Intersurgical Pulmo-Protect™ lung function filter

Forced expiratory and inspiratory manoeuvres are used to assess a patient's lung function. This assessment helps diagnose the extent of any disease process in the patient's lung, as a pre and postoperative assessment, during smoking cessation and occupational health programmes.

During these tests patients may generate peak flows as high as 12 L/sec (720 LPM) and expel infective droplets, which could contaminate the pulmonary function test equipment. As a result cross infection between patients is a real risk[1].

Pulmo-Protect combines low resistance with a high bacterial and viral efficiency filter designed specifically to protect the patient and equipment during lung function tests.

Pulmo-Protect provides:

- Protection of pulmonary function test equipment
- High filtration properties reduces risk of contamination between patients
- Low resistance performance ensures efficacy of results and complies with ATS/ERS recommendations[2]
- Low functional volume
- Microbiological filtration effectiveness has been independently tested and validated to provide >99.99% efficiency against bacteria and viruses[3]
- Flexible, comfortable, disposable mouth piece helps with patient compliance and improve the effectiveness of the test
- Comfortable single patient nose clip prevents patient-to-patient touch contamination
- Device compatible range of colour coded filters available individually or as a complete pulmonary function test kit

Contaminants

Filtered air

Expiratory breath

Electrostatic filter

1691000   1691050   1691010

Pulmo-Protect options

For use with the following test devices	Pulmo-Protect lung function filter	Filter, mouthpiece and nose clip	Filter, flexible mouthpiece and nose clip
JAEGER®, MasterScreen, SensorMedics®, Vmax™, Micro Medical®, Chest and Microgard®	1691000 (Qty 50) ○ ◉	1691050 (Qty 30) ○ ◉	1691010 (Qty 30) ○ ◉
Medisoft, BodyBox, HypAir Compact + and SpiroAir	1691001 (Qty 50) ⬤	1691051 (Qty 30) ⬤	1691011 (Qty 30) ⬤
Fukuda Denshi®, SP-350 and Fudac-77	1691002 (Qty 50) ⬤	1691052 (Qty 30) ⬤	1691012 (Qty 30) ⬤

Accessories

Code		Description	Box Qty.
1691020		Flexible mouthpiece	10
1691040		Nose clip	35
1692001	*NEW*	Pulmo-Protect lung function filter adaptor for KoKo® ID 45mm compatible with 1691000	50
1692002	*NEW*	Pulmo-Protect lung function filter adaptor for COSMED X9 compatible with 1691000	50
1692003	*NEW*	Pulmo-Protect lung function filter adaptor for COSMED Flowmeter compatible with 1691000	50

Make an enquiry

References:

1. Journal of Respiratory Medicine 2005.09.015 An audit into the efficacy of single use bacterial/viral filters for the prevention of equipment contamination during lung function assessment.

2. European Respiratory Journal 2005; 26: 319–338 Standardisation of spirometry M.R. Miller, J. Hankinson, V. Brusasco, F. Burgos, et al. 3. Nelson Labs 771942B.1

4. Nelson Labs 771943B.1

BREATHING SYSTEM FILTERS

The CareStar® breathing system filter significantly contributes to infection prophylaxis in anesthesia and ventilation treatment through high retention rates.

– High-performance electrostatic filter
– Patient-side or device-side use
– Minimal workload and low cost
– Sampling connector with tethered cap
– Sampling port in convenient 45° angle
– Transparent housing for visual control
– Standardized connectors for safe connection
  to other components
– Clear labeling and red color coding
  for quick identification

A

A **Electrostatic filter CareStar® 45,**
disposable, 45 ml deadspace, 50 pcs. MP01755

MT-4387-2007

B

B **Electrostatic filter CareStar® 40A,**
disposable, 40 ml deadspace, angled, 50 pcs. MP01765

MT-4747-2007

C

C **Electrostatic filter CareStar® 30,**
disposable, 30 ml deadspace, 50 pcs. MP01770

MT-0011-2007

Not all articles are available worldwide.

BREATHING SYSTEM FILTERS

SPECIFICATIONS

	Filter CareStar® 45	Filter CareStar® 40A	Filter CareStar® 30
Part number	MP01755	MP01765	MP01770
Deadspace (ml)			30
Recommended tidal volume (ml)			100 to 1,500
Bacterial retention (%)**			≥ 99.99
Viral retention (%)**			≥ 99.99
Filtration method			Electrostatic
Moisture loss* (mg H_2O/l air)			–
Moisture output (mg H_2O/l air)			–
Resistance (mbar)			< 1 at 15 l/min
Weight (g)			23
ISO connectors			22M/15F – 22F/15M
Sampling port			Luer Lock with tethered cap
Housing			Polypropylene
Maximum duration of use			24 hours
Shelf life in undamaged packaging			3 years
Product			PVC-free/ Latex free

SPECIFICATIONS

	Filter SafeStar® 80	Filter SafeStar® 60A	Filter SafeStar® 55
Part number	MP01785	MP01795	MP01790
Deadspace (ml)			
Recommended tidal volume (ml)			
Bacterial retention (%)**			
Viral retention (%)**			
Filtration method			
Moisture loss* (mg H_2O/l air)			
Moisture output (mg H_2O/l air)			
Resistance (mbar)			
Weight (g)			
ISO connectors			
Sampling port			
Housing			
Maximum duration of use			
Shelf life in undamaged packaging			
Product			

Cleanroom manufactured according to EN ISO 14644-1:2014.

*According to ISO 9360-1:2000.
**Test has been performed by Nelson Lab, USA, before 2010

Not all articles are available worldwide.

CATHETER MOUNTS AND AIRWAY CONNECTORS

4. CATHETER MOUNTS AND AIRWAY CONNECTORS

- Smoothbore products provide low resistance to flow while external coil reduces kinks and blockages
- Extendable product provides a lightweight and flexible solution
- Double swivel connector increases ease of use
- Double cap to maintain PEEP during suctioning or bronchoscopy
- Each catheter mount and airway connector is equipped with a red safety cap so that the system is completely closed and protected until directly prior to use on the patient
- 22F/15M connector on device side as a two-in-one solution
- Standardized connectors for safe connection to other components
- Luer Lock port for gas sampling
- Disposable convenience enhances workflow
- PVC-free design of gas leading components eliminates risk of softeners such as DEHP

A **Catheter mount ErgoStar® CM 40, disposable, 10 cm, double swivel elbow, 50 pcs.**   MP01840

A

D-12406-2014

B

D-12407-2014

C

Compact™ extendable anaesthetic breathing systems providing a versatile solution

Optimum compression

Designed for economy, the unique Compact extendable anaesthetic breathing system can be compressed to almost one fifth of its extended length. Supplied in compressed form increasing the number of systems per box, there can be significant space and cost savings compared with other breathing systems. A standard box of Compact systems could provide a hospital with an extra three weeks supply.

- More Compact systems per box
- Lower storage requirements
- Lower freight volume costs
- Improved disposal

Low resistance to flow

Designed with a shallow profile resulting in more laminar gas flow and lower resistance to flow. At 60 L/min, resistance to flow of the extended tube is 1.0 cm H_2O per metre.

Lightweight system

Lighter than other extendable systems ensuring that the 'pull' on the patient's airway device is kept to a minimum.
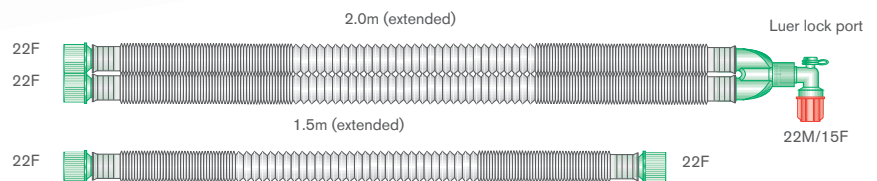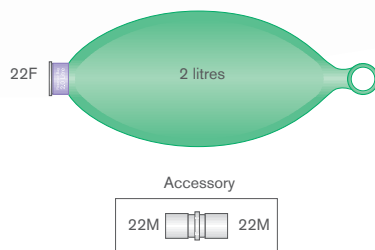
Low compliance

The compliance of the Compact system tube when extended is 4.4ml/kpa per metre of tube, which is less than that required in the ISO 5367:2000 standard.

Adjustable length

Packed and supplied in the shortest length for simple extension to the length required for clinical use.

Easy positioning

The nature of the Compact system tube allows for it to be set in any position required. This results in multiple positioning possibilities, ideal for head and neck surgery where the system can be positioned away from the patient, and does not require any additional patient connections.

Code	Description	Box Qty.
2150000	22mm Compact, extendable breathing system with luer elbow, ≥1.5m	70
2151000 (S*)	22mm Compact, extendable breathing system with luer elbow, ≥2.0m	70 (30*)
2152000	22mm Compact, extendable breathing system with 3L bag and limb, ≥2.0m	35
2153000	22mm Compact, extendable breathing system with 3L bag and filter and limb, ≥2.0m	35
2154000 (S*)	22mm Compact, extendable breathing system with 2L bag and limb, ≥2.0m	35 (20*)
2155000	22mm Compact, extendable breathing system with two re-sealable water traps and limb, ≥3.0m	12
2156000	22mm Compact, extendable breathing system with 2L bag and limb, ≥3.0m	25
2157000	22mm Compact, extendable breathing system with 2L bag and limb, ≥3.0m	25
2158000	22mm Compact, extendable breathing system with luer elbow, ≥3.0m	40
1526000	Compact, extension tube ≥2.0m	100

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).
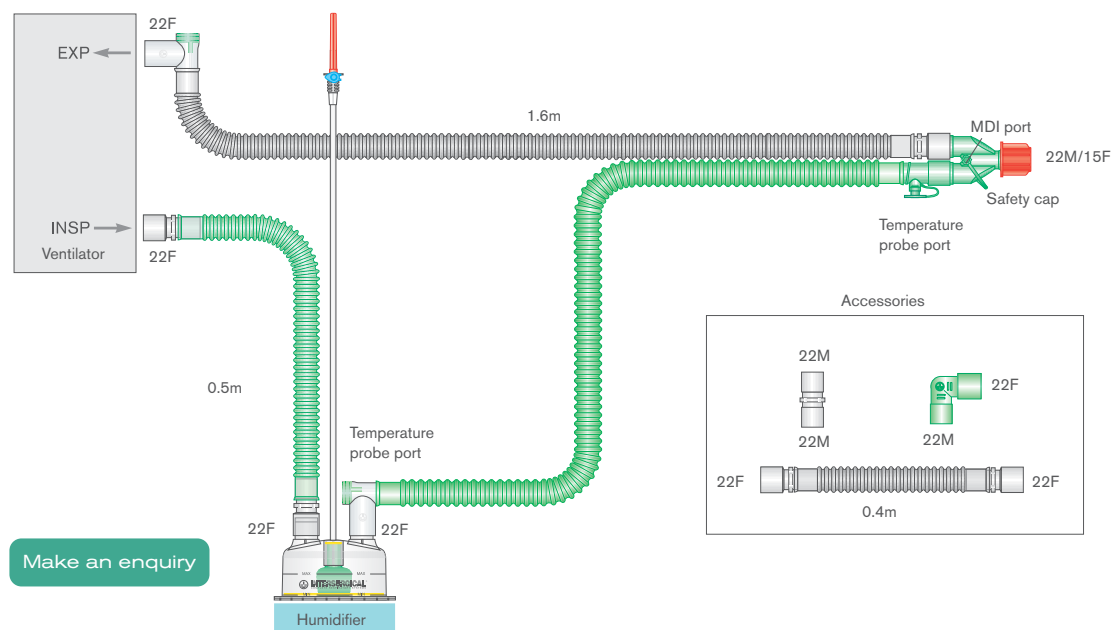
Flextube™ breathing systems for active humidification with heated wire

Available with single or dual heated wires and an auto fill humidification chamber if required. All Intersurgical active humidification breathing systems are suitable for use with the majority of humidification base units.

Silver Knight™ breathing systems include anti-microbial protection designed to help slow down the proliferation of micro-organisms and reduce cross infection within the Intensive Care environment. On heated wire Silver Knight breathing systems, both the green inspiratory and the lilac expiratory limbs include the anti-microbial additive for added protection against healthcare acquired infections.

Please see page 5 for a guide to our tube types.

Dual heated wire

👁 system illustrated

Code	Description	Box Qty.
2026000	22mm Flextube dual heated wire breathing system with extra limbs. ≥ 1.6m	10
👁 2026310 (S*)	22mm Flextube dual heated wire breathing system with auto-fill chamber and extra limb. ≥ 1.6m	7 (6*)
2026100	22mm Flextube – Silver Knight dual heated wire breathing system with extra limb. ≥ 1.6m	10
2026131	22mm Flextube – Silver Knight dual heated wire breathing system with auto-fill chamber and extra limb. ≥ 1.6m	7
4525850	15mm Flextube dual heated wire breathing system with extra limb. ≥ 1.6m	15
6392810	10mm Flextube dual heated wire breathing system with auto-fill chamber and extra limb. ≥ 1.6m	7

Single heated wire

Code	Description	Box Qty.
2025000	22mm Flextube single heated wire breathing system with water trap and extra limb. ≥ 1.6m	10
2025310 (S*)	22mm Flextube single heated wire breathing system with water trap, auto-fill chamber and extra limb. ≥ 1.6m	7 (5*)
2025100	22mm Flextube – Silver Knight single heated wire breathing system with water trap and extra limb. ≥ 1.6m	10
2025131	22mm Flextube – Silver Knight single heated wire breathing system with water trap, auto-fill chamber and extra limb. ≥ 1.6m	7
4504810	15mm Flextube single heated wire breathing system with water trap, auto-fill chamber and extra limb. ≥ 1.2m	7
6091810	10mm Flextube single heated wire breathing system with neo water trap, auto-fill chamber and extra limb. ≥ 1.6m	20

Ⓢ Sterile option available   🛡 Silver Knight - please see more information on page 60

(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).

Reservoir bags – single-use

We offer a range of single-use reservoir bags that have excellent compliance characteristics for use in various clinical applications. Available in a range of sizes and bag neck fittings, they are totally latex-free.

The range also includes two bags with our 'Baggins the Bear' symbol for use with paediatric systems.

Please see our website for support material for paediatrics.

Code	Description	Box Qty.
2830000	Reservoir bag, 3L with anti occlusion cage mount, 22F neck	10
2820000	Reservoir bag, 2L with anti occlusion cage mount, 22F neck	10
2810000	Reservoir bag, 1L with anti occlusion cage mount, 22F neck	10
2811000	Reservoir bag, 1L with anti occlusion cage mount, 15F neck	10