

# **Airway Management**



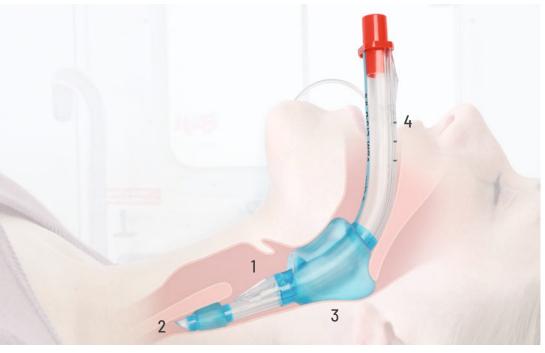
Laryngeal Tubes / Cuff Pressure Gauges / Intubation Aids / Cricothyrotomy Resuscitators / Face Masks / Manual Suction Pump / Pelvic Sling / Simulators



The medical devices in this catalogue do not contain phthalates which require labelling according to CLP Regulation (EC) 1272/2008.

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# Laryngeal Tube LTS-D The 2nd generation supraglottic airway device





The Laryngeal Tube LTS-D is a 2nd generation supraglottic airway (with drain tube) and an alternative adjunct to temporarily secure the airway during emergency situations, e.g. cardiopulmonary resuscitation, in hospital as well as prehospital environments. It is easy to insert and use, even with minimal training (1). In situations with limited space or in patients with minimal mouth opening the slim design of the Laryngeal Tube facilitates insertion (2).

The teeth mark is an indicator regarding the correct depth of insertion and for orientation and repositioning purposes. The colour coded system has proven invaluable in emergencies as the syringe and connectors indicate the recommended maximum inflation volume.

Features

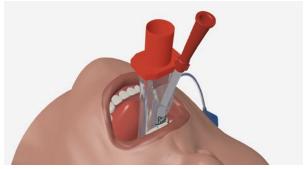
- 1 Multiple ventilation outlets for efficient ventilation
- 2 Drain tube to prevent the risk of aspiration
- 3 Thin walled cuffs allow maximum airway leak pressure and reduce the spread of aerosol thanks to efficient pharyngeal sealing. This is achieved at low cuff pressure ( $< 60 \,\mathrm{cm}\,\mathrm{H}_2\mathrm{O}$ ) making the LTS-D atraumatic to the mucosa.
- 4 Teeth mark as indicator for correct depth of insertion

### **Drain Tube**

- Drain tube recommended as current standard in international guidelines. All LTS-D sizes include the drain tube as standard
- Providing the largest suction capability with easy access can accomodate up to 18 Fr gastric tube

### **Gastric Tube**

- Insertion of a gastric tube is helpful to confirm correct placement of the LTS-D



Drain Tube with inserted 18 Fr gastric tube.

Clinical Features



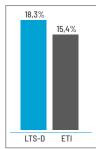
Exchange of LTS-D for Tracheal Tube using video laryngoscopy and a Bougie.



- Reduction of Aerosol Spread (3)







Higher 72-hour survival in adults with OHCA (LTS-D compared to ETI)(5).

Order information

#### Laryngeal Tube LTS-D / For single use, sterile

Size	Patient	Weight / Height	Drain Tube	Fiberscope	Colour	LTS-D With colour coded syringe	Box	LTS-D	Box
0	Newborn	< 5 kg	10 Fr	< 3.0 mm		REF 32-06-100-1	1	REF 32-06-000-1	10
1	Infant	5 – 12 kg	10 Fr	< 3.0 mm		REF 32-06-101-1	1	REF 32-06-001-1	10
2	Child	12 – 25 kg	16 Fr	< 4.0 mm		REF 32-06-102-1	1	REF 32-06-002-1	10
2.5	Child	125 - 150 cm	16 Fr	< 4.0 mm		REF 32-06-125-1	1	REF 32-06-025-1	10
3	Adult	< 155 cm	18 Fr	< 6.0 mm		REF 32-06-103-1	1	REF 32-06-003 -1	10
4	Adult	155 – 180 cm	18 Fr	< 6.0 mm		REF 32-06-104-1	1	REF 32-06-004-1	10
5	Adult	>180 cm	18 Fr	< 6.0 mm		REF 32-06-105-1	1	REF 32-06-005-1	10

### Laryngeal Tube LTS-D Emergency Set / With colour coded syringe, for single use, sterile

Version	REF	Box
Emergency Set for children, consisting of size 0, 1, 2, 2.5	32-06-309-1	1
Emergency Set for adults, consisting of size 3, 4, 5	32-06-209-1	1

Syringe / For Laryngeal Tube, colour coded, with Luer attachment, for single use

Size	REF	Box
20 ml	54-04-111	10
60 ml	54-04-444	10
100 ml	54-04-555	10



### Biteblock / With elastic Necktape, for single use, sterile

Size	For Tracheal Tube	Size Laryngeal Tube LTS-D	Size Laryngeal Mask	REF	Вох
4	6.5 – 8.0 mm I.D.	-	2, 2.5	40-66-040-1	20
5	8.5 – 11.0 mm I.D.	2, 2.5	-	40-66-050-1	20
6	-	3, 4, 5	3, 4, 5	40-66-060-1	20



Additional information



Brochure





of use



bibliography

- S-Guide and i-Bougie see page 10 and 11

- References see page 30

<sup>-</sup> Cuff Pressure Gauge Universal see page 8

# Intubating Laryngeal Tube iLTS-D VBM's 3rd generation supraglottic airway device





Features







Intubation

Ventilation

**Drain Tube** 

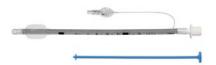
Order information

Intubating Laryngeal Tube iLTS-D / For single use, sterile

Size	Patient	iLTS-D 1x iLTS-D 1x Syringe	Box	<b>iLTS-D</b> 10 x iLTS-D	Box	iLTS-D Intubation Set 1x iLTS-D 1x ET Tube with Stabilizer 1x Syringe	Вох
2.5/3	125 - 155 cm	REF 32-08-123-1	1	REF 32-08-023-1	10	REF 32-08-309-1	1
4/5	≥ 155 cm	REF 32-08-145-1	1	REF 32-08-045-1	10	REF 32-08-209-1	1

ET Tube / With Stabilizer, armored, for single use, sterile

Size	iLTS-D Size	REF	Box
5.5 mm I.D.	2.5/3	31-40-055-1	10
7.5 mm I.D.	4/5	31-40-075-1	10





### / Cuff Pressure Gauges

Cuff pressure gauges have been established as a standard device in many clinical institutions. More and more societies of anaesthesiology and intensive care throughout the world are endorsing the systematic control of cuff pressure in the recommendation of their guidelines. Ventilator-associated pneumonia (VAP) is the leading nosocomial cause of mortality in the Intensive Care Unit and has significant impact on hospital costs and length of stay. A leading cause of VAP is micro-aspiration of potentially infectious secretions through microchannels formed from infolding of redundant cuff material after inflation. Cuff pressure management can contribute to reduce tracheal ischemia and subsequent complications. Availability of the device and precision of the measurement are fundamental to the success of treatments.

### / Cuff Controller

Automatic Cuff Pressure Gauge

The Cuff Controller is an electronic device that has been developed for the continuous control and monitoring of cuff pressure.

It has proven showing effectiveness in maintaining the cuff pressure in the recommended range in ICU patients.





#### Front Side

- Large LCD display
- Intuitive cuff pressure adjustment
- Adjustable range: 0 60 cmH<sub>2</sub>0
- Integrated alarms for over-pressure or leakage



#### Back Side

Universal clamp for fixation to 25 mm standard rail

Order information

Features

**Cuff Controller** / For electricity 100 – 240 VAC, with battery, universal clamp and Connecting Tubing 200 cm

REF	Box
55-13-500	1

Connecting Tubing / For single use

Length	REF	Box
200 cm	54-05-113	10



### / Cuff Manometer

Analogue Cuff Pressure Gauges for tracheal tubes and supraglottic airway devices

Cuff Pressure Gauges are used to adjust and control the pressure of tracheal tube cuffs and cuffs of supraglottic airway devices. The ergonomically designed Cuff Pressure Gauges are compact, robust and portable and are characterised by their accuracy and precision. The analogue system is independent from any energy source and therefore no power supply or batteries are required.

The colour coded areas on the scale help to display the ideal pressure to maintain tracheal mucosal capillary blood flow.



Universal Pediatric Pocket Sensitive Monitor

Order information

Cuff Manometer / Analogue Cuff Pressure Gauge with Connecting Tubing 100 cm

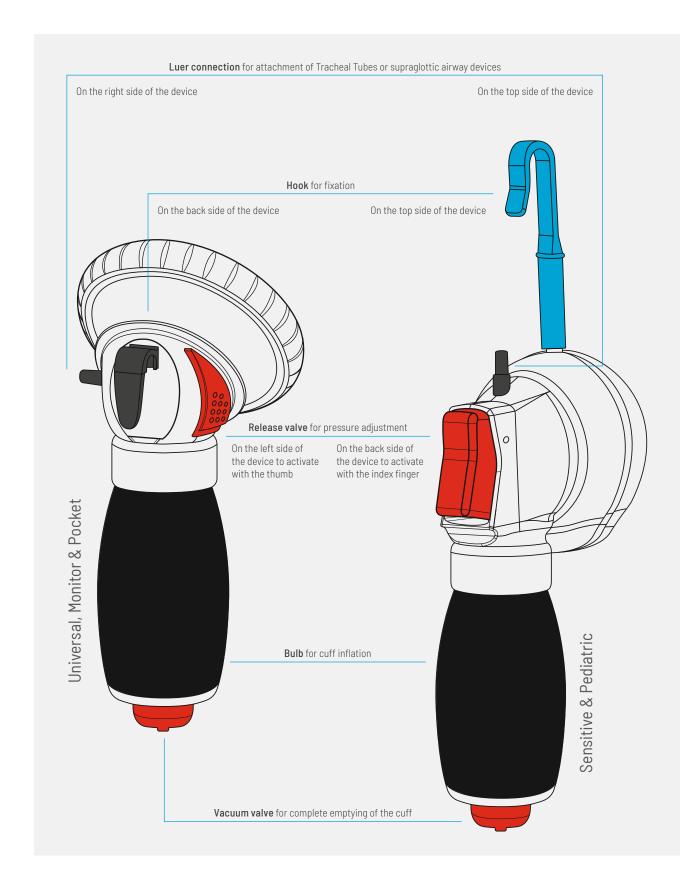
	Universal	Monitor	Pocket	Sensitive	Pediatric	Box
	REF 54-07-000	REF 54-05-000	REF 54-04-000	REF 54-03-001	REF 54-02-001	1
Pressure range	0 - 120 cmH <sub>2</sub> 0	0 - 120 cmH <sub>2</sub> 0	0 - 120 cmH <sub>2</sub> 0	0-120 cmH <sub>2</sub> 0	$0-60cmH_2O$	
Scale	Ø 68 mm	Ø 68 mm	Ø 50 mm	Ø 50 mm	Ø 50 mm	

Accessories

Connecting Tubing / For single use

Length	REF	Box	Male Luer	Luer Lock
100 cm	54-05-112	10		

Features











### S-Guide

Malleable intubating guide for Difficult Airway Management



S-Guide is an intubation aid for difficult airway management and facilitates orotracheal intubation, especially in patients where visualisation of the glottis is inadequate.

Due to its **malleability**, it is suitable for direct and indirect laryngoscopy, in particular for video laryngoscopes with non channelled blades.

Supplied with two types of  $O_2$  Connectors, **oxygenation\*** is possible throughout the whole intubating process. Not impairing oxygenation even when the S-Guide is bent. The S-Guide is provided with a coloured, preformed and atraumatic **soft tip**.

\* Oxygenation is possible with the sizes 11 Fr and 15 Fr. Oxygenation is not possible with the size 8 Fr.

Features



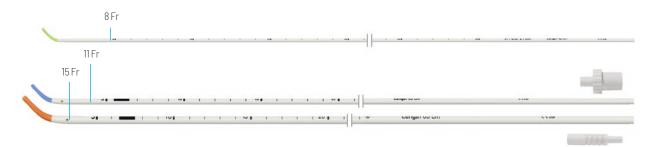




Soft and Atraumatic Tip

Oxygenation\*

Malleability



Order information

S-Guide / Two types of O<sub>2</sub> Connectors included (11Fr and 15Fr), for single use, sterile

Size	Length	Centimetre Markings	For Tracheal Tube	REF	Box
8 Fr	40 cm	5 to 30 cm	≥ 3.0 mm I.D.	33-92-400-1	5
11 Fr	65 cm	5 to 40 cm	≥ 4.5 mm I.D.	33-91-650-1	5
15 Fr	65 cm	5 to 40 cm	≥ 6.0 mm I.D.	33-90-650-1	5



Application video



Flyer intubation aids



Recommendation of use



Annotated bibliography

### / i-Bougie

The versatile introducer to facilitate difficult intubation

The i-Bougie is an effective device to facilitate orotracheal intubation, especially in patients where visualisation of the glottis is inadequate.

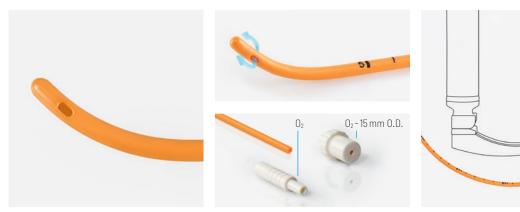
Made of HDPE\* material (non-PVC) with specific mechanical properties, the i-Bougie is shapeable according to the laryngoscope blade and the low friction surface facilitates easy railroading of the tracheal tube. The design of the distal tip is atraumatic and rounded and provides additional confidence to the user.

The i-Bougie is hollow and supplied with two types of  $O_2$  Connectors allowing oxygen flow through the lateral openings at the distal tip.

\* HDPE = High Density Polyethylene



Features



Atraumatic Distal Tip

Oxygenation

Shapeability



Order information

**i-Bougie /** Two types of  $O_2$  Connectors included, for single use, sterile

Size	Length	Centimetre Markings	For Tracheal Tube	REF	Box
14 Fr	70 cm	5 to 40 cm	≥ 6.0 mm I.D.	33-70-700-1	5



Brochure



Flyer intubation aids



Annotated bibliography

### / X-Changer

Tube exchanger to maintain the airway during tracheal tube exchange



The X-Changer is designed to facilitate tracheal tube exchange with the possibility for temporary oxygenation. 3 sizes are available to minimize the gap between I.D. of tracheal tube and 0.D. of catheter to avoid impingement upon the arytenoids (6). The catheter is made of soft material for better patient tolerance. When used as placeholder for extubation it can be left in situ until the need for reintubation is deemed unlikely (7, 8). Maintaining airway access increases the probability of success should reintubation of the patient with a difficult airway become necessary (9). The X-Changer can be used to increase the safety of changing tracheal tubes (10).

Features







Soft and Atraumatic Tip

Oxygenation

Centimetre Markings

Order information

**X-Changer /** Two types of  $O_2$  Connectors included, for single use, sterile

Size	Length	Centimetre Markings	For Tracheal Tube	REF	Box
11 Fr	80 cm	5 to 40 cm	≥ 4.0 mm I.D.	33-42-800-1	5
14 Fr	80 cm	5 to 40 cm	≥ 5.0 mm I.D.	33-41-800-1	5
19 Fr	80 cm	5 to 40 cm	≥ 7.0 mm I.D.	33-40-800-1	5

Additional information



Application video

Brochure





Flyer intubation aids

Annotated bibliography

### Pocket Introducer

The smallest packaged introducer to facilitate difficult intubation



Pocket Introducer is an aid for the difficult airway to facilitate orotracheal intubation under direct laryngoscopy or via video laryngoscopy. The 15 Fr introducer with preformed tip and centimetre markings unfolds from 20 cm to 65 cm with only 3 clicks and ready for use within seconds.

In folded condition, the introducer provides the smallest pack size and is the ideal space solution for emergency bags, helicopters, lab coat pockets, crash carts, etc.

Order information

Pocket Introducer / For single use, sterile

Pocket Introducer / In robust plastic cartridge, for single use, sterile

Size	Length	Centimetre Markings	For Tracheal Tube	REF	Вох	Size	Length	Centimetre Markings	For Tracheal Tube	REF	Box
15 Fr	65 cm	10 to 40 cm	≥ 6.0 mm I.D.	33-80-650-1	5	15 Fr	65 cm	10 to 40 cm	≥ 6.0 mm I.D.	33-81-650-1	1

Additional information







Flyer intubation aids



Annotated bibliography

### / Stylet

Intubation stylet enables preforming of the tracheal tube



Features

- Soft, atraumatic tip
- Without silicone connector
- With moveable silicone connector, which allows fixation of the tracheal tube

Order information

#### Stylet / Reusable

Size	Length	For Tracheal Tube	Without Silicone Connector	Box	With Moveable Silicone Connector (15 mm I.D.)	Box
Small	34 cm	2.5 – 3.5 mm I.D.	REF 90-10-111	25	REF 90-10-001	10
Medium	38 cm	4.0 – 4.5 mm I.D.	REF 90-10-222	25	REF 90-10-002	10
Large	45 cm	5.0 - 6.5 mm I.D.	REF 90-10-333	25	REF 90-10-003	10
Large	45 cm	7.0 – 11.0 mm I.D.	REF 90-10-444	25	REF 90-10-004	10



Flyer intubation aids



Annotated bibliography

### Quicktrach I

Set for percutaneous cricothyrotomy according to the catheter-over-needle technique



Quicktrach I is a percutaneous cricothyrotomy set according to the catheter-over-needle technique, for securing the airway in a CICO situation (Cannot Intubate – Cannot Oxygenate) in case of upper airway obstruction.

The sterile set is preassembled and available in blister packaging or plastic tube.



Features

### Needle

 Due to the conical needle tip, the opening into the trachea is dilated

#### Cannula

 Inner diameter is adequate for temporary ventilation with standard breathing systems (11)

### Stopper

 Reduces the risk of posterior tracheal wall perforation while inserting the needle into the trachea

#### Necktape

- For safe fixation

### Syringe

For checking the location in the trachea



Blister packaging



Plastic tube, ideal for emergency bags. Dimension: 23 cm (L), Ø 5 cm

Order information

Quicktrach I / In blister packaging, for single use, sterile

Patient	Cannula	REF	Box
Child	2.0 mm I.D.	30-04-002-1	1
Adult	4.0 mm I.D.	30-04-004-1	1

Quicktrach I / In plastic tube, for single use, sterile

Patient	Cannula	REF	Box
Child	2.0 mm I.D.	30-04-902-1	1
Adult	4.0 mm I.D.	30-04-904-1	1



Application video



Brochure



Flyer cricothyrotomy



Annotated bibliography

### / Quicktrach II

Set for percutaneous cricothyrotomy according to the catheter-over-needle technique

Quicktrach II is a percutaneous cricothyrotomy set according to the catheter-over-needle technique, for securing the airway in a CICO situation (Cannot Intubate – Cannot Oxygenate) in case of upper airway obstruction. The cuff allows sealing of the trachea.

The sterile set is preassembled and available in blister packaging or plastic tube.





Features

### Needle

 Due to the conical needle tip, the opening into the trachea is dilated

#### Cannula

 Inner diameter is adequate for temporary ventilation with standard breathing systems (11)

#### Cuff

- The cuff allows sealing of the trachea

### Stopper + Safety Clip

 Reduces the risk of posterior tracheal wall perforation while inserting the needle into the trachea

#### Necktape

- For safe fixation

#### Syringe

For checking the location in the trachea



Blister packaging



Plastic tube, ideal for emergency bags. Dimension: 23 cm (L), Ø 5 cm

Order information

**Quicktrach II /** With cuff, in blister packaging, for single use, sterile

Patient	Cannula	REF	Box
Adult	4.0 mm I.D.	30-10-004-1	1

**Quicktrach II /** With cuff, in plastic tube, for single use, sterile

Patient	Cannula	REF	Box
Adult	4.0 mm I.D.	30-10-904-1	1



Application video



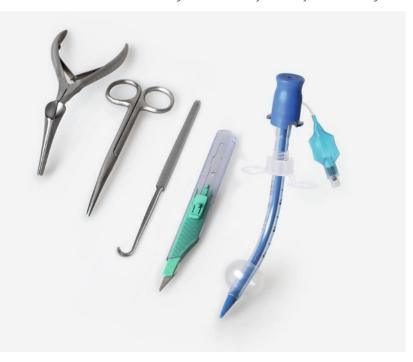
Flyer cricothyrotomy



Annotated bibliography - References see page 30

### / Surgicric II

Set for surgical cricothyrotomy according to the classical surgical technique



Surgicric II is a cricothyrotomy set for the classical surgical technique and enables securing the airway in case of upper airway obstruction, respectively as "Ultima Ratio" if all other attempts to ventilate the patient failed. The special feature of Surgicric II is the combination of tube and dilator. The pre-inserted dilator in the tube allows for a rapid, easy procedure.

Packed in a specific sterile pouch, the set is providing clear overview of all components.

Features

#### Scissors

 For blunt dissection up to the cricothyroid membrane

### Speculum and Tracheal Hook

- To hold the incision open

#### Necktape

- Safe fixation of the tube

### Dilator

- Soft tip to prevent injury of the posterior tracheal wall
- Smooth transition between dilator and tube tip
- Locking mechanism reduces the risk of accidental dislocation of the dilator from the tracheal tube

#### 6.0 mm I.D. Tube

- Cuff for protection against aspiration
- Moveable flange
- Atraumatic, rounded tube tip

#### **Extension Tubing**

- With suction possibility ≤ 16 Fr

# Sterile field

### Content

- 1 Scalpel #11
- 2 Syringe 10 ml
- **3** 6.0 mm I.D. tube with cuff and dilator
- 4 Necktape
- **5** Extension tubing
- 6 Tracheal hook
- 7 Scissors
- 8 Speculum

Robust packaging and compact pack size to fit emergency bags, backpacks, crash carts, etc.

### Pack size:

31.5 cm (L) x 15.2 cm (W) x 5.0 cm (H) **Unfolded size / sterile field:** 

56 cm (L) x 39 cm (W)



Order information

Surgicric II / For single use, sterile

30-08-117-1 1



Application video



Brochure



Flyer cricothyrotomy



Annotated bibliography

### / Surgicric III

Set for surgical cricothyrotomy according to the Seldinger technique

Surgicric III is a set for surgical cricothyrotomy according to the Seldinger technique. The guidewire with a special J-tip facilitates an atraumatic insertion.

The special feature of Surgicric III is the combination of tube and dilator. The pre-inserted dilator in the tube allows for a rapid, easy procedure.

Packed in a specific sterile pouch, the set is providing clear overview of all components.



Features

#### Guidewire

- J-shape allows atraumatic insertion
- 10 cm, 20 cm und 30 cm graduation marks for depth orientation

#### Necktape

- Safe fixation of the tube

#### Dilator

- Soft tip to prevent injury of the posterior tracheal wall
- Smooth transition between dilator and tube tip
- Locking mechanism reduces the risk of accidental dislocation of the dilator from the tracheal tube

### 6.0 mm I.D. Tube

- Cuff for protection against aspiration
- Moveable flange
- Atraumatic, rounded tube tip

#### **Extension Tubing**

- With suction possibility ≤ 16 Fr

### Content

- 1 Safety scalpel #11
- 2 Syringe 10 ml
- 3 6.0 mm I.D. cuffed tube with dilator
- 4 Necktape for tube
- **5** Extension tubing
- 6 Necktape for cannula
- 7 Introducer catheter (needle & cannula)
- 8 Guidewire

Robust packaging and compact pack size to fit emergency bags, backpacks, crash carts, etc.

### Pack size:

31.5 cm (L) x 15.2 cm (W) x 5.0 cm (H) Unfolded size / sterile field:  $56 \, \text{cm} \, (L) \, x \, 39 \, \text{cm} \, (W)$ 



Order information

Surgicric III / For single use, sterile

REF Box

**30-08-227-1** 1

Additional information







Flyer cricothyrotomy

Annotated bibliography

### / ScalpelCric

Set for surgical cricothyrotomy according to the scalpel technique





ScalpelCric is a surgical set for cricothyrotomy according to the scalpel technique. The set has been developed to match the latest recommendations from the DAS (Difficult Airway Society) 2015 Guidelines.

Based on the simple description of "stab, twist, bougie, tube", the ScalpelCric is meant to facilitate the execution of eFONA (emergency Front Of Neck Access) in a CICO situation (Cannot Intubate – Cannot Oxygenate). The set is packed in a specific sterile pouch with each component organised in the order of use. This can be important at the critical time of the procedure.

Features

### Bougie

- Low friction surface for easy railroading of the tube
- Angled and atraumatic tip
- Centimetre markings to control insertion depth

#### 6.0 mm I.D. tube

- Cuff for protection against aspiration
- Moveable flange
- Atraumatic, rounded tube tip

### **Extension Tubing**

- With suction possibility ≤ 16 Fr

### Necktape

Safe fixation of the tube



#### Content

1 Scalpel #10 214 Fr Bougie (40 cm) 3 6.0 mm I.D. tube with cuff 4 Extension tubing 5 Syringe 10 ml 6 Necktape Robust packaging and compact pack size to fit emergency bags, backpacks, crash carts, etc.

#### Pack size:

31.5 cm (L) x 15.2 cm (W) x 5.0 cm (H)

Unfolded size / sterile field:

56 cm (L) x 39 cm (W)

Order information

ScalpelCric / For single use, sterile

REF Box 30-08-447-1 1 3



Application video



Brochure



Flyer cricothyrotomy



Annotated bibliography

### **/** Jet-Ventilation Catheters

Percutaneous cricothyrotomy

Order information

Jet-Ventilation Catheters acc. to Ravussin / For single use, sterile

Size	Patient	Emergency Set With syringe	Box	Anaesthesia Set	Вох
13 G	Adult	REF 30-02-913-1	1	REF 30-02-013-1	5
14 G	Child	REF 30-02-914-1	1	REF 30-02-014-1	5
16 G	Infant	REF 30-02-918-1	1	REF 30-02-018-1	5



Additional information



Annotated bibliography

### / Manujet III

The Manujet III is a manually controlled oxygen delivery system used for transtracheal ventilation.

It is recommended for emergency rooms, crash carts, ambulances and operating rooms as it offers a quick and efficient oxygenation of a patient.





Order information

Manujet III / In a case with 4 m pressure hose, Jet-Ventilation Catheters acc. to Ravussin (13 G, 14 G, 16 G) and Connecting Tubing 100 cm

 REF
 Box

 30-01-003
 1

Manujet III / Ditto but with NIST plug and without pressure hose

REF Box 30-01-003NIST 1 Connecting Tubing / Length 100 cm, non sterile

R	REF	Box
5	4-05-111	10

### Silicone Resuscitator Set

Reusable



Order information

#### Set for Infant /

In a rigid, transparent carrying case, Silicone Resuscitator Bag 280 ml, Silicone Face Mask size 1, Reservoir Bag 600 ml,  $\rm O_2$  Tubing 200 cm

REF	Box
88-10-390	1

#### Set for Child /

In a rigid, transparent carrying case, Silicone Resuscitator Bag 450 ml, Silicone Face Mask size 3, Reservoir Bag 2500 ml, cm  $\rm O_2$  Tubing 200 cm

REF	Box
88-10-290	1

#### Set for Adult /

In a rigid, transparent carrying case, Silicone Resuscitator Bag 1500 ml, Silicone Face Mask size 5, Reservoir Bag 2500 ml, O<sub>2</sub> Tubing 200 cm

REF	Box
88-10-190	1







### / Silicone Resuscitator Bag

Order information

Silicone Resuscitator Bag / Reusable

 Infant 280 ml
 Box
 Child 450 ml
 Box
 Adult 1500 ml
 Box

 REF 88-10-300
 1
 REF 88-10-200
 1
 REF 88-10-100
 1







### / PVC Resuscitator Set

For single use



Order information

#### Set for Infant /

In a transparent PE-bag, PVC Resuscitator Bag 280 ml, PVC Face Mask size 1, Reservoir Bag 600 ml, O<sub>2</sub> Tubing 200 cm

REF Box 84-10-395 6 Set for Child /

In a transparent PE-bag, PVC Resuscitator Bag 450 ml, PVC Face Mask size 3, Reservoir Bag 2500 ml, O<sub>2</sub> Tubing 200 cm

REF Box 84-10-295 6 Set for Adult /

In a transparent PE-bag, PVC Resuscitator Bag 1500 ml, PVC Face Mask size 5, Reservoir Bag 2500 ml, O<sub>2</sub> Tubing 200 cm

 REF
 Box

 84-10-195
 6







Accessories Resuscitators

### PEEP-Valve / Reusable

Pressure Range	Connection	Colour	REF	Box
2-10 cmH <sub>2</sub> 0	30 mm I.D. with additional adapter 22 mm 0.D.	Blue	88-13-006	1
5-20 cmH <sub>2</sub> 0	30 mm I.D. with additional adapter 22 mm 0.D.	Blue	88-13-007	1



30 mm I.D.

22 mm 0.D.

### PEEP-Valve / For single use

Pressure Range	Connection	Colour	REF	Box
2-10 cmH <sub>2</sub> 0	30 mm I.D. with additional adapter 22 mm 0.D.	Orange	89-13-006	1
5-20 cmH <sub>2</sub> 0	30 mm I.D. with additional adapter 22 mm O.D.	Orange	89-13-007	1



30 mm I.D.

). 22 mm 0.D.

**PEEP-Adapter** /  $22 \, \text{mm}$  I.D. /  $30 \, \text{mm}$  O.D., for PEEP-Valve when used with Silicone Resuscitator, reusable

REF	Вох
88-13-003	1



### $O_2$ Tubing / For single use

Length	REF	Box
200 cm	89-17-000	1



### Reservoir Bag / For single use

Size	REF	Box
600 ml	89-12-020	5
2500 ml	89-12-010	5





Spare parts for Silicone Resuscitators

**Non-Rebreathing Valve /** Without pressure relief, reusable

REF	Box
88-14-000	1

Non-Rebreathing Valve / With pressure relief  $40\,\text{cmH}_2\text{O}$ , reusable

REF	Box
88-15-000	1

Intake Valve / Reusable

REF	Вох
88-26-000	1







### Bi-Mask

Anatomically shaped anaesthesia face mask





The Bi-Mask is a face mask made of silicone with integrated plastic shell. This supports a comfortable grip, as the mask is malleable and yet provides stability without collapse. Due to the anatomical shape, the Bi-Mask provides an airtight seal with minimum pressure and the ergonomical design allows an optimised grip via C-grip. The Bi-Mask is available in 5 sizes and processable up to 100 times (autoclavable at 134°C).

Features

### Mask Body

Allows visibility for patient observation

### Internal Plastic Shell

- Provides stability without collapse
- Colour coding facilitates size selection
- Supports a comfortable grip due to its malleability

### Soft Silicone Rim

 Seals to a variety of face shapes

### **UDI-Code and Serial Number**

Product traceability and tracking of product usage

### **Hook Ring**

 Allows fixation of the mask in combination with a Fixation Tape

### 22 mm I.D. Connection

 For resuscitator bag or breathing system

Order information

#### Bi-Mask / Reusable

Size	Patient	Connection	Colour	REF	Box
2	Child, small	22 mm I.D.		35-65-222	1
3	Child, large	22 mm I.D.		35-65-223	1
4	Adult, small	22 mm I.D.		35-65-224	1
5	Adult, medium	22 mm I.D.		35-65-225	1
6	Adult, large	22 mm I.D.		35-65-226	1

Accessories Bi-Maske Hook Ring / Reusable

REF	Вох
88-60-266	10



### Rendell Baker Mask

Order information

Rendell Baker Mask / Reusable

Size	Patient	Connection	REF	Box
0	Newborn	22 mm I.D.	35-60-000	10
1	Infant	22 mm I.D.	35-60-001	10
2	Child, small	22 mm I.D.	35-60-002	10
3	Child, large	22 mm I.D.	35-60-003	10







### / Paediatric Mask

Order information

Paediatric Mask / Reusable

Size	Patient	Connection	REF	Box
0	Newborn	15 mm 0.D.	88-11-000	10
1	Infant	15 mm 0.D.	88-11-001	10
2	Child	22 mm I.D.	88-11-002	10







### / PVC Face Mask

Order information

PVC Face Mask / With inflatable cushion, for single use

Size	Patient Connection Colour		REF	Box	
1	Newborn	15 mm 0.D.	-	35-40-201	10
2	Infant	15 mm 0.D.	-	35-40-202	10
3	Child	22 mm I.D.		35-40-203	10
4	Adult, small	22 mm I.D.		35-40-204	10
5	Adult, medium	22 mm I.D.		35-40-205	10
6	Adult, large	22 mm I.D.		35-40-206	10



### **/** Accessories for Face Masks

Order information

Fixation Tape / Reusable

Patient	REF	Box
Child	35-70-155	10
Adult	35-70-255	10

Fixation Tape / For single use

Patient	REF	Box
Adult	35-30-255	10





# **Endoscopy Mask**The ideal combination of ventilation and endoscopy

Allows endoscopy and simultaneous ventilation during fiberoptic intubation, bronchoscopy, gastroenterology or transesophageal echocardiography. A specific membrane prevents airway leak at any step of the procedure, providing an excellent seal on the patient's face and during insertion of the endoscope or a tracheal tube. It is especially beneficiary to patient comfort and the working quality of the practitioner during awake procedures.

Order information

Endoscopy Mask / For single use

Size	Membrane	REF	Вох
0	2.0 mm I.D.	30-40-000	6
1	2.0 mm I.D.	30-40-111	6
3	3.0 mm I.D.	30-40-333	6
3	5.0 mm I.D.	30-40-335	6
5	5.0 mm I.D.	30-40-555	6
5	10.0 mm I.D.	30-40-777	6





Accessories Endoscopy Mask

Additional information Hook Ring / For Endoscopy Masks, for single

REF	Box	
30-40-266	10	





Application video echocardiography



Application video endoscopy



Application video fiberoptic intubation



Application video sedation during gastrointestinal endoscopy

### Bronchoscope Airway

The lumen is large enough to guide the fiberscope and tracheal tube. The length is designed to form a path leading to the glottis. The Airway has a lateral opening for easy removal after intubation. The external biteblock protects the fiberscope.

Order information

Bronchoscope Airway / With integrated biteblock, for single use, sterile

Size	Length	REF	Box
0	36 mm	30-40-400-1	10
2	65 mm	30-40-420-1	10
4	85 mm	30-40-440-1	10



### Manual Suction Pump

For effective and quick suction of fluids from the oro- and pharyngeal cavities

The Manual Suction Pump is a inexpensive alternative for EMS personnel and first responders. It easily fits in most emergency cases or bags and always ready for use, as the operation of the device is independent from any power source.

Features



Order information

Manual Suction Pump / Vacuum pump, suction catheters (28 Fr and 40 Fr), container 250 ml, sealing cap, adapter for standard suction catheters, suction cap

Vacuum pump: reusable Accessories: for single use

REF Box 30-55-000 1 Accessory Kit for Manual Suction Pump / Suction catheters ( $28\,\mathrm{Fr}$  and  $40\,\mathrm{Fr}$ ), container  $250\,\mathrm{ml}$ , sealing cap, adapter for standard suction catheters, suction cap For single use

REF Box 30-56-000 1

All accessories in one set

### / Pelvic Sling

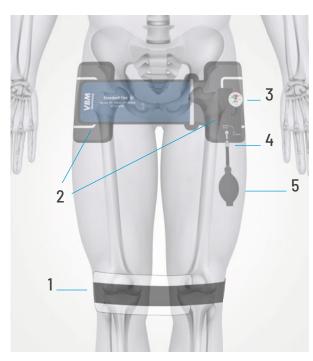
Pneumatic system for the stabilisation of pelvic fractures

The Pelvic Sling is a non-invasive, external pelvis stabiliser for compression and stabilisation of unstable pelvic fractures. The inflatable cuffs exert a lateral pressure to the pelvis for external stabilisation of the pelvic ring to restore the anatomic conditions.

Hemorrhage is reduced by reduction of the intra-pelvic volume.



Features



Pelvic Sling in situ with slide splint used as knee fixation.

### 1 Slide Splint / Knee Fixation

- To slide the Pelvic Sling underneath the patients pelvis
- After removal used as knee fixation

#### 2 Cuffs

- Lateral compression of the pelvis due to pneumatic cuffs
- Minimal mechanical manipulation on the fractured pelvis

#### 3 Manometer

Visual control of the applied pressure

### 4 Stopcock

- For a leak free transport

#### 5 Hand Inflator

achieved

- For inflation and deflation of both cuffs

rotation of the lower extremities

- Removable for MRI use



Pelvic Sling / For single use

Size	Patient	Hip Circumference	REF	Box
S	Junior	70 - 90 cm	34-10-006	1
М	Standard	90 - 110 cm	34-10-004	1
L	Large	110 - 140 cm	34-10-005	1

The Pelvic Sling is packed in a compact size bag, ready to use.

#### Pack size:

major a correct placement of the Pelvic Sling can be

The slide splint facilitates the application of the Pelvic Sling and can help to consider the important internal

42 cm (L) x 19 cm (W) x 7 cm (H)

Additional information

information



Application video



Annotated bibliography

### / Airway Management Simulators

Simulation is the ideal method for replicating clinical situation and contributes to improve patient care by enhancing proficiency of practitioners. VBM has developed a wide range of skill-trainers and mannequins with the highest possible fidelity to train all airway procedures.

### Bill III

- Tracheal intubation
- Supraglottic airway insertion
- Mask ventilation
- Fiberoptic bronchoscopy (if bronchial tree is connected)
- Fiberoptic intubation
- Video laryngoscopy
- Inflatable tongue for Difficult Airway simulations

No.

Order information

Bill III / With carrying bag

REF Box 30-29-000 1

**Bronchial Tree acc. to Dr. Nakhosteen /** For connection to simulator "Bill III"

REF	Box
30-19-400	1



### / Transparent Head

Order information

**Transparent Head /** For demonstration and positioning of Laryngeal Tubes, with carrying bag

REF Box 30-16-300 1



### / Crico-Trainer

Order information

### Crico-Trainer "Adelaide"

The chin is moveable to train cricothyrotomy under more difficult conditions. The skin has two layers to simulate skin and cricothyroid membrane. Complete with 5 skins.

Crico-Trainer "Adelaide" / With 5 skins

REF	Box
30-14-700	1

#### Crico-Trainer "Frova"

For practising cricothyrotomy and percutaneous tracheostomy, complete with 10 skins and 10 tracheal structures.

Crico-Trainer "Frova" / With 10 skins and 10 tracheal structures

REF	Box
30-14-000	1



#### Crico-Trainer "Animal"

For fixation of a real animal trachea, complete with 10 skins.

Crico-Trainer "Animal" / With 10 skins

REF	Box
30-14-500	1

### Crico-Trainer "Paediatric"

For practising cricothyrotomy on the child, complete with 10 skins.

Crico-Trainer "Paediatric" / With 10 skins

REF	Box
30-14-900	1



Accessories

Skins /

Crico-Trainer	REF	Box
"Adelaide"	30-14-722	5
"Frova" and "Animal"	30-14-222	10
"Paediatric"	30-14-922	10

Larynx / For Crico-Trainer " Adelaide" and " Frova"

REF	Box
30-14-111	1



Version "Adelaide"

Tracheal Structure / For Crico-Trainer "Frova"

Version "Frova" and "Animal"

REF	Box
30-14-444	10



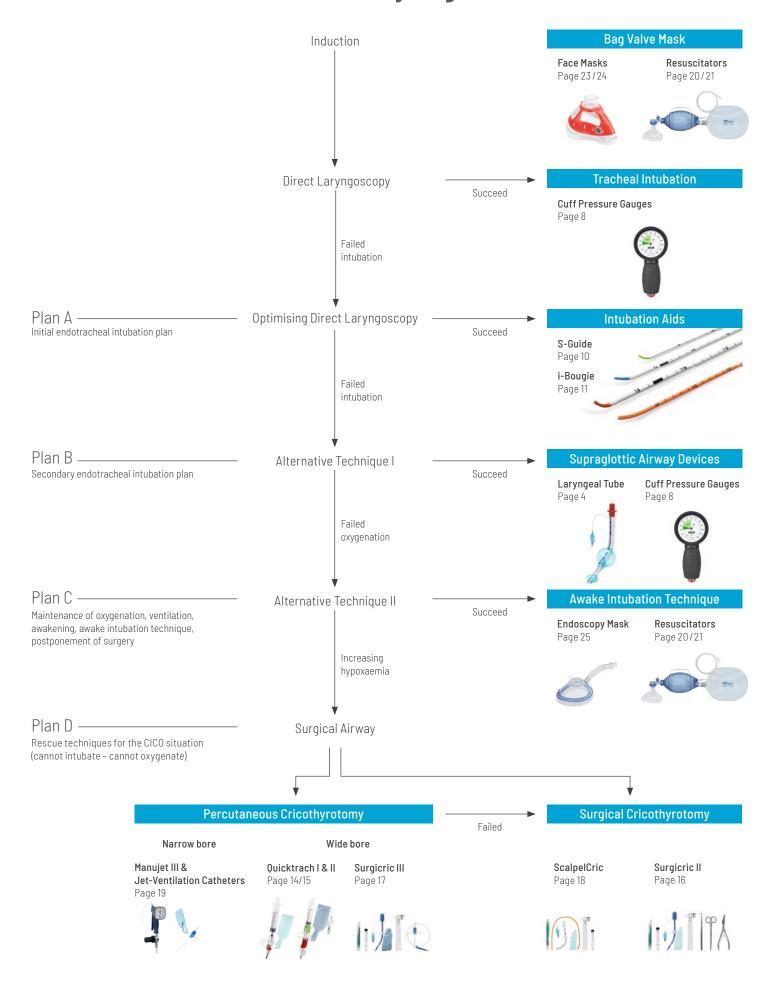
Version "Paediatric"

### List of References

References

- (1) Genzwürker et al. "Emergency airway management by first responders with the laryngeal tube intuitive and repetitive use in a manikin." Scand J Trauma Resusc Emerg Med 2005; 13; 212–217.
- (2) Knacke, Engelhardt (Hrsg.) Fallbeispiele Rettungsdienst, Band II, S+K Verlag, 2006.
- (3) Ott M, et al., "Exploration of strategies to reduce aerosol-spread during chest compressions: A simulation and cadaver model," Resuscitation, 2020.
- (4) Wiese C:H.R. et al. "Reduction in no flow time using a laryngeal tube. Comparsion to bag-mask ventilation," Anaesthesist, 2008.
- (5) Wang H.E. et al. "Effect of a Strategy of Initial Laryngeal Tube Insertion vs Endotracheal Intubation on 72-Hour Survival in Adults With Out-of-Hospital Cardiac Arrest. A Randomized Clinical Trial," JAMA, 2018.
- (6) C. A. Hagberg and J. L. Benumof, Benumof and Hagberg's airway management, 4rd ed. Philadelphia: Elsevier, p. 767, 2018.
- (7) I. Dornberger, Schwieriges Atemwegsmanagement bei Erwachsenen und Kindern, Stuttgart: Thieme, p. 92, 2013.
- (8) C. A. Hagberg and J. L. Benumof, Benumof and Hagberg's airway management, 4rd ed. Philadelphia: Elsevier, p. 768, 2018.
- (9) C. A. Hagberg and J. L. Benumof, Benumof and Hagberg's airway management, 4rd ed. Philadelphia: Elsevier, p. 861, 2018.
- (10) M. Parotto et al., "Extubation of the Challenging or Difficult Airway," Current anesthesiology reports, pp. 1–7, 2020.
- (11) X. Onrubia et al., "Front of neck access to the airway: A narrative review," Trends in Anaesthesia and Critical Care, vol. 22, pp. 45–55, 2018.

### / VBM Difficult Airway Algorithm



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### / VBM - Specialists in Airway Management



### **Our Company**

Since 1981, we have been developing, producing and selling medical technology solutions in the areas of Airway Management, Accessories for Anesthesia & Intensive Care and Tourniquet Systems.

We are a globally active family business with roots in the northern Black Forest - where around 200 employees work from development to the finished product.

We distribute our products worldwide through our sales office in USA and trading partners in over 100 countries.

### Our Vision

At VBM we think about the future. As a family business, we have the courage to think long-term and make sustainable decisions. Always with the aim of supplying our customers and ultimately the patients with high-quality products.



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