



## Respiratory device filters

A range of replacement filters for the protection of respiratory equipment. CPAP, bilevel, oxygen concentrators and suction devices.



## Device filtration

**A range of replacement filters for the protection of respiratory equipment. CPAP, bilevel, oxygen concentrators and suction devices.**

As a specialist in respiratory care and filtration Intersurgical is pleased to now offer a wide range of filtration solutions for devices which are in common use in the treatment of patients with respiratory disorders. We can provide a replacement filtration solution for the majority of CPAP, bilevel devices, oxygen concentrators and suction devices commonly found 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	50	50
Material	Polypropylene	Clear ABS and polycarbonate, Hydrophobic pleated membrane filter	Clear ABS, polypropylene electrostatic membrane filter
Connections	8mm barbed	22M/15F-55F	22M-22F
Bacterial filtration efficiency	99.999%	>99.9999%	>99.99%
Viral filtration efficiency	99.999%	>99.99999%	>99.99%
Compressible volume	–	120ml	80ml
Effective filtration area	22cm <sup>2</sup>	–	33cm <sup>2</sup>
Filtration ability	0.027 micron	–	–
Resistance to flow at 60L/min	–	–	0.8cmH <sub>2</sub> O
Weight	–	56g	28g

## Suction unit filters



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
Bacterial filtration efficiency	99.999%	>99.999%
Viral 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 Respirationics® EverFlo™
Box quantity	10	150	10
Bag quantity	1	10	1
Material	HEPA filter	–	HEPA filter
Bacterial filtration efficiency	99.999%	–	99.999%

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

EverFlo is a trade mark Respirationics, 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
Bacterial 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	–
Bacterial filtration efficiency	99.999%	–

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



Code	1695003	1695004	1695005
Description	Foam pre-filter for Breas® Vivo™ 30/40	Filter for Breas® 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.

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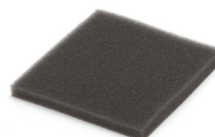
## Foam pre-filters and filters for CPAP/bilevel equipment



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® SOMNOcomfort™/SOMNOsoft™	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

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SOMNOcomfort and SOMNOsoft are trade marks of Weinmann.

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

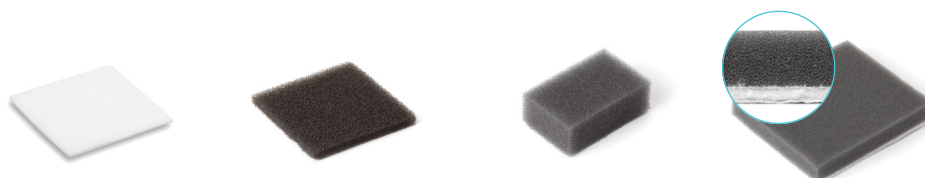


Code	1695027	1695028	1695021
Description	Foam pre-filter for Weinmann® SOMNObalance™	Filter for Weinmann® SOMNObalance™	Filter for Fisher & Paykel® ICON®
Box quantity	50	50	500
Bag quantity	10	10	10
Dimensions	70mm x 30mm	68.5mm x 29.5mm	20mm tapering to 13.8mm at the top (trapezoidal)



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

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