



**Product List**

- M1182629, D-fend™ Pro Water Trap, Multi-Patient Disposable
- M1200227, D-fend™ Pro+ Water Trap, Single-Patient-Use Disposable
- 8002174, Mini D-fend™ Water Trap, Disposable
- 876446-HEL, D-fend™, Black Water Trap, Multi-Patient Disposable
- 881319-HEL, D-fend™+, Green Water Trap, Single-Patient-Use Disposable

# Water Trap Filtration

## GE Healthcare Water Traps for Gas Monitoring Modules

### Disclaimers

- The D-fend Pro(+), Mini D-fend and D-fend(+) water traps inhibit bacteria, viruses, water and mucus from entering the respiratory measurement system. An independent third-party lab has tested for viral filtration efficacy (VFE) against a surrogate infectious material known as Phi X 174, one of the smallest viruses available for testing. No effectiveness testing has been performed for recent viruses like COVID-19 (or SARS) with any of the water traps listed.
- Use the water trap according to instructions provided with the water trap.
- For heightened precaution with patients suspected or confirmed COVID-19 infection, the water traps may be replaced more frequently than indicated on the instructions for use.



**Table 1. D-fend Pro Water Trap, Multi-Use and D-fend Pro+ Water Trap, Single-Use**

<b>Bacterial Filtration Efficiencies</b>	<b>&gt; 99.999970%</b>
<b>Viral Filtration Efficiencies</b>	<b>&gt; 99.9988%</b>
<b>Tidal Volume range</b>	<b>Water traps are positioned at end of the side stream gas sampling line. Sampling rate is 120 mL/ min, tidal volume from 5 mL to 2000 mL depending on airway adapter.</b>  <b>Please note that the filtration efficiency is not dependent on the tidal volume.</b>
<b>Internal Volume</b>	<b>Container volume is &gt; 5.5 mL</b>
<b>Moisture output</b>	<b>Water vapor will pass through the filter, water condensate does not</b>
<b>Resistance</b>	<b>A clean and unused water trap with 105 mL/ min air flow resistance is between 22 and 52 mbar</b>
<b>Filter type</b>	<b>PTFE oleophobic membrane, 0.2 micro membrane on polyester backer</b>

There are application-specific water traps for Anesthesia and Critical Care. The M1182629 D-fend Pro Water Trap is intended for multiple patients in an operating room environment, whereas the M1200227 D-fend Pro+ Water Trap is for single-patient-use in an intensive care environment.



**Table 2. Mini D-fend Water Trap**

<b>Bacterial Filtration Efficiencies</b>	>99.99998%
<b>Viral Filtration Efficiencies</b>	>99.99997%
<b>Tidal Volume range</b>	<p>Not applicable. Water traps are positioned at end of the side stream gas sampling line. Sampling rate is 150 mL / min. Tidal volume is not measured by the associated gas module (E-miniC).</p> <p>Please note that the filtration efficiency is not dependent on the tidal volume.</p>
<b>Internal Volume</b>	Container volume is > 5.5 mL
<b>Moisture output</b>	Water vapor will pass through the filter, water condensate does not
<b>Resistance</b>	The maximum flow resistance over the water trap for the Mini D-fend is 25mbar at 200 mL / min.
<b>Filter type</b>	Gore™ Medical Membrane, a 0.2 micrometer membrane on nonwoven polyethylene/polypropylene



**Table 3. D-fend, Black, Multi-Use and D-fend+, Green, Single-Use**

<b>Bacterial Filtration Efficiencies</b>	>99.99998%
<b>Viral Filtration Efficiencies</b>	>99.99997%
<b>Tidal Volume range</b>	<p>Water traps are positioned at end of the side stream gas sampling line. Sampling rate is 200 mL / min. Tidal volume range is from 15 mL to 2000 mL depending on the airway adapter.</p> <p>Please note that the filtration efficiency is not dependent on the tidal volume.</p>
<b>Internal Volume</b>	Container volume is > 5.5 mL
<b>Moisture output</b>	Water vapor will pass through the filter, water condensate does not
<b>Resistance</b>	The maximum flow resistance over the water trap is 20 mbar at 200mL / min
<b>Filter type</b>	Gore™ Medical Membrane, a 0.2 micrometer membrane on nonwoven polyethylene/polypropylene

There are application-specific water traps for Anesthesia and Critical Care. The 876446-HEL D-fend Water Trap is intended for multiple patients in an operating room environment, whereas the 881319-HEL D-fend+ Water Trap is for single-patient-use in an intensive care environment.

## To ensure maximum patient and clinician safety, please adhere to the following guidelines:

- Use a reliable bacterial/viral filter at the patient circuit Y-piece. Follow filter guidelines for appropriate replacement frequency.
- Gas sampled by the module should be directed to a scavenging system.

## Additional Information

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- Visit [www.apsf.org](http://www.apsf.org) for information regarding:
  - [Recommendations for Airway Management in a Patient with Suspected Coronavirus \(2019-nCoV\)](#)
  - [FAQ on Anesthesia Machine Use, Protection and Decontamination During the COVID-19 Pandemic](#)
- CARESCAPE Respiratory Modules User's Manual
- Instructions For Use:
  - [D-fend™ Pro Water Trap, Multi-Patient Disposable](#)
  - [D-fend™ Pro+ Water Trap, Single-Patient-Use Disposable](#)
  - [Mini D-fend™ Water Trap , Disposable](#)
  - [D-fend™, Black, Multi-Patient Disposable](#)
  - [D-fend™+, Green, Single-Patient-Use Disposable](#)
- Technical Specifications:
  - CARESCAPE Respiratory Modules specifications
  - Compact Airway Modules specifications
  - E-miniC specifications
- [D-Fend Pro white paper](#)
- Monitoring solutions SA for Respiratory catalog

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DOC2395783 06/20