



# UniFlow™ coaxial breathing systems



**Anaesthesia** ▪ Anaesthetic Breathing Systems



# UniFlow™ universal coaxial breathing systems ideally suited for low flow anaesthesia

The UniFlow range of universal coaxial anaesthetic breathing systems has been designed to meet the demands of changing clinical practice and user demands.

UniFlow systems fit all standard carbon dioxide absorbers and are ideally suited for use in low flow anaesthesia.



**Silver Knight™ version**  
Also available

**Integral respiratory gases monitoring line safely inside the outer lumen**

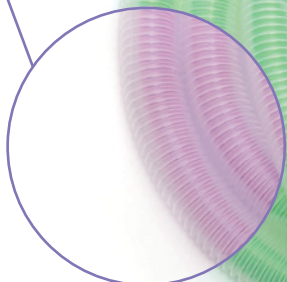
Cannot be caught accidentally, which can result in a disconnection of the monitoring line (not applicable with 2900000 and 2901000)

**Dual lumen feature**

Patient receives warmer humid gases than with a conventional two limb parallel system

**Extendable expiratory gases limb up to 0.5 metres long**

Easy to fit UniFlow to any absorber system



**Large 30mm diameter outer lumen**

This ensures that the resistance to flow of the expired gases is kept to a minimum.

**The inner lumen has an integral swivel feature**

The inner lumen is independent from the outer lumen reducing the possibility of kinking leading to restriction of gas flow

**The inner lumen is fixed at the patient end**

The inner lumen will not migrate up the outer lumen adding to the dead space. It also allows for the insertion of the UniFlow leak tester to assess the integrity of the inner lumen, as recommended by the AAGBI<sup>1</sup>

**Each UniFlow system comes complete with a leak tester**

Easy to test the integrity of the inner lumen as recommended by the AAGBI<sup>1</sup>. Safety is assured as both the inner and outer lumens can be properly and independently tested for leaks.



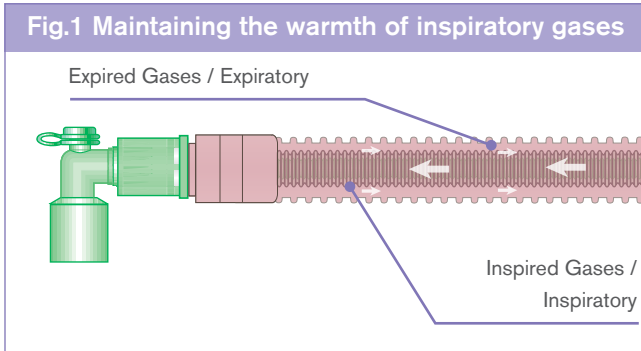
▶ Video available at [www.intersurgical.com](http://www.intersurgical.com)



Reference: 1. 'Checking Anaesthetic Equipment 3', (2004), E2, Anaesthetic Association of Great Britain and Ireland (AAGBI).

## The 'universal' system

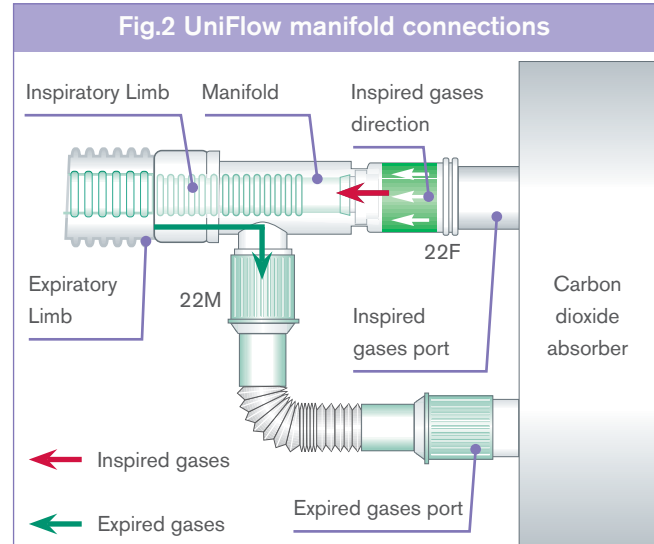
Inspired gases are warmed and humidified whilst passing through the soda lime in the absorber; because UniFlow™ is a coaxial system, with the inspiratory limb within the larger expiratory tube, these gases remain warm and humidified through to the patient.



## Connecting the UniFlow

All UniFlow systems have a clear 22F connection with a directional arrow marked on the manifold (see Fig.2). This should be connected to the inspired gases port on the carbon dioxide absorber.

Fully extendible Intersurgical Compact tube attaches between the 22M connector on to the manifold and the expired (or return) gases port on the carbon dioxide absorber; the Compact tube allows for extension and manoeuvrability so that it can be safely and conveniently attached to the unit.

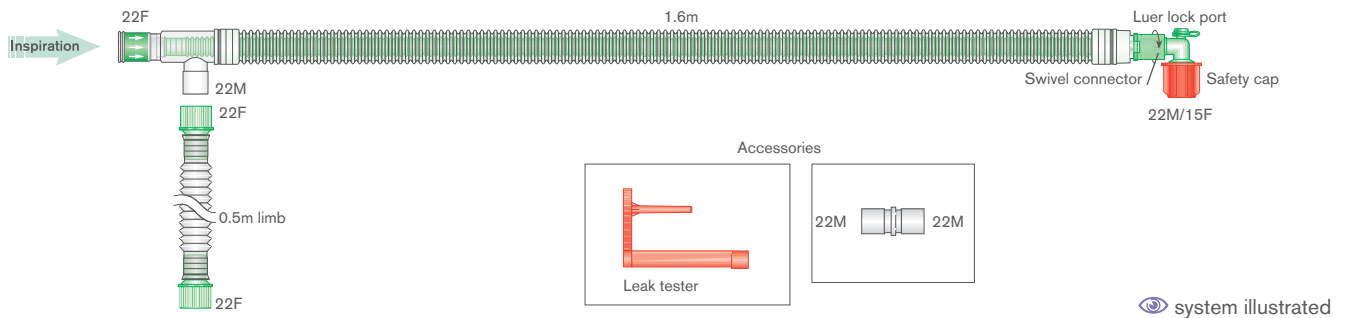


## UniFlow coaxial breathing systems with leak tester

UniFlow is a convenient tube-within-a-tube breathing system designed with low flow anaesthesia in mind, offering warmer, more humid inspiratory gases, and the option of an integrated respiratory gases monitoring line.

UniFlow can now be used on paediatrics to as low as 5kg in weight<sup>2</sup>.

## Standard breathing systems



Code	Description	Box Qty.
2900000 (S*)	30mm UniFlow coaxial breathing system with 0.5m limb, 1.6m	12 (10*)
2901000	30mm UniFlow coaxial breathing system with 0.5m limb, 2.4m	10

Make an enquiry

## Integral monitoring line

Separate monitoring lines can be accidentally disconnected as they are very small in diameter. Some of the UniFlow systems have integral monitoring lines for respiratory gas monitoring within the outer tubing. This starts at the patient connection and ends at the luer port on the manifold. Connect a standard monitoring line (such as Intersurgical monitoring line code 2725 or 2737) to this luer port and the other end to the respiratory gases monitor\*. For convenience the UniFlow deluxe system comes complete with two different length monitoring lines.

\* If this option is required it is recommended that a Filter or HMEF (without luer port) is used.

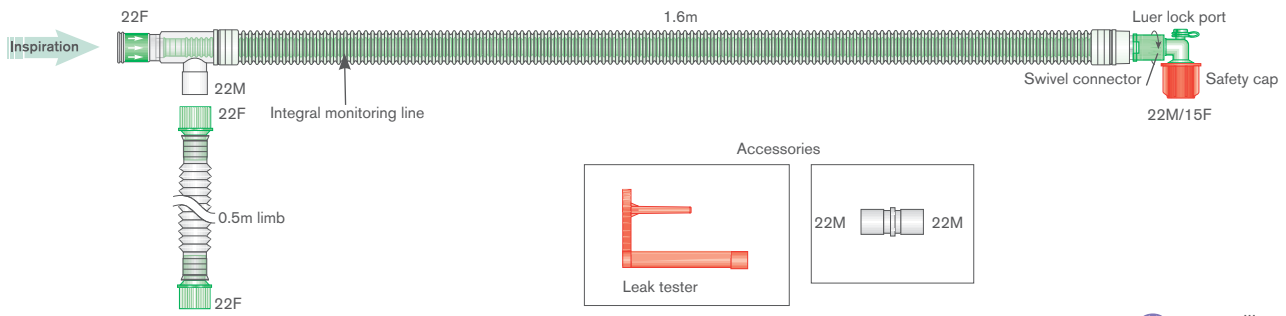
Sterile option available

(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).

Reference: 2. Queen Silvia's Childrens Hospital, Gothenburg, 2009.



## Standard breathing systems with monitoring line



system illustrated

Code	Description	Box Qty.
2902000 (S*)	30mm UniFlow coaxial breathing system with integral monitoring line and 0.5m limb, 1.6m	12 (10*)
2903000	30mm UniFlow coaxial breathing system with integral monitoring line and 0.5m limb, 2.4m	10

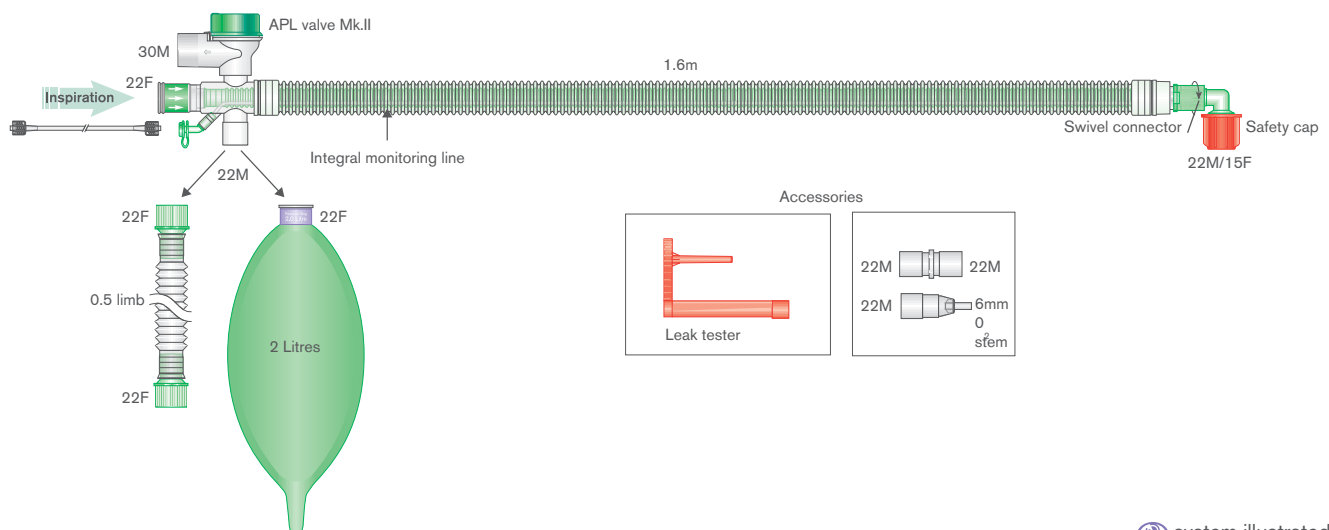
Make an enquiry

## Deluxe systems

The UniFlow deluxe system includes a reservoir bag, two monitoring lines plus extra connectors and is ideal for use in induction, maintenance, recovery and transport; one breathing system throughout the various stages of the anaesthesia process. Use of UniFlow for transport is easily achieved by connecting the inspired gases port to the trolley oxygen supply via the 6mm connector (trolley oxygen supply has a tube with it that connects to the 6mm port of the connector) and the 2 litre reservoir bag connected to the 22M connection on the manifold. The extendable limb can be used between the bag and manifold if an extension to the bag is required. The APL valve is adjusted by the clinician to suit patient needs.

## UniFlow deluxe breathing systems with monitoring line

The UniFlow deluxe coaxial breathing systems incorporate an APL valve, 2 litre reservoir bag and two different length monitoring lines. This allows the system to be used for anaesthesia induction, low flow anaesthesia and delivery of supplemental oxygen in recovery and transport.



system illustrated

Code	Description	Box Qty.
2910000	30mm UniFlow deluxe coaxial breathing system with 2L bag, integral monitoring line and 0.5m limb, 1.6m	12
2911000	30mm UniFlow deluxe coaxial breathing system with 2L bag, integral monitoring line and 0.5m limb, 2.4m	10

Make an enquiry

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).



# Silver Knight™ anti-microbial breathing systems

## Helping in the fight against Hospital Acquired Infections

### Protect with Silver Knight

In the continued fight against Hospital Acquired Infections, Intersurgical has developed the Silver Knight range of systems with an anti-microbial additive to further enhance patient safety. This anti-microbial, silver-based ion additive has been introduced to a range of breathing systems for both anaesthesia and intensive care use. Testing to ISO Standard 22196 shows a reduction in bacterial viable count by 99.9% against controls.<sup>1</sup>

### How does it work?

Silver Knight is an anti-microbial additive that uses silver ions to disrupt the normal enzymatic activities of bacteria. It functions as a safe, quick and effective catalyst to deactivate pathogenic bacteria and prevent their proliferation.

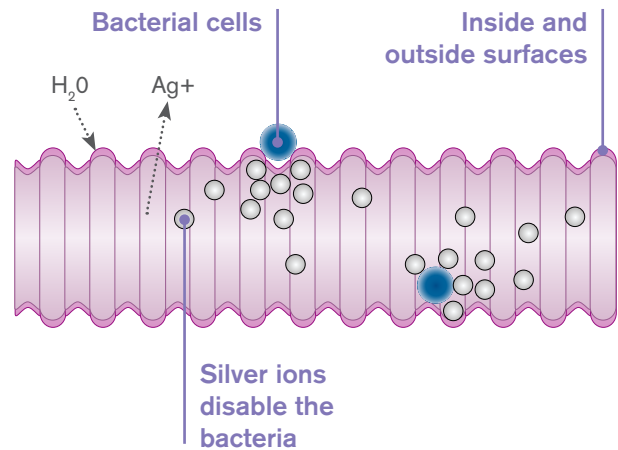
This technology allows the ions to be released in small quantities over time to reduce microbial growth within, and on, the surface of the breathing systems.

Silver Knight breathing systems are all validated for up to seven days use, and remain active, in unopened packaging, for up to five years.

[www.intersurgical.com/info/silverknight](http://www.intersurgical.com/info/silverknight)

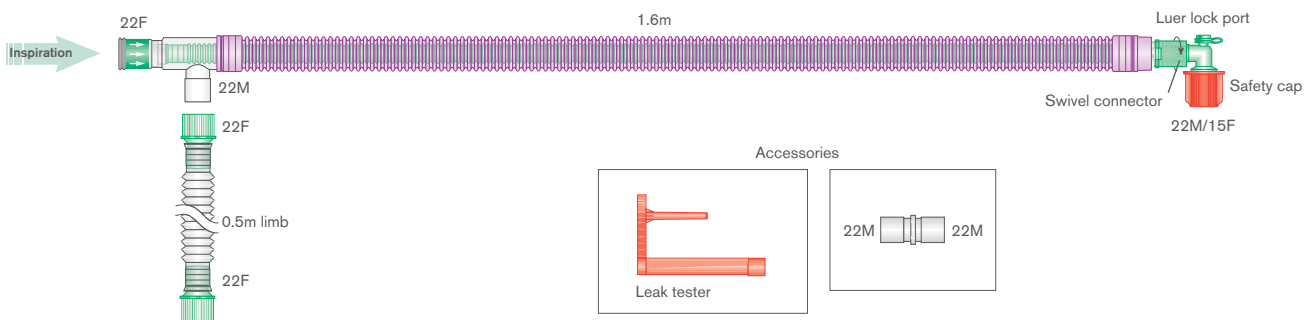
Silver Knight is proven<sup>1</sup> to help reduce the incidence of MRSA infection and other organisms including *Staphylococcus epidermis*, *Pseudomonas aeruginosa*, *Klebsiella pneumoniae*, *Acinetobacter calcoaceticus* and *Escherichia coli*.

▶ Video available at [www.intersurgical.com](http://www.intersurgical.com)



## Silver Knight anti-microbial UniFlow™ coaxial breathing systems

### Standard breathing systems



👁 system illustrated

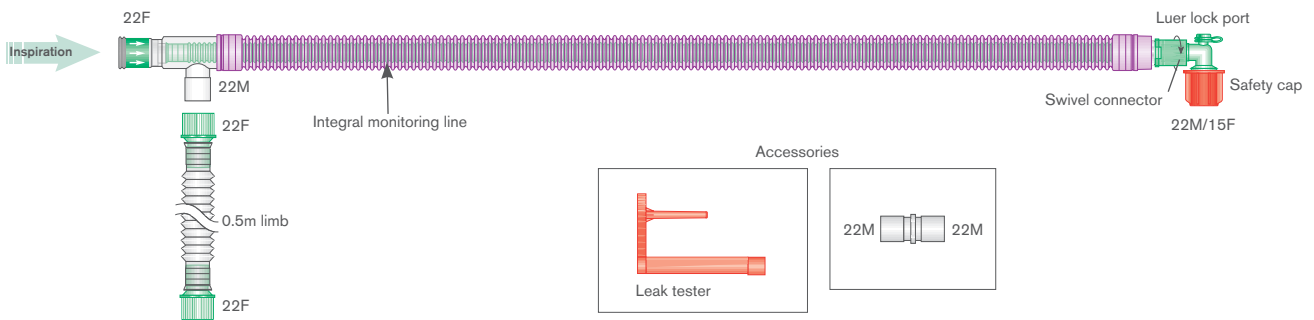
Code	Description	Box Qty.
👁 2900100	30mm Silver Knight anti-microbial UniFlow coaxial breathing system with 0.5m limb, 1.6m	12
2901100	30mm Silver Knight anti-microbial UniFlow coaxial breathing system with 0.5m limb, 2.4m	10

Make an enquiry

Silver Knight

The addition of Silver Ion anti-microbial additive to Intersurgical breathing system tubing greatly reduces the viable microbial count level over time. The tubing has demonstrated a long lasting anti-microbial affect against a broad range of micro-organisms responsible for Hospital Acquired Infections. References: 1. Intersurgical Ltd. Certified Independent Test Results, 2003.

### Standard breathing systems with monitoring line

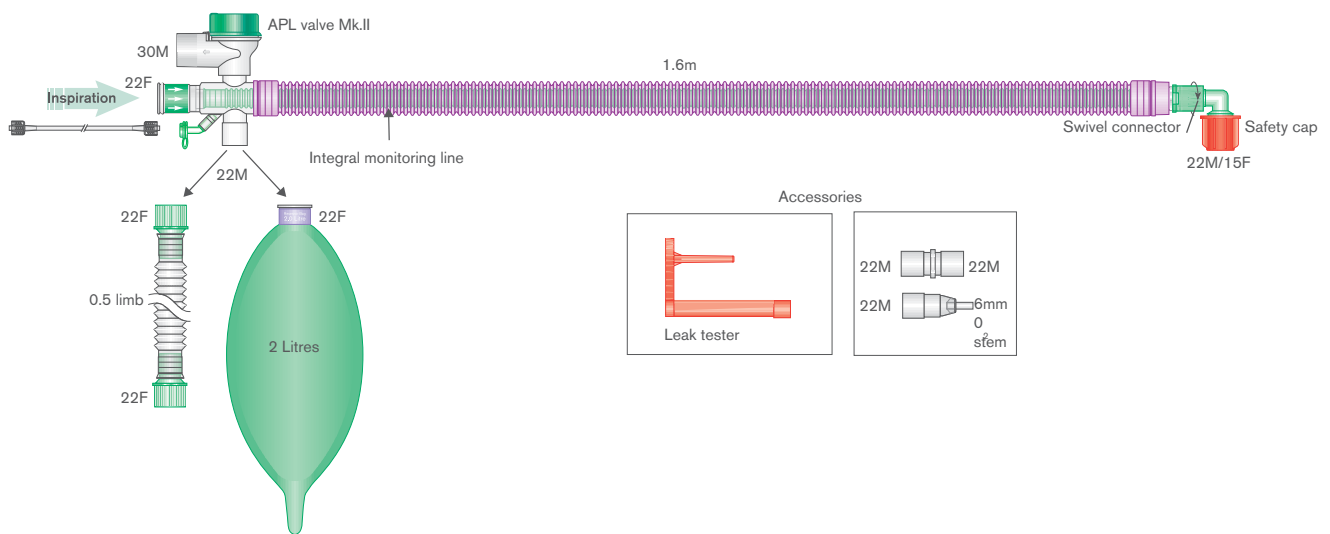


👁 system illustrated

Code	Description	Box Qty.
👁 2902100	30mm Silver Knight™ anti-microbial UniFlow™ coaxial breathing system with integral monitoring line and 0.5m limb, 1.6m	12
2903100	30mm Silver Knight anti-microbial UniFlow coaxial breathing system with integral monitoring line and 0.5m limb, 2.4m	10

Make an enquiry

### Deluxe breathing systems with monitoring line



👁 system illustrated

Code	Description	Box Qty.
👁 2910100	30mm Silver Knight anti-microbial UniFlow deluxe coaxial breathing system with 2L bag, integral monitoring line and 0.5m limb, 1.6m	12
2911100	30mm Silver Knight anti-microbial UniFlow deluxe coaxial breathing system with 2L bag, integral monitoring line and 0.5m limb, 2.4m	10

Make an enquiry

Silver Knight



Intersurgical Ltd, Crane House, Molly Millars Lane, Wokingham, Berkshire, RG41 2RZ, UK  
 T: +44 (0)118 9656 300 F: +44 (0)118 9656 356 info@intersurgical.com www.intersurgical.com



The manufacturer Intersurgical Ltd is certified to ISO 9001:2008, ISO 13485:2003 and ISO 14001:2015

**Please think before you print**  
 Save energy and paper.  
 If you must print this information sheet please print it double sided.

IS5.8 • Issue 6 01.18