



## HMEFs

Disposable heat and moisture exchangers  
with integrated bacterial/viral filter



Heat and Moisture Exchange Filters (HMEFs) reduce the need for cleaning tubing and equipment and are convenient for healthcare personnel when compared to the use of active humidifiers. These highly efficient filters help protect the patient, healthcare personnel and the equipment from various microorganisms present in the breathing circuit.

GE's HMEF products meet filtration requirements for adult and pediatric applications in the operating room, intensive care unit, and other respiratory care environments.

With a proven history of success, Vital Signs products offer you and your patients efficient and effective humidification and filtration.

- Excellent moisture output reduces the need for active humidification
- Designed for low breathing resistance, reducing the patient's work of breathing
- Light-weight, latex-free material enhances patient comfort
- Transparent housing makes it easy to determine replacement
- Sampling port allows for convenient gas sampling proximal to the patient



Angled HMEFs are used without an additional elbow, thereby reducing weight and dead space, as well as eliminating a possible disconnect point.



Our cap-and-strap feature attaches the sampling port cap to the HMEF, ensuring it won't be lost or misplaced.

## Technical Data

	HMEF 1000 HMEF 1000/S Angled HMEF 1000/S†	HMEF 750 HMEF 750/S Angled HMEF 750/S†	HMEF 500	HMEF Mini
Tidal volume range (ml)	300-1000	120-750	120-500	60-500
Filtration efficiency <sup>1</sup>				
Bacterial (%)	99.9999	99.9999	99.999	99.999
Viral (%)	99.99	99.998	99.98	99.98
Moisture output (mg H <sub>2</sub> O/l) <sup>2</sup>				
VT 250 ml	N/A	32	31	31
VT 500 ml	33	30	30	27
VT 750 ml	32	27	N/A	N/A
VT 1000 ml	30	N/A	N/A	N/A
Moisture loss (mg H <sub>2</sub> O/l) <sup>2</sup>				
VT 250 ml	N/A	5.5	6.5	6.5
VT 500 ml	4.5	7.5	7.5	10.5
VT 750 ml	5.5	10.5	N/A	N/A
VT 1000 ml	7.5	N/A	N/A	N/A
Pressure drop kPa/cm H <sub>2</sub> O) <sup>2</sup>				
30 l/min	0.10 (1.0)	0.09 (0.9)	0.15 (1.5)	0.14 (1.4)
60 l/min	0.23 (2.3)	0.22 (2.2)	0.33 (3.3)	0.32 (3.2)
Dead space (ml)	77	34	30	21
Weight (g)	24	17	15	14
Connectors				
Patient side (mm)	15M/22M	15M/22M	15F/22M	15F/22M
Machine side (mm)	15M/22F	15M/22F	15M/22F	15M/22F
Sampling port	1000: no 1000/S: yes Angled 1000/S: yes	750: no 750/S: yes 750: no	Luer lock	Luer lock

† Connectors : Patient side (mm) : 15M

## Changing Frequency

Always replace the HMEF after each patient. When used continuously on a single patient, change the HMEF every 24 hours or more frequently as required.

## Contraindications

- HMEFs are contraindicated in patients producing fulminating frothy secretions within their airways and lungs.
- HMEFs should not be used on patients with very small tidal volumes, for example, neonates.
- HMEFs should not be used with active humidifiers or nebulizers.

## Instructions For Use

For detailed information on use of product, always refer to the Instructions For Use accompanying the device.

1 Measured by Nelson Laboratories Inc., USA. Records on file.

2 Measured according to standard ISO 9360:2000.

These products are in conformity with the relevant provisions of the Council Directive 93/42/EEC, concerning medical devices, Annex I - Essential Requirements.

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