter, which is integrated into a sturdy plastic housing. Humidostom<sup>®</sup> Junior is equipped with a round, standardised opening, which enables the attachment onto a 15-mm connector of the tracheostomy tube.

With a weight of only 2 g, this air humidifier is particularly light, which reduces the tension on the tracheostomy tube. These properties make the Humidostom<sup>®</sup> Junior comfortable to wear.

Despite its low weight and the relatively small plastic housing, the Humidostom<sup>®</sup> Junior has a good humidification capacity. The normal humidification effect sets in after only a few breaths.

The Humidostom<sup>®</sup> Junior can be worn for max. 24 hours. It is supplied in hygienic, non-sterile, individual packaging. The packing unit contains 50 pieces.

#### HME WITH OXYGEN SUPPLY PORT



The Humidostom<sup>®</sup> HME is for the attachment to a tracheostomy tube or an endotracheal tube with a 15 mm connector.

Humidostom<sup>®</sup> consists of a robust plastic housing, in which a foam filter has been integrated, enabling the filtering, warming and humidification of the air. The humidification effect sets in after only a few breaths.

The Humidostom<sup>®</sup> HME also has a lateral port (ISO plug-in connection 5 mm), which enables the connection to an oxygen device, if required.

Humidostom<sup>®</sup> is a product for single use only. The item is supplied in hygienic, individual packaging. The packing unit contains 50 pieces.



**Order information:** 

 Humidostom<sup>®</sup>, HME with oxygen supply port, pack of 50

### HUMIDOSTOM® TYPE 2



The Humidostom<sup>®</sup> type 2 HME is for the attachment to a tracheostomy tube or an endotracheal tube with a 15 mm connector.

Humidostom<sup>®</sup> type 2 consists of a robust plastic housing, in which a foam filter has been integrated, enabling the filtering, warming and humidification of the air. The humidification effect sets in after only a few breaths.

Humidostom<sup>®</sup> type 2 is a product for single use only. The item is supplied in hygienic, individual packaging. The packing unit contains 50 pieces.



Order information: > Humidostom® type 2, HME

pack of 50

**REF 46150** 

HME



The HumiDual<sup>®</sup> HME is a Heat and Moisture Exchanger, which consists of a plastic housing with two oppositely positioned foam filters, a safe-ty overpressure valve, as well as a connection for an oxygen supply.

The plastic housing has a connection opening for the attachment to the 15 mm connector of a tracheostomy tube (e.g., Duravent<sup>®</sup> UNI) or an endotracheal tube (ETT).

HumiDual<sup>®</sup> HMEs are intended for patients with spontaneous breathing. The humidification effect sets in after only a few breaths.

HumiDual<sup>®</sup> is a product for single use only. The product is supplied in sterile packaging. The packing unit contains 50 pieces.

Order information: HumiDual®, HME, sterile, pack of 50

### **HUMIDOFIX®**

#### HME

**REF 46470** 



The Humidofix<sup>®</sup> HME is a Heat and Moisture Exchanger and can be used for tracheostomy tube wearers. The HME is attached to the 15 mm connector of a tracheostomy tube. Expired warmth and moisture are held back, conserved and applied to the inspired air. The high moisture extraction reduces the risk of encrustations in the tracheostoma.

The functional design of the Humidofix<sup>®</sup>, with integrated paper filter, ensures maximum comfort. Humidofix<sup>®</sup> HMEs are intended for patients with spontaneous breathing. The humidification effect sets in after only a few breaths.

To avoid accumulations of secretions, the HME should be regularly exchanged. Humidofix<sup>®</sup> is intended for single use only.

Humidofix<sup>®</sup> is supplied in individual, sterile packaging, in a box of 30.

To use the Humidofix<sup>®</sup> HME, at the same time as an oxygen supply, a special adapter for an oxygen connector (accessory) for Humidofix<sup>®</sup> is required. This consists of a holder for the attachment to the HME and a transparent plastic tube for the oxygen supply.

The oxygen connector adapter for Humidofix<sup>®</sup> is supplied in a sterile packing unit of 10 pieces.

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**Order information:** 

Humidofix®, HME, sterile, pack of 30

Adapter for oxygen supply for Humidofix®, sterile, consisting of holder and tube, pack of 10

REF 46440 REF 46441

# **SECUTRACH®**

The Secutrach<sup>®</sup> shower guard offers you functionality and protection in excellent product quality. The Secutrach<sup>®</sup> shower guard is tied around the neck and closed with a button. The bulbous plastic cap lies over the neck opening.

The sides of the cap also have a thin protective edge, which fits seamlessly to the skin and thereby optimises the protection against water. The air opening is located in the lower area of the cap. The air flows in through it.

The integrated struts enable the Secutrach<sup>®</sup> shower guard to retain its shape, even during showering, as they stabilise the plastic cap so that it cannot collapse. Nevertheless, the material is flexible and gentle to the skin, making it comfortable to wear.

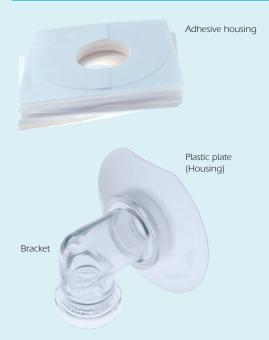
The Secutrach<sup>®</sup> shower guard is adjustable to different neck sizes. It allows tracheostomised and laryngectomised patients to shower and wash their hair. The ingress of water into the tracheostoma is largely prevented by the cover.

The Secutrach® shower guard is supplied in hygienic, individual packaging.



**Order information:** > Secutrach<sup>®</sup> shower guard

# **BLOM-SINGER® SHOWER GUARD**



The Blom-Singer<sup>®</sup> plastic shower guard consists of a tube-shaped bracket, which is combined with a flexible plastic plate. This plastic plate (housing) is fixed on the tracheostoma with adhesive plates. The Blom-Singer<sup>®</sup> shower guard provides a largely waterproof seal of the tracheostoma.

The air flows in through the holes, these are located at the end of the bracket. The shower guard is removed by pulling off the adhesive plate. Any remainders of the skin adhesive can be gently removed with a special cleaning wipe, e.g., Opticlear<sup>®</sup>.

The adhesive plates in the "standard" size are intended for single use only. Alternatively, the shower guard can also be fixed with the compact, self-adhesive Blom-Singer® TruSeal<sup>™</sup> adhesive housing. In this fixing system, the shower guard (bracket) can be fixed directly on the base plate (adhesive housing).

The Blom-Singer<sup>®</sup> shower guard is not suitable for bathing and swimming.

The shower guard is supplied complete in a pack of 1 plastic plate (housing) and 30 adhesive housing.

#### Order information: ► Blom-Singer® shower guard ► Blom-Singer® TruSeal™ adhesive housing, pack of 30

REF 47100 REF 44800

**REF 47000** 

# SPEECH AIDS/VOICE AMPLIFIERS





After successful laryngectomy, it is most important for the patient to be able to speak as quickly as possible again and to be well understood. That is why we recommend speech facilitation with a speech therapist. The speech therapist will usually start speech facilitation with the oesophageal voice. Parallel to this, speaking with an electronic speech aid can also be a part of the voice rehabilitation.

The electronic speech aid generates sound oscillations, through special electronic switching, these are transmitted to the mouthpharynx area, when the device is applied to the neck, and can thereby transform the normal speech motions into comprehensible speech.

### **VOICETEC® VOICE AMPLIFIER**





clip-on microphone (with retaining clip)



hand-microphone

#### Specifications:

#### Transmitter unit

Power supply: Power consumption: Transmission frequency:

Housing dimensions: Weight:

Receiver unit Mains Plug:

Power supply:

Receiving frequency:

Range: Housing dimensions: Weight:

Rechargeable battery Operating time: Charging time: 2 x 1.5V type AA 120 mA 863–865 MHz (choice of 3) 90 x 60 x 24 mm 70 g (without battery)

### AC 110–240V 300 mA/50–60 Hz

6 x 1.2 V 800 mAh Ni-MH type AA 863–865 MHz (choice of 3) approx. 15 m 140 x 80 x 45 mm 270 g (without rechargeable battery)

approx. 7-8 hours approx. 8-10 hours The Voicetec<sup>®</sup> voice amplifier enables excellent amplification of a quiet oesophageal voice and is also well suited for patients/users with vocal chord damage. It can be used whenever a louder conversation volume is desired, to, e.g., be understood even with high levels of background noise. With the help of the Voicetec<sup>®</sup> voice amplifier, it is possible, even without strenuous attempts, to speak loudly.

The wireless, radio-controlled transmitter unit enables the greatest of mobility. This extends the patient's comfort and field of application.

An unpleasant side effect in many voice amplifiers is the feedback, which is very noticeable with a loudly whistling device. These disruptive noises are largely suppressed by the innovative technology of the Voicetec<sup>®</sup> voice amplifier.

The included audio connection cable is a useful accessory and enables the connection to an external amplifier/mixer. It is particularly suitable when speaking in front of many people, e.g., during a speech at an event.

The voice amplifier is supplied with extensive accessories, such as the rechargeable batteries, audio-connection cable, wireless transmitter unit with retaining clip, headband microphone, clip-on microphone (with retaining clip), hand-microphone, etc.

#### The advantages at a glance:

- very good amplification of the oesophageal voice
- > wireless transmitter unit
- extensive accessories
- continuous volume control
- Iow feedback
- possible connection to an external amplifier

#### Voicetec<sup>®</sup> voice amplifier scope of delivery:

- 1 receiver unit
- 1 transmitter unit
- 1 audio connection cable
- 1 mains plug
- 1 headband microphone
- 2 x 1.5 V batteries
- 12 x 1.2 V rechargeable batteries
- 1 clip-on microphone

171

hand microphone
 operating instructions

- **Order information:**
- Voicetec<sup>®</sup> voice amplifier Voice amplifier with transmitter unit

**REF 77350** 

# **EMERGENCY AIDS**





There are special aids for neck breathers, which can be particularly helpful in emergencies, in individual cases, perhaps even life saving.

# FAHL® ALARM DEVICE



The alarm device generates a loud alarm, through an acoustic or visual signal, in emergencies when calling for help is not possible. This alarm can be turned into a continuous tone by pulling out the contact pin with neck strap. This makes it possible to quickly alert other people, in emergencies. This is why it is important for every tracheostomy tube user to carry the device at all times.

The alarm device is battery-operated. Batteries are included in the scope of delivery.



#### Specifications: Dimensions: Weight: Sound pressure:

11.2 x 3.5 x 2.0 cm approx. 100 g approx. 98 dB

Order information: FAHL® Alarm device for laryngectomised and tracheostomised patients **REF 76000** 

## FAHL® EMERGENCY VENTILATION MASK



The ventilation mask for neck breathers enables safe mouth-to-tracheostoma ventilation, whenever required or in emergencies.

The attachment of a disposable valve provides the user with reliable protection from possible risks of infection. The exhaled air can escape through the valve at the side of the mask and is not re-inhaled. Any escaping secretions are also diverted through this valve. The ventilation mask is funnel-shaped and is made of soft, medical silicone. The flexible material enables a reliable seal of the tracheostoma, even on an uneven skin surface.

It is recommendable to carry the emergency ventilation mask at all times, in order to have it close to hand in emergencies.

Order information: FAHL® Emergency ventilation mask for laryngectomised and tracheostomised patients REF 75000

### FAHL® VENTILATION FUNNEL ACCORDING TO PROF. STOLL



This medical aid is intended for use in emergencies. The ventilation funnel enables mouth-to-tracheostoma ventilation. The ventilation funnel consists of a soft silicone tracheostoma mask and a plastic adapter tube, which is attached to the mask.

The ventilation funnel is suitable for direct ventilation through the tracheostoma, as well as for indirect ventilation through a tracheostomy tube.

This product is easy to clean and is small, light and handy.

The easy to detach plug-in connection enables the ventilation funnel to be easily disassembled into individual parts, which can easily be stored in e.g., a jacket pocket. This allows the ventilation funnel to be carried easily, so that it is ready to hand in emergencies.



**Order information:** > FAHL® Ventilation funnel according to Prof. Stoll

## FAHL® SMELLING AID

#### WITH 22 MM COMBI-ADAPTER AND TRACHEOSTOMA MASK





Smelling aid with 22 mm combiadapter and adhesive plate



Duravent® smelling aid

The smelling aid with a 22 mm combi-adapter was developed for patients after larynx surgery, to provide a short-term ability to smell. Particular value was placed on comfortable and simple operation.

The smelling-aid with a 22 mm combi-adapter consists of a flexible plastic tube, which can easily be moved in different directions. One end of the smelling aid has a detachable mouthpiece, which is brought to the mouth. A special 22 mm combi-adapter is located at the other end.

This 22 mm combi-adapter has various applications: It enables the attachment of a silicone tracheostoma mask, through which a mouth-tracheostoma connection can be made, which enables smelling. Holding and pressing the mask on, are required for this, in order to create an airtight seal to the tracheostoma.

The 22 mm combi-adapter also enables, with use of standard adhesive plates, e.g., Blom-Singer<sup>®</sup>, a firm connection to the tracheostoma, which frees the user's hands during smelling.

First, the adhesive housing (base plate) is attached over the tracheostoma by sticking it to the skin. The smelling aid with 22 mm combiadapter is then simply inserted into the housing ring and connected to the base plate. This creates a firm and airtight connection to the tracheostoma, which can, if necessary, be easily released by unplugging the adapter.

The smelling aid fits so tightly, that the user can move largely unrestricted and has his/her hands free.

The smelling aid with the 22 mm combi-adapter can be perfectly combined with the 22 mm combi-adapter of the Duravent<sup>®</sup> KOMBI or Duratwix<sup>®</sup> tracheostomy tube. For this, the free ends of the smelling aid are inserted into the socket of the Duravent<sup>®</sup>/Duratwix<sup>®</sup>combiadapter.

This item is supplied in individual packaging, complete with 22 mm combi-adapter and silicone tracheostoma mask.

Adhesive housing/retaining plates must be ordered separately.

 FAHL<sup>®</sup> Smelling aid with a 22 mm combi-adapter and tracheostoma mask
 Blom-Singer<sup>®</sup> TruSeal™ adhesive housing, standard, pack of 30 REF 75130 REF 44800

# **AIRWAY MANAGEMENT PRODUCTS FOR CHILDREN**





We provide numerous medical products that are specially adapted for the special requirements of tracheostomised children.

This catalogue only contains a selection of the special products for children which you can obtain from us.

You can also find information on products, for almost all product groups for children, in the previous chapters of this catalogue.

By arrangement, it may be possible to custom-make individual products.

#### TRACHEOTEC® TRACHEOSTOMY TUBE FOR CHILDREN WITHOUT INNER CANNULA



The Tracheotec® tracheostomy tubes are made of soft, transparent medical-grade polymer.

The Tracheotec® tracheostomy tube consists of only an outer cannula with a fixed attachment.

The 15 mm connector enables Heat and Moisture Exchangers (HMEs) or speaking valves, with 15 mm connectors, to be attached.

An X-ray contrast strip, running laterally in the cannula tube, enables radiological visualisation to check the position in the tracheostoma.

Tracheotec<sup>®</sup> tracheostomy tubes are single-patient products and are supplied in individual, sterile packaging (sterilised with ethylene oxide).

#### Size chart for TRACHEOTEC® tracheostomy tube for children without inner cannula

Size	O.D. Tip mm	O.D. neck flange mm	I.D. mm	Length mm (Midline)	Length mm (Outer curve)	REF
3	4.7	4.7	3.0	43.7	47.2	18560-03
3.5	5.3	5.3	3.5	46.7	50.6	18560-035
4	6.0	6.0	4.0	52.7	57.1	18560-04
4.5	6.7	6.7	4.5	52.7	57.7	18560-045
5	7.3	7.3	5.0	55.7	61.1	18560-05
5.5	8.0	8.0	5.5	57.7	63.6	18560-055
6	8.7	8.7	6.0	60.7	67.1	18560-06
6.5	9.3	9.3	6.5	66.7	73.5	18560-065
7	10.0	10.0	7.0	69.6	77.0	18560-07

Sizing information:

**O.D.** Tip = Outer diameter of the outer tube at the tip of the cannula · **O.D. neck flange** = Outer diameter behind the neck flange · **I.D.** = Inner diameter at the tip of the cannula **Length** = Length over the midline/outer curve

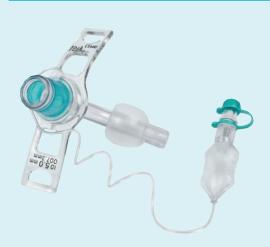
Order information:

TRACHEOTEC<sup>®</sup> tracheostomy tube, without inner cannula, sterile, size 3-7

**REF 18560** 

When ordering, please state the size after the item number!

### TRACHEOTEC® UNI TRACHEOSTOMY TUBE FOR CHILDREN WITH LOW-PRESSURE CUFF, WITHOUT INNER CANNULA



The Tracheotec<sup>®</sup> tracheostomy tube only consists of an outer cannula with a low-pressure cuff.

The Tracheotec<sup>®</sup> UNI tracheostomy tubes are also available in small sizes, and can therefore be applied on children.

The low-pressure cuff can be filled through a one-way valve and securely seals the cannula to the trachea wall. The accidental swallowing of secretions is prevented. The cuff's pilot line is integrated into the outer cannula, achieving a level and smooth outer shape. This prevents additional irritation of the mucous membranes.

In these Tracheotec<sup>®</sup> UNI tracheostomy tubes, the cannulas are each equipped with a standard 15 mm swivel connector. The integrated 15mm connector enables the attachment of Heat and Moisture Exchangers (HMEs).

The Tracheotec<sup>®</sup> tracheostomy tubes are made of soft, transparent medical-grade polymer.

An X-ray contrast strip, running laterally in the cannula tube, enables radiological visualisation to check the position in the tracheostoma.

Tracheotec<sup>®</sup> tracheostomy tubes are single-patient products and are supplied in individual, sterile packaging (sterilised with ethylene oxide).

As a variation, the Tracheotec<sup>®</sup> tracheostomy tubes are also available in the version Tracheotec® SUCTION tracheostomy tube with suction line, in the sizes 5-7.

Size chart for TRACHEOTEC® UNI and TRACHEOTEC® SUCTION tracheostomy tubes for children													
Size	e O.D. Tip mm O.D. neck flange mm		I.D. mm	Length mm (Midline)	Length mm (Outer curve)	REF UNI	REF SUCTION						
5	7.3	7.3	5.0	55.7	61.1	18920-05	18930-05						
5.5	8.0	8.0	5.5	57.7	63.6	18920-055	18930-055						
6	8.7	8.7	6.0	60.7	67.1	18920-06	18930-06						
6.5	9.3	9.3	6.5	66.7	73.5	18920-065	18930-065						
7	10.0	10.0	7.0	69.6	77.0	18920-07	18930-07						

Sizing information:

O.D. Tip = Outer diameter of the outer tube at the tip of the cannula · O.D. neck flange = Outer diameter behind the neck flange · I.D. = Inner diameter at the tip of the cannula Length = Length over the midline/outer curve

Order information:

- **REF 18920** TRACHEOTEC<sup>®</sup> UNI tracheostomy tube with low-pressure cuff, without inner cannula, sterile, size 5-7
  - TRACHEOTEC® SUCTION tracheostomy tube with low-pressure cuff, without inner cannula, with suction line, sterile, size 5-7 When ordering, please state the size after the item number!

**REF 18930** 

176

## **DURAVENT® MINI UNI TRACHEOSTOMY TUBE**



Duravent<sup>®</sup> MINI UNI tracheostomy tubes were developed specially for the use on children. The soft, anatomically shaped neck flange fits perfectly the neck and reliably prevents unwanted pressure from being transmitted to the tracheal wall. The thin, thermo-sensitive material (medical grade polymer) ensures a large respiratory volume and comfortable use. The cannula can be securely fixed via the ergonomically placed eyelets for the tube holder. Two inner cannulas with 15 mm connector for the adaptation of e.g., HMEs, are included in the scope of delivery. Alternatively, this cannula can also be supplied without inner cannula. In this version, the 15 mm connector is firmly connected to the neck flange of the outer cannula.

This product is supplied in hygienic, non-sterile, individual packaging.

Size chart for Duravent® MINI UNI tracheostomy tube with 15 mm connector												
Size O.D. neck flange mm O.D. Tip mm I.D. mm O-cannula I.D. mm I-cannula Length												
3	5.2	3.8	2.7	1.8	55							
3.5	6.2	4.8	3.6	2.7	55							
4	7.2	5.8	4.4	3.3	55							
5	8.4	6.6	5.4	4.3	55							
Sizing inform	Sizing information:											

**O.D. neck flange =** Outer diameter behind the neck flange · **O.D. Tip =** Outer diameter of the outer cannula at the tip of the cannula · **I.D. =** Inner diameter at the tip of the cannula **O-cannula =** Outer cannula · **I-cannula =** Inner cannula · **Length =** Length over the outer curve

information:	Duravent® MINI UNI tracheostomy tube with two inner cannulas,	REF 11012
	<ul> <li>with 15 mm connector, size 3-5</li> <li>DURAVENT® MINI UNI tracheostomy tube, without inner cannula, with fixed 15 mm connector, size 3-5</li> </ul>	REF 11010

# **DURAVENT® MINI TRACHEOSTOMY TUBE WITH SPEAKING VALVE** WITH THREE INNER CANNULAS, ONE WITH AN ATTACHABLE UNIVERSAL SPEAKING VALVE AND ONE WITH A 15 MM CONNECTOR



The speaking variant of the Duravent<sup>®</sup> MINI is supplied with three inner cannulas. One of these carries a speaking valve, which enables the patient to speak. A standard HME with 15 mm connector can be attached to the version with 15 mm adapter filter systems, which fulfil the requirements of the children's anatomy and are not too big, especially suitable here are, e.g., Humidostom<sup>®</sup> Junior.

Alternatively, the Duravent<sup>®</sup> MINI tracheostomy tube with speaking valve is also available with an attachable silver speaking valve.

# Size chart for Duravent<sup>®</sup> MINI tracheostomy tube with speaking valve, with three inner cannulas, one with an attachable universal speaking valve and one with a 15 mm connector

Size	O.D. neck flange mm	O.D. Tip mm	I.D. mm O-cannula	I.D. mm I-cannula	Length mm
3	5,2	3,8	2,7	1,8	55
3,5	6,2	4,8	3,6	2,7	55
4	7,2	5,8	4,4	3,3	55
5	8,4	6,6	5,4	4,3	55

#### Sizing information:

Order i

**O.D. neck flange =** Outer diameter behind the neck flange · **O.D. Tip =** Outer diameter of the outer cannula at the tip of the cannula · **I.D. =** Inner diameter at the tip of the cannula **O-cannula =** Outer cannula - **I-cannula =** Inner cannula · **Length =** Length over the outer curve

 Order information:
 Duravent® MINI tracheostomy tube with speaking valve, with three inner cannulas one with an attachable universal speaking valve and one with a 15 mm connector, size 3-5
 REF 21083

 DURAVENT® MINI tracheostomy tube with speaking valve, with three inner cannulas, one with an attachable silver speaking valve and one with an attachable silver speaking valve and one with a 15 mm connector, size 3-5
 REF 21083

# SENSOFOAM® TRACHEAL FOAM COMPRESS

#### FOR CHILDREN



The Sensofoam<sup>®</sup> compress is a high-grade compress for tracheostomy tube users. It is distinguished by its high absorbency. The Sensofoam<sup>®</sup> compress is made of multiple layers; the skin-coloured, breathable top layer prevents the saturation of the compress. The absorbent foam quickly and surely soaks up secretions.

In addition, the adhesion/agglutination with the skin is prevented. This allows the compresses also to be removed easily. The Sensofoam® compress causes little irritation and is therefore especially suitable for application on a sore tracheostoma.

The foamy material is especially soft and is comfortable to wear. The Sensofoam<sup>®</sup> compress softly and securely cushions the tracheostomy tube against the skin and prevents bruising. At the same time, this stabilises the fit of the tracheostomy tube in the tracheostoma.

Specially for children, we offer the Sensofoam<sup>®</sup> compress in a smaller format.

A hole for the tracheostomy tube is located in the middle of the compress. The holes in the foam compresses for children have a particularly small diameter, so that the compress fits well to the cannula wall.

There is also a slit, which enables quick changes of the compress. The cannula can stay in the tracheostoma and does not need to be removed before changing the compress.

An additional variant is the Sensofoam<sup>®</sup> NEO, it is based on the anatomical shape of the neck flange and is adapted to the special needs of children.

The hole is moved slightly towards the lower edge, increasing comfort and ensuring good padding of the neck flange.

The Sensofoam<sup>®</sup> compresses are intended for single use and are supplied in sterile, individual packaging, in a box of 10.





Order information:

Sensofoam<sup>®</sup> tracheal foam compress for children, with a slit, sterile, size 6.5 x 6.5 x 0.5 cm, pack of 10
 Sensofoam<sup>®</sup> NEO tracheal foam compress for children, sterile,

pack of 10

# **1-KAM® TRACHEAL COMPRESS**



This high quality, especially absorbent tracheal compress, made of soft non-woven fabric, is ideal for children. The convenient format of 6 x 7 cm and the particularly small opening for the tracheostomy tube, with a diameter of 5 mm, makes the compress well suited for tracheostomised infants and small children.

The compress softly cushions the neck flange and securely fixes the cannula in the tracheostoma.

A version of the 1-KAM<sup>®</sup> tracheal compress with a slit is available, for compress changes without removal of the cannula from the tracheostoma. In the version 1-KAM<sup>®</sup> Zip, the slit is jigsaw-shaped. The single-layer 1-KAM<sup>®</sup> Zip compress for children has a practical zip and, for handling reasons, the slit is bottom up. The jigsaw-shaped slit provides secure and reliable fixation, which is even retained when a large amount of secretions have been absorbed. The compress enables easy changing of the compresses, even with the cannula in place; it is very kind to the skin and offers reliable clothing protection.

The 1-KAM<sup>®</sup> tracheal compress for children is disposable and supplied in non-sterile, hygienic packaging.

Each packing unit contains 20 pieces.



Order information:	1-KAM® tracheal compress for children, 6 x 7 cm, pack of 20	REF 30610
	1-KAM <sup>®</sup> tracheal compress for children, with a slit, 6 x 7 cm,	REF 30620
	pack of 20 1-KAM <sup>®</sup> Zip compress for children, 6 x 7 cm,	REF 30621
	pack of 20	

# **OPTIFLAUSCH® TUBE HOLDER**

#### WITH ADHERENT FASTENER FOR CHILDREN



The Optiflausch® for children enables the secure fixation of tracheostomy tubes. Optiflausch® is distinguished by its very comfortable wearing properties. Optiflausch® consists of a light foam core, which is surrounded by a skin-friendly non-woven fabric. The materials used are comfortably soft. The stretch-fabric allows coughing reflexes and guarantees a snug fit.

The tube holder is suitable for neck sizes of 18 to 25 cm. At the ends of the Optiflausch<sup>®</sup> tube holder are thin adherent strips, which are threaded into the eyelets of the tracheostomy tube's neck flange. For fastening, the adherent strips are turned over and fixed to the fluffy side of the tube holder. This ensures a secure fit of the tracheostomy tube. If the tube holder is too long, it can be shortened to the desired length by cutting it. The tube holder is approx. 4 mm thick and 2 cm wide. If you desire an even slimmer band, we recommend the version Optiflausch<sup>®</sup> Slim for children, with a width of only 1 cm.

Optiflausch<sup>®</sup> and Optiflausch<sup>®</sup> Slim are intended for single use only. The tube holders are supplied in individual, hygienic packaging.



Order information:

Optiflausch<sup>®</sup> tube holder with adherent fastener for children, white
 Optiflausch<sup>®</sup> Slim tube holder with adherent fastener for children, white

REF 32555 REF 32557

# SUPRAFIX® FOAM TUBE HOLDER

# WITH ADHERENT FASTENER FOR CHILDREN



The softly cushioned foam tube holder, with adherent fastener, is ideally suited for the sensitive neck region of infants and young children. Without the neck straps, it is approx. 12 cm long and can be adjusted, through the elastic neck straps, to a maximum neck size of 27 cm. The foam material is covered with a soft, non-woven fabric, which ideally absorbs moisture and prevents abrasions.

Alternatively, the foam tube holder is also available with a hook, for quick fixing to the tracheostomy tube.

This item is supplied individually and for single use, in non-sterile, hygienic packaging.



Order information:

Suprafix<sup>®</sup> foam tube holder with adherent fastener for children Suprafix<sup>®</sup> foam tube holder with hook for children REF 32510 REF 32310

### FAHL® STOMA PROTECTION BIB

#### FOR CHILDREN



The stoma protection bib for children consists of 3 or 5-layered, especially air-permeable Diolen tulle. The bib filters, humidifies and warms the inspired air. It provides good protection from the ingress of foreign bodies, e.g., insects, dust, etc. The special feature of the stoma protection bib for children is the especially small format with shortened neck straps. An adherent fastener is sewn onto the neck straps. The length of the neck straps can easily be varied by cutting them.

The neckerchief is washable.

Please specify the child's age when ordering!



Order information: 
FAHL<sup>®</sup> Stoma protection bib, for children, 3-layered
FAHL<sup>®</sup> Stoma protection bib for children, 5-layered

#### REF 40110 REF 40210

## FAHL® STOMA PROTECTION NECKERCHIEF

#### FOR CHILDREN



The stoma protection neckerchief for children is tied around the neck using an approx. 1 cm wide cotton strap. The fabric bib lies over the tracheostoma. The centrally incorporated Diolen insert, made of multiple layers of mesh fabric, warms, humidifies and, at the same time, filters the air.

The stoma protection neckerchief prevents the ingress of foreign bodies, e.g., dust and insects, into the tracheostoma and catches escaping tracheal secretions.

Stoma protection neckerchiefs for children are made in a small format, with shortened neck straps.

An adherent fastener is sewn onto the neck straps. The length of the neck straps can easily be varied by cutting them.

Stoma protection neckerchiefs are available in different colours and patterns, as well as fabric qualities, from normal to highly air-permeable. Please note the information on our colour sample card. Stoma protection neckerchiefs are washable and do not lose their shape. For reasons of hygiene, they should be changed daily.

Please specify the child's age when ordering!



Order information: FAHL® Stoma protection neckerchief for children Please additionally specify colour no. when ordering (see colour sample card)! REF 42010

### **HUMIDOSTOM® JUNIOR**

#### HME FOR CHILDREN



Humidostom<sup>®</sup> Junior is a Heat and Moisture Exchanger, especially for children. They help to filter, warm and humidify the inspired air. The Humidostom<sup>®</sup> Junior HME consists of a foam filter, which is integrated into a sturdy plastic housing. Humidostom<sup>®</sup> Junior is equipped with a round, standardised opening, which enables the attachment onto a 15-mm connector of the tracheostomy tube.

With a weight of only 2 g, this air humidifier is particularly light, which reduces the tension on the tracheostomy tube. These properties make the Humidostom<sup>®</sup> Junior comfortable to wear.

Despite its low weight and the relatively small plastic housing, the Humidostom<sup>®</sup> Junior has a good humidification capacity. The normal humidification effect sets in after only a few breaths.

The Humidostom<sup>®</sup> Junior can be worn for max. 24 hours. It is supplied in hygienic, non-sterile, individual packaging. The packing unit contains 50 pieces.

Order information: Humidostom<sup>®</sup> Junior, HME for children, pack of 50

REF 46850

### FAHL® TRACHEAL DILATOR

#### FOR CHILDREN



The tracheal dilator enables the dilation of the tracheostoma in tracheostomised patients. Inserting the tracheostomy tube is considerably easier through the dilated tracheostoma, as a "contraction" of the tracheostoma, especially in unstable openings, is prevented.

The tracheal dilator is made of stainless steel. The tips of the tracheal dilator are specially shaped and rounded, in order to minimise the risk of injury when inserting it into the tracheostoma.

The special design, with the three spreadable wings, enables the tracheostoma to be opened evenly in all directions during cannula changing. By pressing the handles together the tracheal dilator opens and dilates the body orifice. This makes inserting the tracheostomy tube considerably easier.

The tracheal dilator is a product for tracheostomy tube users and should always be close to hand for a fast cannula change.

The tracheal dilator is also indispensable in emergencies, in order to secure the airway.

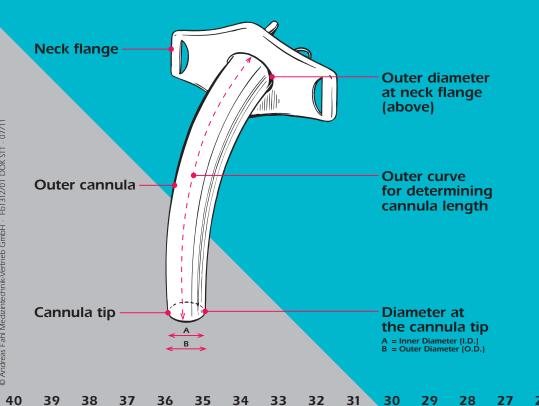
## SIZING TRACHEOSTOMY TUBES

# ANDREAS FAHL MEDIZINTECHNIK-VERTRIEB GMBH · PHONE +49(0)22 03/29 80-0

Tracheostomy tubes are available in different materials and different versions. A good fit of the cannula is essentially determined by two factors, the cannula diameter and the cannula length. As the sizing of the individual cannula manufacturers is based on different measuring principles, these cannot always be directly compared. Exact measurement is often necessary, whereby certain aids can be helpful in measuring, e.g., a flexible measuring tape. The following overview shows how the cannula diameter and length can be determined. It also illustrates which measurements are most commonly used.

	aryngotec <sup>®</sup> button	Duravent®	Tracoe <sup>®</sup> - Comfort PVC	Intravent®/ silicone	LaryTube™	Laryngotec®	Stoma button	Duracuff®	Tracoe®-Twist	Duratwix®	Larchel®	Fome®-Cuff/ Aire® Cuff	Tracheoflex® Rüsch	Spiraflex <sup>®</sup>	Biesalski Rüsch	Portex	Tracheotec®	Portex Blue Line Ultra	Tracheosoft Mallinckrodt	Shiley LPC/FEN/ CFS/CFN	Shiley PDC/PDL/ PED/NEO
OD OD Tip Shield mm mm	OD Tip mm	OD OD Tip Shield mm mm	OD OD Tip Shield mm mm	OD OD Tip Shield mm mm	OD OD Tip Shield mm mm	OD Tip mm	OD Lib DD	OD OD Tip Shield mm mm	OD OD Tip Shield mm mm	OD OD Tip Shield mm mm	OD Tip mm	OD Tip mm	OD OD Tip Shield mm mm	OD Tip mm	OD OD Tip Shield mm mm	OD OD Tip Shield mm mm	OD Tip mm	OD OD Tip Shield mm mm	OD OD Tip Shield mm mm	OD OD Tip Shield mm mm	OD OD Tip Shield mm mm
<b>0</b> 4.5 6.1		<b>3</b> 3.8 5.2	<b>3</b> 4.6 6.4										<b>3</b> 5.0 5.0			<b>3</b> 4.2 4.2	<b>3</b> 4.7				<b>3</b> 4.5 4.5
<b>1</b> 5.0 6.4		<b>3.5</b> 4.8 6.2	<b>3</b> 4.6 6.4										<b>3</b> 5.0 5.0			<b>3.5</b> 4.9 4.9	<b>3.5</b> 5.3				<b>3.5</b> 5.2 5.2
<b>2</b> 5.7 6.8		<b>4</b> 5.8 7.2	<b>4</b> 5.3 7.3										<b>4</b> 6.0 6.0		<b>4</b> 5.4 7.1	<b>4</b> 5.5 5.5	<b>4</b> 6.0				<b>4</b> 5.9 5.9
<b>3</b> 6.4 7.5		<b>4</b> 5.8 7.2	<b>4</b> 5.3 7.3										<b>5</b> 6.9 6.9		<b>4</b> 5.4 7.1	<b>4.5</b> 6.2 6.2	<b>4.5</b> 6.7				<b>4.5</b> 6.5 6.5
<b>4</b> 7.0 8.2		<b>5</b> 6.6 8.4	<b>5</b> 6.3 8.7						<b>4</b> 7.2 8.4				<b>5</b> 6.9 6.9		<b>5</b> 6.2 8.2	<b>5</b> 6.9 6.9	<b>5</b> 7.3		<b>5</b> 7.0 7.0		<b>5</b> 7.1 7.1
<b>5</b> 7.7 9.1		<b>6</b> 7.8 9.4	<b>6</b> 7.6 10.0						<b>5</b> 8.6 9.4				<b>6</b> 8.2 8.2		<b>6</b> 7.2 9.2	<b>6</b> 8.3 8.3	<b>5.5</b> 8.0		<b>5</b> 7.0 7.0		<b>5.5</b> 7.7 7.7
<b>6</b> 8.4 9.8		<b>6</b> 7.8 9.4	<b>6</b> 7.6 10.0			<b>7</b> 10.2			<b>5</b> 8.6 9.4		<b>9</b> 9.0	<b>5</b> 7.3	<b>6</b> 8.2 8.2		<b>7</b> 8.3 10.8	<b>6</b> 8.3 8.3	<b>6</b> 8.7	<b>6</b> 9.2 9.2	<b>6</b> 8.3 8.3	<b>4</b> 9.4 9.4	<b>6</b> 8.3 8.3
<b>7</b> 9.0 10.9		<b>7</b> 8.8 10.2	<b>7</b> 9.0 10.5			<b>7</b> 10.2		<b>7</b> 8.8 10.2	<b>6</b> 9.2 10.4		<b>9</b> 9.0	<b>6</b> 8.7	<b>7</b> 9.9 9.9	<b>7</b> 10.4	<b>7</b> 8.3 10.8	<b>7</b> 9.7 9.7	<b>6.5</b> 9.3	<b>7</b> 10.5 10.5	<b>7</b> 9.6 9.6	<b>4</b> 9.4 9.4	<b>6.5</b> 9.0 9.0
<b>8</b> 9.7 11.6	<b>8</b> 11.0	<b>8</b> 9.8 11.2	<b>8</b> 10.0 11.3	<b>8</b> 12.0 12.0	<b>8</b> 12.0 12.0	<b>8</b> 11.2	<b>8</b> 12.0	<b>8</b> 9.8 11.2	<b>7</b> 10.4 11.9	<b>7</b> 10.8 11.9	<b>10</b> 10.0	<b>7</b> 10.0	<b>7</b> 9.9 9.9	<b>7</b> 10.4	<b>8</b> 9.3 11.9	<b>7.5</b> 10.4 10.4	<b>7</b> 10.0	<b>7</b> 10.5 10.5	<b>7</b> 9.6 9.6	<b>6</b> 10.8 10.8	
<b>9</b> 10.4 12.3	<b>8</b> 11.0	<b>9</b> 11.2 12.4	<b>9</b> 11.6 12.6	<b>8</b> 12.0 12.0	<b>8</b> 12.0 12.0	<b>9</b> 12.4	<b>8</b> 12.0	<b>9</b> 11.2 12.4	<b>7</b> 10.4 11.9	<b>7</b> 10.8 11.9	<b>10</b> 10.0	<b>7</b> 10.0	<b>8</b> 11.1 11.1	<b>8</b> 11.4	<b>9</b> 10.5 12.9	<b>8</b> 11.0 11.0	<b>7.5</b> 10.7	<b>7.5</b> 11.3 11.3	<b>8</b> 10.9 10.9	<b>6</b> 10.8 10.8	
<b>10</b> 11.0 13.2	<b>9</b> 12.0	<b>10</b> 12.2 13.4	<b>9</b> 11.6 12.6	<b>9</b> 13.5 13.5	<b>9</b> 13.5 13.5	<b>10</b> 13.4	<b>9</b> 13.0	<b>10</b> 12.2 13.4	<b>8</b> 11.4 12.5	<b>8</b> 11.4 12.5	<b>11</b> 11.0	<b>8</b> 11.0	<b>9</b> 12.4 12.4	<b>9</b> 12.4	<b>10</b> 11.1 13.8	<b>9</b> 12.4 12.4	<b>8</b> 11.3	<b>8</b> 11.9 11.9	<b>9</b> 12.3 12.3	<b>8</b> 12.2 12.2	
<b>11</b> 11.7 13.8	<b>9</b> 12.0	<b>10</b> 12.2 13.4	<b>10</b> 12.6 13.7	<b>9</b> 13.5 13.5	<b>9</b> 13.5 13.5	<b>10</b> 13.4	<b>9</b> 13.0	<b>10</b> 12.2 13.4	<b>9</b> 12.5 13.7	<b>9</b> 12.5 13.7	<b>12</b> 12.0	<b>9</b> 12.3	<b>10</b> 13.0 13.0	<b>10</b> 13.4	<b>10</b> 11.1 13.8	<b>9</b> 12.4 12.4	<b>8.5</b> 12.0	<b>8.5</b> 12.6 12.6	<b>9</b> 12.3 12.3	<b>8</b> 12.2 12.2	
<b>12</b> 12.4 14.6 <b>1</b>	<b>10</b> 13.0	<b>11</b> 13.2 14.6	<b>10</b> 12.6 13.7	<b>10</b> 15.0 15.0	<b>10</b> 15.0 15.0	<b>11</b> 14.4	<b>10</b> 15.0	<b>11</b> 13.2 14.6	<b>9</b> 12.5 13.7	<b>9</b> 12.5 13.7	<b>13</b> 13.0	<b>9</b> 12.3	<b>10</b> 13.0 13.0	<b>10</b> 13.4	<b>11</b> 12.6 14.9	<b>10</b> 13.7 13.7	<b>9</b> 12.7	<b>9</b> 13.3 13.3	<b>10</b> 13.3 13.3	<b>10</b> 13.8 13.8	
<b>13</b> 13.0 15.0 <b>1</b>	<b>11</b> 14.0	<b>12</b> 14.2 15.4	<b>11</b> 13.6 15.0	<b>10</b> 15.0 15.0	<b>10</b> 15.0 15.0	<b>12</b> 15.4	<b>10</b> 15.0	<b>12</b> 14.2 15.4	<b>10</b> 13.8 15.0	<b>10</b> 13.8 15.0	<b>13</b> 13.0	<b>9.5</b> 13.3	<b>11</b> 14.1 14.1	<b>11</b> 14.4	<b>11</b> 12.6 14.9	<b>10</b> 13.7 13.7	<b>10</b> 14.0	<b>10</b> 14.0 14.0	<b>10</b> 13.3 13.3	<b>10</b> 13.8 13.8	
<b>14</b> 13.7 15.8 <b>1</b>	<b>11</b> 14.0	<b>12</b> 14.2 15.4	<b>12</b> 14.6 16.2	<b>10</b> 15.0 15.0	<b>10</b> 15.0 15.0	<b>12</b> 15.4	<b>11</b> 16.0	<b>12</b> 14.2 15.4	<b>10</b> 13.8 15.0	<b>10</b> 13.8 15.0	<b>14</b> 14.0	<b>9.5</b> 13.3	<b>11</b> 14.1 14.1	<b>11</b> 14.4	<b>12</b> 13.4 15.8		<b>10</b> 14.0	<b>10</b> 14.0 14.0			
<b>15</b> 14.5 16.6 <b>1</b>	<b>12</b> 15.0	<b>13</b> 15.2 16.6	<b>12</b> 14.6 16.2	<b>12</b> 17.0 17.0	<b>12</b> 17.0 17.0	<b>13</b> 16.6	<b>12</b> 17.0				<b>15</b> 15.0		<b>12</b> 15.1 15.1		<b>13</b> 14.5 17.5						
<b>17</b> 17.0 17.0 <b>1</b>	<b>12</b> 15.0		<b>13</b> 16.0 17.2	<b>12</b> 17.0 17.0	<b>12</b> 17.0 17.0	<b>13</b> 16.6	<b>12</b> 17.0				<b>16</b> 16.0				<b>13</b> 14.5 17.5						
1	<b>12</b> 15.0		<b>14</b> 17.3 18.2																		

# **TRACHEOSTOMY TUBE**



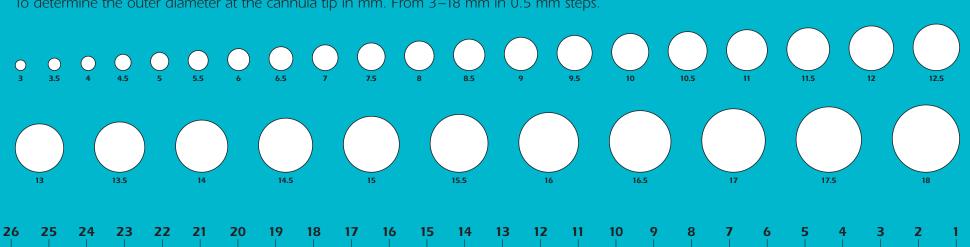
In the selection of tracheostomy tubes of different materials, it should be noted that the material strength could also influence the inner lumen of the cannula. For example, because of the thick-walled material, a non-metal cannula has a smaller inner volume than the thin-walled silver cannula.

In comparison, the inner diameter at the cannula tip will therefore play a role. In some tracheostomy tubes, the lengths of the middle radius or the middle length are also stated. These are the mean bending radius of the cannula tube, i.e., the radius of the (geometric) middle layer of the tube bend.

The following table is intended to facilitate the determination of the outer diameter at the cannula tip. The diameter can simply be determined by placing the cannula (tip) on the template.

### **CIRCULAR TEMPLATES**

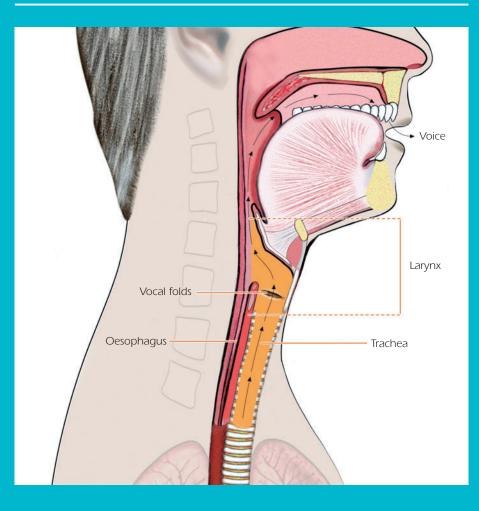
To determine the outer diameter at the cannula tip in mm. From 3–18 mm in 0.5 mm steps.

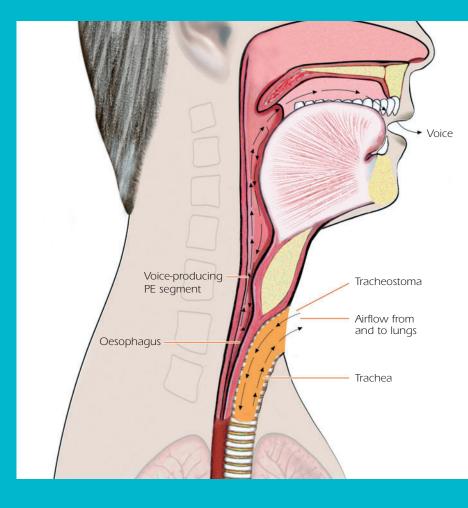


### **BEFORE THE LARYNGECTOMY/TRACHEOSTOMY**

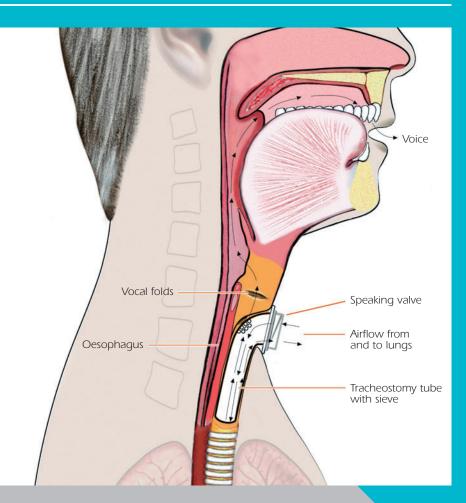
### AFTER THE LARYNGECTOMY

# AFTER THE LARYNGECTOMY WITH SPEECH AID

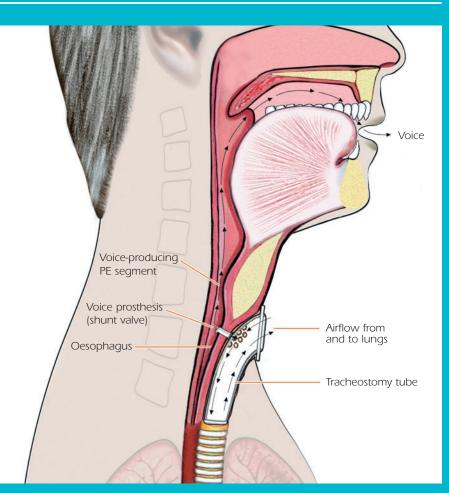


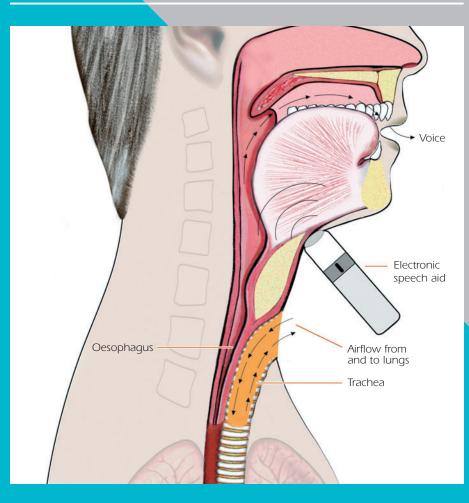


# AFTER THE TRACHEOSTOMY

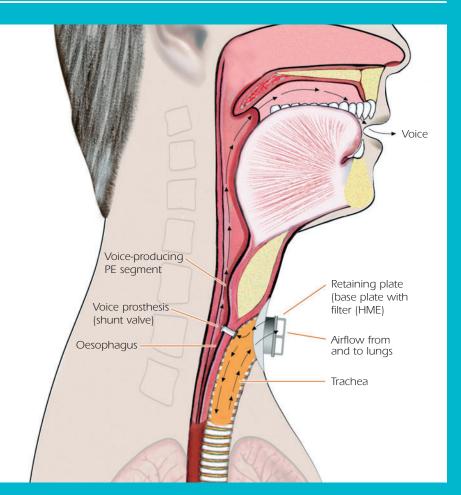


# AFTER THE LARYNGECTOMY WITH VOICE PROSTHESIS





# AFTER THE LARYNGECTOMY WITH HME



# ORDERING

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