# **Intersurgical**Home Care Catalogue

Continuing to care from hospital to home





Breathing Systems and Accessories



Breathing Filters, HMEs, HMEFs

Oxygen and Aerosol Therapy



Edition 5





#### Introduction

Intersurgical is Europe's leading designer, manufacturer and supplier of a wide range of medical devices for respiratory support.

We provide flexible patient solutions for airway management, anaesthesia, critical care, and oxygen & aerosol therapy for use within emergency care, the hospital environment and also in the home.

With over 30 years experience in this area, we understand the changing and challenging clinical environments and needs of our customers and their patients.

We believe the best way to maintain the highest standards in design, manufacture, quality and customer care is to have complete control of these aspects of our business. This integrated in-house philosophy means we are able to respond quickly and effectively to our customers and consistently meet their requirements.

Innovation is an important aspect of our business in all areas, helping us to deliver high quality products and services whilst allowing us to provide cost effective solutions to meet today's needs.

Maintaining these high standards runs through everything we do: for our employees, clinicians and patients alike. Driven by these core principles and a commitment to care, Intersurgical is a company you can trust.

With high volumes of products manufactured weekly, quality has to be designed into all aspects of our products, from concept through to final manufacture, incorporating automatic testing to ensure product integrity.

All of our products are designed and manufactured to meet the requirements of relevant BS, ISO and EN standards.

We are also committed to lowering the environmental impact of our products and services and have implemented an Environmental Management System which has been certified to the international standard ISO 14001.

We hope we can provide a solution for your needs.







Our company goal:

'To provide the most comprehensive range of respiratory products; offering quality, innovation and choice'











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# **Intersurgical Home Care**

Many of the products we develop as a company are designed for use in both hospital and home. These products have allowed us to create a Home Care range focused on the home care patient, whether they are ventilated or using oxygen. We aim to offer a solution to all your home ventilatory and oxygen delivery requirements and understand each patient is different, because of this we offer the widest possible range.

The range includes single and dual limb breathing systems suitable for a wide range of home care ventilators, lengths of tube for CPAP applications through to nasal cannula for oxygen therapy.





# A guide to symbols used in this catalogue

Throughout the catalogue we use a number of symbols to identify specific characteristics about our products, please familiarise yourself with these below.



#### Lower environmental impact product

The Eco range of products has been designed as part of our ongoing focus on sustainable development. Wherever you see the logo we have reduced the environmental impact of these products compared with traditional PVC options.



#### View product video

We have a large number of product videos to show a product's features and benefits and how they are used. These can be viewed on the product pages of our website.



#### Single use and Latex free

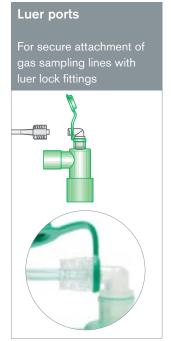
All products detailed in this catalogue are single-use and latex free unless otherwise stated.

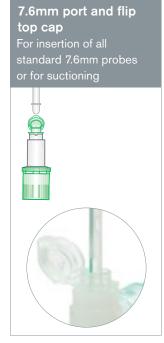
## A guide to our ports and caps

Ports and caps are available on a variety of products including catheter mounts, elbows, T-pieces, Y-pieces and connectors. All Intersurgical port caps are fixed to the connectors for added safety this prevents loss or misplacement in use.

Video available at www.intersurgical.com

















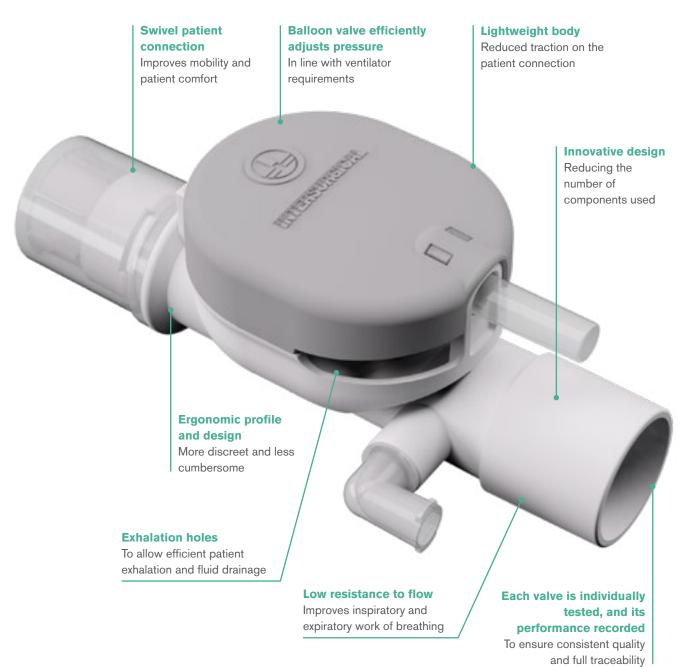
The range includes single and dual limb breathing systems suitable for a wide range of home care ventilators, lengths of tube for CPAP applications and a choice of connectors and accessories.

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# Single limb breathing systems designed for hospital and home

The single limb breathing system with exhalation valve range has been designed with the patient in mind. This range features our exhalation valve popular for its user friendly characteristics and exceptional design. It is fully compatible with many home care ventilators.





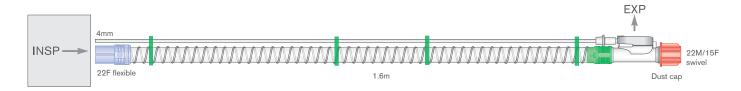






We offer a wide range of breathing systems including both dual and single limb suitable for many home care ventilators. We offer systems in many different configurations to cater for as many situations as possible.

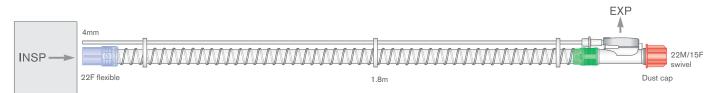
# Breathing system for use with Air Liquide Medical Systems Monnal® T50



Code	Description	Box Oty.
5113018	22mm Smoothbore exhalation valve breathing system with control line. ≥ 1.6m	25

Make an enquiry

# Breathing systems for use with Breas<sup>®</sup> Vivo<sup>™</sup> 50

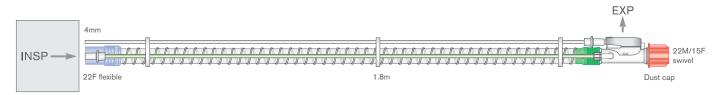


system illustrated

	Code	Description	Box Qty.
<b>③</b>	5194000	22mm Smoothbore exhalation valve breathing system with control line. ≥ 1.8m	25
	5113006	22mm Smoothbore exhalation valve breathing system with control line, monitoring line (removable), water trap and extra limb. ≥ 1.6m	20
	5804000	22mm Smoothbore bilevel breathing system with swivel CO₂ leak port. ≥ 1.8m	30

Make an enquiry

# Breathing system for use with Airox® Smartair®



Code	Description	Box Qty.
5191000	22mm Smoothbore exhalation valve breathing system with control line and monitoring line. ≥ 1.8m	25

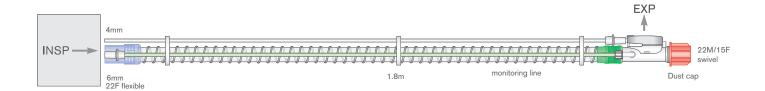
Make an enquiry

Airox and Smartair are registered trademarks of Airox S.A.

Monnal is a registered trade mark of Air Liquide Medical Systems. Breas is a registered trade mark of Breas Medical AB. Vivo is a trade mark of Breas Medical AB.

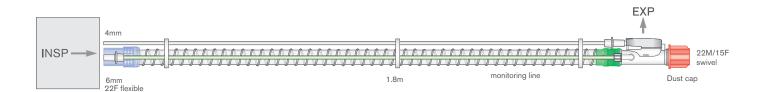
71VO IS a trade mark of Breas Medical A

# Breathing system for use with Covidien® Legendair



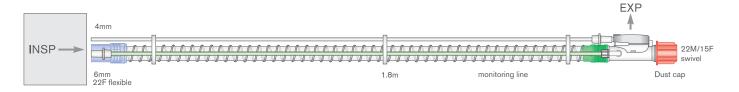
Code	Description	Box Oty.
5191000	22mm Smoothbore exhalation valve breathing system with control line and monitoring line. ≥ 1.8m	25

# Breathing system for use with Puritan Bennett® 560



Code	Description	Box Oty.
5191000	22mm Smoothbore exhalation valve breathing system with control line and monitoring line. ≥ 1.8m	25

# Breathing systems for use with Philips Respironics® Trilogy 100



system illustrated

	Code	Description	Box Qty.
<b>③</b>	5191000	22mm Smoothbore exhalation valve breathing system with control line and monitoring line. ≥ 1.8m	25
	5804000	22mm Smoothbore bilevel breathing system with swivel CO₂ leak port. ≥ 1.8m	30

Covidien is a registered trade mark of Covidien AG. Puritan Bennett is a registered trade mark of Covidien LP.





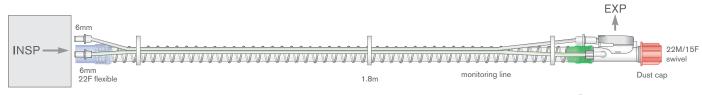






Respironics is a registered trade mark of Respironics, Inc.

# Breathing systems for use with ResMed® Astral® 150

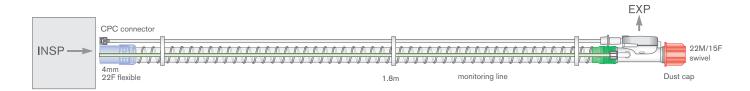


system illustrated

	Code	Description	Box Qty.
	5197000	22mm Smoothbore exhalation valve breathing system for use with ResMed® Astral™ ventilators with control line and monitoring line. ≥ 1.8m	25
	5199000	15mm Smoothbore exhalation valve breathing system for use with ResMed Astral™ ventilators with control line and monitoring line. ≥ 1.6m	15
	5804000	22mm Smoothbore bilevel breathing system with swivel CO₂ leak port. ≥ 1.8m	30
	5000000	22mm Smoothbore breathing system. ≥ 1.6m	12

Make an enquiry

# Breathing system for use with ResMed<sup>®</sup> VSIII™



Code	Description	Box Oty.
5190000	22mm Smoothbore exhalation valve breathing system with control line and monitoring line. ≥ 1.8m	25

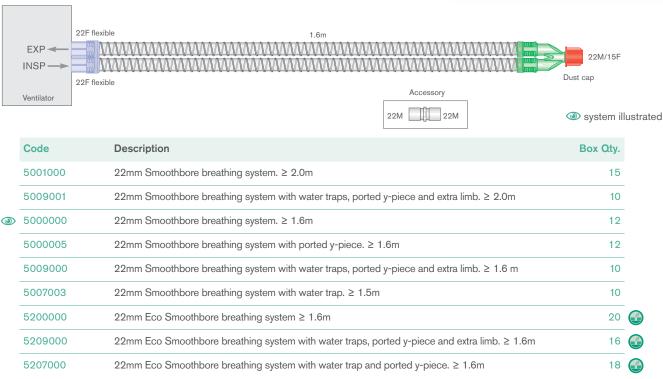
Make an enquiry

ResMed and Astral are registered trade marks of ResMed Limited. VSIII is a trade mark of ResMed.

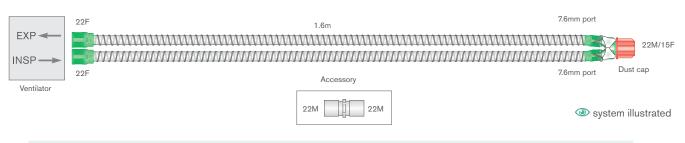
# Adult universal breathing systems

Intersurgical offer a range of universal adult breathing systems, including Smoothbore dual limb systems and single limb systems with an exhalation valve. Options include water traps, monitoring lines and different system lengths. Some products are available in Eco Smoothbore, which is a lightweight non-PVC tubing.





## Paediatric 15mm universal breathing systems



	Code	Description	Box Qty.
	5024000	15mm Smoothbore breathing system with straight 15mm y-piece. ≥ 2.4m	10
	5009009	15mm Smoothbore breathing system with water traps and extra limb. ≥ 2.0m	10
	5016000	15mm Smoothbore breathing system with straight 15mm y-piece. ≥ 1.6m	12
<b>③</b>	5500000	15mm Smoothbore breathing system with ported y-piece. ≥ 1.6m	20
	5513000	15mm Smoothbore breathing system with water traps, ported Y-piece and extra limb. ≥ 1.6m	12

Make an enquiry







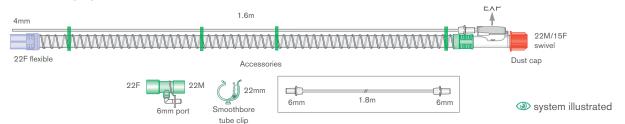


# Adult universal breathing systems

The single limb breathing system with exhalation valve range has been designed with the patient in mind. This range features our exhalation valve popular for its user friendly characteristics and exceptional design. It is fully compatible with many home care ventilators.



# Single limb breathing systems with exhalation valve



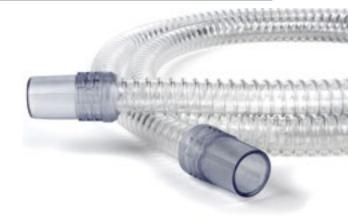
	Code	Description	Box Oty.
	5183000	22mm Smoothbore exhalation valve breathing system with control line and monitoring line. ≥ 1.6m	20
	5183064	22mm Smoothbore exhalation valve breathing system with control line and monitoring line. ≥ 1.6m	10
	5182000	22mm Smoothbore exhalation valve breathing system with control line. ≥ 1.6m	10
	5191004	22mm Smoothbore exhalation valve breathing system with control line and monitoring line. ≥ 1.8m	25
	5113010	22mm Smoothbore exhalation valve breathing system with control line, monitoring line, water trap and extra limb. ≥ 1.6m	d 20
	5113077	22mm Smoothbore exhalation valve breathing system with control line and monitoring line. ≥ 1.6m	25
<b>③</b>	5113005	22mm Smoothbore exhalation valve breathing system with control line and monitoring line (removable). ≥ 1.6m	25
	5113006	22mm Smoothbore exhalation valve breathing system with control line, monitoring line (removable), water trap and extra limb. ≥ 1.6m	20





# 15mm and 22mm Smoothbore tubing

A range of Smoothbore tube lengths, with soft end connectors in different lengths and diameters.



# 22F flexible

Code	Description	Box Qty.
5118000	15mm Smoothbore tube with soft end connectors, 22F-22F. ≥ 1.8m	20
5118001	15mm Smoothbore tube with soft end connectors, 22F-22F. ≥ 0.4m	20

# 22F flexible 22F flexible

Code Description Box Qty. 5418000 15mm Smoothbore polypropylene tube with soft end connectors, 22F-22F  $\geq$  1.8m 60

5318000 22mm Smoothbore polypropylene tube with soft end connectors, 22F-22F ≥ 1.8m 50

22F flexible 22F flexible

Code	Description	Length	Box Qty.
5020000	22mm Smoothbore tube with soft end connectors, 22F-22F	≥ 2.0m	20
5018000	22mm Smoothbore tube with soft end connectors, 22F-22F	≥ 1.8m	20
5015000	22mm Smoothbore tube with soft end connectors, 22F-22F	≥ 1.5m	30
5012000	22mm Smoothbore tube with soft end connectors, 22F-22F	≥ 1.2m	30
5010000	22mm Smoothbore tube with soft end connectors, 22F-22F	≥ 1.0m	40
5080000	22mm Smoothbore tube with soft end connectors, 22F-22F	≥ 0.8m	40
5006000	22mm Smoothbore tube with soft end connectors, 22F-22F	≥ 0.6m	40
5005000	22mm Smoothbore tube with soft end connectors, 22F-22F	≥ 0.5m	50
5004000	22mm Smoothbore tube with soft end connectors, 22F-22F	≥ 0.4m	50
5003000	22mm Smoothbore tube with soft end connectors, 22F-22F	≥ 0.3m	50













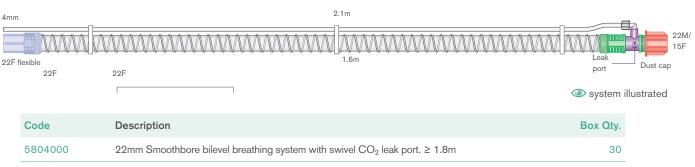
Intersurgical • Quality, innovation and choice

# Bilevel 22mm breathing systems

Passive Smoothbore bilevel breathing systems offer a perfect solution for dry high flow gas.

Machine connection filtration can be added using a low-resistance Flo-Guard breathing filter. (see page 29)





5804000 22mm Smoothbore bilevel breathing system with swivel CO₂ leak port. ≥ 1.8m 30

5805000 22mm Smoothbore bilevel breathing system with monitoring line and swivel CO₂ leak port. ≥ 1.6m 35

5808000 22mm Smoothbore bilevel breathing system with split monitoring line and swivel CO₂ leak port. ≥ 1.6m 25

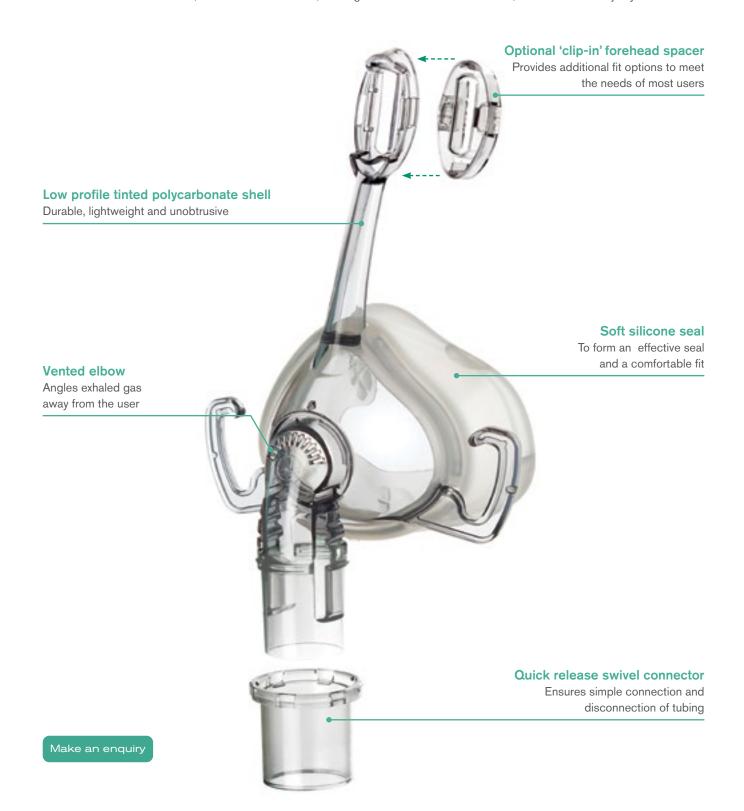
5809000 22mm Smoothbore bilevel breathing system with monitoring line with filter, water trap, swivel CO₂ leak port, extra limb and Clear-Guard™ filter. ≥ 1.6m

## Novus™ nasal CPAP mask

The Novus nasal CPAP mask is a comfortable and lightweight interface intended for use by adult patients (>30kg) who have been prescribed CPAP or bilevel therapy in the home.

Designed to provide a well tolerated and easy solution for home care patients, Novus has a small number of parts, which is beneficial when fitting and adjusting the mask, and ensures that assembly and disassembly for cleaning is simple in the home environment.

Novus is available in two sizes, with a soft silicone seal, offering a comfortable and effective fit, suitable for the majority of users.



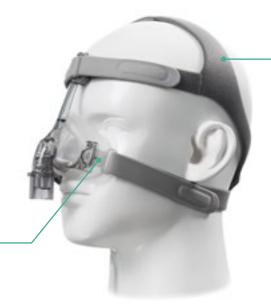








# Intersurgical Novus™ nasal CPAP mask



**Breathable headgear**Comfortable for the user

Optional quick release grip

Improves headgear fitting and can be added to either side of the mask, to suit all users

# **Ordering information**

The Novus nasal CPAP mask is available in two sizes medium and large.

Code	Description	Languages in the Instructions For Use	Box Qty.
7770000	Novus nasal CPAP mask, Large	English, French, German, Spanish, Italian	8
7771000	Novus nasal CPAP mask, Large	Danish, Dutch, Finnish, Norwegian, Portuguese, Swedish	8
7772000	Novus nasal CPAP mask, Large	Traditional Chinese, Simplified Chinese, Czech, Japanese, Lithuanian, Russian, Turkish	8
7790000	Novus nasal CPAP mask, Medium	English, French, German, Spanish, Italian	8
7791000	Novus nasal CPAP mask, Medium	Danish, Dutch, Finnish, Norwegian, Portuguese, Swedish	8
7792000	Novus nasal CPAP mask, Medium	Traditional Chinese, Simplified Chinese, Czech, Japanese, Lithuanian, Russian, Turkish	8

#### Accessories

Code	Description	Box Qty.
7776000	Novus nasal CPAP mask headgear (including headgear and quick release headgear clip)	20
5318000	22mm Smoothbore polypropylene tube with soft end connectors, 22F-22F ≥ 1.8m	50
5418000	15mm Smoothbore polypropylene tube with soft end connectors, 22F-22F ≥ 1.8m	60



# Lung clearance

A range of face masks, breathing systems and kits for use within the home environment.

#### QuadraLite<sup>™</sup> masks

#### A truly unique face mask

The QuadraLite is a soft and comfortable mask with a flexible seal that is available in four sizes to fit all patients.

The innovative anatomically shaped masks offer a light, clear, single use alternative to the reusable rubber masks and the plastic cushion masks.

The range of four sizes incorporates a colour-coded soft seal for easy selection and provides a superior airtight seal over a wide range of faces.

These phthalate-free non-PVC masks have a smaller volume resulting in reduced dead space.



#### The greener, safer choice

QuadraLite masks are manufactured from polypropylene and thermoplastic elastomer, contain no PVC and are phthalate-free

#### **Transparent shell**

For excellent visibility

#### Soft seal

A comfortable airtight fit with flexibility for different face sizes



#### **Anatomical shape**

Provides a precise fit combined with lower dead space

#### Colour-coding

Colour matching with other Intersurgical products for easy selection



www.intersurgical.com/info/quadralite

Video available at www.intersurgical.com



Code	Description	Size	Box Qty.	
7194000	QuadraLite, large adult, anaesthetic mask, with green cushion and hook ring, 22F (replaces traditional mask size 5-6)	4	35	
7193000	QuadraLite, medium adult, anaesthetic mask, with yellow cushion and hook ring, 22F (replaces traditional mask size 3–5)	3	35	
7192000	QuadraLite, small adult, anaesthetic mask, with white cushion and hook ring, 22F (replaces traditional mask size 2-3)	2	25	
7191000	QuadraLite, infant, anaesthetic mask, with grey cushion, 15M (replaces traditional mask size 0-1)	1	30	









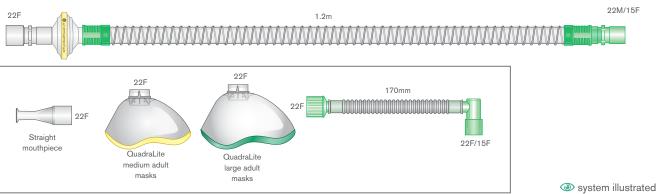




# Cough assist breathing systems

A range of systems for all cough assist (insufflation/exsufflation) machines.





	Code	Description	Box Qty.
<b>③</b>	2000213	22mm Smoothbore medium and large adult, cough assist breathing system with mask, catheter mount, mouthpiece and Flo-Guard™ filter. ≥ 1.2m	8
	2000098	22mm Smoothbore large adult, cough assist breathing system with scented mask, catheter mount and Flo-Guard™ filter. ≥ 1.2m	- 8
	2000099	22mm Smoothbore cough assist, breathing system with Flo-Guard™ filter. ≥ 1.2m	20
	5001005	22mm Smoothbore large adult, cough assist breathing system with mask and Flo-Guard™ filter. ≥ 1.0m	10
	5001006	22mm Smoothbore medium adult, cough assist breathing system with mask and Flo-Guard™ filter. ≥ 1.0m	10
	5001007	22mm Smoothbore small adult, cough assist, breathing system with mask and Flo-Guard™ filter. ≥ 1.0m	10





#### **Humidification chambers**

An integral part of the breathing system, the humidification chamber allows it to interface with the heated humidifier base. The range consists of three chamber options for use with humidifier bases. Simply slide the chamber into position on the hot plate of the base controller allowing the inspiratory gas to pass over the heated water. Chambers can be purchased individually or as part of a breathing system package.

The auto fill humidification chamber offers a fixed level of water within the chamber, ensuring a constant system volume. This, coupled with the strong polycarbonate body and non compressible float, ensures that adverse changes in system compliance are reduced to a minimum. The chamber provides optimum humidification output without compromising resistance to flow. The dual float and dual valve design provides further reassurance of reliability.



#### Inline filter

Prevents any debris entering the chamber

#### **Dual valve**

For added security

# Clearly visible water level indicator

Easy to see for instant accurate fluid level assessment

#### Advanced dual float design

The closed cell material of the primary float ensures a totally reliable unsinkable rigid mechanism, whilst the secondary float provides added security

#### **Protective cassette**

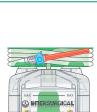
Protects the chamber from contamination and conveniently stores the fill set before use

# Strong polycarbonate clear material

Improved compliance characteristics. Allows for easy visual assessment of the fluid level at all times



Prevents accidental burns when removing the chamber from the heater base







2310000

2320000

2340000

Code	Description	Box Qty.
2310000	Auto fill humidification chamber with fill set	30
2320000	Manual fill humidification chamber with fill set and clamp	30
2340000	Medium manual fill humidification chamber	30











# Tube management programme

A full range of tube management options that when used in conjunction with Intersurgical breathing systems allows the clinician to position our products efficiently and comfortably around the patient area. These help to provide a safe and tidy environment reducing the risk of disconnection and patient trauma.

Intersurgical tube clips, 22F red Dust cap and the humidification chamber fill set spike cover are designed to interface with the Intersurgical tube management grip and the tube management clip via a notch feature.

Tube clips are available to fit our Smoothbore and Flextube™ breathing systems with options available for 10mm, 15mm, 22mm and 30mm single and dual limb breathing systems.

Tube clips 10mm, 15mm, 22mm, 30mm





Red Dust cap or humidification chamber fill set spike cover







Motern readure interraces with

Tube management clip





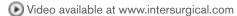
**Tube management grip** 





#### **Tube holder**

Our ergonomically designed tube holder is a neat way of supporting a breathing system close to the patient. Available in two sizes the tube support efficiently holds in place 10, 15, 22 and 30mm tube with a smaller groove to grip monitoring lines and cables. The flexible neck is easily positioned to take the strain of the breathing system away from the patient.







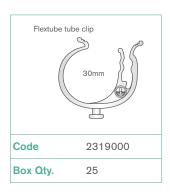


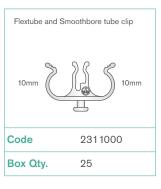
# Tube management guide



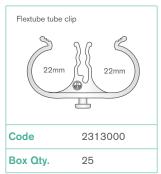




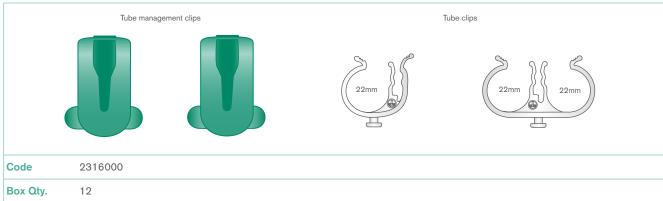






















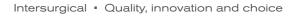


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# Water traps

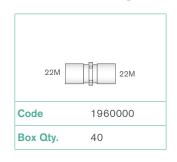
A range of self-sealing water traps that allow for emptying during use. As the base of the water trap is opened the internal valve automatically closes ensuring the breathing system remains airtight. As the base is replaced, the valve re-opens allowing drainage of the breathing system to recommence.

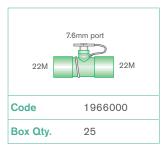
The right-angled version is ideal for use in applications where a  $90^{\circ}$  attachment may be required.

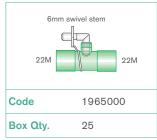


Code	Description	Box Qty.
1911000	Water trap, self-sealing, medium	55
1912000	Water trap, self-sealing, large	50
1916000	Water trap, right-angled, self-sealing, medium	55
1915000	Water trap, right-angled, self-sealing, large	40

# 22mm straight connectors and mouthpieces

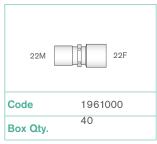




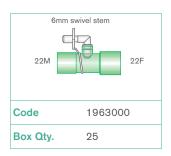


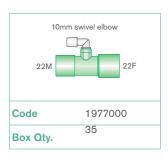


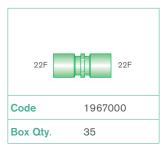


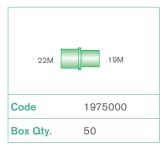


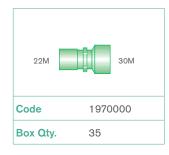




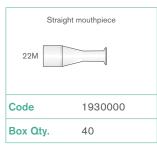


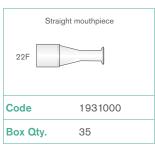


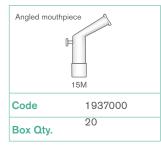


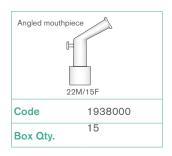


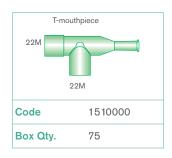


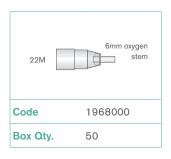


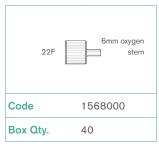
















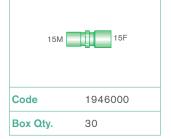




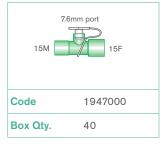
# 15mm straight connectors

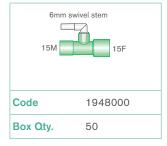
#### Make an enquiry

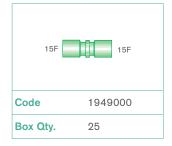






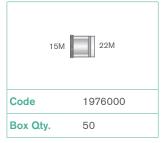


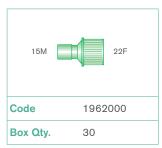


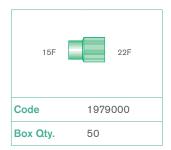










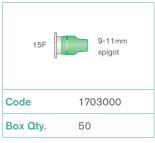


# **Elastomeric soft connectors**









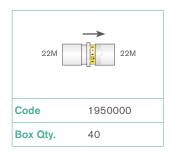


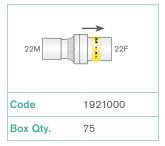




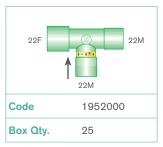
## **Directional valves**

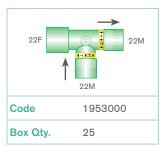
#### Make an enquir

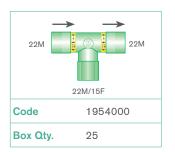






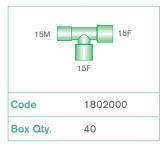






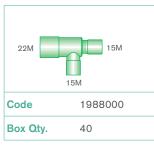
# **T-piece connectors**

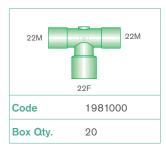
#### Make an enquiry



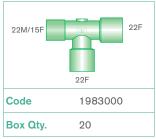


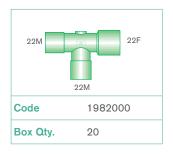








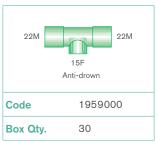


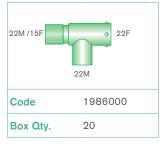












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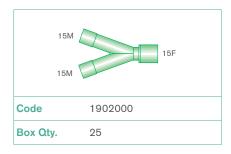






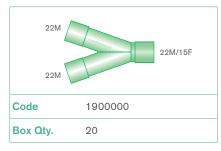


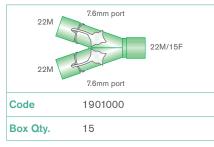
# Y-piece connectors

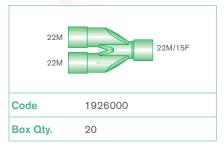


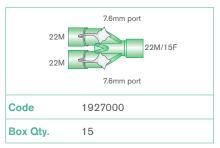


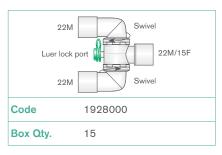


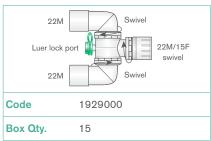














A range of products designed for the protection of the patient and equipment. Patient connectors are available with a variety of options.

Breathing Filters, HMEs and HMEFs	28
Device Filtration	34
Patient Connections	41









# Why use a breathing filter

Breathing filters are designed to prevent microbial cross contamination which can occur via patients, ventilator breathing systems and respiratory equipment. Their use has been widely recognised as an effective method of reducing cross contamination and has been recommended by a number of medical associations<sup>1</sup>.

#### The threat to patients is varied

Patients requiring respiratory support at home may be exposed to the risk of cross contamination from the equipment, breathing systems or the environment. Documented areas of concern regarding infection from breathing systems include *Hepatitis C*, *Mycobacterium tuberculosis*, blood in sputum and the *SARS* virus.

Long term ventilated patients may be at risk from pseudomonal growth in the breathing system and in water bath humidifiers. The strategic use of an effective breathing filter protects both the patient and equipment bi-directionally, helping to prevent infection.

Effective use of filters in the homecare environment can also help protect the respiratory equipment which the patient relies upon, as well as helping to optimise its function and helping to prolong its life.

#### Effective validated performance

The Intersurgical range of breathing systems has been designed for the protection of the patient, breathing system and equipment. They have been independently tested and proven to be highly efficient in preventing the passage of bacteria and viruses, which would result in contamination.

The wide and varied product range offers:

- Validated bacterial and viral filtration efficiency<sup>2</sup>
- Proven Filtration against TB and Hepatitis C
- Choice of patient connections optimising patient comfort
- Compatible with respiratory equipment
- Lightweight improving patient comfort
- Low resistance to flow

#### Potential infectious viruses [Particle sizes µ microns]

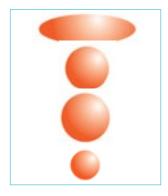


Coliphage T1 [0.017μ]

MS-2 coliphage [0.02μ]

Hepatitis C [0.03μ]

Adenovirus [0.07µ]



*Mycobacterium tuberculosis* [0.3μ x 1.0μ smallest size]

Serratia marcescens [0.45µ]

Pseudomonas aeruginosa [0.5µ]

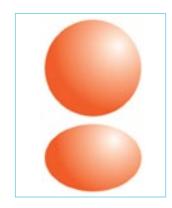
Brevundimonas diminuta [0.3µ]



HIV [0.11 $\mu$ ]

Cytomegalovirus (CMV) [0.1µ]

Orthomyxovirus [0.1µ]



Staphylococcus aureus [1.0µ]

Bacillus subtilis [1.0μ x 0.7μ]

References

1. Association of Anaesthetists of Great Britain and Ireland 1996. Danish Society of Anaesthetists 1998. French Society of Anaesthetists 1998.
2. All filters are independently validated for filtration efficiency at the Health Protection Agency, Porton Down, Salisbury, Wiltshire, UK and Nelson laboratories Inc, USA.



# **Breathing filters**

Designed for the protection of the patient, the breathing system and the equipment.

- Filta-Guard™: high efficiency electrostatic filter
- Clear-Guard™ Midi: low volume electrostatic filter
- Clear-Guard™ 3: cost-effective electrostatic filter with ergonomic housing
- Inter-Guard: sterile electrostatic filter
- Hydro-Guard Mini Mk.II: pleated mechanical hydrophobic filter









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Clear-Guard™ Midi

Clear-Guard™ 3

Code	1944000	1644007	1544007
Box Oty.	70	100	150
Filtration efficiency	>99.999%	>99.9%	>99.99%
Resistance to flow at 30L/min	1.0cm H₂O	0.7cm H₂O	0.9cm H₂O
Resistance to flow at 60L/min	2.3cm H₂O	1.8cm H₂O	1.9cm H₂O
Compressible volume	67ml	34ml	60ml
Weight	40g	19g	27g
Connectors	22F-22M/15F	22F-22M/15F	22F/15M-22M/15F
Minimum tidal volume	>200ml	>100ml	>200ml





Inter-Guard

**Hydro-Guard Mini** 

Code	1344007S	1745000
Box Qty.	50	40
Luer lock port		✓
Filtration efficiency	>99.998%	>99.999%
Resistance to flow at 30L/min	0.8cm H₂O	1.3cm H₂O
Resistance to flow at 60L/min	2.0cm H₂O	2.9cm H₂O
Compressible volume	41ml	63ml
Weight	22g	30g
Connectors	22F/15M-22M/15F	22F/15M-22M/15F
Minimum tidal volume	>150ml	>200ml













# Filters for equipment protection

Designed for protection of equipment and the environment from contamination at the machine end.

#### Flo-Guard

#### Low resistance filter

The Flo-Guard breathing filter is designed to be used at the machineend of a breathing system to protect the patient and machine against cross contamination, while maintaining a low resistance across a wide range of flow rates.

The low resistance makes it an ideal filter for use in both the hospital and home setting, where high flow rates may potentially be used; this includes CPAP, Bilevel and CoughAssist® applications.

The Flo-Guard provides an excellent bacterial and viral filtration efficiency whilst offering a low resistance to flow even at very high flow rates.



Code	1690000 NEW		
Box Qty.	50		
Filtration efficiency	>99.99%		
Resistance at 30L/min	0.4 cm H <sub>2</sub> O		
Resistance at 60L/min	0.8cm H <sub>2</sub> O		
Resistance at 90L/min	1.4cm H <sub>2</sub> O		
Resistance at 120L/min	2.0cm H <sub>2</sub> O		
Resistance at 150Lmin	2.7cm H₂O		
Resistance at 180L/min	3.4cm H₂O		
Resistance at 210L/min	4.3cm H <sub>2</sub> O		
Resistance at 240L/min	5.1cm H <sub>2</sub> O		
Compressible volume	80ml		
Weight 28g			
Connectors 22F-22M			

Make an enquiry

# Air-Guard™

The Air-Guard Clear filter is a hydrophobic pleated membrane filter designed for the protection of oxygen concentrator machines and other respiratory equipment.

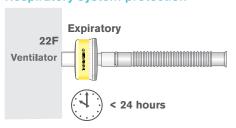
The Air-Guard Clear filter will function as a microbial filter when used to protect oxygen concentrator machines or when used in breathing systems to protect equipment from contamination. Its filtration effectiveness has been tested in accordance with the test method described in ISO EN 23328 - Part 1. It offers HEPA performance and has been independently tested to determine effectiveness against viruses and bacteria.

This product excels as a bacterial and viral filter and can be used as such in a respiratory system providing the maximum period of use is 24 hours, which corresponds to the usual protocols and procedures concerning breathing filters.

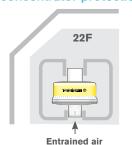


Code	1790000 (S*)	
Box Qty.	50 (40*)	
Filtration efficiency	>99.9999%	
Resistance to flow at 30L/min	0.9cm H₂O	
Resistance to flow at 60L/min	1.9cm H₂O	
Compressible volume	120ml	
Weight	56g	
Connectors	22F-22M/15F	

#### Respiratory system protection



#### Oxygen concentrator protection



Make an enquiry

**Please note:** this product is contraindicated for use at the patient connection end of the breathing system.

Sterile option available

(S\*) Add an S to the seven digit code number for the sterile version of this product eg. 5000000S (sterile box quantity is shown in brackets). CoughAssist is a registered trade mark of Respironics, Inc.



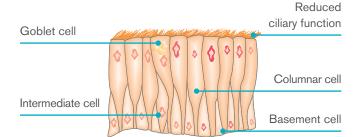
# **Heat and Moisture Exchangers (HMEs)**

In normal respiration the anatomy of the upper airway helps to warm and humidify inspired air, and to retain the warmth and moisture contained in expired air. During inspiration, even cold or dry air is typically heated to 37  $^{\circ}\text{C}$  and, fully saturated, contains 44mg  $\text{H}_2\text{O}$  per litre. In mechanical ventilation or anaesthesia, the patient's upper airway may be bypassed by the introduction of a tracheal tube. As a result the patient's lungs may be confronted with cold dry inspired gas.

# Prolonged exposure to dry ventilatory gases can lead to:

- Localised inflammation of the trachea
- A reduction in ciliary function
- Retention and thickening of secretions
- Lowering of patient temperature
- Reduction in cardiopulmonary function
- Increased risk of tracheostomy tube occlusion
- Extended duration and cost of care

# Respiratory epithelium adversely affected by heat and moisture loss



# Hydro-Therm™ HME range

A dedicated range of Heat and Moisture Exchangers designed to replicate the functions of the body's upper airway by conserving expired heat and moisture and returning them to the patient during inhalation. The Hydro-Therm is a small volume, lightweight device which is clinically suitable over a wide range of patient sizes.





Code	1850000	1560000
Box Qty.	20	150
Moisture return	30.8mg H₂O/L	31.6mg H₂O/L
Moisture loss	7.8 mg H₂O/l	6.7 mg H₂O/l
Resistance to flow at 30L/min	0.5cm H₂O	0.2cm H₂O
Resistance to flow at 60L/min	1.6cm H <sub>2</sub> O	0.8cm H <sub>2</sub> O
Compressible volume	20ml	59ml
Weight	11.8g	31g
Connectors	15M-22M/15F	22F/15M-22M/15F
Minimum tidal volume	>60ml	200ml

Make an enquiry

Make an enquiry



(S\*) Add an S to the seven digit code number for the sterile version of this product eg. 5000000S (sterile box quantity is shown in brackets).











# Hydro-Trach™ T and Inter-Therm™ T+ ranges

A choice of HME devices designed for use on tracheostomised patients, the Hydro-Trach T and Inter-Therm T+ are ideal products for prolonged use with spontaneously breathing patients.

#### Clipped suctioning port

Small and lightweight Reduces pull and drag on the

patient's airway

away when not in use

Allows easy access for suctioning without removing the device

Integrated swivel oxygen connector

Allows for quick and convenient connection

of supplemental oxygen and can be folded

## **Clear housing**

For easy visual inspection of possible secretion build up



#### **Anti-occlusion mechanism**

Allows the HME element to partially dislodge in the event of total occlusion or vigorous cough



(F) Video available at www.intersurgical.com

## Hydro-Trach T

#### Inter-Therm T+

1.8m oxygen tube

#### Average Fi O, at variable O<sub>2</sub> flow rates

Oxygen (L/min)	Fi O <sub>2</sub> at 15 BPM
1	26.5%
2	32.2%
3	35.0%
4	38.2%
5	41.8%
6	44.9%
7	47.9%
8	50.6%

Small and lightweight

**Optimal humidification** 

prolonged period of time

away when not in use

Reduces the side effects associated

with breathing cold dry gases over a

Integrated swivel oxygen connector

Allows for quick and convenient connection

of supplemental oxygen and can be folded

Reduces pull and drag on the patient's airway

	riyuro-iracii i		IIIter-II	ICIIII I T
Code	1873000 (S*)	1874000 (S*)	1875000 (S*)	1875001 (S*)
Box Qty.	25 (100*)	40 (20*)	25 (100*)	25 (20*)
Moisture loss	13.2mg H <sub>2</sub> O/L	13.2mg H₂O/L	13.1mg H <sub>2</sub> O/L	13.1mg H <sub>2</sub> O/L
Calculated moisture return	26mg H₂O/L	26mg H <sub>2</sub> O/L	26.1mg H <sub>2</sub> O/L	26.1mg H <sub>2</sub> O/L
Resistance at 30L/min	0.3cm H₂O	0.3cm H <sub>2</sub> O	0.4cm H₂O	0.4cm H₂O
Resistance at 60L/min	0.6cm H₂O	0.6cm H₂O	1.1cm H₂O	1.1cm H₂O
Compressible volume	19ml	19ml	19ml	19ml
Weight	8g	8g	9g	9g
Connectors	15F	15F	15F	15F
Minimum tidal volume	>60ml	>60ml	>60ml	>60ml

1.8m oxygen tube

# Inter-Therm™ T+

#### Clipped suction port

Accessories

Allows easy access for suctioning without removing the device

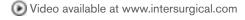
#### Clear housing and white HME elements

Optimises visualisation of possible pulmonary secretions



#### **Unique corrugated** paper design

Provides perfect combination between humidification output and low resistance to flow



Contact us



Sterile option available (S\*) Add an S to the seven digit code number for the sterile version of this product



#### **Device filtration**

As a specialist in respiratory care and filtration Intersurgical is pleased to offer a wide range of filtration solutions for devices which are in common use for the treatment of patients with respiratory problems. There is a filtration solution offered for the most common devices present in the market.

Obstructive sleep apnoea (OSA) can have a major impact upon the health and life of the individual, but it is a treatable condition. Treatment options include the use of a Continuous Positive Airway Pressure (CPAP) device, that prevents the airway from collapsing by delivering a continuous supply of compressed air via a mask whilst the patient is sleeping. In severe cases a bilevel device which delivers different pressure during the inspiratory and expiratory breath may be required to allow normal uninterrupted sleep.

#### Why use a filter?

All CPAP and bilevel machines have a filter, normally located at the air intake on the back or side of the machine.

The CPAP machine takes in room air, filters and pressurises it to deliver therapy to help prevent the airway from collapsing during sleep. These devices can also attract debris from the environment, which, may include dust, pet hair, smoke, and other potential allergens. The filter is designed to clear these elements from the air before it reaches the patient's lungs.

#### How often should I change the CPAP filter?

It is very important to regularly change the CPAP filters. If these become dirty, the air that is breathed in with the device will likewise be unclean. In general it is recommended that the filters be changed or cleaned at least once per month.

If the device is being used in a particularly dirty or dusty environment, it may be sensible to replace the filters more often. Regular checking of the filter will determine how dirty it is becoming and whether increased replacement is necessary. Even if the filter appears clean, it should be replaced on at least a monthly basis or in line with recommendation of the original manufacturer.

#### What are oxygen concentrators?

An oxygen concentrator is a portable or electrical device that extracts air from the surrounding environment, providing oxygen therapy to a patient via nasal cannula at higher concentrations than available in ambient air. They are used as a safer, less expensive and more convenient alternative to tanks of compressed oxygen.

Drawn air from the environment is passed through a cylinder filled with zeolite pellets where it is compressed to a few times normal atmospheric pressure (typically 20 psi/138 kPa gauge, or 2.36 atmospheres absolute) and passed through the zeolite bed. The bed adsorbs the nitrogen, leaving nearly-pure oxygen in the output - up to 90-95%. There is a compressor inside the machine that can make a noise during use. The reservoir and the concentrator have limited storage, so virtually all the oxygen saved is released into the oxygen tubing for delivery to the patient.

#### Why is a filter required?

Ambient air contains millions of particles, some of which will be sub-micron. Particles of this size can easily enter and clog the working components of the machine or penetrate deeply into the lungs of the patient.

Air filters are therefore required to:

- 1. Protect the oxygen concentrator
- 2. Protect the patient from particulate matter and the risk of infection
- 3. In some instances they function as a dampener to reduce the level of noise emitted by the machine

#### Suction devices

These devices provide a source of negative pressure and a collection chamber to allow the safe removal of bodily fluids and secretions.

These devices are prone to both damage and contamination if they are exposed to bodily fluids due to operating errors, the position of a high quality hydrophobic bacterial and viral filter between the suction pump and the secretion canister will help prevent this possibility.







# Filters for respirators, ventilators and gas lines



Code	1635001	1790000	1690000
Description	Hydrophobic inline filter for O <sub>2</sub> /gas concentrators	Air-Guard™ Clear filter	Flo-Guard low resistance filter for CPAP, bilevel and cough assist applications
Box quantity	100	50	50
Bag quantity	10	1	1
Connections	8mm barbed	22M/15F-22F	22M-22F
Filtration efficiency	99.999%	>99.9999%	>99.99%
Compressible volume	-	120ml	80ml
Resistance to flow at 60L/min	-	0.9cmH₂O	0.8cmH <sub>2</sub> O
Weight	-	56g	28g

#### Suction unit filters

Make an enquiry





Code	1635003	1635004
Description	Suction filter for DeVilbiss® Vacu-Aide™	Suction filter for ATMOS™
Box quantity	100	100
Bag quantity	10	10
Material	Translucide styrolux	Translucide styrolux
Connections	11mm barbed	D.E. 12mm/9mm
Filtration efficiency	99.999%	>99.999%
Effective filtration area	24.6cm <sup>2</sup>	24.6cm <sup>2</sup>
Maximum operating temperature	100°C	100°C
Maximum operating pressure	20psi	20psi

# HEPA filters, foam pre-filters and accessories for oxygen concentrators







Code	1790001	1695026	1790002
Description	Oxygen concentrator intake filter for Invacare® Platinum®	Foam pre-filter for Invacare® Platinum®	Oxygen concentrator intake filter for Respironics® EverFlo™
Box quantity	10	150	10
Bag quantity	1	10	1
Material	HEPA filter	-	HEPA filter
Filtration efficiency	99.999%	-	99.999%

#### Make an enquiry

DeVilbiss is a registered trade mark of DeVilbiss Healthcare LLC. Vacu-Aide is a trade mark of DeVilbiss Healthcare LLC.

ATMOS is a trade mark of ATMOS Medizintechnik GmbH & Co. KG. Invacare is a registered trade mark of Invacare Corporation.

Platinum is a registered trade mark of Invacare International Corporation. Respironics is a registered trade mark of Respironics, Inc.

EverFlo is a trade mark Respironics, Inc.















Code	1695001	1695002	1790003
Description	Foam top cap for Respironics® Millennium™	Foam Pre-filter for Respironics® Millennium™	Oxygen concentrator intake filter for DeVilbiss® Sunrise 515
Box quantity	100	150	10
Bag quantity	10	10	1
Dimensions	65mm D.E. x 20mm D.I.	215mm x 108mm	-
Material	_	_	Clear bronze tinted ABS + pleated paper combined with acoustic foam
Capacity	-	-	Volume up to 100L/min
Noise level	-	_	acoustic media reduces noise
Filtration efficiency	-	-	99.999%





Code	1790004	1695025
Description	Oxygen concentrator intake filter for DeVilbiss® Sunrise 525	Foam pre-filter for Invacare® Homefill®
Box quantity	10	150
Bag quantity	1	10
Dimensions	_	170mm x 85mm x 12mm
Material	Clear bronze tinted ABS + pleated paper combined with acoustic foam	_
Capacity	Volume up to 100L/min	-
Noise level	acoustic media reduces noise	-
Filtration efficiency	99.999%	-

Make an enquiry

 $Respironics is a registered trade \ mark \ of \ Respironics, \ Inc. \ . \ Millennium \ is \ a \ trade \ mark \ of \ Respironics, \ Inc.$ 

DeVilbiss is a registered trade mark of DeVilbiss Healthcare LLC.

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# Foam pre-filters and filters for CPAP/bilevel equipment

Make an enquiry







Code	1695003	1695004	1695005
Description	Foam pre-filter for Breas® Vivo™ 30/40	Filter for Breas <sup>®</sup> Vivo™ 30/40	Filter for Breas® iSleep™
Box quantity	300	300	400
Bag quantity	10	10	10
Dimensions	85mm x 15.5mm	85mm x 15.5mm	23mm x 66mm







Code	1695006	1695007	1695008
Description	Foam pre-filter for Breas® iSleep™	Filter for ResMed® AutoSet™/ AutoSet Spirit™/ S8 Elite™	Filter for ResMed® S7™
Box quantity	150	400	200
Bag quantity	10	10	50
Dimensions	23mm x 66mm	40mm tapering to 25mm at the top (trapezoidal)	40mm tapering to 30mm at the top (trapezoidal)







Code	1695009	1695010	1695011
Description	Filter for ResMed® S8™	Filter for ResMed® S9 Elite™	Foam pre-filter for Rempro™ Harmony™ 2
Box quantity	200	150	200
Bag quantity	50	50	10
Dimensions	35mm tapering to 25mm at the top (trapezoidal)	53.6mm x 35.6mm	94mm x 40mm

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ResMed is a registered trade mark of ResMed Limited. AutoSet, S8 Elite, S8, S7 and S9 Elite are trade marks of ResMed Limited.

Rempro and Harmony are trade marks of Respironics, Inc.









### Foam pre-filters and filters for CPAP/bilevel equipment

#### Make an enquiry







Code	1695012	1695013	1695014
Description	Foam pre-filter for Respironics® M Series/ PR one	Filter for Respironics® M Series/PR one	Filter for Respironics® Rempro™
Box quantity	150	150	200
Bag quantity	50	10	10
Dimensions	44mm x 23mm x 10mm	45mm x 23mm x 15mm	91mm x 40mm







Code	1695015	1695016	1695017
Description	Foam pre-filter for Respironics® Harmony™/Synchrony™	Filter for Respironics® Harmony™/ Synchrony™	Foam pre-filter for Covidien® Puritan Bennett® GoodKnight® 418
Box quantity	100	100	200
Bag quantity	10	10	10
Dimensions	120mm x 60mm	122mm x 80mm	132mm x 21mm







Code	1695018	1695019	1695020
Description	Foam pre-filter for Covidien® Puritan Bennett® GoodKnight® 420	Foam pre-filter for Weinmann® SOMNO <i>comfort™</i> /SOMNO <i>soft™</i>	Filter for Weinmann® SOMNOcomfort™
Box quantity	500	200	200
Bag quantity	10	10	10
Dimensions	48mm x 23mm	68mm x 68mm	67.5mm x 67.5mm

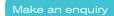
Respironics is a registered trade mark of Respironics, Inc. Rempro, Harmony and Synchrony are trade marks of Respironics, Inc.

Covidien is a registered trade mark of Covidien AG. Puritan Bennett is a registered trade mark of Covidien LP.

GoodKnight is a registered trade mark of Nellcor Puritan Bennett LLC. Weinmann is a registered trade mark of Weinmann Geräte für Medizin GmbH & Co. KG. SOMNO comfort and SOMNO soft are trade marks of Weinmann.



### Foam pre-filters and filters for CPAP/bilevel equipment









Code	1695027	1695028	1695021
Description	Foam pre-filter for Weinmann® SOMNO <i>balance™</i>	Filter for Weinmann <sup>®</sup> SOMNO <i>balance™</i>	Filter for Fisher & Paykel® ICON®
Box quantity	50	50	500
Bag quantity	10	10	10
Dimensions	70mm x 30mm	68.5mm x 29.5mm	20mm tapering to 13.8mm at the top (trapezoidal)





Code	1695022	1695023
Description	Filter for Weinmann® SOMNOcomfort™ 2	Foam pre-filter for DeVilbiss® Solaris™
Box quantity	100	150
Bag quantity	10	10
Dimensions	148mm x 78mm	142mm x 93mm

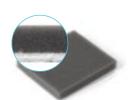
### Foam pre-filters and filters for ventilators











Code	1695031	1695032	1695033	1695024
Description	Filter for Breas® Vivo™ 50	Foam pre-filter for Breas® Vivo™ 50	Foam pre-filter for Sefam™ DreamStar® and Covidien® Sandman™	Double filter layer (foam pre-filter + filter) for Covidien® Legendair
Box quantity	150	150	150	150
Bag quantity	10	10	10	10
Dimensions	56mm x 56mm	56mm x 56mm	41mm x 26mm	70mm x 60mm

Weinmann is a registered trade mark of Weinmann Geräte für Medizin GmbH & Co. KG. SOMNObalance and SOMNOcomfort are trade marks of Weinmann. Fisher & Paykel and ICON are registered trade marks of Fisher & Paykel Healthcare Limited.

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### Double swivel elbows

A range of double swivel elbows providing added mobility at the patient connection, with a variety of ports for all clinical applications. All Intersurgical port caps are fixed to the connectors for added safety, preventing loss or misplacement in use.

Please see page 4 for the guide to ports and caps

Video available at www.intersurgical.com











Make an enquiry

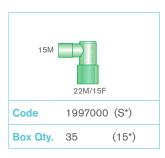
#### Fixed elbows

A range of fixed elbow connections with a variety of ports for a number of clinical applications. All Intersurgical port caps are fixed to the connectors for added safety, preventing loss or misplacement in use.

Please see page 4 for the guide to ports and caps





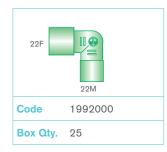






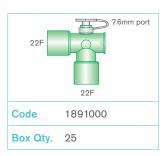


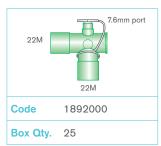
















#### Make an enquiry



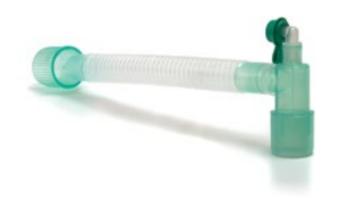
### Flexible catheter mounts

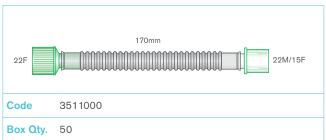
A range of flexible catheter mounts available with a variety of elbow connections and ports for all applications. All Intersurgical port caps are fixed to the connectors for added safety, preventing loss or misplacement in use.

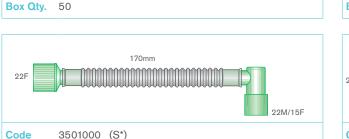
Please see page 4 for the guide to ports and caps

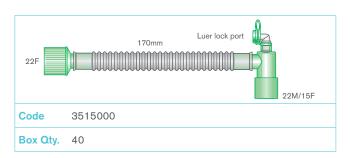
Video available at www.intersurgical.com







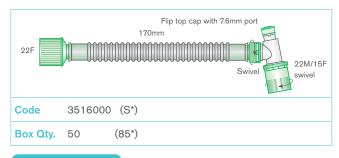




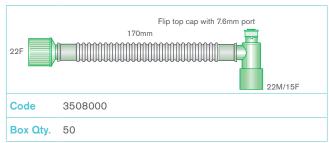
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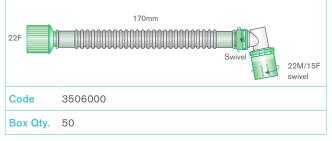
Box Qty.

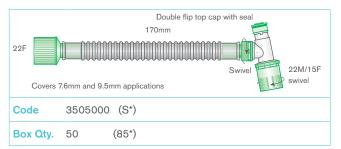
50











#### Make an enquiry

Sterile option available







### Superset<sup>™</sup> catheter mounts

The Superset catheter mount has a concertina design to allow for complete positioning control.

The design allows the adjustment of deadspace from 20ml to 40ml (code 3504000: 15–36ml) and the adjustment of length from 70mm to 150mm, excluding connectors (code 3504000).

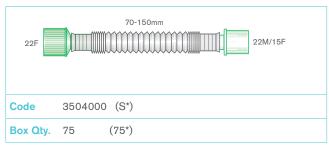
The range is available with fixed and double swivel elbows and a variety of ports for all applications. All Intersurgical port caps are fixed to the connectors for added safety, preventing loss or misplacement in use.

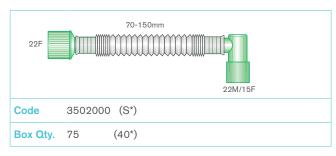


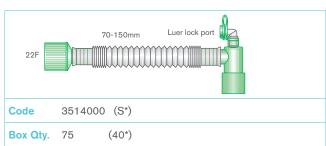
Please see page 4 for the guide to ports and caps

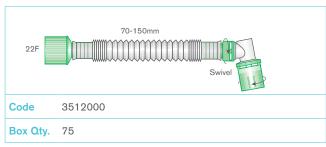
Video available at www.intersurgical.com

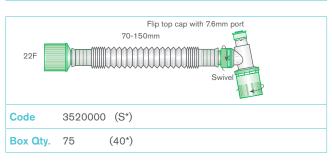


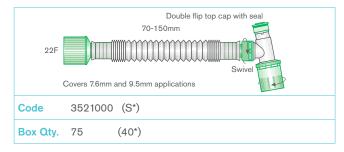












Make an enquiry



### Smoothbore catheter mounts

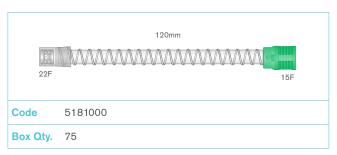
A range of Smoothbore catheter mounts providing good flow characteristics, lower tubing compliance and clear, crush-resistant tubing. Available in a variety of lengths with double swivel elbows and double flip top caps. All Intersurgical port caps are fixed to the connectors for added safety, preventing loss or misplacement in use.

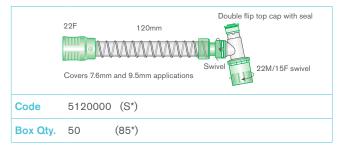


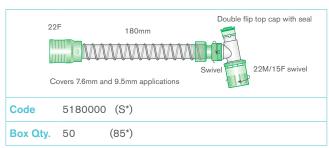
Please see page 4 for the guide to ports and caps

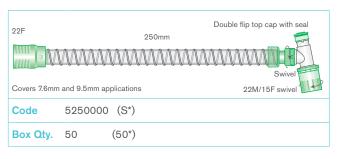
Video available at www.intersurgical.com























A range of products dedicated to oxygen delivery, humidification of oxygen and nebulisation of drugs

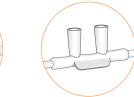
Oxygen Therapy	44
Aerosol Therapy	48
Nehuliser Therany	50

#### Nasal cannula

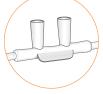
#### Conventional nasal cannula

A range of products for adult, paediatric and neonates are available with a wide selection of prong shapes to suit all patient requirements. All oxygen tubing in the range is manufactured in a 'multi-channel' design, which permits oxygen flow even if the tubing is 'kinked'. The Earguard option includes soft silicone foam cushions, which are easily adjusted and securely fitted to prevent trauma to the patient's ears. Nasal cannula used in the homecare environment should be used with fire safety valves.

Video available at www.intersurgical.com



**Curved prongs:** Improved anatomical shape and fit



Flared prongs: Slow down the flow of oxygen



**Curved and** Flared prongs: Combines the benefits of both



**Straight Prongs** 



**Curved prongs** with ear guards: Improved anatomical fit and patient comfort

Code	Description	Length	Box Oty.
1161000	Adult, nasal cannula with straight prongs and tube	1.8m	50
1161004	Adult, nasal cannula with straight prongs and tube	2.1m	50
1162000	Adult, nasal cannula with straight prongs and tube	5m	20
1165000	Adult, nasal cannula with curved prongs and tube	1.8m	50
1161020	Adult, Satin nasal cannula with straight prongs and tube	1.8m	50
1165020	Adult, Satin nasal cannula with curved prongs and tube	1.8m	50
1165002	Adult, nasal cannula with curved prongs, ear guards and tube	2.1m	50
1165003	Adult, nasal cannula with curved prongs, ear guards and tube	5m	40
1165005	Adult, nasal cannula with curved prongs and tube, single patient use	0.1m	70
1165021	Adult, Satin nasal cannula with curved prongs and tube	2.1m	50
1161021	Adult, Satin nasal cannula with straight prongs and tube	2.1m	50
1166000	Adult, nasal cannula with flared prongs and tube	1.8m	50
1167000	Adult, nasal cannula with curved/flared prongs and tube	1.8m	50
1163000	Paediatric, nasal cannula with curved prongs and tube	2.1m	50
1164000	Neonatal, nasal cannula with curved prongs and tube	2.1m	50

#### Dual lumen nasal cannula

The dual lumen cannula is specifically designed for use with all electronic or pressure activated portable liquid oxygen systems. It features a dual lumen cannula which delivers oxygen to, and senses demand from, both nostrils. When demand drops so does the supply of oxygen conserving the available supply of gas. The cannula is made from Intersurgical's soft satin material, proven in testing to create 20% less friction to the patient's face and ears compared with a standard cannula. It has been designed to be configured with fire safety valves to prevent the propogation of fire down the tube.



Code	Description	Length	Box Oty.
1165011	Dual lumen, adult, nasal cannula with curved prongs and tube, single patient use	1.25m	50
1165012	Dual lumen, adult, nasal cannula with curved prongs and tube, single patient use	1.8m	50
1165013	Dual lumen, adult, nasal cannula with curved prongs and tube, single patient use	2.5m	50











# Intersurgical EcoLite™ the lightest and most comfortable range of oxygen and aerosol masks

#### **Welcome to the Comfort Zone**

The unique design and materials used to manufacture the Intersurgical EcoLite mask provides improved patient comfort and a reduced environmental impact.

#### **Comfortable for the Patient**

Improved patient comfort has been key to the development of the Intersurgical EcoLite mask. The latest manufacturing technology has enabled us to combine two non-PVC materials in the same product, the polypropylene material forming the body of the Intersurgical EcoLite mask is clear, lightweight and rigid enough to maintain the masks shape, whilst the second softer TPE material is utilised in the seal, which is in contact with the patients face.

#### **Comfortable for the Environment**

The Intersurgical EcoLite mask is an important part of our Eco range, designed as part of our ongoing focus on sustainable development. Various groups have questioned the use of PVC in medical products and its impact on the environment. The utilisation of alternative materials has resulted in the elimination of PVC from the Intersurgical EcoLite mask, reducing the environmental impact.



www.intersurgical.com/info/eco

Adult Medium concentration oxygen mask

#### Incurved nose seal

Conforms to different nose shapes designed to prevent oxygen entering patient's eyes

#### No metal nose clip

MRI compatible

### Soft face seals Increased patient

creased patient comfort

### Elastic can be positioned under or over the ears

Below ear position eliminates trauma to top of ears

### **Exhalation ports**

Designed to minimise the amount of rebreathed carbon dioxide



### A choice of "under chin" or "on chin" positions

Provides a better fit on a wider range of patient face shapes



Oxygen masks used in the homecare environment should be used with fire safety valves.

Code	Description	Box Qty.
1136015	Intersurgical EcoLite, adult, medium concentration oxygen mask	55
1190015	Intersurgical EcoLite, paediatric, medium concentration oxygen mask	42
1174004	Oxygen tube, 0.1m	25

Lower environmental impact product



# AquaFlow™ oxygen bubble humidifiers

A homecare range of devices for delivering unheated humidification to your patients. The AquaFlow range of bubble humidifiers are suitable for patients receiving variable oxygen therapy.





1521000

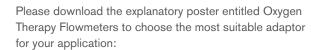
1520000

Code	Description	Box Qty.
1521000	AquaFlow, homecare oxygen bubble humidifier with bottle, 120ml	20
1520000	AquaFlow, homecare bubble humidifier with bottle plus M12 adaptor, 120ml	20

Make an enquiry

### Flowmeter adaptors

Oxygen therapy flowmeters are available with a variety of connection types. The Intersurgical range of adaptors has been designed to permit the attachment of humidification devices with 9/16 UNF (D.I.S.S) threaded couplings to a variety of flowmeter types.





### www.intersurgical.com/products/oxygen-and-aerosol-the rapy/flow meter-adaptors

Code	Description	Box Qty.
1508001	Sure-Loc™ flowmeter adaptor	45
1506001	BOC® flowmeter adaptor	50
1509001	Flowmeter adaptor M12	50
1504001	Oxygen flowmeter nipple D.I.S.S	50
1505001	Oxygen flowmeter nipple M12	50



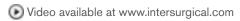






### Oxygen tubing

Oxygen tubing is available in 50m rolls which can be cut to the required length. We also offer multi-channel tubing in various lengths. A non-PVC version is available, providing an environmentally friendly choice.





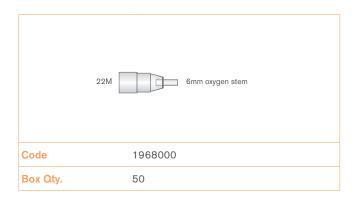


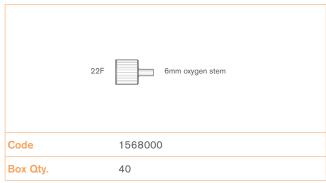
	Code	Description		Box Oty.	
	1180000	Oxygen thick wall tube, 5mm ID-7mm OD (1 roll)	50m	1	
	1170000	Oxygen bubble tube, 4mm-8mm ID (1 roll)	50m	1	
	1175000	Oxygen tube	4m	30	
	1174010	Non-PVC oxygen tube	2.1m	100	
	1174003	Oxygen tube	2.1m	100	
	1174000	Oxygen tube	1.8m	125	
	1174004	Oxygen tube	0.1m	25	
	1173000	Oxygen tube with wide connector	1.8m	60	
	1178000	Sure-Loc™, oxygen tube	1.8m	125	
	1476000	Sure-Loc™ oxygen tube with flowmeter adaptor	1.8m	75	

Make an enquiry

### Oxygen tube connectors

Male and female straight oxygen connectors, with 6mm oxygen stems.









### Aerosol face masks

Aerosol face masks, available in adult and paediatric sizes, made without using PVC as part of our Intersurgical EcoLite range.



illustrated

Code	Description	Connectors	Box Qty.	
1188015	Intersurgical EcoLite, adult, aerosol mask	22F	50	
1198015	Intersurgical EcoLite, paediatric, aerosol mask	22F	42	

Make an enquiry

### Tracheostomy masks and T-pieces

Tracheostomy masks to fit adult and paediatric patients. The EcoLite adult mask is made without PVC materials and has a quick release elastic for ease of use.







illustrated

Code	Description	Connectors	Box Qty.	
1200050	Intersurgical EcoLite, adult, tracheostomy mask	22M	30	
1206000	Paediatric, tracheostomy mask	22M	35	
1980000	Tracheostomy T-piece	22M-22M-22M/15F	25	
1984000	Tracheostomy T-piece with 7.6mm port	22M-22M-22M/15F	25	











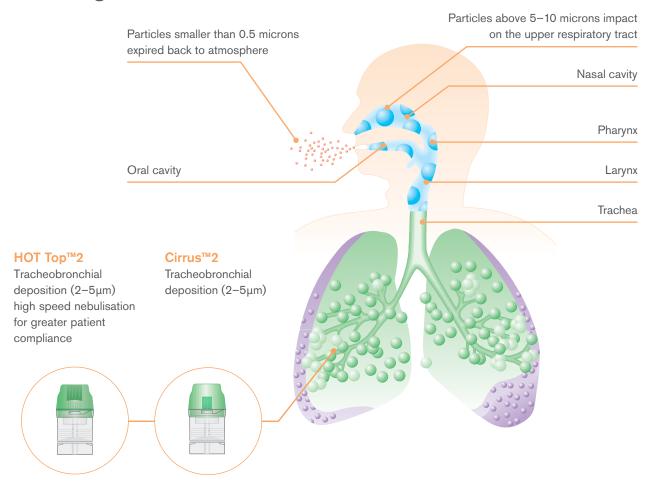
### Aerosol therapy accessories

A range of accessories for aerosol therapy.



Code	Description	Box Oty.
1966001	Straight connector 22M-MDI port-22M	25
1964001	Straight connector 22M-MDI port away from patient-22F	25
1947001	Straight connector 15M-MDI port away from patient-15F	25
1947003	Straight connector 15M-MDI port towards patient-15F	25
1953000	Anti-pollution T-piece directional valve, 22F-22MV-22M	25

### Choosing a nebuliser



### Tracheobronchial deposition



#### **HOT Top2 nebuliser**

The HOT Top2 is designed for high speed nebulisation. It significantly reduces treatment time compared with conventional nebulisers.

At a driving gas flow of 8 L/min, the a Mass Median Diameter (MMD) is 2.8 microns.



#### Cirrus2 nebuliser

The Cirrus2 has been designed to minimise the residual volume and reduce drug wastage.

At a driving gas flow of 8 L/min, the MMD is 3.1 microns.

Neonatal Therapy Training Video available at www.intersurgical.com













### Cirrus™2 nebuliser and nebuliser mask kits

Based on the well-established Cirrus nebuliser the Cirrus2 incorporates a number of improved features. These include a graduated drug cup which provides guidance on how much drug is in the nebuliser. The cup now has a quick-release fitting which enables the nebuliser to be attached, as well as detached, with a quarter turn. This speeds up the refilling process and provides a more reliable seal between the cup and the nebuliser body.

The Cirrus2 nebuliser is designed to deliver drugs for tracheobronchial deposition. At a driving gas flow of 8 L/min, the Mass Median Diameter (MMD) is 3.1 microns.

The Cirrus2 Adult mask kit incorporates the Intersurgical EcoLite™ aerosol mask, this non-PVC mask reduces the environmental impact of this product compared with a conventional mask kit by 28%.

Video available at www.intersurgical.com



Low residual volume

Reduced drug waste

Standard 22F Taper

Fits masks, T-pieces and mouthpieces

### Quick-release fitting

Attaches and detaches easily

Code	Description	Tube length	Box Oty.
1200051	Cirrus2 nebuliser, adult, Intersurgical EcoLite tracheostomy mask kit with tube	1.8	20
1402000	Cirrus2 nebuliser		75
1453015	Cirrus2 nebuliser, adult, Intersurgical EcoLite mask kit with tube	2.1m	30
1453017	Cirrus2 nebuliser, adult, Intersurgical EcoLite mask kit with non-PVC tube	2.1m	30
1454015	Cirrus2 nebuliser, paediatric, Intersurgical EcoLite mask kit with tube	2.1m	36
1455000	Cirrus2 nebuliser, mouthpiece kit with tube, single patient use	2.1m	35
1464000	Cirrus2 nebuliser, universal mouthpiece T-kit with tube	1.8m	40
1464004	Cirrus™2 nebuliser universal mouthpiece T-kit with filter, Sure-Loc™ flowmeter adaptor and Sure-Loc tube	1.8m	20
1464021	Cirrus2 nebuliser, mouthpiece kit, filter and tube	2.1m	20
2605000	Cirrus2 nebuliser breathing system T-kit, 22mm and tube	1.8m	40
2606000	Cirrus2 nebuliser breathing system T-kit, 15mm and tube	1.8m	35
2608000	Cirrus2 nebuliser breathing system T-kit, 10mm and tube	1.8m	45

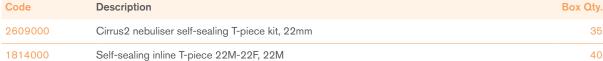
#### Self-sealing T-piece

The Cirrus2 is available with a self-sealing T-piece, which enables the nebuliser to be attached (or detached) from the ventilator without interfering with patient ventilation or inadvertantly activating any alarms.



Video available at www.intersurgical.com







💪 Lower environmental impact product

### HOT Top™2 nebuliser

The HOT Top2 nebuliser is a new design of open nebuliser incorporating twin entrainment ports for high output flows resulting in reduced treatment times and improved patient compliance.

In addition, the HOT Top2 nebuliser incorporates a number of improved features. These include the graduated nebuliser drug cup which provides guidance on how much drug is left in the nebuliser and a quick-release fitting which enables the nebuliser to be attached and detached with a quarter-turn. This speeds up the refilling process and provides a more reliable seal between the cup and the nebuliser body.

The HOT Top2 nebuliser is designed to deliver drugs for tracheobronchial deposition. At an optimum driving gas flow

of 8 L/min, 78% of the volume output will comprise particles of less than 5 microns in diameter with a Mass Median Diameter (MMD) of 2.8 microns.

At the lower driving gas flow of 6 L/min the performance is equivalent to a conventional closed nebuliser making it suitable for use with compressors, which typically have lower flow outputs<sup>1</sup>.

The HOT Top2 mask kits incorporate the Intersurgical EcoLite<sup>™</sup> aerosol mask, this non-PVC mask reduces the environmental impact of this product compared with a conventional mask kit by 28%.

Video available at www.intersurgical.com

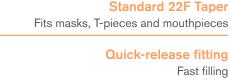


### Faster treatment times

Improved patient compliance

#### Graduated nebuliser cup guide

Faster preparation



Low residual volume

Reduced drug waste

#### HOT Top2 nebulisers - Standard base

Code	Description	Tube length	Box Oty.	
1472015	HOT Top2 nebuliser		65	
1463015	HOT Top2 nebuliser, adult, Intersurgical EcoLite mask kit with tube	1.8m	30	
1468015	HOT Top2 nebuliser, paediatric, Intersurgical EcoLite mask kit with tube	1.8m	36	
1478015	HOT Top2 nebuliser mouthpiece kit with tube	1.8m	45	

#### Make an enquiry

#### HOT Top2 nebulisers - Sure-Loc™ Base

HOT Top2 nebulisers are available with a Sure-Loc base, when used with Intersurgical Sure-Loc tube and adaptor this system provides secure connections, preventing accidental tube disconnections from the nebuliser and the flow meter.





Code	Description	Tube length	Box Oty.	
1471015	HOT Top2 nebuliser with Sure-Loc base		65	
1473015	HOT Top2 nebuliser, adult, Intersurgical EcoLite mask kit with Sure-Loc base, Sure-Loc flowmeter adaptor and Sure-Loc tube	2.1m	30	
1474015	HOT Top2 nebuliser, paediatric, Intersurgical EcoLite mask kit with Sure-Loc base, Sure-Loc flowmeter adaptor and Sure-Loc tube	1.8m	36	
1475015	HOT Top2 nebuliser mouthpiece kit with Sure-Loc base, Sure-Loc flow meter adaptor and Sure-Loc tube	1.8m	45	

Cower environmental impact product

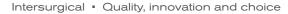
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