

## Experience Counts - emergency healthcare solutions for military & homeland defence



**Pneupac**<sup>TM</sup>

**medfusion**<sup>TM</sup>

**BCI**<sup>TM</sup>

**JELCO**<sup>TM</sup>

**PORTEX**<sup>TM</sup>

**medex**<sup>TM</sup>

**Deltec**<sup>TM</sup>

**LEVEL 1**<sup>TM</sup>

# smiths

**Smiths Medical** is a leading global provider of medical devices for the hospital, emergency, home and specialist environments.

Our products are used during critical and intensive care, surgery, post-operative care during recovery, and in a series of high-end home infusion therapies.

We offer 12 of the most respected and easily recognisable brands within our portfolio: **Portex™, Medex™, Deltec™, Level1™, Cozmore™, Pneupac™, Wallace™, CADD™, BCI™, Jelco™, Medfusion™ and Surgivet™.**

Smiths Medical employs some 7,500 people, with manufacturing concentrated in the US, the UK, Mexico and Italy. Most territories are serviced through wholly-owned local sales and distribution companies. As part of **Smiths Group plc**, a FTSE 100 UK based company, **Smiths Medical** is well positioned to invest in continuous improvement, technological innovation and customer service.



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Detection

John Crane

## Smiths Detection

Smiths Detection is a world-leading designer and manufacturer of sensors that detect and identify explosives, narcotics, weapons, chemical agents, biohazards and contraband.

Our technology helps customers in the global transportation, ports and borders, critical infrastructure, military and emergency responder markets. We have the most comprehensive range of detection technologies in the world, including trace detection, millimetre-wave, infra-red, biological detection and diagnostics.

## John Crane

John Crane is a world-leading provider of products and services for the major process industries, these include the oil and gas, chemical, pharmaceutical, pulp and paper, and mining sectors.

We help to enhance customer productivity by providing advanced technology mechanical products backed by an exceptional global service network.

## Smiths Medical

Smiths Medical is a leading supplier of specialist medical devices and equipment for global markets. Our products are focused in the medication delivery, vital care and safety devices market segments.

In medication delivery, our devices help to treat cancer patients, deliver insulin to diabetics and provide relief to those in pain. Our vital care products reduce hospital acquired infections, manage patients' airways before, during and after surgery, maintain body temperature and assist reproduction through IVF therapy. Our safety products keep health workers safe by helping to prevent needlestick injuries and reduce cross infections.

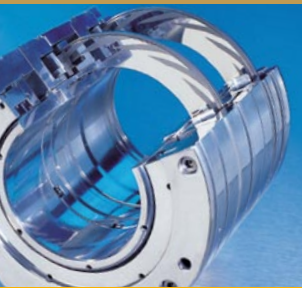


# smiths

Medical

Interconnect

Flex-Tek



## Smiths Interconnect

Smiths Interconnect designs and manufactures specialised electronic and radio frequency products that connect, protect and control critical systems for the global wireless telecommunications, aerospace, defence, space and medical markets.

Smiths Interconnect is an electronic components and sub-systems business providing signal, power and microwave solutions that are application specific and incorporate innovative technologies to help our customers achieve ultimate system performance.

## Flex-Tek

Flex-Tek provides engineered components that heat and move fluids for the aerospace, medical, industrial, construction and domestic markets.

Our flexible hosing and rigid tubing is deployed on commercial aircraft as well as in motor sport for fuel and hydraulic applications. In the home our technology can be found in domestic equipment including vacuum cleaners and HVAC systems support.

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## Pneupac® compPAC™ Ventilator

Versatile options for driving the ventilator and powering the internal compressor

- Air mix and Oxygen enrichment facility
- Separate controls for minute volume and frequency
- Integrated electronic pressure monitoring/alarm system
- Filter canister for use in contaminated areas
- NATO Catalogue number: 6530-99-364-0032



Emergency and transport ventilation are now an established part of emergency medical practice throughout the world. Many portable ventilators exist to perform these tasks but are dependent to some extent on power or compressed gas supplies such as oxygen cylinders, with a life of only about 30 minutes. While this may not pose a serious problem in urban locations, difficulties may arise in more remote locations or unusual circumstances (mass casualty/terrorist activity) where oxygen availability is limited and re-supply difficult.

The Pneupac® compPAC™ ventilator has the unique ability to be driven from an external gas supply or from its internal compressor. When driven by oxygen the Pneupac® compPAC™ ventilator will deliver 100% or 45% oxygen during the air mix mode, extending cylinder life. Alternatively when oxygen is limited the internal compressor will drive the ventilator using filtered air drawn from the surrounding environment. It may also be powered by the internal battery or an external electrical supply.

Designed for use in the most difficult of environments the Pneupac® compPAC™ ventilator has been developed in conjunction with military and emergency organizations. It provides life support to casualties in a wide range of situations where conventional resuscitation equipment is not adequate (war zones, toxic environments, mass disasters).

Pneupac® compPAC™ Ventilator	
Description	Product Code
Model COM200 with Integral Compressor, Alarms and Rubber Boot with Tilt Facility	COM200
Mains Power Supply 230/115V to 26V DC plus 12V-24V Input and Trickle Charge for NiCad	PS12
Hard Case	W183-001
Filter, NBC, NATO No. 4240-99-132-0941	W7265
User Manual	504-2055/A



## Portex® Front Line Chest Drainage Kit

- Compact
- Easy to use
- Designed specifically for the military or mass casualty situations
- NATO Catalogue number: 6515-99-811-0449

## Portex® Cricothyroidotomy Kit - PCK

- Quick procedure
- Veress needle indicates entry to the trachea
- 6mm Cricothyroidotomy tube with Soft-Seal® cuff enables spontaneous breathing
- 15mm connector allows connection to manual resuscitators or ventilator circuits
- Pre-assembled kit contains components required for the procedure
- Includes scalpel, tube holder, nylon sutures and Thermovent® T Heat and Moisture Exchanger



In difficult environments, where emergency medical care has to be administered efficiently, you need equipment that you can trust to be quick and simple to use. The PCK enables emergency airway access in front line or other extreme trauma situations. The device is pre-assembled and its packaging compact, secure and robust, making it ideal for inclusion in trauma bags.

The kit comprises of a chest drainage bag folded to minimum proportions but ensuring no interference with the valve. The 28Fr chest tube is connected directly to the drainage bag. The flexible introducer is incorporated within the lumen of the chest tube in order to maintain the curvature when packed. There is a 1 meter (3 ft) "O" suture and a pair of 13cm (5") blunt forceps for blunt dissection. The kit is packed within a polythene bag that has a rip strip. This bag is then placed within the Tyvek®, water-proof outer pack. Ideal for administration of emergency drainage procedures when seconds count and the working environment is hostile.

Portex® Cricothyroidotomy Kit - PCK	
Description	Product Code
Portex® Cricothyroidotomy Kit - PCK	100/465/060

Portex® Front Line Chest Drainage Kit	
Description	Product Code
Portex® Front Line Chest Drainage Kit	209/022/280

Portex®  
1st Response™ Adult  
Manual Resuscitators

- Collapsible volume bag for ease of storage
- Horizontally-oriented, low dead-space patient valve assembly
- Patient connector with integral swivel improves range of motion
- 30mm exhalation port accepts PEEP valve
- Enhanced SureGrip™ textured surface helps you maintain a secure grasp



Pneupac® VR1™

- First response portable ventilator for emergency personnel
- Designed for use in demanding conditions
- Small and lightweight
- Rapid respiratory support in emergency clinical situations
- Safety controls that are both intuitive and simple to use



The Pneupac® range of emergency and transport ventilators are renowned throughout the world for quality and robustness. The Pneupac® VR1™ combines the key characteristics of the Pneupac® ventilators into a small, lightweight and highly deployable emergency ventilator.

Pneupac® VR1™	
Description	Product Code
Pneupac® VR1™ Responder kit	VR1RESNGB
Pneupac® VR1™ with demand breathing kit	VR1STDNGB
Pneupac® VR1™ Air Mix with demand breathing kit	VR1AIRNGB

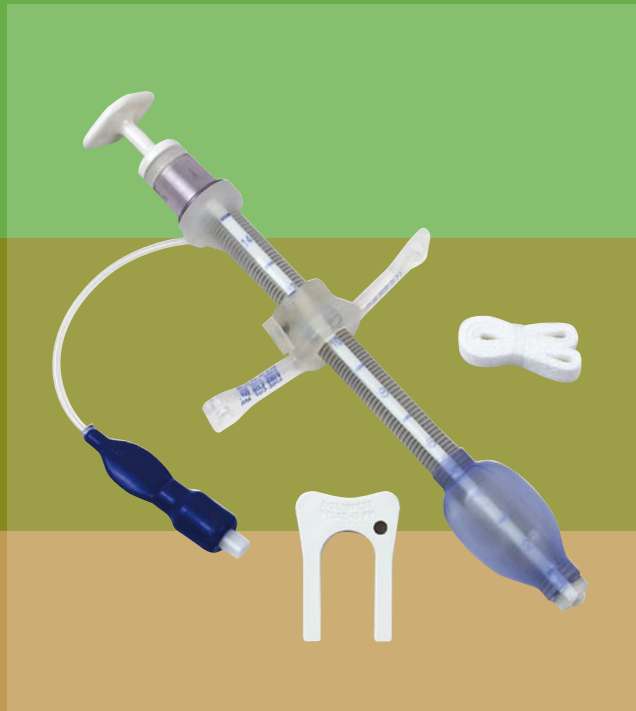
Portex® 1st Response™ adult manual resuscitators are single use and reduce the risk of patient to patient cross-infection, while allowing effective monitoring through all phases of resuscitation.

Portex® 1st Response™ Adult Manual Resuscitators	
Description	Product Code
Adult manual resuscitator with tethered dust cap, reservoir bag and adult mask	8500E
Adult manual resuscitator with tethered dust cap, 101cm (40") flexible tubing reservoir and adult mask	8503E



## Portex® Soft-Seal® Laryngeal Mask

- Single use
- Translucent, thermosensitive PVC tubing
- Smooth one-piece mould design
- Exclusive Soft-Seal® Cuff to reduce pressure rise and minimise trauma
- Eliminates the risk of cross infection



## Bivona® Hyperflex™ Adjustable Flange Tracheostomy Tube



- Flexible, wire reinforced silicone tracheostomy tube with an adjustable flange
- Available in Tight To Shaft (TTS™) or Mid-Range Aire-Cuf® variants
- Obturator provided to shape the tube to the patient's anatomy
- Available in a range of sizes, 6 – 9mm ID



The Bivona® Hyperflex™ adjustable flange tracheostomy tubes are a range of silicone products which provide a high level of comfort for patients with unusual anatomy or pathology.

Bivona® Hyperflex™ Cuffed Tracheostomy Tube				
Mid-range Aire-Cuf® adjustable neck flange Hyperflex™ tracheostomy tubes				
Size I.D (mm)	Size O.D (mm)	Length (mm)	Pack Size	Product Code
6.0	8.7	110	1	75HA60
7.0	10.0	120	1	75HA70
8.0	11.0	130	1	75HA80
9.0	12.3	140	1	75HA90

Bivona® Hyperflex™ Cuffed Tracheostomy Tube				
TTS™ adjustable neck flange Hyperflex™ tracheostomy tubes				
Size I.D (mm)	Size O.D (mm)	Length (mm)	Pack Size	Product Code
6.0	8.7	110	1	67HA60
7.0	10.0	120	1	67HA70
8.0	11.0	130	1	67HA80
9.0	12.3	140	1	67HA90

The Portex® Soft-Seal® Laryngeal mask has been designed to allow ease of airway access in difficult, emergency situations. The thermosensitive PVC material facilitates the quick placement of the product and transparency enables clear visualization of blood, secretions or regurgitated gastric contents. These single use products are sterilized and individually packed for convenience in emergencies.

Portex® Soft-Seal® Laryngeal Mask	
Description	Product Code
Neonates/infants up to 5kg, Size 1	100/220/100
Infants 5-10kg, Size 1.5	100/220/150
Infants/children 10-20kg, Size 2	100/220/200
Children 20-30kg, Size 2.5	100/220/250
Children 30-50kg, Size 3	100/220/300
Adults 50-70kg, Size 4	100/220/400
Adults 70kg+, Size 5	100/220/500

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### Level 1® H-1200 Fast Flow Fluid Warmer with integrated Air Detector / Clamp

- Automated pressure chambers
- Audible and visual alarms if reservoir temperature reaches 43.9°C
- Meets all AABB standards for blood warming
- Complete range of disposable administration sets and accessories available



The Level 1® H-1200 Fast Flow Fluid Warmer with integrated Air Detector / Clamp meets the demands of the most challenging cases. At the heart of this advanced system is a 42°C heat source for warming crystalloid and blood. This unit has the benefits of incorporating air detection and automatic clamping capability, while continuing to deliver warm fluids as fast as 1,000ml/min or as slow as 75ml/hr.

#### **Level 1® H-1200 Fast Flow Fluid Warmer with integrated Air Detector / Clamp**

Description	Product Code
Level 1® H-1200 Fast Flow Fluid Warmer: with automated pressure chambers, built in air detection and automatic clamping capability	H-1200



## Level 1® HOTLINE® Blood and Fluid Warmer

- Easy to set up and position
- Requires minimum priming volume
- Compatible with standard I.V. sets
- Superior performance results in warmer patients

The Level 1® HOTLINE® Blood and Fluid Warmer can deliver normal body temperature fluids to patients at routine flow rates. The patented triple lumen tubing maintains a layer of 42°C circulating solution around the patient line, eliminating patient line cool down.

Level 1® HOTLINE® Blood and Fluid Warmer	
Description	Product Code
HOTLINE® Blood and Fluid Warmer	HL-90
Disposable Warming Set	L-70NI

## Level 1® EQUATOR®

- For use in pre, peri and post operative environment
- Controls the air delivery temperature at the hose end
- Patented hose-end control and digital display
- Snuggle Warm® blankets are available in both adult and children sizes



Level 1® EQUATOR® delivers a high volume of warmed air efficiently to the patient blanket, minimizing cutaneous heat loss and decreasing the core to peripheral temperature gradient. Perforations on the patient side of the blanket gently disperse warm air over the cool skin of the patient.

Level 1® EQUATOR®	
Description	Product Code
Convective Warming Unit	EQ-5000



## BCI® Digit® Finger Oximeter

- Easy-to-use one-button keypad
- Large LED display for use in a wide range of light or dark environments
- Pulse-strength bar indicates relative perfusion at the measurement site
- Auto power shutdown after 8 seconds conserves batteries when not in use
- Low-battery indicator flashes when remaining battery time drops under 30 minutes

The BCI® Digit® Finger Oximeter combines monitor and sensor into one lightweight, pocket size portable solution, which is ideal for military and civil emergencies, hospitals and clinical environments. It provides fast, reliable SpO<sub>2</sub>, pulse rate and pulse strength measurements for monitoring patients ranging from paediatric to adult.

BCI® Digit® Finger Oximeter	
Description	Product Code
BCI® Digit® Finger Oximeter Yellow	3420Y
BCI® Digit® Finger Oximeter Grey	3420G

## BCI® 3303 Hand-Held Pulse Oximeter

- Easy-to-read LED display with adjustable brightness
- Separate patient and system tones for recognition of patient alarms or monitor alerts
- One-touch direct function keys for easy, no-menu operation
- 24-hour memory feature with on-screen recall for up to 99 patient SpO<sub>2</sub> and pulse rate readings
- Internal rechargeable Ni-MH battery

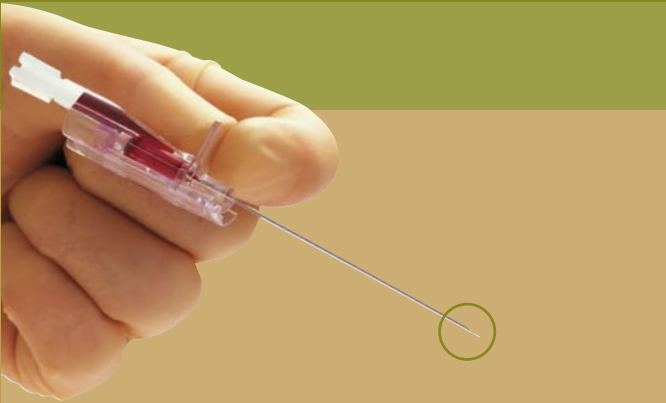
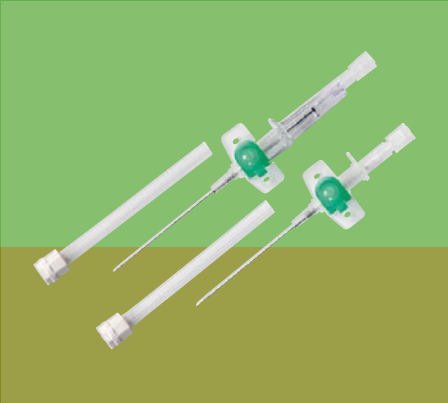


The BCI® 3303 unit is portable and provides a continuous, or spot check pulse oximetry monitoring system with alarms and an internal rechargeable battery. Tough enough for field use with protective rubber boot. Ideal for use in the hospital or clinical environment during emergency air or land transportation.

BCI® Hand Held Pulse Oximeter	
Description	Product Code
BCI® Hand Held Pulse Oximeter	3303



Goes in sharp



Comes out blunt



**Jelco®  
PROTECTIV® ACUVANCE® 2**

- Significantly reduces the risk of needle stick injury
- Combines needle stick protection with ease of use
- Catheter insertion requires minimal change in technique
- Unique safety mechanism extends the blunt beyond the needle tip

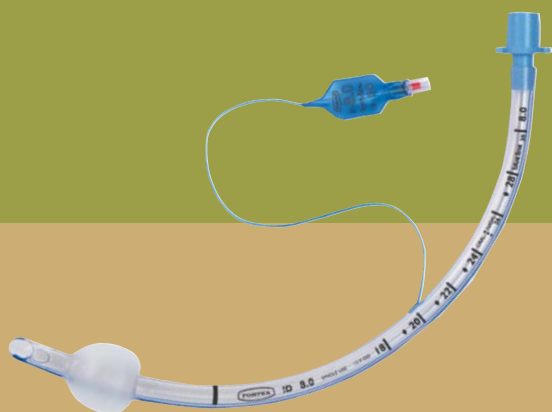
Needle sticks still pose the greatest occupational risk for transmitting HIV and other blood borne pathogens. The Jelco® PROTECTIV® ACUVANCE® 2 I.V. catheter range is designed to reduce percutaneous injuries. The optimally engineered needle is closely tailored to the precision bevelled polyurethane catheter which uses a thin wall technology.

Jelco® PROTECTIV® ACUVANCE® 2 I.V. Safety Catheter with Injection Valve					
Gauge	Length (mm)	Outside Diameter (mm)	Flow Rate ml/min	Obturator Reference	Product Code
14	45	2.2	315	4514	1714
16	45	1.8	210	4516	1716
18	45	1.3	100	4518	1718
20	32	1.1	65	4520	1720
22	25	0.9	38	4522	1722

Please contact us for further configurations.



## Additional Products



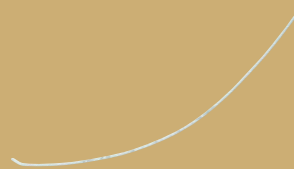
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3



6



4



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2



5



9

### 1 Portex® Oral / Nasal Blue Line® Endotracheal Tube

Clear PVC, Profile Soft Seal Cuff  
Product Code: 100/199/050-100 (sizes 5-10)

### 2 Portex® Disposable Guedel Airway

Product Code: 100/320/010-200 (sizes 00-4)

### 3 Portex® Nasopharyngeal Airway

Product Code: 100/210/060-090 (sizes 6-9)

### 4 Portex® Single Use Introducer (Bougie)

Product Code: 100/123/515

### 5 Portex® Thermovent® T2 HME

Product Code: 100/570/022

### 6 Portex® Blue Line® Adjustable Flange Cuffed Tracheostomy Tube

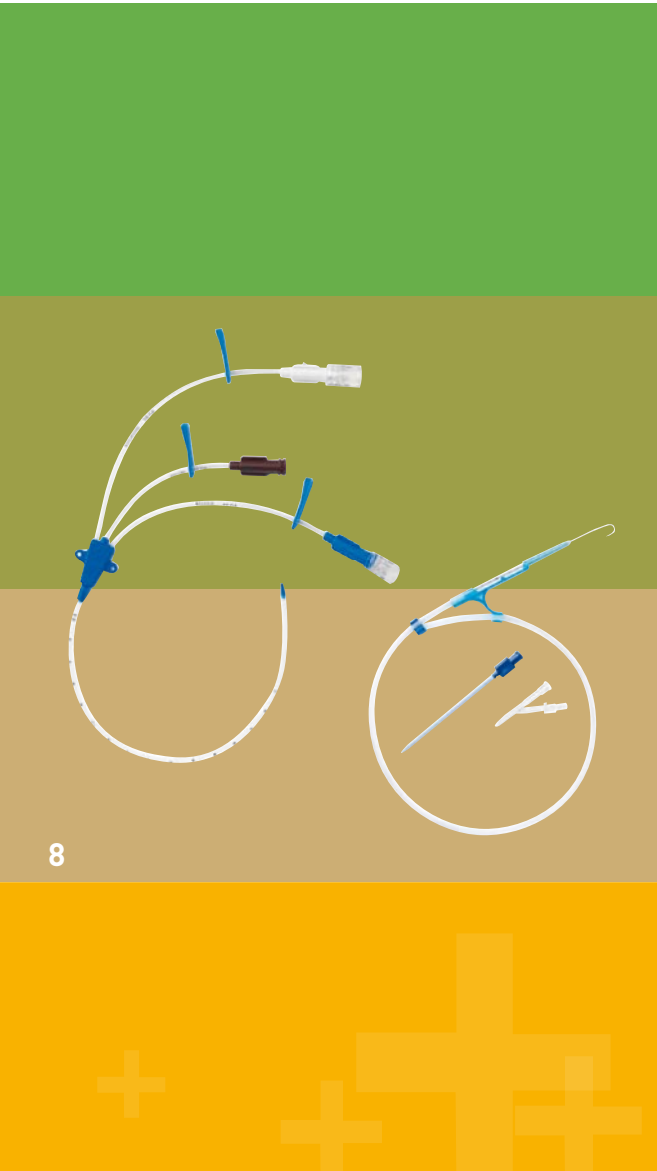
Product Code: 100/523/060-100 (sizes 6-10)

### 7 Jelco® OPTIVA® 2 I.V. Catheter Injection Port

Product Code: 1014-1022 (sizes 14G - 22G)

### 8 Deltac® LOGICATH® Central Venous Catheters 1-5 Lumen Sets and Kits

Product Code: - Various codes



Smiths Medical is a world leader in the design, manufacture and distribution of medical devices used in Anaesthesia & Critical Care and Medication Delivery & Patient Monitoring. These areas encompass airway management, ventilation, pain management, needle safety, arterial blood sampling, temperature management, critical care monitoring, hospital and ambulatory infusion, vascular access and thoracic drainage.

## Anaesthesia and Critical Care

Smiths Medical offers a comprehensive range of airway management products under the Portex® brand, which is recognized by Anaesthetists throughout the world for its superior performance. The products form the foundation of a complete system from machine to patient for all Anaesthetic, Operating Room and ICU environments, incorporating well-known products such as endotracheal tubes, filters, Portex® PVC and Bivona® silicone tracheostomy tubes with Pneupac® anaesthetic machines and resuscitation equipment.

The Portex® brand also includes epidural, spinal and combined trays for use in obstetrics, operating rooms and pain centres. In 1990, the company was the first to provide arterial blood sampling syringes with needlestick protection with the introduction of the Needle-Pro® devices. The Level 1® brand offers a complete solution for temperature management during perioperative procedures.

## Medication Delivery and Patient Monitoring

Smiths Medical's Medfusion® brand provides specialized infusion equipment for hospitals. A variety of syringe pumps, large volumetric pumps and patient controlled analgesia (PCA) pumps combine innovative ideas and robust construction. The Deltec® brand is one of the market leading brands in ambulatory infusion pumps & vascular access.

Smiths Medical also offers leading edge technology to monitor respiration, oxygen saturation, expired carbon dioxide, temperature, blood pressure, inspired O2 and ECG under its well established BCI® brand.

### 9 Portex® Training Mannequin and Accessories

Tracheostomy Trainer & Case  
Product Code: **TOT100**

Trauma Kit (2 Tracheas & 4 Skins)  
Product Code: **TOT101**

Replacement Thyroid  
Product Code: **TOT102**

Replacement Carina with Balloons  
Product Code: **TOT103**

Black Carry Case  
Product Code: **TOT104**

## Further Information

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Smiths, compPAC, Portex, 1st Response, Digit, BCI, HOTLINE, Level 1, Soft Seal, Bivona, Pneupac, Deltec, Needle-Pro, Medex, Thermovent, Pneupac VR1, EQUATOR, CO2 Clip, Hyperflex, Blue Line, Aire-Cuf, TTS, PROTECTIV, PROTECTIV ACUVANCE, OPTIVA, LOGICATH, Snuggle Warm, SureGrip and the Smiths Medical Design Mark are trademarks of the Smiths Medical family of companies. © 2009 Smiths Medical family of companies. All rights reserved.  
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