



# COMPETENCE IN TRACHEOSTOMY

#### Over Six Decades of Expertise

TRACOE medical is your competent partner in the highly specialised field of tracheostomy and laryngectomy – for both physicians and patients.

Special requirements call for special solutions, which is why TRACOE medical offers a complete product line consisting of various product families which complement one another. They start with percutaneous sets for performing dilation tracheostomy, include an assortment of tracheostomy tubes, and extend to items for rehabilitation and aftercare. TRACOE medical also offers products to support proper functioning of the tubes, mainly for use in hospitals, rehab clinics and nursing homes. Tracheostomy accessories, made to harmonise precisely with other TRACOE products, help hospitals and homecare facilities to keep their costs under control while supporting patients in using, cleaning and properly caring for their tracheostomy tubes.

All tracheostomy tubes are developed by TRACOE medical, as they have the know-how for innovations to form and then to be turned into practice-orientated products.

For its continuous success to improve and complement the product range through innovations, the firm was not only elected "Company of the Year 2010 in the County Mainz-Bingen in the Category Innovation" but also belongs to one of the TOP 100 most innovative middle-sized companies 2010.

#### **Certified Quality**

TRACOE medical's products are CE-certified. This documents the fact that they are developed, manufactured and tested in compliance with legal requirements and the basic stipulations of the EC Directive on Medical Products 93/42/EEC (Annex 1). This certification is regularly renewed on the basis of audits by a Notified Body. QM certification has also been obtained to show that TRACOE medical has implemented an effective quality management system which conforms to DIN EN ISO 13485:2003, AC 2007. All of TRACOE medical's staff are integrated in this quality system to ensure a consistently high level of quality for all TRACOE products.

TRACOE products meet the requirements of the most demanding applications and comply with all relevant national and international guidelines and standards. They are registered and approved in many countries world-wide, including the United States (US21CFR820-FDA) and Canada (CanMDR).





#### Management

Successfull partners since 1992: Prof. Dr. med. Franz Waldeck (Development and Production), Stephan Köhler (Administration, Marketing and Sales).



# THE TRACOE PROGRAMME

# From Hospitals to the Care of Permanent Wearers

	Sets for percutaneous tracheostomy
	TRACOE twist Tracheostomy Tubes  Made of tissue-friendly polyurethane; for use in hospitals and during rehabilitation
• • • • • • • • • • • • • • • • • • • •	TRACOE vario Tracheostomy Tubes  With variably adjustable neck flange – for use in hospitals
	TRACOE pure Tracheostomy Tube The economical version for short-term use
•••••	TRACOE mini Tracheostomy Tubes  Designed to meet the special requirements of neonates and children  Page 40
	TRACOE comfort Tracheostomy Tubes  Made of medical grade, clear polymer material – e.g. speaking tubes for long-term use in therapy, during rehabilitation and for permanent wearers
	TRACOE modular  Speaking valves as well as heat/moisture exchangers – for attachment to tracheostomy tubes, stoma buttons, short tubes and adhesive carriers
	TRACOE technic Medical Technology  Precision medical instruments for the cuff pressure management
	TRACOE larynx stoma buttons, silicone short tubes, adhesive carriers and button plus
• • • • • • • • • • • • • • • • • • • •	TRACOE care Accessories  For ongoing care as well as product maintenance and cleaning
	Information for Patients  Useful information about TRACOE tubes and daily care of them Page 86  Information for Distributors  Information for hospitals and distributors. Contact information, how to place orders, sales support, etc. Page 88



# TRACOE® percutan

## A Proven Technique

Percutaneous dilation tracheostomy has established itself as a standard procedure in intensive medicine. The Ciaglia technique is the one most widely used. The TRACOE experc system is based on this proven method, so there is no need to learn a new procedure. The sets are tailored to the use of unfenestrated and fenestrated tubes as well as tubes with subglottic suction line of the product groups TRACOE twist, incl. TRACOE twist plus NEW!, and TRACOE vario (not fenestrated).

#### The Feature

How to slide the tube over the insertion instrument into the tracheostoma is a challenge in percutaneous dilation tracheostomy. The TRACOE experc sets deliver the solution in form of the patented atraumatic inserter and the atraumatic insertion system. A soft silicone sleeve at the tip of the insertion instruments smoothly bridges the gap in diameter between the inserter and the tube. This lets the tube be inserted safely and easily.

## **Option for Reinsertion**

For difficult reinsertion situations unfenestrated and fenestrated TRACOE *twist, twist* plus NEW! as well as unfenestrated TRACOE *vario* tubes are available. They are available individually and premounted on the atraumatic inserter. The offered Seldinger guide wire should be used in any difficult case.

# TRACOE experc Set twist



**REF 320** 

**REF** 321

**RFF** 322

#### TRACOE experc Set twist

**REF 320** Set in sterile package

- 1 TRACOE experc Dilation Set (REF 520)
- 1 TRACOE twist tracheostomy tube with low pressure cuff and atraumatic inserter (REF 301-P)

#### **REF 321** Set in sterile package

- ◆ 1 TRACOE experc Dilation Set (REF 520)
- 1 TRACOE twist tracheostomy tube, fenestrated, with low pressure cuff and atraumatic inserter (REF 302-P)

#### **REF 322** Set in sterile package

- 1 TRACOE experc Dilation Set (REF 520)
- 1 TRACOE twist tracheostomy tube with low pressure cuff, <u>subglottic suction line</u> and atraumatic inserter (REF 306-P)
- REF 322: As a product variant the set is also available with REF 888-306-P, fenestrated
- TRACOE *twist* tubes REF 301-P, REF 302-P and REF 306-P as well as TRACOE experc Dilation Set (REF 520) are also available separately.

#### Package Contents per Set:

TRACOE experc Dilation Set for Percutaneous Tracheostomy, in sterile Package





- Scalpel
- Syringe
- Puncture needle (14 G) with Teflon catheter
- Seldinger guide wire <u>made of kink resistant</u> NiTiNol with inserter
- Short dilator 14 CH/FR
- Guiding catheter with safety stop
- TRACOE experc dilator with hydrophilic coating (slides easily after moistening)
- 4 compresses

TRACOE twist Tracheostomy Tube with Low Pressure Cuff and Atraumatic Inserter, in sterile Package:

REF 301-P unfenestrated (see Page 6),
 or REF 302-P fenestrated (see Page 6),
 or REF 306-P unfenestrated, with subglottic suction line (see Page 7)





#### The Feature of the TRACOE experc Set twist is the Atraumatic Insertion System of the Tubes.

Its tip has a folding silicone sleeve that smoothly bridges over the gap in diameter between the inserter and the end of the tube (Fig. 1).

The inserter also excels with a precise fit into the tube and a stop at the 15 mm conector. Once the tube is in the trachea, the inserter is pulled out of the tube. In doing so the silicone sleeve flaps back to facilitate its easy removal (Fig. 2).

#### The Benefits:

- Dilation is performed using the Ciaglia one-step technique.
- The atraumatic inserter smoothes over the gap in diameter between the end of the tube and the inserter. This minimizes the risk of injury when inserting the tracheostomy tube into the trachea.
- The stop at the 15 mm conector prevents the inserter from being inserted too far into the tube, which additionally reduces the risk of injury.
- The separately available tubes with insertion system can also be used for reinsertion into a percutaneously created tracheostoma and/or change tubes; if necessary in combination with the Seldinger guide wire (see page 19).

Ordering Information: REF 320, REF 321 and REF 322	Size	REF-No.	Units/package
REF 320, consisting of: 1 TRACOE experc Dilation Set (REF 520) and	07	REF 320-07	1
1 TRACOE twist tracheostomy tube, unfenestrated, with low pressure cuff	80	REF 320-08	1
and atraumatic inserter (REF 301-P)	09	REF 320-09	1
REF 321, consisting of: 1 TRACOE experc Dilation Set (REF 520) and	07	REF 321-07	1
1 TRACOE twist tracheostomy tube, fenestrated, with low pressure cuff	80	REF 321-08	1
and atraumatic inserter (REF 302-P)	09	REF 321-09	1
REF 322, consisting of: 1 TRACOE experc Dilation Set (REF 520) and	07	REF 322-07	1
1 TRACOE twist tracheostomy tube, unfenestrated, with subglottic suction	08	REF 322-08	1
line, low pressure cuff and atraumatic inserter (REF 306-P)	09	REF 322-09	1



#### TRACOE twist Tracheostomy Tube, <u>Unfenestrated</u>, with Low Pressure Cuff and Atraumatic Inserter

#### **REF 301-P** In sterile package

- Outer cannula with cuff
- 2 inner cannulas with 15 mm connector
- Atraumatic inserter
- Reinsertion tube
- Sterile lubricating gel
- Perforated Obturator and wide neck strap (shown below)

#### TRACOE twist Tracheostomy Tube, <u>Fenestrated</u>, with Low Pressure Cuff and Atraumatic Inserter

#### REF 302-P

In sterile package

- Outer cannula, fenestrated, with cuff
- ◆ Inner cannula with 15 mm connector
- Inner cannula, fenestrated, with 15mm connector
- Occlusion cap
- Atraumatic inserter
- Reinsertion tube
- Sterile lubricating gel
- Perforated obturator and wide neck strap (shown below)

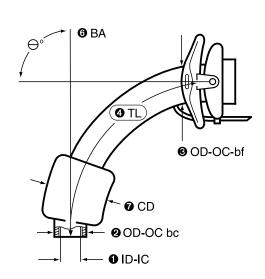


#### Each TRACOE twist tube is supplied with a

perforated obturator and a wide adjustable neck strap as well as a tube info card with peel-off stickers on front and back. The neck strap is also available separately (REF 903-F).









# TRACOE twist Tracheostomy Tube, <u>Unfenestrated</u>, with Low Pressure Cuff, Subglottic Suction Line and Atraumatic Inserter

#### REF 306-P

In sterile package

- Outer cannula with cuff and subglottic suction line
- 2 inner cannulas with 15 mm connector
- 2 connectors for suction devices
- Atraumatic inserter
- Reinsertion tube
- Sterile lubricating gel
- Perforated obturator and wide neck strap (shown on page 6)

#### **Product Variant:**

TRACOE twist Tracheostomy Tube,
<u>Fenestrated</u>, with Low Pressure Cuff,
Subglottic Suction Line and Atraumatic Inserter

#### REF 888-306-P

In sterile package

- Outer cannula, <u>fenestrated</u>, with cuff and subglottic suction line
- Inner cannula with 15 mm connector
- Inner cannula, fenestrated, with 15 mm connector
- 2 connectors for suction devices
- Atraumatic inserter
- Reinsertion tube
- Sterile lubricating gel
- Perforated obturator and wide neck strap (shown on page 6)

#### Reference Numbers and Measurements: REF 301-P, REF 302-P and REF 306-P

Size	• ID-IC	<b>9</b> OD-OC bc	<b>②</b> OD-OC bf	D-OC bf Lengths (mm)		<b>6</b> ВА	O CD
	(mm)	(mm)	(mm)	<b>4</b> TL	AB	(⊖°)	(mm)
07	7.0	10.4	12.0	74	80.5	95	26
08	8.0	11.4	12.7	76	83.0	90	28
09	9.0	12.5	14.2	78	88.5	90	30

• ID-IC: inside diameter (clear width) at bottom of inner cannula; • OD-OC bc: outside diameter at bottom of outer cannula; • OD-OC bf: outside diameter of outer cannula behind the flange; • Length TL: along centre line from start of neck flange to bottom of tube; • Length AB: length along outer bend from start of neck flange to bottom of tube; • CD: cuff diameter

► To order, specify: REF + size (e.g. REF 301-07-P).



# TRACOE experc Set twist plus

#### up to Size 10



**REF 330** 

**NEW!** 

RFF 331

**NEW!** 

**RFF** 332

**NEW!** 

## TRACOE experc Set twist plus



#### Also available in size 10!

#### **REF 330** Set in sterile package

- 1 TRACOE experc Dilation Set (REF 520)
- 1 TRACOE twist plus tracheostomy tube with low pressure cuff and atraumatic insertion system (REF 311-P)

#### **REF 331** Set in sterile package

- 1 TRACOE experc Dilation Set (REF 520)
- 1 TRACOE twist plus tracheostomy tube double fenestrated, with low pressure cuff and atraumatic insertion system (REF 312-P)

#### **REF 332** Set in sterile package

- 1 TRACOE experc Dilation Set (REF 520)
- 1 TRACOE twist plus tracheostomy tube, unfenestrated, with low pressure cuff, with subglottic suction line and atraumatic insertion system (REF 316-P)
- REF 332: As a product variant the set is also available with REF 888-316-P, fenestrated
- TRACOE *twist* plus tubes REF 311-P, REF 312-P and REF 316-P as well as TRACOE experc Dilation Set (REF 520) are also available separately.

#### Package Contents per Set:

TRACOE experc Dilation Set for Percutaneous Tracheostomy, in sterile Package

#### **REF 520**



- Scalpel
- Syringe
- Puncture needle (14 G) with Teflon catheter
- Seldinger guide wire <u>made of kink resistant</u> NiTiNol with inserter
- Short dilator 14 CH/FR
- Guiding catheter with safety stop
- TRACOE experc dilator with hydrophilic coating (slides easily after moistening)
- 4 compresses

TRACOE twist plus Tracheostomy Tube with Low Pressure Cuff and Atraumatic Inserter, in sterile Package:

REF 311-P

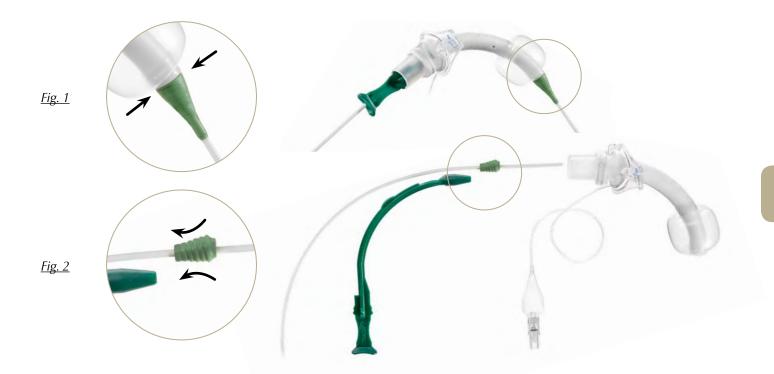
unfenestrated (page 10),

<u>or</u> **REF 312-P** 

<u>double fenestrated</u> (page 10), unfenestrated, with subglottic

<u>or</u> **REF 316-P** 

suction line (page 11)





# The Feature of the TRACOE experc Sets *twist* plus is the Atraumatic Insertion System of the Tubes.

The system consists of two parts: the white guiding catheter with silicone sleeve and the green inserter in the inner cannula. The silicone sleeve smoothly bridges over the gap in diameter between the end of the tube and the inserter thus minimising the risk of injury when inserting the tracheostomy tube into the trachea (see Fig. 1).

The TRACOE *twist* plus tracheostomy tubes are delivered premounted on the atraumatic insertion system, the inner cannula is already placed in the tube. The insertion system stabilises and assists guiding the tube; it excels with a precise fit into the tube and a stop at the 15 mm connector.

Once the tube is in the trachea the green inserter and the white guiding catheter with silicone sleeve are grabbed as a unit and removed together. By doing so the silicone sleeve flaps back and the guiding catheter can be removed easily (see Fig. 2). The Seldinger guide wire can be removed either prior or together with the guiding catheter. Alternatively the

green inserter can be removed <u>first</u>, followed by the white guiding catheter and the Seldinger guide wire. Under no circumstances the white guiding catheter must be removed first.

#### The Benefits:

- Dilation is performed using the proven Ciaglia one-step technique.
- The atraumatic inserter smoothes over the gap in diameter between the end of the tube and the inserter.
   This minimises the risk of injury when inserting the tracheostomy tube into the trachea.
- The stop at the 15 mm connector prevents the inserter from being inserted too far into the tube, which additionally reduces the risk of injury.
- The separately available tubes with inserting system can also be used for reinsertion into a percutaneously created tracheostoma and/or change tubes; if necessary in combination with the Seldinger guide wire (see page 19).

Ordering Information: REF 330, REF 331 and REF 332	Size	REF-No.	Units/package
DEF 000 III ( 4 TDA 00E DIIII 0 4 (DEF 500)	07	REF 330-07	1
REF 330, consisting of: 1 TRACOE experc Dilation Set (REF 520)	08	REF 330-08	1
and 1 TRACOE <i>twist</i> plus tracheostomy tube, <u>unfenestrated</u> , with low pressure cuff and atraumatic insertion system (REF 311-P)	09	REF 330-09	1
with low pressure cult and attaumatic insertion system (her 311-r)	10	REF 330-10	1
	07	REF 331-07	1
REF 331, consisting of: 1 TRACOE experc Dilation Set (REF 520)	08	REF 331-08	1
and 1 TRACOE <i>twist</i> plus tracheostomy tube, <u>double fenestrated</u> ,	09	REF 331-09	1
with low pressure cuff and atraumatic insertion system (REF 312-P)	10	REF 331-10	1
REF 332, consisting of: 1 TRACOE experc Dilation Set (REF 520)	07	REF 332-07	1
and 1 TRACOE twist plus tracheostomy tube, unfenestrated, with	08	REF 332-08	1
subglottic suction line, low pressure cuff and atraumatic insertion system	09	REF 332-09	1
(REF 316-P)	10	REF 332-10	1





Detail of the additional fenestration at the inner bend

REF 312-P





REF 311-P

**NEW!** 

#### TRACOE twist plus Tracheostomy Tube, Unfenestrated, with Low Pressure Cuff and Atraumatic Insertion System

#### **REF 311-P** In sterile package

- Outer cannula with cuff
- 2 inner cannulas with 15 mm connector
- Atraumatic insertion system
- Sterile lubricating gel
- Perforated Obturator and wide neck strap (shown below)

#### TRACOE twist plus Tracheostomy Tube, Double Fenestrated, with Low Pressure Cuff and Atraumatic Insertion System

#### REF 312-P In sterile package

- Outer cannula, double fenestrated, with cuff
- Inner cannula with 15 mm connector
- Inner cannula, double fenestrated with 15 mm connector
- Occlusion cap
- Atraumatic insertion system
- Sterile lubricating gel
- Perforated obturator and wide neck strap (shown below)

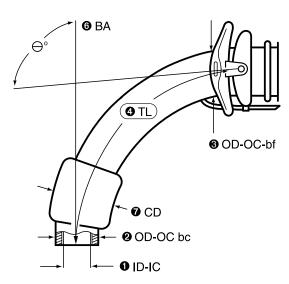
# twist plus



Each TRACOE twist plus tube is supplied with a perforated obturator and a wide adjustable neck strap as well as a tube info card with peel-off stickers on front and back. The neck strap is also available separately (REF 903-F).









#### TRACOE twist plus Tracheostomy Tube, Unfenestrated, with Low Pressure Cuff, Subglottic Suction Line and Atraumatic **Insertion System**

#### REF 316-P

In sterile package

- Outer cannula with cuff and subglottic suction line
- 2 inner cannulas with 15 mm connector
- 2 connectors for suction devices
- Atraumatic insertion system
- Sterile lubricating gel
- Perforated obturator and wide neck strap (shown on page 10)

#### **Product Variant:**

TRACOE twist plus Tracheostomy Tube, Double Fenestrated, with Low Pressure Cuff, Subglottic Suction Line and Atraumatic **Insertion System** 

#### REF 888-316-P

In sterile package

- Outer cannula, <u>double fenestrated</u>, with cuff and subglottic suction line
- Inner cannula with 15 mm connector
- Inner cannula, double fenestrated, with 15 mm connector
- 2 connectors for suction devices
- Atraumatic insertion system
- Sterile lubricating gel
- Perforated obturator and wide neck strap (shown on page 10)

#### Reference Numbers and Measurements: REF 311-P, REF 312-P and REF 316-P

Size	• ID-IC	<b>9</b> OD-OC bc	<b>OD-OC</b> bf	Length	s (mm)	<b>©</b> ВА	<b>©</b> CD
	(mm)	(mm)	(mm)	TL	AB	( <b>⊖°</b> )	(mm)
07	7.0	9.8	10.1	85	91	100	26
08	8.0	10.8	11.1	88	95	100	28
09	9.0	11.8	12.1	90	99	100	30
10	10.0	12.8	13.1	92	102	100	32

• ID-IC: inside diameter (clear width) at bottom of inner cannula; • OD-OC bc: outside diameter at bottom of outer cannula; OD-OC bf: outside diameter of outer cannula behind the flange; Length TL: along centre line from start of neck flange to bottom of tube; 3 Length AB: length along outer bend from start of neck flange to bottom of tube; @ BA: bending angle; @ CD: cuff diameter

► To order, specify: REF + size (e.g. REF 311-07-P)

# TRACOE experc Set vario



**REF 420** 

**REF 421** 

**REF 422 NEW!** 

## TRACOE experc Set vario

#### **REF 420** Set in sterile package

- 1 TRACOE experc Dilation Set (REF 520)
- 1 TRACOE vario tracheostomy tube, spiral-reinforced, with adjustable neck flange, low pressure cuff and atraumatic insertion system (REF 450-P)

#### **REF 421** Set in sterile package

- 1 TRACOE experc Dilation Set (REF 520)
- 1 TRACOE vario XL tracheostomy tube, spiral-reinforced, with adjustable neck flange, low pressure cuff and atraumatic insertion system (REF 451-P)

#### **REF 422** Set in sterile package

- 1 TRACOE experc Dilation Set (REF 520)
- 1 TRACOE vario extract tracheostomy tube with adjustable neck flange, low pressure cuff, subglottic suction line and atraumatic insertion system (REF 470-P)

#### **REF 423** Set in sterile package

- 1 TRACOE experc Dilation Set (REF 520)
- 1 TRACOE vario tracheostomy tube with adjustable neck flange, low pressure cuff and atraumatic insertion system (REF 460-P)

#### Package Contents per Set:

TRACOE experc Dilation Set for Percutaneous Tracheostomy, in sterile Package

#### **REF 520**



- Scalpel
- Syringe
- Puncture needle (14G) with Teflon catheter
- Seldinger guide wire made of kink resistant NiTiNol with inserter
- Short dilator 14 CH/FR
- Guiding catheter with safety stop
- TRACOE experc dilator with hydrophilic coating (slides easily after moistening)
- 4 compresses

TRACOE vario Tracheostomy Tube with Adjustable Neck Flange, Low Pressure Cuff and Atraumatic Insertion System, in sterile Package:

	REF 450-P	spiral-reinforced (see Page 15),
<u>or</u>	REF 451-P	extra-long, spiral-reinforced
		(see Page 15),
<u>or</u>	REF 460-P	not spiral-reinforced
		(see Page 16),
<u>or</u>	REF 461-P	extra-long, not spiral-reinforced
		(see Page 16),
<u>or</u>	REF 470-P	not spiral-reinforced,
		with subglottic suction line
		(see Page 17),
<u>or</u>	REF 471-P	extra-long, not spiral-reinforced,
		with subglottic suction line
		(see Page 17)



TRACOE vario tubes REF 450-P, REF 451-P, REF 460-P, REF 461-P, REF 470-P and REF 471-P as well as TRACOE experc Dilation Set (REF 520) are also available separately.







The optimized TRACOE vario tubes have an adjustable neck flange with locking lever and pliable wings on the flange that can be adjusted independently of one another

**NEW!** 

**NEW!** 

#### **REF 424**

Set in sterile package

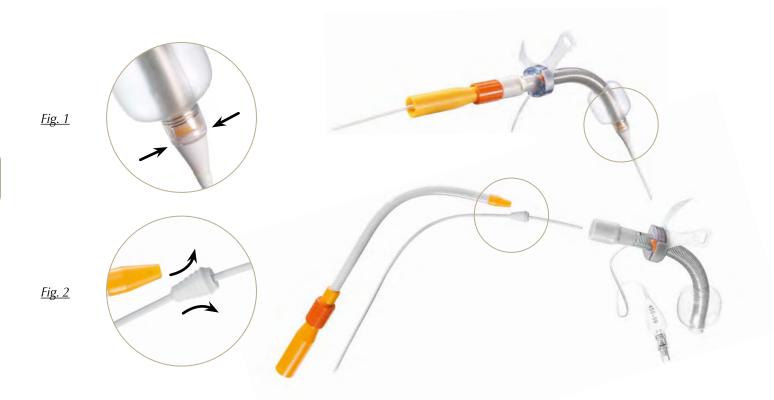
- ◆ 1 TRACOE experc Dilation Set (REF 520)
- ◆ 1 TRACOE vario XL tracheostomy tube with adjustable neck flange, low pressure cuff and atraumatic insertion system (REF 461-P)

#### **REF 425**

Set in sterile package

- 1 TRACOE experc Dilation Set (REF 520)
- ◆ 1 TRACOE vario extract XL tracheostomy tube with adjustable neck flange, low pressure cuff, subglottic suction line and atraumatic insertion system (REF 471-P)

Ordering Information: REF 420, REF 421, REF 422, REF 423, REF 424 and REF 425	Size	REF-No	Units/package
REF 420 consisting of: 1 TRACOE experc Dilation Set (REF 520) and 1 TRACOE	07	REF 420-07	1
vario tracheostomy tube with adjustable neck flange, spiral-reinforced, with low	08	REF 420-08	1
pressure cuff and atraumatic insertion system (REF 450-P)	09	REF 420-09	1
REF 421 consisting of: 1 TRACOE experc Dilation Set (REF 520) and 1 TRACOE	07	REF 421-07	1
vario XL tracheostomy tube with adjustable neck flange, spiral-reinforced,	80	REF 421-08	1
with low pressure cuff and atraumatic insertion system (REF 451-P)	09	REF 421-09	1
REF 422, consisting of: 1 TRACOE experc Dilation Set (REF 520) and 1 TRACOE	08	REF 422-08	1
vario extract tracheostomy tube with adjustable neck flange, low pressure cuff, subglottic suction line and atraumatic insertion system (REF 470-P)	09	REF 422-09	1
REF 423, consisting of: 1 TRACOE experc Dilation Set (REF 520) and 1 TRACOE	07	REF 423-07	1
vario tracheostomy tube with adjustable neck flange, low pressure cuff and	80	REF 423-08	1
atraumatic insertion system (REF 460-P)	09	REF 423-09	1
REF 424, consisting of: 1 TRACOE experc Dilation Set (REF 520) and 1 TRACOE	07	REF 424-07	1
vario XL tracheostomy tube with adjustable neck flange, low pressure cuff and	08	REF 424-08	1
atraumatic insertion system (REF 461-P)	09	REF 424-09	1
REF 425, consisting of: 1 TRACOE experc Dilation Set (REF 520) and 1 TRACOE vario extract XL tracheostomy tube with adjustable neck flange, low pressure cuff,	08	REF 425-08	1
subglottic suction line and atraumatic insertion system (REF 471-P)	09	REF 425-09	1





#### The Feature of the TRACOE experc Set vario is the Atraumatic Insertion System of the Tubes.

The system consists of two parts: the guiding catheter with silicone sleeve and the inserter for stabilisation and guidance of the tube.

The silicone sleeve smoothly bridges over the gap in diameter between the end of the tube and the inserter thus minimising the risk of injury when inserting the tracheostomy tube into the trachea (see Fig. 1).

The insertion system excels with a precise fit into the tube and a stop at the 15 mm connector. Once the tube is in the trachea first the inserter is removed and only then the guiding catheter with silicone sleeve. By doing so the silicone sleeve flaps back and the guiding catheter can be removed easily (see Fig. 2). The Seldinger guide wire can be removed either prior or together with the guiding catheter. Under no circumstances the guiding catheter must be removed first.

#### The Benefits:

- Dilation is performed using the proven Ciaglia one-steptechnique.
- The atraumatic insertion system smoothes over the gap in diameter between the end of the tube and the inserter. This minimises the risk of injury when inserting the tracheostomy tube into the trachea.
- The stop at the 15 mm connector prevents the inserter from being inserted too far into the tube, which additionally reduces the risk of injury.
- The separately available tubes with insertion system can also be used for reinsertion into a percutaneously created tracheostoma and/or change tubes; if necessary in combination with the Seldinger guide wire (see page 19).



TRACOE vario Tracheostomy Tube Spiral-Reinforced, with Adjustable Neck Flange, Low Pressure Cuff and Atraumatic Insertion **System** 

REF 450-P

In sterile package

- Cannula with 15 mm connector, spiral-reinforced, with cuff, scale and atraumatic insertion system
- Sterile lubricating gel
- Obturator and wide neck strap (shown below)

TRACOE vario XL Tracheostomy Tube, Extra-Long, Spiral-Reinforced, with Adjustable Neck Flange, Low Pressure Cuff and Atraumatic **Insertion System** 

REF 451-P

In sterile package

- Cannula, extra-long, with 15 mm connector, spiral-reinforced, with cuff, scale and atraumatic insertion system
- Sterile lubricating gel
- Obturator and wide neck strap (shown below)



#### Each TRACOE vario tube is supplied with an

obturator and a wide adjustable neck strap as well as a tube info card with peel-off stickers on front and back. The neck strap is also available separately (REF 903-F).





#### TRACOE vario Tracheostomy Tube with Adjustable Neck Flange, Low Pressure Cuff and Atraumatic Insertion System

REF 460-P In sterile package

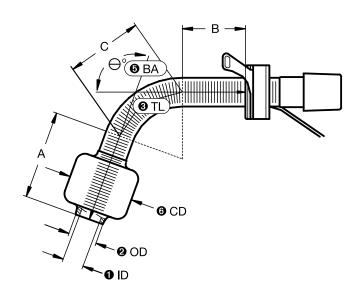
- Cannula with 15 mm connector, cuff, X-ray contrast line, scale and atraumatic insertion system
- Sterile lubricating gel
- Obturator and wide neck strap (shown on page 15)

#### TRACOE vario XL Tracheostomy Tube, Extra-Long, with Adjustable Neck Flange, Low Pressure Cuff and Atraumatic Insertion System

**REF 461-P** 

In sterile package

- Cannula, extra-long, with 15 mm connector, cuff, X-ray contrast line, scale and atraumatic insertion system
- Sterile lubricating gel
- Obturator and wide neck strap (shown on page 15)





#### TRACOE vario extract Tracheostomy Tube with Adjustable Neck Flange, Low Pressure Cuff, **Subglottic Suction Line and Atraumatic Insertion System**

REF 470-P In sterile package

- Cannula with 15 mm connector, cuff, X-ray contrast line, scale, subglottic suction line and atraumatic insertion system
- 2 connectors for suction devices
- Sterile lubricating gel
- Obturator and wide neck strap (shown on page 15)

TRACOE vario extract XL Tracheostomy Tube, Extra-Long, with Adjustable Neck Flange, Low Pressure Cuff, Subglottic Suction Line and Atraumatic Insertion System

#### REF 471-P

In sterile package

- Cannula, extra-long, with 15 mm connector, cuff, X-ray contrast line, scale, subglottic suction line and atraumatic insertion system
- 2 connectors for suction devices
- Sterile lubricating gel
- Obturator and wide neck strap (shown on page 15)

#### Reference Numbers and Measurements: REF 450-P, REF 460-P and REF 470-P (not available in size 07)

Size	<b>O</b> ID	<b>Q</b> OD	Lengths (mm)					<b>⊙</b> BA	<b>©</b> CD
	(mm)	(mm)	Α	С	В	<b>©</b> TL	<b>4</b> AB	( <b>⊖°</b> )	(mm)
07	7.0	9.7	33	32	15	80	86	100	26
08	8.0	11.2	35	35	20	90	97	100	28
09	9.0	12.3	38	35	27	100	106	100	30

#### Reference Numbers and Measurements: REF 451-P, REF 461-P and REF 471-P (not available in size 07)

07	7.0	9.7	35	36	33	104	110	100	26
08	8.0	11.2	37	46	40	123	128	100	28
09	9.0	12.3	38	46	42	126	134	100	30

• ID: inside diameter (clear width) at bottom of cannula; • OD: outside diameter at bottom of cannula; • TL: length along centre line; 4AB: length along outer bend; 5BA: bending angle; CD: cuff diameter

To order, specify REF + size (e.g. REF 450-07-P).

# **TRACOE** experc Module System



#### TRACOE experc Dilation Set

In sterile package

The TRACOE experc Dilation Set can be supplemented with the tracheostomy tube which is best suited for the patient:

#### For patients needing ventilation

- ► REF 450-P (page 15), as Set REF 420 (page 12)
- ► REF 451-P (page 15), as Set REF 421 (page 12)

#### For patients with thick neck

- ► REF 451-P (page 15), as Set REF 421 (page 12)
- ▶ REF 461-P (page 16), as Set REF 424 (page 13)
- ▶ REF 471-P (page 17), as Set REF 425 (page 13)

#### For ventilation

- ▶ REF 460-P (page 16), as Set REF 423 (page 12)
- ▶ REF 461-P (page 16), as Set REF 424 (page 13)

#### For ventilation and/or rehabilitation

- ▶ REF 301-P (page 6), as Set REF 320 (page 4)
- ► REF 311-P (page 10), <u>as Set</u> REF 330 (page 8)

#### For ventilation and/or rehabilitation as speaking tube

- ► REF 302-P (page 6), <u>as Set</u> REF 321 (page 4)
- ▶ REF 312-P (page 10), as Set REF 331 (page 8)

#### For ventilation and/or rehabilitation with subglottic suction line

- ▶ REF 306-P (page 11), as Set REF 322 (page 4)
- ▶ REF 316-P (page 11), as Set REF 332 (page 8)
- ▶ REF 470-P (page 17), as Set REF 422 (page 12)
- ▶ REF 471-P (page 17), <u>as Set</u> REF 425 (page 13)



REF 450-P TRACOE vario, spiral-reinforced



**REF 460-P** TRACOE vario, not spiralreinforced



REF 451-P TRACOE vario, extra-long, spiral-reinforced



**REF 461-P** TRACOE vario, extra-long, not spiral-reinforced



TRACOE vario extract, not spiral-reinforced, with subglottic suction line



REF 471-P TRACOE vario extract, extralong, not spiral-reinforced, with subglottic suction line



RFF 301-P TRACOE twist, not fenestrated



**REF 302-P** TRACOE twist, fenestrated



TRACOE twist, not fenestrated, with subglottic suction line



**REF 311-P** TRACOE twist plus, not fenestrated



**REF 312-P** TRACOE twist plus, double fenestrated



TRACOE twist plus, not fenestrated, with subglottic suction line



All TRACOE tracheostomy tubes for the percutaneous tracheostomy are available in sizes 07, 08 and 09 (REF 470-P and REF 471-P only in sizes 08 and 09). TRACOE twist plus tracheostomy tubes are available in size 10 as well.



### Seldinger Guide Wire with Guiding Catheter

**REF 517** 

Set in sterile package

- Seldinger guide wire made of kink resistant NiTiNol
- Guiding catheter

To be used with all TRACOE twist tubes with atraumatic inserter.



The Seldinger technic with the Seldinger Guide Wire, should be used in difficult situations to provide a safer guided way into the trachea.

#### Seldinger Guide Wire

**REF 518** 

Pack of 5, supplied in individual sterile packages

Seldinger guide wire made of kink resistant NiTiNol





## High Acceptance

TRACOE *twist* tubes are made of tissue-friendly medical-grade polyurethane, so that they are well-tolerated by patients. They are radiopaque and come in sterile packages.

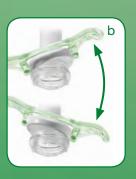
## **Maximum Mobility**

The most outstanding feature of TRACOE *twist* is the anatomically shaped neck flange that moves around two axes: vertically (a) and horizontally (b). This allows patients to turn their head and neck freely without the tube exerting pressure on the trachea. The neck strap can easily be attached while the tube is in situ (c). TRACOE *twist* tubes have thin walls, which ensure maximum air flow. The material of the low pressure cuff is soft and flexible and ensures a good sealing of the trachea with accurate cuff pressure management.

#### **Maximum Cost-Effectiveness**

TRACOE *twist* tubes were originally developed primarily for clinical use: e.g. for mechanical ventilation in intensive care or for ENT surgery. However, TRACOE *twist* tubes are now very often used during rehabilitation and by patients at home. The investment is enhanced by a broad range of replacement parts and accessories.







# **TRACOE** *twist* – Tracheostomy Tubes







# Tracheostomy Tube with Low Pressure Cuff

#### **REF 301** In sterile package

- Outer cannula with cuff
- 2 inner cannulas with 15 mm connector
- Perforated obturator and wide neck strap (shown below)
- Neck flange, blue writing: fenestrated outer cannula



Neck flange, green writing: unfenestrated outer cannula



Each TRACOE twist tube is supplied with a perforated obturator and a wide adjustable neck strap as well as a tube info card with peel-off stickers on front and back. The neck strap is also available separately (REF 903-F).





# <u>Fenestrated</u> Tracheostomy Tube with Low Pressure Cuff

#### **REF 302** In sterile package

- Outer cannula, fenestrated, with cuff
- Inner cannula, fenestrated, with 15 mm connector
- Inner cannula with 15 mm connector
- Occlusion cap for 15 mm connector
- Perforated obturator and wide neck strap (shown below)



● REF 305 ● REF 306 ● REF 309

The colour coding is conspicuously printed on each box. This helps you organise your inventory and quickly and reliably locate the right tube.

## REF 301-P, REF 302-P and REF 306-P:

TRACOE *twist* tracheostomy tubes with atraumatic inserter. For details see page 4 to 7.







#### **Tracheostomy Tube**

#### **REF 303**

In sterile package

- Outer cannula
- 2 inner cannulas with 15 mm connector
- Perforated obturator and wide neck strap (shown on page 22)

#### **Fenestrated** Tracheostomy Tube

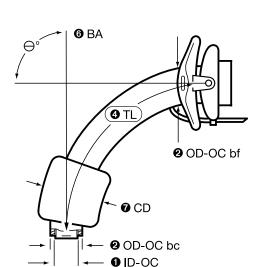
#### **REF 304**

In sterile package

- Outer cannula, fenestrated
- Inner cannula, fenestrated, with 15 mm connector
- ◆ Inner cannula with 15 mm connector
- ◆ Occlusion cap for 15 mm connector
- Perforated obturator and wide neck strap (shown on page 22)

## **Reference Numbers and Measurements:**

REF 301, REF 302, REF 303, REF 304, REF 306 and REF 309



Size	0	0	8	Lengtl	ns (mm)	6	0
	ID-IC (mm)	OD-OC bc (mm)	OD-OC bf (mm)	<b>⊘</b> TL	<b>⊙</b> AB	BA (⊖°)	CD (mm)
04	4.0	7.2	8.6	56	63.0	110	15
05	5.0	8.6	10.1	66	73.0	100	18
06	6.0	9.2	10.8	72	79.5	95	23
07	7.0	10.4	12.0	74	80.5	95	26
80	8.0	11.4	12.7	76	83.0	90	28
09	9.0	12.5	14.2	78	88.5	90	30
10	10.0	13.8	15.2	80	89.5	90	32

● ID-IC: inside diameter (clear width) at bottom of inner cannula; ● OD-OC bc: outside diameter at bottom of outer cannula; ● OD-OC bf: outside diameter of outer cannula behind the flange; ● Length TL: along centre line from start of neck flange to bottom of tube; ● Length AB: length along outer bend from start of neck flange to bottom of tube; ● BA: bending angle; ● CD: cuff diameter

To order, specify: REF + size (e.g. REF 306-04).









#### Laryngectomy Tube

**REF 305** In sterile package

- Outer cannula
- Inner cannula with 15 mm connector
- Inner cannula with grooved low profile connector
- Perforated obturator and wide neck strap (shown on page 22)

# Tracheostomy Tube, <u>Unfenestrated</u>, with Low Pressure Cuff and <u>Subglottic Suction Line</u>

**REF 306** In sterile package

- Outer cannula with cuff and subglottic suction line
- 2 inner cannulas with 15 mm connector
- 2 connectors for suction devices
- Perforated obturator and wide neck strap (shown on page 22)

#### **Reference Numbers and Measurements: REF 305**

Size	0	0	8	Lengtl	hs (mm)	6
	ID-IC (mm)	OD-OC bc (mm)	OD-OC bf (mm)	<b>⊕</b> TL	<b>⊙</b> AB	BA (⊖°)
05	5.0	9.0	10.1	47	52	125
06	6.0	9.4	10.8	50	56	120
07	7.0	10.6	12.0	52	59	120
08	8.0	11.6	12.7	56	63	115
09	9.0	12.8	14.2	58	66	108
10	10.0	14.2	15.2	60	70	100

● ID-IC: inside diameter (clear width) at bottom of inner cannula; ● OD-OC bc: outside diameter at bottom of outer cannula; ● OD-OC bf: outside diameter of outer cannula behind the flange; ● Length TL: along centre line from start of neck flange to bottom of tube; ● Length AB: length along outer bend from start of neck flange to bottom of tube; ● BA: bending angle

• Please refer to the figure on page 23.

► To order, specify: REF + size (e.g. REF 305-05).



The reference numbers and measurements for REF 306 to REF 309 can be found on the table on page 23.





**Product Variant:** 

TRACOE twist Tracheostomy Tube, <u>Fenestrated</u>, with Low Pressure Cuff and <u>Subglottic Suction Line</u>

**REF 888-306** In sterile package

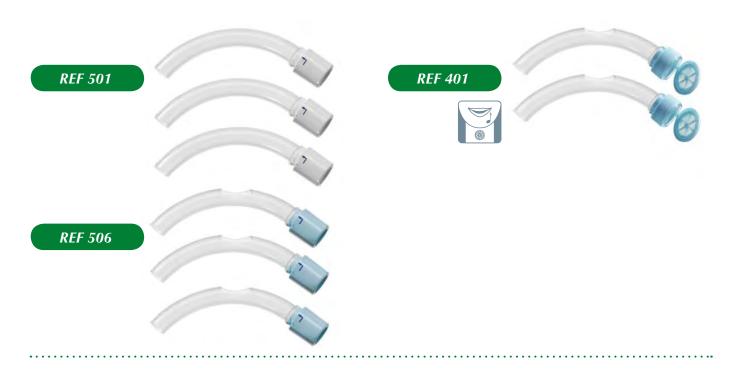
- Outer cannula, <u>fenestrated</u>, with cuff and <u>subglottic suction line</u>
- ◆ Inner cannula with 15 mm connector
- Inner cannula, fenestrated, with 15 mm connector
- 2 connectors for suction devices
- Perforated obturator and wide neck strap (shown on page 22)

Tracheostomy Tube with Low Pressure Cuff and Air Supply Line for Speaking

**REF 309** In sterile package

- Outer cannula with cuff and air supply line for speaking
- Inner cannula with 15 mm connector
- Perforated obturator and wide neck strap (shown on page 22)

## **TRACOE** *twist* – Spare Parts and Accessories



# Spare Inner Cannulas, <u>Unfenestrated</u>, with 15 mm Connector

**REF 501** 3 units supplied in

individual sterile packages

**REF 501-X** 10 units supplied in

individual sterile packages

The inner cannulas are spare parts for *twist* tubes REF 301, REF 302, REF 303, REF 304, REF 306 and REF 309.

Sizes: 04, 05, 06, 07, 08, 09, 10

# Inner Cannulas, <u>Fenestrated</u>, with Integrated Speaking Valve (light blue)

**REF 401** 2 units supplied in

individual sterile packages

The inner cannulas are accessories for twist tubes

REF 302 and REF 304.

Sizes: 04, 05, 06, 07, 08, 09, 10

# Spare Inner Cannulas, <u>Fenestrated</u>, with 15mm Connector (light blue)

**REF 506** 3 units supplied in

individual sterile packages

**REF 506-X** 10 units supplied in

individual sterile packages

The inner cannulas are spare parts for *twist* tubes REF 302, REF 304 and REF 888-306.

Sizes: 04, 05, 06, 07, 08, 09, 10



All fenestrated inner tubes are recognizable by blue parts, e.g. 15 mm connector.





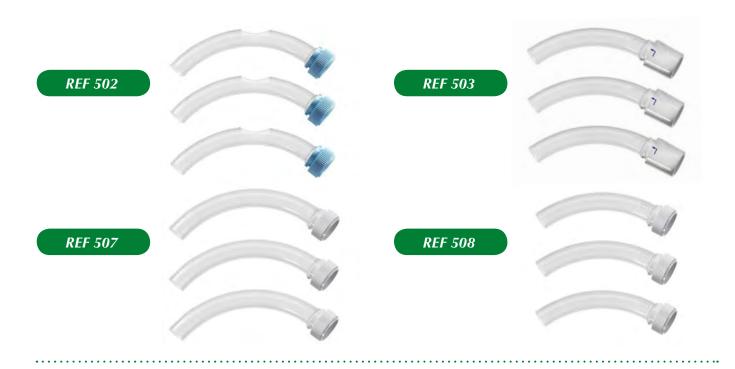






Accessory for TRACOE *twist* Tubes: Speaking valves and artificial noses (for details see page 60 and 61).





# Inner Cannulas, <u>Fenestrated</u>, with Grooved Low Profile Connector (light blue)

**REF 502** 3 units supplied in

individual sterile packages

The inner cannulas are accessories for twist tubes

REF 302 and REF 304.

Sizes: 04, 05, 06, 07, 08, 09, 10

#### Inner Cannulas, <u>Unfenestrated</u>, with Grooved Low Profile Connector (white)

**REF 507** 3 units supplied in

individual sterile packages

The inner cannulas are accessories for twist tube

REF 303.

Sizes: 04, 05, 06, 07, 08, 09, 10

# Spare Inner Cannulas, <u>Unfenestrated</u>, with 15 mm Connector

**REF 503** 3 units supplied in

individual sterile packages

The inner cannulas are spare parts for twist tube

REF 305.

Sizes: 05, 06, 07, 08, 09, 10

# Spare Inner Cannulas, <u>Unfenestrated</u>, Short, with Grooved Low Profile Connector (white)

**REF 508** 3 units supplied in

individual sterile packages

The inner cannulas are spare parts for twist tube

REF 305.

Sizes: 05, 06, 07, 08, 09, 10

## TRACOE twist plus – Tracheostomy Tubes







Detail of the additional fenestration at the inner bend







Colour Coding







Colour Coding



#### TRACOE twist plus Tracheostomy Tube with Low Pressure Cuff

**REF 311** In sterile package

- Outer cannula with cuff
- 2 inner cannulas with 15 mm connector
- Perforated Obturator and wide neck strap (shown on page 30)

#### TRACOE twist plus Tracheostomy Tube, Double Fenestrated, with Low Pressure Cuff

**REF 312** In sterile package

- Outer cannula, double fenestrated, with cuff
- Inner cannula with 15 mm connector
- Inner cannula, double fenestrated, with 15 mm connector
- Occlusion cap for 15 mm connector
- Perforated obturator and wide neck strap (shown on page 30)



#### Features of TRACOE twist plus **Tracheostomy Tubes:**

- Elongated version of the well-proven TRACOE twist tubes.
- Greatly reduced wall thickness
- Maximal inner lumen thin-walled but stable inner cannula
- Less outer diameter with more inner lumen
- Less airway resistance
- New safety locking device for the inner tube
- Highly improved phonation through double-fenestration of REF 312 and REF 314: multiple fenestration at the outer bend as well as two additional phonation holes at the inner bend.





#### **TRACOE** *twist* plus Colour Coding:

REF 311 .... REF 312 .... REF 313



## REF 314 ## REF 316

The colour coding is conspicuously printed on each box. This helps you organise your inventory and quickly and reliably locate the right tube.



#### REF 311-P, REF 312-P and REF 316-P:

TRACOE twist plus Tracheostomy tubes with atraumatic insertion system. For details see pages 8 to 11.









Detail of the additional fenestration at the inner bend









Colour Coding







Colour Coding



#### TRACOE twist plus Tracheostomy Tube

#### **REF 313** In sterile package

- Outer cannula
- 2 inner cannulas with 15 mm connector
- Perforated Obturator and wide neck strap (shown on page 30)

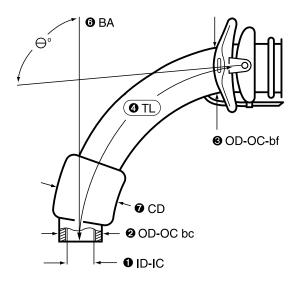
#### TRACOE twist plus Tracheostomy Tube, Double Fenestrated

#### **REF 314**

In sterile package

- Outer cannula, double fenestrated
- ◆ Inner cannula with 15 mm connector
- Inner cannula, <u>double fenestrated</u>, with 15 mm connector
- Occlusion cap for 15 mm connector
- Perforated obturator and wide neck strap (shown on page 30)

## twist plus

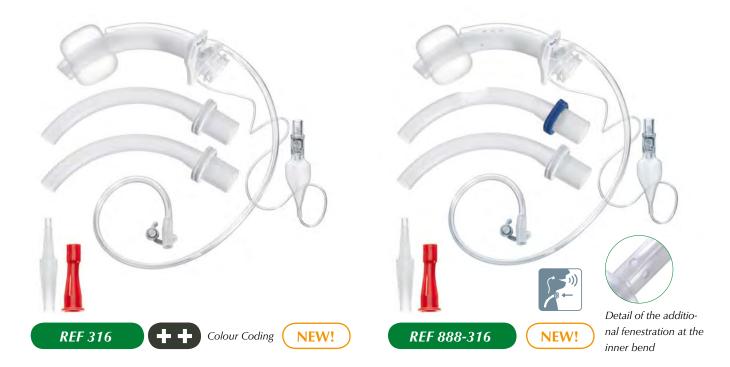


# Reference Numbers and Measurements: REF 311, REF 312, REF 313, REF 314 and REF 316

Size	0	2	8	Lengths (mm)		6	0
	ID-IC	OD-OC bc	OD-OC bf	4	•	BA	CD
	(mm)	(mm)	(mm)	TL	AB	( <b>⊖°</b> )	(mm)
07	7,0	9,8	10,1	85	91	100	26
08	8,0	10,8	11,1	88	95	100	28
09	9,0	11,8	12,1	90	99	100	30
10	10,0	12,8	13,1	92	102	100	32

● ID-IC: inside diameter (clear width) at bottom of inner cannula; ● OD-OC bc: outside diameter at bottom of outer cannula; ● OD-OC bf: outside diameter of outer cannula behind the flange; ● Length TL: along centre line from start of neck flange to bottom of tube; ● Length AB: length along outer bend from start of neck flange to bottom of tube; ● BA: bending angle; ● CD: cuff diameter

► To order, specify: REF + size (e.g. REF 311-08).



#### TRACOE twist plus Tracheostomy Tube, <u>Unfenestrated</u>, with Low Pressure Cuff and Subglottic Suction Line

#### **REF 316** In sterile package

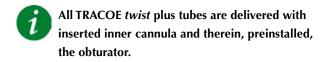
- Outer cannula with cuff and subglottic suction line
- 2 inner cannulas with 15 mm connector
- 2 connectors for suction devices
- Perforated obturator and wide neck strap (shown below)

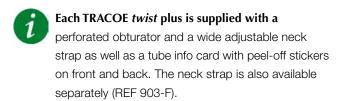
#### **Product Variant:**

TRACOE twist plus Tracheostomy Tube, <u>Double Fenestrated</u>, with Low Pressure Cuff and Subglottic Suction Line

#### **REF 888-316** In sterile package

- Outer cannula, <u>double fenestrated</u>, with cuff and subglottic suction line
- Inner cannula with 15 mm connector
- Inner cannula, <u>double fenestrated</u>, with 15 mm connector
- 2 connectors for suction devices
- Perforated obturator and wide neck strap (shown below)









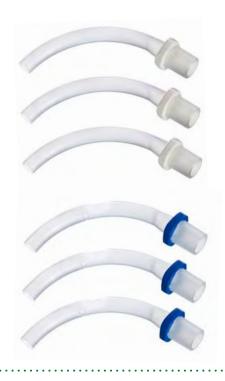
# **TRACOE** *twist* plus – Spare Parts and Accessories



**NEW!** 

**REF 523** 

**NEW!** 





Detail of the additional two phonation holes at the inner bend

# Spare Inner Cannulas, <u>Unfenestrated</u>, with 15 mm Connector

**REF 521** 3 units supplied in

individual sterile packages

**REF 521-X** 10 units supplied in

individual sterile packages

The inner cannulas are spare parts for *twist* plus tubes REF REF 311, REF 312, REF 313, REF 314 and REF 316.

Sizes: 07, 08, 09, 10

# Spare Inner Cannulas, <u>Double Fenestrated</u>, with 15 mm Connector

**REF 523** 3 units supplied in

individual sterile packages

**REF 523-X** 10 units supplied in

individual sterile packages

The inner cannulas are spare parts for *twist* plus tubes REF 312, REF 314 and REF 888-316.

Sizes: 07, 08, 09, 10



# TRACOE®

vario

#### **Patented**

TRACOE *vario* – the flexible tube with the patented, variably adjustable neck flange. By means of a practical pressure mechanism, the neck flange can be moved and, thus, be adjusted individually to any patient. A scale ensures the exact positioning of the neck flange in preparation to change tubes (a). The flange is fixed immediately after its release. Additionally as an optional precaution, the neck flange can be securely locked by pulling up the orange lever system (b). Since no screw top is used, no pressure of any kind will be exerted on the trachea.

# **Numerous Adaptabilities**

The pliable wings on the flange can be adjusted independently of one another (c). This provides additional possibilities for meeting the unique anatomical requirements of each patient.

TRACOE *vario* tracheostomy tubes come in many different versions: reinforced with a metal spiral or made of clear plastic (with an X-ray contrast line), with or without low pressure cuff, with subglottic suction line and in an extra-long version.







# TRACOE vario – Tracheostomy Tubes





**REF 450** 



Colour Coding

In sterile package

**REF 455** 



Colour Coding

#### Tracheostomy Tube Spiral-Reinforced, with Adjustable Neck Flange and Low Pressure Cuff

#### REF 450

- Cannula with 15 mm connector, spiral-reinforced, with cuff and scale
- Obturator and wide neck strap (shown below)

#### Tracheostomy Tube Spiral-Reinforced, with Adjustable Neck Flange

#### **REF 455**

In sterile package

- Cannula with 15 mm connector, spiral-reinforced, with scale
- Obturator and wide neck strap (shown below)

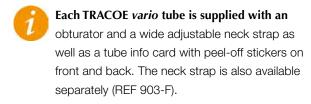


#### **TRACOE** *vario* Colour Coding:

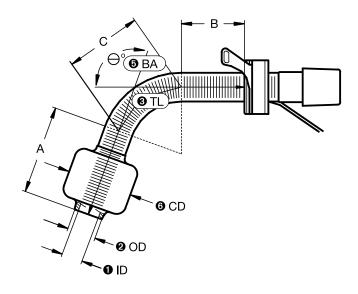
SREF 450 SREF 455 ■ REF 460 ■ REF 470

XL REF 451 XL REF 461 XL REF 471

The colour coding is conspicuously printed on each box. This helps you organise your inventory and quickly and reliably locate the right tube.









**Tracheostomy Tube** with Adjustable Neck Flange and **Low Pressure Cuff** 

#### **REF 460**

In sterile package

- Cannula with 15 mm connector, cuff, X-ray contrast line and scale
- Obturator and wide neck strap (shown on page 34)

#### Reference Numbers and Measurements: REF 450, REF 455 and REF 460

Size	<b>O</b> ID	<b>Q</b> OD		Le	ngths (n	nm)		<b>9</b> BA	<b>©</b> CD
	(mm)	(mm)	Α	C	В	<b>Ø</b> TL	<b>4</b> AB	( <b>⊖°</b> )	(mm)
06	6.0	8.2	30	28	12	70	76	100	23
07	7.0	9.7	33	32	15	80	86	100	26
08	8.0	11.2	35	35	20	90	97	100	28
09	9.0	12.3	38	35	27	100	106	100	30
10	10.0	13.7	38	37	35	110	120	100	32
11	11.0	14.8	38	37	35	110	121	100	34

• ID: inside diameter (clear width) at bottom of cannula; • OD: outside diameter at bottom of cannula; @TL: length along centre line; @ AB: length along outer bend; @ BA: bending angle; @CD: cuff diameter (REF 450 and REF 460)

To order, specify REF + size (e.g. REF 450-06).

# TRACOE vario – Tracheostomy Tubes, extra-long





REF 451 Colour Coding

REF 461 XL Colour Coding

NEW!

#### TRACOE vario XL Tracheostomy Tube, <u>Extra-Long</u>, Spiral-Reinforced, with Adjustable Neck Flange and Low Pressure Cuff

#### **REF 451**

In sterile package

- Cannula with 15 mm connector, spiral-reinforced, with cuff and scale
- Obturator and wide neck strap (shown on page 34)

#### TRACOE vario XL Tracheostomy Tube, <u>Extra-Long</u>, with Adjustable Neck Flange and Low Pressure Cuff

#### **REF 461**

In sterile package

- Cannula with 15 mm connector, cuff, X-ray contrast line and scale
- Obturator and wide neck strap (shown on page 34)

#### Reference Numbers and Measurements: REF 451, REF 461 and REF 471

Size	<b>O</b> ID	<b>9</b> OD		Le	ngths (m	m)		<b>6</b> BA	<b>6</b> CD
	(mm)	(mm)	Α	C	В	<b>©</b> TL	<b>4</b> AB	( <b>⊖°</b> )	(mm)
07	7.0	9.7	35	36	33	104	110	100	26
80	8.0	11.2	37	46	40	123	128	100	28
09	9.0	12.3	38	46	42	126	134	100	30
10	10.0	13.7	38	52	45	135	146	100	32

#### **Reference Numbers and Measurements: REF 470**

07	7.0	9.7	33	32	15	80	86	100	26
08	8.0	11.2	35	35	20	90	97	100	28
09	9.0	12.3	38	35	27	100	106	100	30
10	10.0	13.7	38	37	35	110	120	100	32

- ID: inside diameter (clear width) at bottom of cannula; ② OD: outside diameter at bottom of cannula; ③ TL: length along centre line; ④ AB: length along outer bend; ⑤ BA: bending angle, ⑥ CD: cuff diameter
- Please refer to the figure on page 34.
- ▶ To order, specify REF + size (e.g. REF 451-07).



 Artificial noses (for details see page 61)

# TRACOE vario – Tracheostomy Tubes, with Subglottic Suction Line



#### TRACOE vario extract Tracheostomy Tube with Adjustable Neck Flange, Low Pressure Cuff and Subglottic Suction Line

**REF 470** In sterile package

- Cannula with 15 mm connector, cuff, X-ray contrast line, scale and subglottic suction line
- 2 connectors for suction pump
- Obturator and wide neck strap (shown on page 34)

#### TRACOE vario XL extract Tracheostomy Tube, Extra-Long, with Adjustable Neck Flange, Low Pressure Cuff and Subglottic Suction Line

**REF 471** In sterile package

- Cannula with 15 mm connector, cuff, X-ray contrast line, scale and subglottic suction line
- 2 connectors for suction pump
- Obturator and wide neck strap (shown on page 34)



#### REF 470 and REF 471, with subglottic suction line. **Advantages and Special Information:**

- Accumulated subglottic secretions can be suctioned off at the lowest point, in other words right above the cuff. This reduces the risk of bacterially contaminated secretions entering the lower respiratory tract and the risk of developing aspiration pneumonia.
- The suction line is integrated in the wall of the tube to avoid any pressure marks in the tracheostoma. Via this line, secretions can be suctioned off.
- The variably adjustable neck flange with rotating wings permits universal adjustment to any neck anatomy (e.g. thick necks, postoperative oedema, asymmetrical necks).



#### REF 450-P, REF 451-P, REF 460-P, RE 461-P, **REF 470-P and REF 471-P:**

TRACOE vario tracheostomy tubes with atraumatic insertion system. For details refer to page 12 to 17.



# TRACOE® pure

# **Large Range of Sizes**

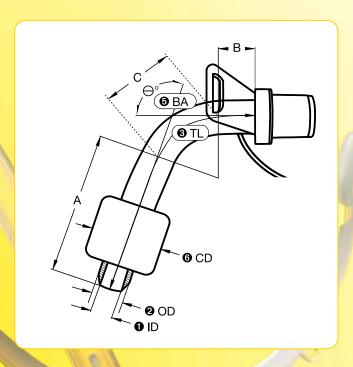
The TRACOE *pure* tube is supplied in sizes 5.0 to 10.0 finely differentiated in steps of 0.5 mm. This permits selection of the right tube for a precise fit in any anatomical situation.

# **Proven TRACOE Specifications**

The TRACOE pure tracheostomy tube also includes many proven TRACOE specifications: e.g. the transparent design for easier detection of soiling.

# A Clear Case

Transparent design,
11 different sizes in steps
of 0.5 mm – the economical
version for short-term use.







#### **Tracheostomy Tube** with Low Pressure Cuff

#### **REF 480**

In sterile package

- Cannula with cuff
- Perforated obturator
- Wide neck strap
- Tube info card with peel-off stickers on front and back



#### Accessory for TRACOE pure Tube:

- Artificial noses (for details see page 61)
- REF 517, Seldinger guide wire with guiding catheter (for details see page 19)
- REF 518, Seldinger guide wire (for details see page 19)



#### **TRACOE** *pure* Colour Coding:

REF 480: The colour coding is conspicuously printed on each box. This helps you organise your inventory and quickly and reliably locate the right tube.

#### **Reference Numbers and Measurements: REF 480**

Size	<b>O</b> ID	<b>9</b> OD			Lengths (	mm)		<b>©</b> BA	<b>©</b> CD
	(mm)	(mm)	Α	C	В	<b>Ø</b> TL	<b>4</b> AB	( <b>⊖°</b> )	(mm)
5.0	5.0 ± 0.2	6.7 ± 0.2	32	22	10	64 ± 2	69	95-100	17
5.5	$5.5 \pm 0.2$	$7.4 \pm 0.2$	32	25	10	67 ± 2	74	95-100	17
6.0	$6.0 \pm 0.2$	$8.4 \pm 0.2$	33	25	12	70 ± 2	77	95-100	20
6.5	$6.5 \pm 0.2$	9.1 ± 0.2	33	28	12	73 ± 2	80	95-100	20
7.0	$7.0 \pm 0.2$	$9.8 \pm 0.2$	33	29	14	76 ± 2	85	95-100	22
7.5	$7,5 \pm 0,2$	$10.3 \pm 0.2$	34	33	14	81 ± 2	89	95-100	22
8.0	$8.0 \pm 0.2$	11.0 ± 0.2	35	34	16	85 ± 2	94	95-100	24
8.5	$8.5 \pm 0.2$	11.5 ± 0.2	36	36	16	88 ± 2	97	95-100	24
9.0	$9.0 \pm 0.2$	12.0 ± 0.2	38	37	17	92 ± 2	100	95-100	26
9.5	$9.5 \pm 0.2$	12.5 ± 0.2	40	39	17	96 ± 2	106	95-100	26
10.0	$10.0 \pm 0.2$	13.0 ± 0.2	41	39	18	98 ± 2	109	95-100	28

- 10: inside diameter (clear width) at bottom of tube; 20 OD: outside diameter at bottom of tube; 30 TL: length along centre line;
- 4 AB: length along outer bend; 5 BA: bending angle; 6 CD: cuff diameter
- ► To order, specify: REF + size (e.g. REF 480-5.0).



# TRACOE®

mini



## The Smaller, the Greater

Sometimes the greatest achievements are made on a small scale: A prime example is the TRACOE *mini* – the product line especially developed for newborns, infants and children. TRACOE *mini* tracheostomy tubes are particularly soft and equipped with a neck flange with a slanted bottom, providing the tube with an optimised and atraumatic fit. These tubes have very thin walls to meet the special requirements of use in small patients, however, they reliably retain their shape at all times. The smooth, funnel-shaped inner design of the 15 mm connector allows an easy insertion of suction catheters.

# Easy and Reliable

The special obturator is extremely practical. The grip on its end makes sure that the tube can be easily and reliably inserted despite its small size. Neck straps and compresses are also available to match.

# **Anatomically Optimum Solutions**

So the best solution can be found for every small





patient. TRACOE *mini* is available in 12 different sizes: 4 for neonates and 8 for pediatric use.

# **TRACOE** *mini* – Tracheostomy Tubes







Colour Coding







Colour Coding



#### **Tracheostomy Tube for Neonates**

#### **REF 350**

In sterile package

- Cannula
- Obturator and neck strap (shown below)

#### Tracheostomy Tube for Children

#### **REF 355**

In sterile package

- Cannula
- Obturator and neck strap (shown below)



#### **Product variants REF 355:**

Product variants can be made in order to optimise the functionality and wearing comfort and also for patients with complex anatomical and physiological conditions. Product variations have green writing on the neck flange.



#### **TRACOE** *mini* Colour Coding:

REF 350 REF 355



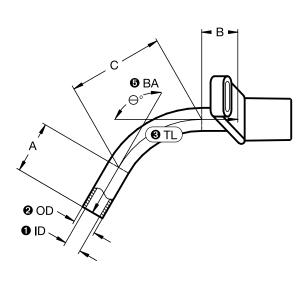
The colour coding is conspicuously printed on each box. This helps you organise your inventory and quickly and reliably locate the right tube.



#### Each TRACOE mini tube is supplied with

an obturator, a wide adjustable neck strap and a tube info card with detachable stickers on front and back. The neck strap is also available separately (REF 903-G).





# Accessories





#### Special accessories for TRACOE mini

such as neck strap and compresses, can be found on pages 76, 83 and 84 as part of the TRACOE care line of accessories.

#### **Reference Numbers and Measurements: REF 350**

Size	<b>O</b> ID	<b>9</b> OD		Len	gths (ı	nm)		<b>⊙</b> BA
	(mm)	(mm)	Α	C	В	<b>©</b> TL	<b>4</b> AB	(⊖°)
2.5	2.5	3.6	6	22	2	30	32	120
3.0	3.0	4.3	7	23	2	32	34	120
3.5	3.5	5.0	8	23	3	34	37	120
4.0	4.0	5.6	9	24	3	36	40	120

#### **Reference Numbers and Measurements: REF 355**

2.5	2.5	3.6	8	22	2	32	34	120
3.0	3.0	4.3	10	24	2	36	39	120
3.5	3.5	5.0	12	25	3	40	43	120
4.0	4.0	5.6	14	27	3	44	48	120
4.5	4.5	6.3	16	28	4	48	52	120
5.0	5.0	7.0	18	28	4	50	55	120
5.5	5.5	7.6	20	30	5	55	60	120
6.0	6.0	8.4	22	35	5	62	67	120

OID: inside diameter (clear width) of tube; OAD: outside diameter of tube; @TL: length along centre line from start of neck flange to bottom of tube; 4AB: length along outer bend from start of neck flange to bottom of tube; 9BW: bending angle

To order, specify REF + size (e.g. REF 355-2.5).

#### TRACOE mini Extension Piece

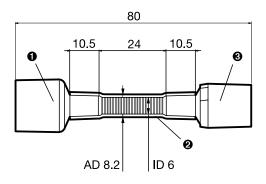
#### **REF 356**

In sterile package

- Extension piece
- Disconnecting aid (wedge)
- Product information card with peel-off sticker on front an back

Prevents obstruction of the patient end of the tube. Fits all *mini* tubes.

#### Measurements in mm:



- 15 mm Connector, female
- Reinforced Tube
- 3 15 mm Connector, male



# Superb Quality

TRACOE comfort:
Tradition and five decades
of continual improvements.
Especially soft and flexible
to maximise wearing comfort.
Large selection of types and
sizes, including tube variants
on request.





# **TRACOE** comfort – Tracheostomy Tubes





**REF 101** 

#### **REF 102**

#### Tube without Inner Cannula

#### **REF 101**

- Cannula
- Wide neck strap (shown on page 47) For acute tracheostomy and emergency care applications.

#### Tube with Inner Cannula

#### **REF 102**

- Outer cannula
- Inner cannula
- Wide neck strap (shown on page 47)

For permanent wearers.



Tubes of size 03, 04, 13 and 14 are made to order. Delivery time is approx. 10 working days.

#### Reference Numbers and Measurements: REF 101 to REF 105-D

Size	0	9	8	4	Length	ns (mm)	●ID-OC: inside diameter (clear width)
	ID-OC (mm)	OD-OC bc (mm)	OD-OC hf (mm)	ID-IC (mm)	<b>⊙</b> TL	<b>3</b> AB	at bottom of outer cannula; <b>②</b> OD-OC bc: outside diameter at bottom of outer
03	3.5	4.8	6.4	2.6	42	46	cannula; <b>3</b> OD-OC bf: outside diame-
04	4.0	5.6	7.3	3.2	50	55	ter of outer cannula behind the flange;
05	5.0	6.7	8.7	4.0	52	57	● ID-IC: inside diameter at bottom of in-
06	6.0	7.6	10.0	4.8	54	60	ner cannula; <b>6</b> Length TL: length along centre line from start of neck flange to
07	7.0	8.8	10.5	5.8	57	65	bottom of tube; <b>©</b> Length AB: length
80	8.0	10.0	11.3	6.8	61	70	along outer bend (greatest length)
09	9.0	11.4	12.6	7.6	65	75	
10	10.0	12.4	13.7	8.7	74	85	
11	11.0	13.1	15.0	9.7	76	87	
12	12.0	14.2	16.2	10.8	78	90	
13	13.0	15.4	17.2	11.8	87	100	⊙ The bending angle is 90° in <i>comfort</i>
14	14.0	16.6	18.2	12.6	91	105	tubes.

To order, specify: REF + size (e.g. REF 105-05).







# **REF 103**



#### **Tube with Inner Cannulas**

#### **REF 102-D**

- Outer cannula
- Two inner cannulas
- Wide neck strap (shown below)

For permanent wearers.

# Bending angle $\Theta^{\circ}$ O AB O TL **3** OD-OC bf

**2** OD-OC bc

- 1D-OC

#### Tube, Fenestrated, with Slide-On Speaking Valve, Type A

#### **REF 103**

- Outer cannula, fenestrated
- Inner cannula, fenestrated, with slide-on silver valve type A
- Inner cannula
- Wide neck strap (shown below)

For tracheostomised patients with fully or partially intact larynx, for speaking.



#### **REF 103-O:**

Product variant of REF 103 with additional oxygen supply port attached to the inner cannula with speaking valve.





#### Each TRACOE comfort tube is supplied with

an adjustable neck strap and a tube info card with peel-off stickers on front and back. The neck strap is also available separately (REF 903-F).







#### Tube, Fenestrated, with Slide-On Speaking Valve, Type A

#### **REF 103-A**

- Outer cannula, fenestrated
- Inner cannula, fenestrated, with slide-on silver valve type A
- Inner cannula with 15 mm connector
- Inner cannula
- Wide neck strap (shown on page 47)

For tracheostomised patients with fully or partially intact larynx, for speaking.



#### **REF 103-A-O:**

Product variant of REF 103-A with additional oxygen supply port attached to the inner cannula with speaking valve.



#### Tube, Fenestrated, with Swivel Speaking Valve, Type B

#### **REF 104**

- Outer cannula, fenestrated
- Inner cannula, fenestrated, with swivel valve type B
- Inner cannula
- Wide neck strap (shown on page 47)

For tracheostomised patients with fully or partially intact larynx, for speaking.



#### **REF 104-O:**

Product variant of REF 104 with additional oxygen supply port attached to the inner cannula with speaking valve.





#### **Product variants:**

Product variants can be made in order to optimise the functionality and wearing comfort and also for patients with complex anatomical and physiological conditions.



#### **Accessory for TRACOE** comfort Tubes:

- Speaking valves, occlusion caps and artificial noses (for details see page 60 and 61)
- REF 517, Seldinger guide wire with guiding catheter (for details see page 19)
- REF 518, Seldinger guide wire (for details see page 19)





#### Tube, Fenestrated, with Swivel Speaking Valve, Type B

#### **REF 104-A**

- Outer cannula, fenestrated
- Inner cannula, fenestrated, with swivel valve type B
- Inner cannula with 15 mm connector
- Inner cannula
- Wide neck strap (shown on page 47)

For tracheostomised patients with fully or partially intact larynx, for speaking.



#### **REF 104-A-O:**

Product variant of REF 104-A with additional oxygen supply port attached to the inner cannula with speaking valve.



#### Tube, Fenestrated, with Swivel Speaking Valve, Type B

#### **REF 114**

- Outer cannula, fenestrated
- Inner cannula, fenestrated, with swivel valve type B
- Inner cannula with 15 mm connector
- Wide neck strap (shown on page 47)

For tracheostomised patients with fully or partially intact larynx, for speaking.

#### **Reference Numbers and Measurements: REF 114 and REF 115**

Size	0	0	8	4	Lengtl	ns (mm)
	ID-OC (mm)	OD-OC bc (mm)	OD-OC bf (mm)	ID-IC (mm)	<b>⑤</b> TL	<b>6</b> AB
07	7.0	8.8	10.5	5.8	57	65
08	8.0	10.0	11.3	6.8	61	70
09	9.0	11.4	12.6	7.6	65	75

- ID-OC: inside diameter (clear width) at bottom of outer cannula; OD-OC bc: outside diameter at bottom of outer cannula; OD-OC bf: outside diameter of outer cannula behind the flange; 4 ID-IC: inside diameter at bottom of inner cannula; 6 Length TL: length along centre line from start of neck flange to bottom of tube; @Length AB: length along outer bend (greatest length)
- The bending angle is 90° in *comfort* tubes.
- Please refer to the figure on page 47.
- To order, specify: REF + size (e.g. REF 114-07).



The reference numbers and measurements for REF 104-A to REF 105-D can be found on the table on page 46.







**REF 105** 

#### **REF 105-D**

#### Tube with 15 mm Connector

#### **REF 105**

- Outer cannula
- Inner cannula with 15 mm connector
- Wide neck strap (shown on page 47) For attaching:

TRACOE humid assist I (REF 640-CT), TRACOE humid assist III (REF 641) and TRACOE humid assist IV (REF 642). Further information see page 58 to 61.

#### **Tube with 15 mm Connector**

#### **REF 105-D**

- Outer cannula
- Two inner cannulas with 15 mm connector
- Wide neck strap (shown on page 47)

#### For attaching:

TRACOE humid assist I (REF 640-CT), TRACOE humid assist III (REF 641) and TRACOE humid assist IV (REF 642). Further information see page 58 to 61.









#### **REF 106-D**

#### Tube, Fenestrated, with 15 mm Connector

#### **REF 115**

- Outer cannula, fenestrated
- Inner cannula, fenestrated, with 15 mm connector
- Inner cannula with 15mm connector
- Wide neck strap (shown on page 47)

For attaching:

TRACOE phon assist (e.g. REF 650-T) and TRACOE humid assist (e.g. REF 640-CT). Further information see page 58 to 61.

#### Laryngectomy Tube

#### **REF 106-D**

- Outer cannula, short
- Two inner cannulas, short
- Wide neck strap (shown on page 47)

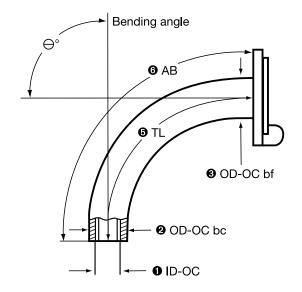
For patients whose larynx has been removed.

The length and bending angle are designed for an optimum fit.

#### Reference Numbers and Measurements: REF 106-D

Size	0	9	0	4	Lengtl	ns (mm)
	ID-OC (mm)	OD-OC bc (mm)	OD-OC bf (mm)	ID-IC (mm)	<b>©</b> TL	<b>6</b> AB
07	7.0	8.8	10.5	5.8	47	50
08	8.0	10.0	11.3	6.8	50	53
09	9.0	11.4	12.6	7.6	52	57
10	10.0	12.4	13.7	8.7	55	60
-11	11.0	13.1	15.0	9.7	58	63
12	12.0	14.2	16.2	10.8	60	66

- ID-OC: inside diameter (clear width) at bottom of outer cannula; OD-OC bc: outside diameter at bottom of outer cannula; OD-OC bf: outside diameter of outer cannula behind the flange; 4 ID-IC: inside diameter at bottom of inner cannula; ♠ Length TL: length along centre line from start of neck flange to bottom of tube; 6 Length AB: length along outer bend (greatest length)
- The bending angle is 90° in comfort tubes.
- Bestellnummer: REF + Größe, z.B. REF 106-D-07





# TRACOE comfort - Tracheostomy Tubes, extra-long (Hautant)





**REF 202-D** 

#### Extra-Long Tube without Inner Cannula

#### **REF 201**

- Cannula, extra-long
- Wide neck strap (shown on page 53)

For acute tracheostomy and emergency care applications.

#### **Extra-Long Tube with Inner Cannulas**

#### **REF 202-D**

- Outer cannula, extra-long
- Two inner cannulas
- Wide neck strap (shown on page 53)

For permanent wearers and patients with tracheal stenosis.

#### Extra-Long Tube with Inner Cannula

#### **REF 202**

- Outer cannula, extra-long
- Inner cannula
- Wide neck strap (shown on page 53)

For permanent wearers and patients with tracheal stenosis.

#### Reference Numbers and Measurements: REF 201 to REF 205, REF 214 and REF 215

Size	0	0	8	0	Lengtl	hs (mm)
	ID-OC (mm)	OD-OC bc (mm	OD-OC bf (mm)	ID-IC (mm)	<b>6</b> TL	<b>6</b> AB
05	5.0	6.6	9.0	4.0	85	92
06	6.0	7.7	9.8	5.0	87	95
07	7.0	8.7	10.5	6.0	93	100
08	8.0	10.5	12.2	6.7	96	105
09	9.0	11.5	13.0	7.5	100	110
10	10.0	12.5	14.5	8.8	104	115
11	11.0	13.5	15.5	9.2	108	120
12	12.0	14.4	16.4	10.0	112	125
13	13.0	15.4	18.0	11.8	116	130
14	14.0	16.4	18.2	12.6	122	135

- ID-OC: inside diameter (clear width) at bottom of outer cannula; 2 OD-OC bc: outside diameter at bottom of outer cannula; **9** OD-OC bf: outside diameter of outer cannula behind the flange; @ID-IC: inside diameter at bottom of inner cannula; 6 Length TL: length along centre line from start of neck flange to bottom of tube; 6 Length AB: length along outer bend (greatest length)
- The bending angle is 90° in *comfort* tubes.
- Please refer to the figure on page 54.

To order, specify: REF + size (e.g. REF 205-05).













#### Extra-Long Tube, Fenestrated, with Slide-On Speaking Valve, Type A

#### **REF 203**

- Outer cannula, extra-long, fenestrated
- Inner cannula, fenestrated, with slide-on silver valve type A
- Inner cannula
- Wide neck strap (shown below)

For tracheostomised patients with fully or partially intact larynx for speaking or with tracheal stenosis.



#### **REF 203-O:**

Product variant of REF 203 with additional oxygen supply port attached to the inner cannula with speaking valve.



Speaking valve or fenstrated tube with integrated speaking valve

#### Extra-Long Tube, Fenestrated, with Swivel Speaking Valve, Type B

#### **REF 204**

- Outer cannula, extra-long, fenestrated
- Inner cannula, fenestrated, with swivel valve type B
- Inner cannula

**REF 204** 

Wide neck strap (shown below)

For tracheostomised patients with fully or partially intact larynx for speaking or with tracheal stenosis.



#### **REF 204-O:**

Product variant of REF 204 with additional oxygen supply port attached to the inner cannula with speaking valve





Tubes of size 13 and 14 are made to order. Delivery time is approx. 10 working days.



Accessory for TRACOE comfort Tubes:

Speaking valves, artificial noses and occlusion caps (for details see page 60 and 61).



#### Each TRACOE comfort tube is supplied with

an adjustable neck strap and a tube info card with peel-off stickers on front and back. The neck strap is also available separately (REF 903-F).











#### Extra-Long Tube, Fenestrated, with Swivel Speaking Valve, Type B

#### **REF 204-A**

- Outer cannula, extra-long, fenestrated
- Inner cannula, fenestrated, with swivel valve type B
- Inner cannula with 15 mm connector
- Inner cannula
- Wide neck strap (shown on page 53)

For tracheostomised patients with fully or partially intact larynx for speaking or with tracheal stenosis.



#### **REF 204-A-O:**

Product variant of REF 204-A with additional oxygen supply port attached to the inner cannula with speaking valve.



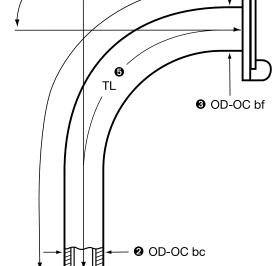
#### Extra-Long Tube, Fenestrated, with Swivel Speaking Valve, Type B

#### **REF 214**

- Outer cannula, extra-long, fenestrated
- Inner cannula, fenestrated, with swivel valve type B
- Inner cannula with 15 mm connector
- Wide neck strap (shown on page 53)

For tracheostomised patients with fully or partially intact larynx for speaking or with tracheal stenosis.

Bending angle





#### **Product variants:**

Product variants can be made in order to optimise the functionality and wearing comfort and also for patients with complex anatomical and physiological conditions.





**REF 205** 

#### **REF 215**



#### Extra-Long Tube with 15 mm Connector

#### **REF 205**

- Outer cannula, extra-long
- Inner cannula with 15 mm connector
- Wide neck strap (shown on page 53)

#### For attaching:

TRACOE humid assist I (REF 640-CT), TRACOE humid assist III (REF 641) and TRACOE humid assist IV (REF 642). Further information see page 58 to 61.

#### Extra-Long Tube, Fenestrated, with 15 mm Connector

#### **REF 215**

- Outer cannula, extra-long, fenestrated
- Inner cannula, fenestrated, with 15 mm connector
- Inner cannula with 15 mm connector
- Wide neck strap (shown on page 53)

#### For attaching:

Speaking valve or fenstrated tube with integrated speaking valve

TRACOE phon assist (e.g. REF 650-T) and TRACOE humid assist (e.g. REF 640-CT). Further information see page 58 to 61.

#### Reference Numbers and Measurements: REF 214 and REF 215

Size	0	9	•	0	Lengtl	hs (mm)
	ID-OC (mm)	OD-OC bc (mm	OD-OC bf (mm)	ID-IC (mm)	<b>⊕</b> TL	<b>3</b> АВ
07	7.0	8.8	10.5	5.8	57	65
08	8.0	10.0	11.3	6.8	61	70
09	9.0	11.4	12.6	7.6	65	75

- ID-OC: inside diameter (clear width) at bottom of outer cannula; ② OD-OC bc: outside diameter at bottom of outer cannula; @OD-OC bf: outside diameter of outer cannula behind the flange; @ID-IC: inside diameter at bottom of inner cannula;
- **⑤** Length TL: length along centre line from start of neck flange to bottom of tube;
- 6 Length AB: length along outer bend (greatest length)
- The bending angle is 90° in comfort tubes.
- ➤ To order, specify: REF + size (e.g. REF 214-07).









**NEW PRODUCT GROUP!** 

# The Modular System

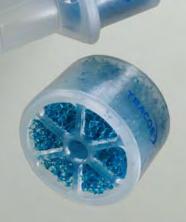
TRACOE speaking valves and heat/moisture exchanger can be attached to different support systems with 15 mm connectors or 22 mm housings, depending on requirements and indications. This modular system for tracheostomy tubes, stoma buttons, short tubes and adhesive carriers permits flexible solutions to suit individual patients.

# Speaking Valves

TRACOE phon assist I is used by tracheostomised patients and offers, due to the infinitely adaptable airway resistance, new therapeutic options. The TRACOE phon assist II speaking valve makes it possible for laryngectomised patients with a voice prosthesis and tracheostomised patients to speak hands-free. Both versions are individually adjustable.

# Heat/Moisture Exchangers

TRACOE humid assist I to IV are heat/moisture exchangers (HMEs) that act like an artificial nose by warming, moistening and filtering inhaled air.





# **For Tracheostomy Tubes**

**Speaking Valves** 



phon assist I REF 650-T



phon assist I with oxygen supply port REF 650-TO



phon assist II REF 655-T

Heat/moisture exchanger (HMEs)



humid assist I REF 640-CT



humid assist II BFF 645



humid assist III REF 641



humid assist IV REF 642

#### **Possible Combinations**

Occlusion Cap REF 516



#### Tubes, fenestrated



■ TRACOE *twist* and *twist* plus tubes, <u>fenestrated</u>, with 15 mm connector

REF 302, REF 302-P, REF 304, REF 888-306, REF 888-306-P, REF 312, REF 312-P, REF 314, REF 888-316, REF 888-316-P



■ TRACOE comfort tube, fenestrated, with 15 mm connector REF 115, REF 215

#### Each in combination with:

- ◆ phon assist I (REF 650-T)
- **◄ phon assist I with oxygen supply port** (REF 650-TO)
- **♦ humid assist I** (REF 640-CT)
- **♦ humid assist III** (REF 641)
- **◆ humid assist IV** (REF 642)
- **◄ phon assist II** (REF 655-T)
- **♦ phon assist II** (REF 655-T) **+ humid assist II** (REF 645)
- **◆ Occlusion Cap** (REF 516)

#### Tubes, unfenestrated

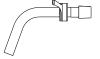


■ TRACOE *twist* and *twist* plus tubes, with 15 mm connector

REF 301, REF 301-P, REF 303, REF 305, REF 306, REF 309, REF 311, REF 311-P, REF 313, REF 316

#### Each in combination with:

- humid assist I (REF 640-CT)
- humid assist III (REF 641)
- **♦ humid assist IV** (REF 642)



■ TRACOE *vario* tubes, with 15 mm connector

REF 450, REF 450-P, REF 451, REF 451-P, REF 455, REF 460, REF 460-P, REF 461, REF 461-P, REF 470, REF 470-P, REF 471-P



TRACOE pure tube, with 15 mm connector
REF 480



■ TRACOE comfort tubes, with 15 mm connector

REF 103-A, REF 104-A, REF 114, REF 105, REF 105-D, REF 204-A, REF 205, REF 214



Caution: All tubes with cuff have to be deflated before using a speaking valve!

# For TRACOE buttons, Silicone Short Tubes and Adhesive Carriers

#### **Speaking Valves**



phon assist I **REF 650-S** 



phon assist I with oxygen supply port REF 650-SO



phon assist II REF 655-S

Heat/moisture exchanger (HMEs)



humid assist I **REF 640-S** 



humid assist II REF 645

Stopper **REF 621** 



## **Possible Combinations**

#### Carrier with 22 mm housings



TRACOE larynx grid button REF 601, REF 602, REF 603



TRACOE larynx stoma button

REF 611, REF 612, REF 613

#### Each in combination with:

- phon assist I (REF 650-S)
- phon assist I with oxygen supply port (REF 650-SO)
- humid assist I (REF 640-S)
- phon assist II (REF 655-S)
- phon assist II (REF 655-S) + humid assist II (REF 645)
- Stopper (REF 621)

**NEW!** 



TRACOE larynx Silicone Short Tube, fenestrated

REF 581, REF 583



TRACOE *larynx* Adhesive Carrier

REF 660, REF 661



**NEW!** 



TRACOE *larynx* Silicone Short Tube REF 580, REF 582

#### Each in combination with:

humid assist I (REF 640-S)



# **Speaking Valves and Occlusion Caps**

# **For Tracheostomy Tubes**



#### TRACOE phon assist I

**REF 650-T**1 unit supplied in sterile package
Speaking valve with air supply from the side, infinitely
adjustable, for attachment to any fenestrated tube
with 15 mm connector (page 22/23, e.g. REF 302
and REF 304).

Air supply from the side allows an individually adjustable airway resistance.

Fits all tube sizes.

#### TRACOE phon assist I with Oxygen Supply Port

**REF 650-TO** 1 unit

supplied in sterile package

**REF 650-TO-5** NEW! 5 units

supplied in sterile package

Speaking valve with air supply from the side, infinitely adjustable, with oxygen supply port. For attachment to any fenestrated tube with 15 mm connector (page 22/23, e.g. REF 302 and REF 304).

Air supply from the side allows an individually adjustable airway resistance.

Fits all tube sizes.

#### TRACOE phon assist II

REF 655-T 1 unit supplied in sterile package plus
5 units TRACOE humid assist II (REF 645),
individually packaged in cleanroom
Hands-free speaking valve, infinitely adjustable,
for attachment to any fenestrated tube with 15 mm
connector (page 22/23, e.g. REF 302 and REF 304).
Fits all tube sizes.

#### Occlusion Caps for 15 mm Connectors (blue)

REF 516 5 units, sterile, individually packaged

Occlusion caps for fenestrated tubes with 15 mm connector.



Scope of delivery of speaking valves and occlusion caps includes a product info card with peel-off stickers on front and back.

# Heat/Moisture Exchanger, HME

# **For Tracheostomy Tubes**



#### TRACOE humid assist I

**REF 640-CT** 50 units,

individually packaged in cleanroom

Heat/moisture exchanger for attachment to any tube with 15 mm connector.

Fits all tube sizes.

#### TRACOE humid assist III

**REF 641** 50 units, sterile,

individually packaged

Heat/moisture exchanger with paper filter for attachment to any tube with 15 mm connector, integrated oxygen supply port, turnable through 360°. Fits all tube sizes.

#### TRACOE humid assist IV

**REF 642** 30 units,

individually packaged in cleanroom

Heat/moisture exchanger for attachment to any tube with 15 mm connector, integrated oxygen supply port and pressure control valve for expectoration of larger quantities of secretion.

Fits all tube sizes.

#### TRACOE humid assist II

**REF 645** 50 units individually

packaged in cleanroom

Heat/moisture exchanger for attaching to the handsfree speaking valve TRACOE phon assist II (REF 655-T).

# **Speaking Valves and Stopper**

# For TRACOE buttons, Silicone Short Tubes and Adhesive Carriers



#### TRACOE phon assist I

**REF 650-S** 1 unit supplied in sterile package Speaking valve with air supply from the side, infinitely adjustable, with flat base.

For insertion in TRACOE stoma and grid buttons (REF 601-603 and REF 611-613), TRACOE adhesive carriers (REF 660 and REF 661) and silicone short tubes (REF 580-583).

Air supply from the side allows an individually adjustable airway resistance.

#### **Caution:**

Not for use by laryngectomised patients.

#### TRACOE phon assist I with Oxygen Supply Port

**REF 650-SO**1 unit supplied in sterile package
Speaking valve, infinitely adjustable, with flat base,
oxygen supply port and cap.

For insertion in TRACOE stoma and grid buttons (REF 601-603 and REF 611-613), TRACOE adhesive carriers (REF 660 and REF 661) and silicone short tubes (REF 580-583).

Air supply from the side allows an individually adjustable airway resistance.

#### **Caution:**

Not for use by laryngectomised patients.

#### TRACOE phon assist II

REF 655-S 1 unit supplied in sterile package plus
5 units TRACOE humid assist II (REF 645),
individually packaged in cleanroom
Hands-free speaking valve, infinitely adjustable, for
attachment to TRACOE stoma and grid buttons
(REF 601-603 and REF 611-613), TRACOE adhesive
carriers (REF 660, REF 661) and silicone short tubes
(REF 580-583). Fits all sizes.

#### **Caution:**

After laryngectomy only to be used in conjunction with a voice prosthesis!

#### Stopper

**REF 621** 5 units supplied in sterile package
To temporarily seal TRACOE stoma and grid buttons
(REF 601-603 and REF 611-613), TRACOE adhesive
carriers (REF 660, REF 661) and silicone short tubes
(REF 580-583) in patients with unobstructed upper
airways and unrestricted breathing.

#### **Caution:**

Not for use by laryngectomised patients.

# Heat/Moisture Exchanger, HME

# For TRACOE buttons, Silicone Short Tubes and Adhesive Carriers



#### TRACOE humid assist I

**REF 640-S** 50 units individually

packaged in cleanroom

Heat/moisture exchanger with flat base for all carriers with 22 mm housing, e.g. TRACOE stoma and grid buttons (REF 601-603 and REF 611-613), TRACOE adhesive carriers (REF 660 and REF 661) and silicone short tubes (REF 580-583).

For patients with or without voice prosthesis.

#### TRACOE humid assist II

**REF 645** 50 units individually

packaged in cleanroom

Heat/moisture exchanger for attaching to the handsfree speaking valve TRACOE phon assist II (REF 655-S).





Scope of delivery of speaking valves and stopper includes a product info card with peel-off stickers on front and back.



Cuff Pressure Monitoring: Spot measurements with a handheld manometer or continuous, fully automatic monitoring and control. Prevents complications and secondary problems for the patient.

# TRACOE® technic

# **Cuff Pressure Managemant**

TRACOE *technic* refers to medical devices, which allow setting and control of pressure in low pressure cuffs of tracheostomy and endotracheal tubes with high precision.

#### Constant Pressure

Why is it so important for the cuff to be properly inflated? For one, to ensure sufficient ventilation at all times. For another, to prevent silent aspiration, which, under certain circumstances, can lead to a nosocomial ventilation pneumonia. It also prevents damage to the trachea (mucosal necrosis, destruction of cartilage, tracheomalacia).

# Two Systems, One Goal

TRACOE technic includes two ways to regularly check the cuff pressure. First, the TRACOE cpm handheld manometer, featuring a large, easy-to-read scale (0-100 cmH<sub>2</sub>O) for quick and easy measurements. The usual pressure range for the application is coloured green.

Second, the fully automatic TRACOE cpc cuff pressure control. It continuously monitors and regulates the pressure in the low pressure cuffs of tracheostomy and endotracheal tubes. Visual and audible alarms warn of leaks or overpressure. TRACOE cpc is compact and lightweight, straightforward and practical to use. It reduces the workload of hospital nursing staff and the cuff pressure is 100% securely monitored and regulated.



# **TRACOE** *technic* – Precision Medical Devices



**RFF** 701

#### TRACOE cuff pressure control

#### **REF 701**

- TRACOE cuff pressure control
- Transformer
- 3 connection tubes with integrated hydrophobic bacteria filter, each one in sterile package, length: 2 m
- 1 TRACOE twist tracheostomy tube with low pressure cuff

A fully automatic, precision device for continuous monitoring and control of the pressure in the low pressure cuffs of tracheostomy and endotracheal tubes.

The device contains a sensor-controlled pump for long-term, precise control of low pressure cuffs. It is powered via a transformer or, during patient transport, by a rechargeable battery (for up to 8 hours). Through a mount on the back of the instrument it can be easily attached to an intensive-care bed, stand or operating table.

The device is CE-certified and EMC-tested.

#### Technical Data on REF 701

Classification  Medical-technical device, Class IIB, active, with measuring and control function  Power supply  Protection rating  II  Operating voltage Micro Processor  Power consumption  Battery  Battery  Battery  Battery  Battery display  Battery operating time  Battery charging time  Battery charging time  Control range  Control precision  Pressure display precision  Max. internal cuff pressure  Maximum vacuum  Alarm functions  Medical-technical device, Class IIB, active, with measuring and control function  Medical-technical device connection  Medical-technical device, Class IIB, active, with measuring and control function  II  Veight  Availage Alarm, values off): 0.08 W  Full power (pump off, valves off): 0.08 W  Full power (pump off, valves off): 0.08 W  Full power (pump and valves active): 0.65 W  Full power (pump and valves active): 0.65 W  Full power (pump and valves off): 0.08 W  Full power (pump and valves active): 0.65 W  Full power (pump off, valves off): 0.08 W  Full power (pump off, valves off): 0.08 W  Full power (pump and valves active): 0.65 W  Full power (pump off, valves off): 0.08 W  Full power (pump and valves off): 0.08 W  Full power (pump and valves active): 0.65 W  Full power (pump off, valves off): 0.08 W  Full power (pump of		
Protection rating  Operating voltage Micro Processor  Power consumption  Idling (pump off, valves off): 0.08 W Full power (pump and valves active): 0.65 W  Battery  9 V, 150 mAh for NiCd and 9 V, 170 mAh for NiMH gattery display  graphic (empty, weak, medium, full)  Battery operating time  8 hours  Battery charging time  6-8 hours  Pressure display  Control range  5 to 100 mbar  Control precision  ± 1 mbar over the entire control range  Pressure display precision  ± 1 mbar  Max. internal cuff pressure  100 mbar  Maximum vacuum  - 250 mbar  Audible and visible signal:  • if the pressure cannot be compensated within 10 seconds  • in case of a pressure increase of > 100 mbar  • if the battery is almost flat  • if the mains connector is unplugged or there is a power failure  Pneumatic device connection  Bayonet connector  Height: 100 mm, width: 150 mm, depth: 60 mm	Classification	
Operating voltage Micro Processor  Power consumption  Ediling (pump off, valves off): 0.08 W Full power (pump and valves active): 0.65 W  Battery  9V, 150 mAh for NiCd and 9V, 170 mAh for NiMH  Battery display  graphic (empty, weak, medium, full)  Battery charging time  8 hours  Battery charging time  6-8 hours  Pressure display  Control range  5 to 100 mbar  Control precision  ± 1 mbar over the entire control range  Pressure display precision  ± 1 mbar  Max. internal cuff pressure  100 mbar  Maximum vacuum  - 250 mbar  Audible and visible signal:  • if the pressure cannot be compensated within 10 seconds  • in the event of leakages  • in case of a pressure increase of > 100 mbar  • if the battery is almost flat  • if the mains connector is unplugged or there is a power failure  Pneumatic device connection  Bayonet connector  Height: 100 mm, width: 150 mm, depth: 60 mm	Power supply	12V
Micro Processor  Power consumption  Idling (pump off, valves off): 0.08W Full power (pump and valves active): 0.65W  Battery  9V, 150mAh for NiCd and 9V, 170mAh for NiMH graphic (empty, weak, medium, full)  Battery operating time  8 hours  Battery charging time  6-8 hours  Pressure display  Control range  5 to 100mbar  Control precision  ± 1mbar over the entire control range  Pressure display precision  ± 1mbar  Max. internal cuff pressure  Maximum vacuum  - 250 mbar  Audible and visible signal:  • if the pressure cannot be compensated within 10 seconds  • in the event of leakages  • in case of a pressure increase of > 100 mbar  • if the battery is almost flat  • if the mains connector is unplugged or there is a power failure  Pneumatic device connection  Bayonet connector  Device dimensions  Height: 100 mm, width: 150 mm, depth: 60 mm	Protection rating	II
Full power (pump and valves active): 0.65 W  Battery  9V, 150 mAh for NiCd and 9V, 170 mAh for NiMH  Battery display  graphic (empty, weak, medium, full)  Battery operating time  8 hours  Battery charging time  6-8 hours  Control range  5 to 100 mbar  Control precision  ± 1 mbar over the entire control range  Pressure display precision  ± 1 mbar  Max. internal cuff pressure  100 mbar  Audible and visible signal:  if the pressure cannot be compensated within 10 seconds  in the event of leakages  in case of a pressure increase of > 100 mbar  if the battery is almost flat  if the mains connector is unplugged or there is a power failure  Pneumatic device connection  Bayonet connector  Height: 100 mm, width: 150 mm, depth: 60 mm	1 0 0	5V
Battery display graphic (empty, weak, medium, full)  Battery operating time 8 hours  Battery charging time 6-8 hours  Pressure display digital  Control range 5 to 100 mbar  Control precision ± 1 mbar over the entire control range  Pressure display precision ± 1 mbar  Max. internal cuff pressure 100 mbar  Maximum vacuum - 250 mbar  Audible and visible signal:  • if the pressure cannot be compensated within 10 seconds  • in the event of leakages  • in case of a pressure increase of > 100 mbar  • if the battery is almost flat  • if the mains connector is unplugged or there is a power failure  Pneumatic device connection  Bayonet connector  Device dimensions  Height: 100 mm, width: 150 mm, depth: 60 mm	Power consumption	J ,
Battery operating time 6-8 hours  Pressure display digital  Control range 5 to 100 mbar  Control precision ± 1 mbar  Max. internal cuff pressure 100 mbar  Maximum vacuum - 250 mbar  Alarm functions  Alarm functions  Alarm functions  Bayonet connector  Presure display precision ± 1 mbar  Audible and visible signal:  if the pressure cannot be compensated within 10 seconds  in the event of leakages  in case of a pressure increase of > 100 mbar  if the battery is almost flat  if the mains connector is unplugged or there is a power failure  Preumatic device connection  Bayonet connector  Height: 100 mm, width: 150 mm, depth: 60 mm	Battery	9V, 150 mAh for NiCd and 9V, 170 mAh for NiMH
Battery charging time 6-8 hours  Pressure display digital  Control range 5 to 100 mbar  Control precision ± 1 mbar over the entire control range  Pressure display precision ± 1 mbar  Max. internal cuff pressure 100 mbar  Maximum vacuum - 250 mbar  Audible and visible signal:  • if the pressure cannot be compensated within 10 seconds  • in the event of leakages  • in case of a pressure increase of > 100 mbar  • if the battery is almost flat  • if the mains connector is unplugged or there is a power failure  Pneumatic device connection Bayonet connector  Device dimensions Height: 100 mm, width: 150 mm, depth: 60 mm	Battery display	graphic (empty, weak, medium, full)
Pressure display  Control range  5 to 100 mbar  Control precision  ± 1 mbar over the entire control range  Pressure display precision  ± 1 mbar  Max. internal cuff pressure  100 mbar  Audible and visible signal:  • if the pressure cannot be compensated within 10 seconds  • in the event of leakages  • in case of a pressure increase of > 100 mbar  • if the battery is almost flat  • if the mains connector is unplugged or there is a power failure  Pneumatic device connection  Bayonet connector  Device dimensions  Height: 100 mm, width: 150 mm, depth: 60 mm	Battery operating time	8 hours
Control range 5 to 100 mbar  Control precision ± 1 mbar over the entire control range  Pressure display precision ± 1 mbar  Max. internal cuff pressure 100 mbar  Maximum vacuum - 250 mbar  Audible and visible signal:  if the pressure cannot be compensated within 10 seconds  in the event of leakages  in case of a pressure increase of > 100 mbar  if the battery is almost flat  if the mains connector is unplugged or there is a power failure  Preumatic device connection Bayonet connector  Device dimensions Height: 100 mm, width: 150 mm, depth: 60 mm	Battery charging time	6-8 hours
Control precision ± 1mbar over the entire control range  Pressure display precision ± 1 mbar  Max. internal cuff pressure 100 mbar  Maximum vacuum - 250 mbar  Audible and visible signal:  • if the pressure cannot be compensated within 10 seconds  • in the event of leakages  • in case of a pressure increase of > 100 mbar  • if the battery is almost flat  • if the mains connector is unplugged or there is a power failure  Pneumatic device connection Bayonet connector  Device dimensions Height: 100 mm, width: 150 mm, depth: 60 mm	Pressure display	digital
Pressure display precision ± 1 mbar  Max. internal cuff pressure 100 mbar  Maximum vacuum - 250 mbar  Audible and visible signal:  • if the pressure cannot be compensated within 10 seconds  • in the event of leakages  • in case of a pressure increase of > 100 mbar  • if the battery is almost flat  • if the mains connector is unplugged or there is a power failure  Preumatic device connection Bayonet connector  Device dimensions Height: 100 mm, width: 150 mm, depth: 60 mm	Control range	5 to 100 mbar
Max. internal cuff pressure       100 mbar         Maximum vacuum       - 250 mbar         Audible and visible signal: <ul> <li>if the pressure cannot be compensated within 10 seconds</li> <li>in the event of leakages</li> <li>in case of a pressure increase of &gt; 100 mbar</li> <li>if the battery is almost flat</li> <li>if the mains connector is unplugged or there is a power failure</li> </ul> Pneumatic device connection         Bayonet connector         Device dimensions       Height: 100 mm, width: 150 mm, depth: 60 mm	Control precision	± 1mbar over the entire control range
Maximum vacuum       - 250 mbar         Audible and visible signal: <ul> <li>if the pressure cannot be compensated within 10 seconds</li> <li>in the event of leakages</li> <li>in case of a pressure increase of &gt; 100 mbar</li> <li>if the battery is almost flat</li> <li>if the mains connector is unplugged or there is a power failure</li> </ul> Pneumatic device connection     Bayonet connector         Device dimensions       Height: 100 mm, width: 150 mm, depth: 60 mm	Pressure display precision	± 1 mbar
Audible and visible signal:  ◆ if the pressure cannot be compensated within 10 seconds  ◆ in the event of leakages  ◆ in case of a pressure increase of > 100 mbar  ◆ if the battery is almost flat  ◆ if the mains connector is unplugged or there is a power failure  Pneumatic device connection  Bayonet connector  Device dimensions  Height: 100 mm, width: 150 mm, depth: 60 mm	Max. internal cuff pressure	100 mbar
<ul> <li>♦ if the pressure cannot be compensated within 10 seconds</li> <li>♦ in the event of leakages</li> <li>♦ in case of a pressure increase of &gt; 100 mbar</li> <li>♦ if the battery is almost flat</li> <li>♦ if the mains connector is unplugged or there is a power failure</li> <li>Pneumatic device connection</li> <li>Bayonet connector</li> <li>Device dimensions</li> <li>Height: 100 mm, width: 150 mm, depth: 60 mm</li> </ul>	Maximum vacuum	- 250 mbar
Device dimensions Height: 100 mm, width: 150 mm, depth: 60 mm	Alarm functions	<ul> <li>♦ if the pressure cannot be compensated within 10 seconds</li> <li>♦ in the event of leakages</li> <li>♦ in case of a pressure increase of &gt; 100 mbar</li> <li>♦ if the battery is almost flat</li> <li>♦ if the mains connector is unplugged or there</li> </ul>
	Pneumatic device connection	Bayonet connector
Weight 350 g (incl. battery)	Device dimensions	Height: 100mm, width: 150mm, depth: 60mm
• • • • • • • • • • • • • • • • • • • •	Weight	350 g (incl. battery)

#### **TRACOE Power Pack (REF 704)**

Power supply	100-240 V, 50-60 Hz
Protection rating	II

#### **Ambient Conditions**

Storage conditions	Temperature -40 to +70°C, relative air humidity 10-95%
Operating conditions	Temperature 10 to +70°C, relative air humidity 10-95 % Altitude up to 3.000 m (NN)



#### TRACOE cuff pressure monitor

#### **REF 720**

- TRACOE cuff pressure monitor
- 1 connection tube REF 702

The TRACOE cuff pressure monitor is used to fill and monitor the pressure of high-volume, low pressure cuffs of tracheostomy and endotracheal tubes.

Its outstanding features and benefits:

- Easy use
- Precise, reproducible pressure indication
- Extra-large, easy-to-read scale from 0-100 cmH<sub>2</sub>O
- Widely spaced scale markings with colour coded pressure ranges

The TRACOE cuff pressure monitor comes with a connection tube with male and female Luer lock connectors on its ends (REF 702).

#### **Connection Tubes**

#### for REF 720, TRACOE cuff pressure monitor:

**REF 702** 10 units supplied in

individual sterile packages

Tube for connecting a tracheostomy or endotracheal tube. With Luer lock connectors. Length 1 m

**REF 703** 10 units supplied in

individual sterile packages

Tube for connecting a tracheostomy or endotracheal tube. With Luer lock connectors. Length: 2 m

## for REF 701, TRACOE cuff pressure control:

REF 703-A 10 units supplied in individual sterile packages

Connecting tube with integrated hydrophobic bacteria filter for connecting a tracheostomy or endotracheal tube. With bayonet and Luer lock connectors.

Length: 2 m





# **Individual Solutions**

TRACOE *larynx* is a product group that is specifically geared to meet the needs of laryngectomised and tracheostomised patients in the hospital, during rehabilitation and homecare.

# The Products

TRACOE stoma buttons and short tubes are made of soft, flexible silicone. Developed for patients who only require a device to keep the tracheostoma open continuously and do not need a proper tracheostomy tube, and for attaching speaking valves and/or HMEs.

The TRACOE adhesive carriers for laryngectomised or tracheostomised patients to attach heat/moisture exchangers (HMEs) humid assist I or the speaking valves phon assist I and phon assist II.

Information and reference numbers for TRACOE heat/moisture exchangers as well as TRACOE speaking valves you will find in the NEW PRODUCT GROUP
TRACOE modular as from page 56 onwards.

# Possible Combinations with TRACOE modular

### Carrier with 22 mm housing



TRACOE larynx grid button REF 601, REF 602, REF 603



TRACOE *larynx* stoma button

REF 611, REF 612, REF 613

### Each in combination with:

- phon assist I (REF 650-S)
- phon assist I with oxygen supply port (REF 650-SO)
- humid assist I (REF 640-S)
- phon assist II (REF 655-S)
- phon assist II (REF 655-S) + humid assist II (REF 645)
- Stopper (REF 621)



TRACOE larynx Silicone Short Tube, fenestrated

REF 581, REF 583



TRACOE larynx Adhesive Carrier

REF 660, REF 661

**NEW!** 



TRACOE *larynx* Silicone Short Tube

REF 580, REF 582

In combination with:

humid assist I (REF 640-S)

Pictures, reference numbers and information for heat/moisture exchangers (humid assist), speaking valves (phon assist) and stoppers you will find in the NEW PRODUCT GROUP TRACOE modular as from page 56 onwards.





# TRACOE larynx – stoma buttons



# TRACOE grid button

## REF 601/REF 602/REF 603

1 unit supplied in sterile package with 1 neck strap

stoma button with eyes for attaching a neck strap and with a removable grid to prevent inhalation of foreign objects.

Sizes: 06, 07, 08, 09, 10, 11, 12

### TRACOE stoma button

## REF 611/REF 612/REF 613

1 unit supplied in sterile package

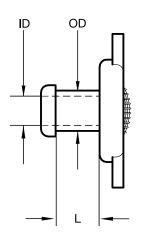
Sizes: 06, 07, 08, 09, 10, 11, 12

# **Reference Numbers and Measurements:** REF 601 to REF 603 and REF 611 to REF 613

			REF 601 REF 611	REF 602 REF 612	REF 603 REF 613
			Short	Standard	Long
Size	ID	OD	Length	Length	Length
	(mm)	(mm)	(mm)	(mm)	(FR)
06	6	9	16	22	30
07	7	10	16	22	30
80	8	11	16	22	30
09	9	12	16	22	30
10	10	13	16	22	30
11	11	14	16	22	30
12	12	15	16	22	30
ID: inside diameter; OD: outside diameter; L: length					
► To order, specify: REF + size (e.g. REF 601-06).					



Scope of delivery TRACOE larynx products (except adhesive carriers) includes a product info card with peel-off stickers on front and back.



# **TRACOE** *larynx* – Silicone Short Tubes



# TRACOE Silicone Short Tube with Connector, **Unfenestrated**

**REF 580** Length 36 mm 1 unit, supplied with

neck strap

**REF 582** Length 53 mm 1 unit, supplied with

neck strap

Ideal for the use in stable tracheostomas to secure the respiratory tracts once no tracheostomy tube is needed anymore.

For attachment to TRACOE humid assist I (REF 640-S).

# TRACOE Silicone Short Tube with Connector, **Fenestrated**

**REF 581** Length 36 mm 1 unit, supplied with

neck strap

**REF 583** Length 53 mm 1 unit, supplied with

neck strap

For tracheostomised and laryngectomised patients with a voice prosthesis.

For attachment to TRACOE phon assist I (REF 650-S), TRACOE phon assist I with oxygen supply port (REF 650-SO), TRACOE phon assist II (REF 655-S) with or without TRACOE humid assist II (REF 645) and TRACOE humid assist I (REF 640-S).

## TRACOE Silicone Short Tube without Connector

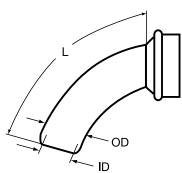
**REF 585** 1 unit, supplied with Length 36 mm

neck strap

**REF 586** 1 unit, supplied with Length 53 mm

neck strap

Ideal for the use in stable tracheostomas to secure the respiratory tracts once no tracheostomy tube is needed anymore.



# Reference Numbers and Measurements: REF 580, REF 581, REF 585 and REF 582, REF 583, REF 586

			REF 580 REF 581 REF 585	REF 582 REF 583 REF 586
Size	ID (mm)	OD (mm)	Length (mm)	Length (mm)
08	9.5	12.0	36	53
09	10.5	13.5	36	53
10	12.5	15.0	36	53
12	13.5	17.0	36	53

ID: inside diameter; OD: outside diameter; L: length

► To order, specify: REF + size (e.g. REF 580-09)

# TRACOE larynx – button plus and Adhesive Carriers



# TRACOE Adhesive Carrier Hydrocolloid

**REF 660** 20 units, individually packaged For affixing onto the tracheostoma.

With anallergenic hydrocolloid coating, particulary suitable for patients with sensitive skin.

Includes support ring for TRACOE speaking valves phon assist I (REF 650-S and REF 650-SO) and phon assist II (REF 655-S) with or without a heat/moisture exchanger TRACOE humid assist II (REF 645) and Stopper REF 621.

### TRACOE Adhesive Carrier Standard

**REF 661** 20 units, individually packaged For affixing onto the tracheostoma.

The adhesive carrier is particularly thin and coated with a strong acrylate adhesive.

Includes support ring for TRACOE speaking valve phon assist I (REF 650-S and REF 650-SO) and phon assist II (REF 655-S) with or without HME TRACOE humid assist II (REF 645), TRACOE humid assist I (REF 640-S) and Stopper REF 621.

# TRACOE button plus

REF 607-70 1 unit, supplied with Length 70 mm neck strap REF 607-45 1 unit, supplied with Length 45 mm neck strap

For the therapy of tracheostomised patients after longterm ventilation - safe airway after decannulation. The sealing is very airtight and dislocation save. The patient is able to cough up the stimulus secretion very fast. With the adjustable neck flange the TRACOE button plus can be positioned optimal to the soft neck tissue. Inside diameter 8.0 mm,

Outside diameter 10.5 mm

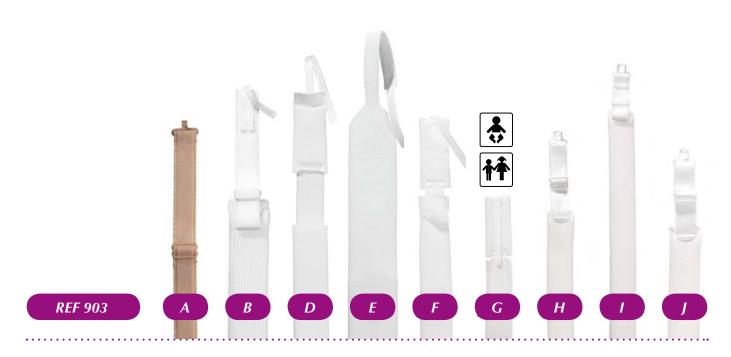
### Caution, not suitable for

- laryngectomised patients
- patients with unstable breathing,
- patients, who primarily breathe through the tracheostoma.





# TRACOE care – Accessories



# Neck Straps

For holding tubes securely in place.

REF	max. length (approx.) in cm	Width of neck strap (approx.) in cm
903-A	44	1.5
903-B	47	2.5
903-D	48	2.5
903-E	49	4.0
903-F	43	2.5
903-G	31	2.5
903-H	39	2.5
903-I	48	2.5
903-J	36	2.5

1 unit	Beige, elastic, with hook
1 unit	White, wide, padded,
	with hook-and-loop fastener
10 units	Identical to REF 903-B
1 unit	White, wide, elastic,
	with hook-and-loop fastener,
	individually adjustable
1 unit	White, wide,
	with hook-and-loop fastener
10 units	Identical to REF 903-E
1 unit	White, wide, consists of two
	parts, adjustable length,
	with hook-and-loop fastener
10 units	Identical to REF 903-F
1 unit	White, wide, consists of two
	parts, adjustable length,
	with hook-and-loop fastener,
	for neonates and children
1 unit	White, wide, padded,
	with hook
10 units	Identical to REF 903-H
1 unit	White, long, wide, padded,
	with hook
10 units	Identical to REF 903-I
1 unit	White, short, wide, padded,
	with hook
10 units	Identical to REF 903-J
	1 unit 10 units 1 unit 1 unit 10 units 1 unit





**REF 902** 

**REF 915** 

# Liquid Paraffin

## **REF 902**

Lubricates and protects TRACOE comfort tubes. Lets inner cannulas be easily inserted and removed, assures best possible fit and good quality of speech. Contents: 25 ml

## **Shower Guard**

## **REF 915**

Protection for tube wearers while showering. Soft, adaptable and adjustable to different neck sizes.

### **Caution:**

May not be used for full-body bathing or swimming!

# **TRACOE** care – Cleaning Kits





**REF 931-B** 

# TRACOE tube clean Cleaning Kits

For cleaning TRACOE tracheostomy tubes and TRACOE buttons.

REF 930-A With cleaning powder and small cleaning swabs

- tube clean cleaning powder (REF 932)
- tube clean cleaning tub (REF 934)
- 1 cleaning brush (REF 938-A)
- 50 cleaning swabs, small (REF 935)

REF 930-B With cleaning powder and <u>large</u> cleaning swabs

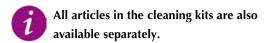
- tube clean cleaning powder (REF 932)
- tube clean cleaning tub (REF 934)
- 1 cleaning brush (REF 938-A)
- 50 cleaning swabs, large (REF 936)

**REF 931-A** With concentrated cleaning liquid and small cleaning swabs

- tube clean concentrated cleaning liquid (REF 933)
- tube clean cleaning tub (REF 934)
- 1 cleaning brush (REF 938-A)
- 50 cleaning swabs, small (REF 935)

**REF 931-B** With concentrated cleaning liquid and large cleaning swabs

- tube clean concentrated cleaning liquid (REF 933)
- tube clean cleaning tub (REF 934)
- 1 cleaning brush (REF 938-A)
- 50 cleaning swabs, large (REF 936)



Detailed tips and information on how to clean, disinfect and care for tracheostomy tubes can be found on pages 85 and 86 and in the respective instructions for use.

# **TRACOE** care – Cleaning Accessories



# TRACOE tube clean **Concentrated Cleaning Liquid**

**REF 933** 1 bottle

Liquid cleaning concentrate for cleaning tracheostomy tubes and stoma/grid buttons. Dissolves incrustations. Rapidly acting.

Contents: 250 ml (for approx. 100 applications)

# TRACOE tube clean Cleaning Powder

**REF 932** 1 tub

Cleaning powder for cleaning tracheostomy tubes and stoma/grid buttons. Dissolves incrustations. Contents: 400 g (for approx. 60 applications)

# TRACOE tube clean Cleaning Tub with Mesh Basket

**REF 934** 1 tub

For tracheostomy tubes and stoma/grid buttons.

Volume: 1000 ml



# TRACOE tube clean **Cleaning Swabs**

**REF 935** <u>Small</u> Pack of 50

Bendable plastic swabs with polyurethane sponge tip for cleaning tracheostomy tubes/cannulas with an inner diameter of 3 to 7 mm. For single use.

# TRACOE tube clean **Cleaning Swabs**

**REF 936** Pack of 50 **Large** 

Bendable plastic swabs with polyurethane sponge tip for cleaning tracheostomy tubes/cannulas with an inner diameter of 8 to 14 mm.

For single use.

### **Protective Skin Cloth**

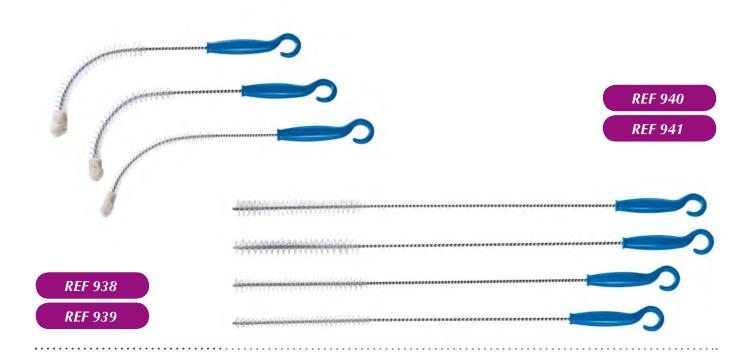
**REF 970** Pack of 50

For daily skin care and cleaning around the tracheostoma. Dermatologically tested, bactericidal, antiseptic, and itch-reducing. Impregnated with lipid regulating substances.

## **Angled Forceps**

**REF 678** 1 unit

To remove incrustations and clean tubes. Made of stainless steel, autoclaveable.



# TRACOE Cleaning Brushes with Wool Tip

**REF 938** 

Pack of 10

Angled brush with extra-soft nylon bristles for removing incrustations. To reduce scratching, the brushes have a wool tip.

REF	Bristle- diameter	For tube inside diameter	Approx. total length
938-A	7 mm	5/6 mm	21 cm
938-В	9 mm	7/8 mm	21 cm
938-C	11 mm	9/10 mm	21 cm

# TRACOE Cleaning Brushes with Wool Tip in a Kit of 5 in Different Sizes

### **REF 939**

The kit contains:

KIT OF 5

Quantity	Bristle- diameter	For tube inside diameter	Approx. total length
1 unit	7 mm	5/6 mm	21 cm
2 units	9 mm	7/8 mm	21 cm
2 units	11 mm	9/10 mm	21 cm

# TRACOE Cleaning Brushes for Flexible **Tracheostomy Tubes**

### **REF 940**

Pack of 10

Extra-long, specially made for cleaning flexible tracheostomy tubes. The wire used has a rounded tip and the bristles are made of soft nylon.

REF	Bristle- diameter	For tube inside diameter	Approx total length.
940-A	7 mm	5/6 mm	31.5 cm
940-В	9 mm	7/8 mm	33.5 cm
940-C	11 mm	9/10 mm	36.0 cm
940-D	13 mm	11/12 mm	36.0 cm

# TRACOE Cleaning Brushes for Flexible Tracheostomy Tubes in a Kit of 10 in Different Sizes

## **REF 941**

The kit contains:

KIT OF 10

Quantity	Bristle- diameter	For tube inside diameter	Approx. total length
2 units	7 mm	5/6 mm	31.5 cm
2 units	9 mm	7/8 mm	33.5 cm
3 units	11 mm	9/10 mm	36.0 cm
3 units	13 mm	11/12 mm	36.0 cm

# TRACOE care - Tracheal Compresses, Nonsterile



# Tracheal Compresses, Aluminium Coated with Zigzag Slit

**REF 905**Pack of 10
Tracheal compresses, aluminium coated, avoid the compress sticking to the wound or the skin. They absorb secretions between the stoma and the tube.

Dimensions: approx. 9 x 9.8 cm

### **Tracheal Compresses**

**REF 910-A** Without slit Pack of 10 **REF 910-B** With zigzag slit Pack of 10

These tracheal compresses absorb secretions from the tracheostoma to avoid skin irritations.

Dimensions: approx. 9 x 9.8 cm

## TRACOE Tracheostoma Protection

**REF 908** Small Pack of 10

Dimensions: approx. 6 x 6.5 cm

**REF 909** Large Pack of 10

Dimensions: approx. 7.2 x 7.2 cm

Prevents foreign objects from entering the tracheostoma. With adhesive strip, for single use, for adults and children.

## Coated Tracheal Compresses with Zigzag Slit

**REF 960** Pack of 10

To absorb secretions from the tracheostoma to avoid skin irritations. The coating further avoids the absorbant compress sticking to the wound or the skin.

Dimensions: approx. 8 x 10 cm



The zigzag slit keeps the compresses securely in place. At the same time it is quite simple to remove the compress and replace it with a new one whilst wearing the tracheostomy tube.



# **Two-Ply Tracheal Compresses**

**REF 907-A** Pack of 10 Without slit **REF 907-B** With zigzag slit Pack of 10

Two-ply tracheal compresses absorb a large amount of secretions from the tracheostoma quickly to avoid skin irritations. At the same time they are used as a pad between the tracheostoma and the tracheostomy tube. Dimensions: approx. 9 x 9.8 cm

## Fleece Tracheal Compresses

**REF 912** Pack of 100

Fluff-free, 4-ply fleece tracheal compresses.

Dimensions: approx. 10 x 10 cm

# Coated Two-Ply Tracheal Compresses with Zigzag Slit

**REF 957** Pack of 10

Two-ply tracheal compresses absorb a large amount of secretions from the tracheostoma quickly to avoid skin irritations. The absorbent coating further avoids the compress sticking to the wound or skin. At the same time they are used as a pad between the tracheostoma and the tracheostomy tube.

Dimensions: approx. 8 x 10 cm





# Tracheal Compresses with Zigzag Slit for Neonates and Children

**REF 961** Pack of 10

Tracheal compresses to absorb secretions from the tracheostoma to avoid skin irritations. At the same time they are used as a pad and a protection for the sensitive skin around the tracheostoma.

The compresses are ideally adapted to the anatomy of neonates and children.

Dimensions: approx. 6.5 x 6.3 cm

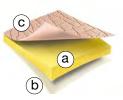
# TRACOE care - Sterile Tracheostomy Dressing



# TRACOE purofoam Tracheostomy Dressing



The TRACOE purofoam tracheostomy dressings are made of highly absorbent open pore polyurethane



foam (a). The foam has a nonsticking layer (b) on the side facing the tracheostoma which allows quick absorption of liquids into the foam's core. The opposite side is covered with a skin coloured,

vapour permeable coating which will prevent leakage of secretions and bacteria through the front of the dressing (c).

Due to the circular opening and the zigzag slit the dressing can be easily replaced with a new one whilst wearing the tracheostomy tube. As the dressing does not stick to the skin, it can be removed and replaced without causing trauma or pain.

The TRACOE purofoam tracheostomy dressing can be used to dress a newly established or an existing, irritated tracheostoma, as well as healed but weeping tracheostomas and any other kind of artificial orifice. This dressing meets modern standards of moist wound treatment.

**REF 958** <u>Large</u> Pack of 10 supplied in

*individual sterile packages* For tracheostomy tube sizes 06 to 12.

Dimensions: approx. 9 x 10 x 0.5 cm

**REF 959** Small Pack of 10 supplied in individual sterile packages

For tracheostomy tube sizes 03 to 05. Dimensions: approx. 6.5 x 6.5 x 0.5 cm

## TRACOE softpad Tracheostomy Stoma Pads

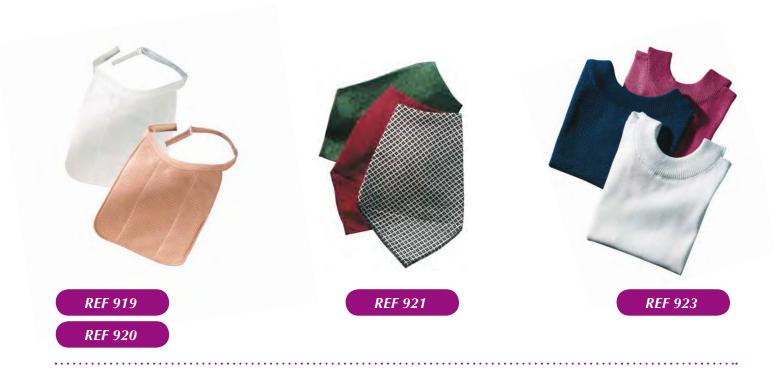
**REF 969** 

Pack of 20 supplied in individual sterile packages

Oval tracheostomy stoma pads made of open-pored, highly absorbent polyurethane foam. Avoids decubitus, compensates unevenness due to scars, seals air leaks (function of speech).

Dimensions: oval, approx. 5.5 cm at longest point and approx. 3.7 cm at widest point.

# **TRACOE** care – Textile Products



### **TRACOE Protective Bibs**

REF 919-A	3-ply		1 unit
REF 919-B	6-ply	White	1 unit
REF 919-C	12-ply		1 unit
REF 920-A	3-ply		1 unit
REF 920-B	6-ply	Beige	1 unit
REF 920-C	12-ply		1 unit

The protective bibs filter and warm the respiratory air. At the same time they protect clothes from possible secretions. Made of polyester, with continuously adjustable hook-and-loop fastener.

## **TRACOE Protective Scarves**

REF 921-A	Grey plaid	XXX	1 unit
REF 921-B	Beige plaid		1 unit
REF 921-C	Dark green	V 4 4	1 unit
REF 921-D	Dark blue		1 unit
REF 921-E	Burgundy		1 unit

Made of 100% viscose with integrated polyester layer. The TRACOE protective scarves are worn around the neck like an average scarf and are secured with an continuously adjustable hook-and-loop fastener.

### **TRACOE Protective Roll-Necks**

**REF 923** Classically elegant Fine knit

REF 923-A	White	1 unit
REF 923-B	Gray	1 unit
REF 923-C	Beige	1 unit
REF 923-D	Dark green	1 unit
REF 923-E	Dark blue	1 unit
REF 923-F	Burgundy	1 unit
REF 923-G	Black	1 unit

TRACOE protective roll-necks are made of 100% cotton with an integrated polyester layer. They are worn underneath the shirt.



Washing Instructions for TRACOE Protective Bibs, **TRACOE Protective Scarves and TRACOE Protective Roll-Necks:** 

- Hand-wash, 30°C, with mild soap
- No dry-cleaning
- No bleaching
- No ironing

# INFORMATION FOR PATIENTS

# Tips for Everyday Use of TRACOE Tracheostomy Tubes

### Cleaning and Maintenance

The easiest way to clean the tubes is to use the TRACOE tube clean cleaning kits (REF 930-A/-B or REF 931-A/-B), developed especially for this purpose. Never use a strong household cleaning product, a denture cleanser, or strong alcohol to clean the tubes. Soften any solid incrustations and remove them using e.g. TRACOE tube clean cleaning swabs (REF 935 and REF 936). After cleaning, rinse the cannulas thoroughly. Allow the inner and outer cannulas to air-dry.



#### **Please note:**

The tips and instructions for the care of the tracheostoma and tracheal hygiene are based on the manufacturer's practical experience. They are not intended to replace the medical advice of a physician or trained healthcare personnel.

TRACOE medical GmbH assumes no liability for claims resulting from the incorrect or improper care of the tracheostoma or incorrect or improper tracheal hygiene.

Medical indications as well as anatomical and physiological conditions vary for each tube wearer. For this reason, patients must consult their physician or healthcare professional for advice on the care of the tracheostoma and tracheal hygiene. Instructions given by the physician and healthcare personnel must be followed.

### Disinfection

If necessary, clean the tubes and then soak them in a disinfectant recommended by TRACOE medical. Afterwards rinse the tubes thoroughly in running water or with distilled water.

## Hygiene

When the tracheostoma is stable, the tubes can be cleaned and maintained during replacement. If the tracheostoma is fresh, however, do not remove the tube for very long, as it may be very difficult to reinsert. Please note that the tube must be taken out of the tracheostoma for cleaning.

Care of the stoma depends on mucous accumulation, scab formation, and skin condition, but it should be cleaned at least twice a day. Use either the TRACOE protective skin cloth (REF 970) or fleece compresses saturated with physiological saline solution to clean the stoma. Do only use fluff free material. Replace the compresses and neck straps regularly. Select the widest, softest neck strap possible to prevent irritation. The skin should be clean and dry (neither desiccated nor waterlogged). If the area around the tracheostoma is chafed, the skin can be treated with appropriate care products according to doctor's orders. When the irritation disappears, treat the area with a skin dressing that is not excessively viscous. A vaporized 0.9% saline solution can be inhaled to loosen or remove scabs or incrustations. A tracheostoma being treated with radiation is often highly sensitive and should be cared for as instructed by your physician or healthcare personnel.

### **Protective Accessories**

To prevent particles of dust and dirt or other objects from entering the trachea through the stoma, special protective articles are needed such as cloths, bibs, roll-necks, filters, etc. Depending on personal requirements, each patient should have at least six such articles on hand.

### Suctioning Frequency

In the same patient the necessity to suction can vary from just a few times each day to up to a number of times an hour. It is important to use a high-quality suction device with suitable performance.

## Moistening

To prevent the formation of scab, the use of an "artificial nose" (e.g. TRACOE humid assist I, REF 640-CT) to keep the airways moist is recommended. Another method is to inhale a vaporized saline solution. A room with up to 50 or 60% relative humidity also helps to maintain proper moisture levels in the airways.

### Materials

TRACOE tracheostomy tubes are made of materials that are approved internationally for medical use. They contain no latex. These products may only be disposed of in compliance with the applicable local regulations for waste materials. In the United States, federal law stipulates that these products may only be sold by or when prescribed by physicians.

# INFORMATION FOR DISTRIBUTORS

# Sales Support

TRACOE medical provides authorized distributors with valuable support for advising their patients:

### **Tube Info Card**

Every TRACOE tube and most of the larynx products come with a card containing all relevant data for documentation and re-ordering purposes in the form of <u>peel-off</u> stickers on the front and back.

### **Advertising**

Photographs of all TRACOE products are available for use in advertising or to create your own training documents; please specify the desired file format.



### Sales Forces

TRACOE product specialists are available to support you in dealing with difficult indications and training your sales force.

### **Training**

TRACOE medical conducts training sessions on products and their applications on request.

### **News-Service**

You receive current information many times throughout the year.

### **Trade Shows/Conferences**

TRACOE medical participates in many major national and international trade shows and conferences. TRACOE medical can also provide you with product posters and catalogues to use at your own events.

### Basic Kit

TRACOE partners have found the top quality TRACOE demonstration case to be an excellent way to display the products. The demonstration cases can be individually stocked with TRACOE products and offer an excellent overview of the TRACOE portfolio at presentations.

# **ORDERING**

## **Delivery**

All TRACOE products are shipped directly ex stock. Non-sterile product variants are generally shipped within 10 days, sterile ones within 4 weeks. Please note: Additional freight charges apply in cases of express deliveries and deliveries to addresses which differ from the address on the invoice.

### Returns

Returns of used products are accepted only if accompanied by a completed decontamination certificate. You can obtain the required form either directly from TRACOE medical or from their website (www.tracoe.com).

### General Terms and Conditions of Business:

Sales and deliveries are made only on the basis of the general terms and conditions of business. You can obtain these either directly from TRACOE medical or from their website (www.tracoe.com).

telephone: +49-69-665668-99

+49-69-665668-86

fax: +49-69-665668-20

e-mail: info@tracoe.com



To ensure prompt handling of your order please indicate the exact reference numbers (REF), the sizes of the tubes and your customer number on your order form.





### **Internet**

To quickly and conveniently obtain information about TRACOE products, news, or general information, simply visit the Internet at: www.tracoe.com.





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