

The **AA001** and **AA031** nasal interfaces feature **a bacterial and viral, pleated, hydrophobic, GMF (glass microfiber), HEPA (High-Efficiency Particulate Air) filter**, designed to prevent bacterial and viral contamination between patients.

The efficiency of the AA001/AA031 filter is as follows:

- Minimum bacterial efficiency of at least 99.999%*
- Minimum viral efficiency of at least 99.996%*



Optiflow Filtered Nasal Interface
with CO₂ Sampling



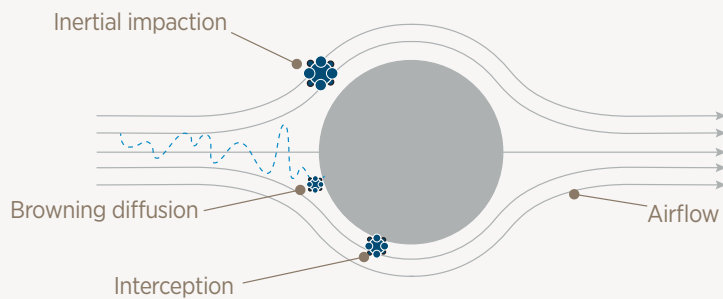
Optiflow Filtered Nasal Interface

The filter achieves its performance by using high-efficiency filtration media, which is then pleated to increase the filtration area. The media's hydrophobic properties enable it to repel fluids that may accumulate during the delivery of humidification. This hydrophobicity ensures filtration efficiency is maintained to prevent the risk of contamination that may be caused by fluid passing through the system.

The filter works by mechanical filtration: diffusion, interception and inertial impaction. Particles that are larger than the pore size of the filter media are captured and those that are smaller are intercepted by the fibers.

The Mechanisms of Filtration for the AA001/AA031 interface filter

Particulate matter is captured within the filter by three main methods: diffusion, interception, and inertial impaction.



Adapted from Brown P et al., Fibrous filter media, 2017.

Diffusion: Brownian motion causes the particle to move in irregular patterns increasing its chance of making contact with and adhering to the filter fiber.

Interception: A particle which is following a gas streamline touches the filter fiber and is captured

Inertial impaction: The inertia of a large particle means that it is unable to quickly adjust to the abrupt changes in streamline direction near a filter fiber. The particle will continue along its original path, hitting the filter fiber.

The filtration is one of the key features of the AA001/AA031 interface filter, **and enables compatible circuit kits to be utilized for multi-patient use.**

**The filter's particulate, bacterial and viral efficiency has been tested, based on ISO-23328-1 and ASTM F2101. Testing was undertaken at a qualified, independent facility that develops specific protocols in line with ISO and ASTM standards to simulate the types of challenges that a filter may be subjected to in clinical settings.*



Consumables

AA001S	Optiflow Filtered Nasal Interface – Small Size	10/box
AA001M	Optiflow Filtered Nasal Interface – Medium Size	10/box
AA001L	Optiflow Filtered Nasal Interface – Large Size	10/box
AA031S	Optiflow Filtered Nasal Interface with CO ₂ Sampling - Small Size	10/box
AA031M	Optiflow Filtered Nasal Interface with CO ₂ Sampling - Medium Size	10/box
AA031L	Optiflow Filtered Nasal Interface with CO ₂ Sampling - Large Size	10/box