



Medical

Pall Ultipor® 100



Extended life Breathing System Filter for use in anesthesia and intensive care

Features

- ▶ High efficiency pleated hydrophobic membrane
- ▶ > 99.999% retention of airborne bacteria and viruses
- ▶ 100% retention of liquidborne microorganisms
- ▶ Retains natural rubber latex allergens
- ▶ 100% individually integrity and efficiency tested
- ▶ Smooth, transparent housing
- ▶ Compatible with drug nebulization administered between the filter and the patient
- ▶ Maximum use life of 48 hours
- ▶ Patient side of filter clearly indicated

Benefits

- ▶ Protects patients and staff against airborne and liquidborne microbial pathogens
- ▶ Can be used during patient anesthesia and then carried over to post-operative ventilation and respiratory therapy
- ▶ 48-hour maximum use life reduces the need for circuit manipulation
- ▶ Superior patient comfort
- ▶ Provides optimal humidification

Filtration. Separation. Solution.SM

Specifications

Filter Medium

Pleated hydrophobic membrane

Airborne Bacterial/Viral

Removal Efficiency

> 99.999%

Liquidborne Bacterial/Viral

Removal Efficiency

100%

Humidification

Water loss: 8 mg/L up to 800 mL tidal volume

Resistance to Air Flow

Approximately 2 cm H₂O at 60 L/min

Construction

Transparent, non-conductive housing

Connections

Tapered connectors (ISO5356-1: 2004)

Patient side: 15 mm ID + 22 mm OD

Breathing system side: 22 mm ID

Filter Volume

Approximately 85 mL

Weight

Approximately 47 g

Recommended Use

Change filter after 24 hours. Use life may be extended to 48 hours if wet nebulization is not performed. Single use (change for each new patient). Use only at the patient end of the circuit.

Product Features

High Efficiency Hydrophobic Membrane Establishes a Barrier Against Microbial Pathogens:

The Pall Ultipor® 100 protects against cross contamination between patients in anesthesia.^{1,2,3} It has been demonstrated to contribute to a reduction in the rate of late-onset, hospital-acquired ventilator-associated pneumonia as compared to a conventional heated wire humidifier in a mechanical ventilation circuit.⁴ The Ultipor 100 has been validated to remove *Mycobacterium tuberculosis*,^{5,6} *Staphylococcus aureus*,⁷ Hepatitis C virus,² and HIV.⁹ When evaluated among a group of 104 breathing filters using the particle retention test specified in ISO23328-1:2003,⁹ it demonstrated outstanding filtration efficiency.

Pall Breathing System Filters have been recommended to protect patients and staff against the risk of SARS during mechanical ventilation.^{10,11}

All Pall Breathing System Filters contain a proprietary fine hydrophobic filter medium that is tested during manufacturing to demonstrate a water intrusion pressure (hydrophobicity) in excess of 50 cm water column.

Optimal Humidification

The Pall Ultipor 100 efficiently heats and humidifies ventilation gases for respiratory therapy patients.^{12,13} It preserves the rheological and physical properties of patient airway mucus, and contributes to the maintenance of physiological mucus clearance.¹⁴

Latex Safety

The Pall Ultipor 100 is free of natural rubber latex. Pall Breathing System Filters have been tested to verify the retention of natural latex rubber allergens in liquids and airborne particles.^{15,16}

Product Life with Drug Nebulization

The Ultipor 100 may be left in place during nebulization of drug solutions administered between the filter and the patient. If nebulization is performed with the filter in place, the filter has a maximum use life of 24 hours. When a metered dose inhaler is used, or when no drugs are nebulized with the filter in place, the maximum use life of the Ultipor 100 is 48 hours.

Quality Assurance

Each Pall Ultipor 100 Breathing System Filter is individually tested during manufacture for:

- ▶ **Filter Integrity** – Assures filter housing and seal quality
- ▶ **Filtration Efficiency** – Assures filter membrane quality using a non-destructive test

In addition, a detailed Product Validation Certificate is issued for each filter manufacturing lot, providing documentation of expected filter performance in protecting patients, staff, breathing systems, and equipment.

Ordering Information

Ultipor 100 Breathing System Filter

Description	Reorder Code		Packaging Units/Case
	USA	Europe	
Ultipor 100 Breathing System Filter	BB100A	BB100E	50/case
Ultipor 100 with monitoring port	BB100AP	BB100P	50/case
Ultipor 100 with 15 mm flex tube	BB100AF	BB100EF	50/case
Ultipor 100 with monitoring port and 15 mm flex tube	BB100APF	BB100PF	50/case

Sterile variants: order codes as above, add S for sterile product.

A range of catheter mounts and connectors are available. Consult your Pall representative for details.

References

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7. Rosales, M. & Dominguez, V. 1992. 2nd International Conference on Prevention of Infection, Nice, France, 4-5th May.
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11. American Association of Anesthesiologists, 2003, www.asahq.org/clinical/pracadvvars.htm.
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13. Martin, C. et al. 1995. Presented at the ATS/ALA meeting, Seattle, WA, USA, May.
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