

Biotronix
Healthcare®

Filtration and HUMIDIFICATION



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Biotronix *Healthcare*®

Filtration and
Humidification



Heat and Moisture Exchange Filters

Biotronix Healthcare's Heat & Moisture Exchangers (HMEs) combines the efficiency of dedicated breathing filters with optimum moisture return. With bacterial/viral filtration efficiencies in excess of 99.999%, and high moisture retention, Biotronix offers an innovative product, for the proper application. These highly efficient filters help protect the patient, healthcare personnel and the equipment from microorganisms present in breathing circuit. Our HMEF products line meet requirements for adult and pediatric applications in the operating room, intensive care unit and most respiratory care environments.

Features and Benefits:

- Superior filtration technology with high efficiency filtration media
- Bacterial filtration efficiency
- Viral filtration efficiency
- Small dead space
- Low resistance
- No dead angle
- Gas sampling port with luer design
- Excellent humidification efficiency
- Medical grade K-resin with greater strength, clear appearance, and smoother surface
- Pretreated polyester foam moisture exchanger element
- Unique shell welding technology

Heat and Moisture Exchange Filters



REF: BA1001
Pediatric HMEF



REF: BA1002
Heat and Moisture
Exchanger and Filter



REF: BA1003
HMEF with Flex Tube



REF: BA1003H
HMEF Mechanical
Filter (HEPA)

	PEDIATRIC HMEF BA1001	ADULT HMEF BA1002	ADULT HMEF BA1003	ADULT HMEF/HEPA BA1003H
Tidal Volume	70-600ml	250-1500ml	250-1500ml	250-1500ml
Bacterial Filtration Efficiency	> 99.999%	> 99.999%	> 99.999%	> 99.9999%
Viral Filtration Efficiency	> 99.99%	> 99.99%	> 99.99%	> 99.999%
Moisture Output	250ml, mg/L: 33.3 500ml, mg/L: 27.8	250ml, mg/L: 35.3 500ml, mg/L: 31.3 1000ml, mg/L: 30.4	250ml, mg/L: 37.3 500ml, mg/L: 33.3 1000ml, mg/L: 31.3	250ml, mg/L: 37.3 500ml, mg/L: 36.0 1000ml, mg/L: 32.3
Pressure Resistance (cmH2O)	15L/min: 0.8 30L/ min: 1.6	15L/min: 0.4 30L/ min: 2.0	30L/min: 0.9 60L/min: 2.0	30L/min: 1.5 60/ min: 2.8
Dead Space	19ML	60ML	89/(60ML)	85ML
Connectors	Patient Side : 22M/15F Machine Side: 15M	Patient Side : 22M/15F Machine Side: 22F/15M	Patient Side : 15F Machine Side: 22F/15M	Patient Side : 22M/15F Machine Side: 15M
Media	Foam+Flat Media	Foam+Flat Media	Foam+Flat Media	Foam+Pleated Glass Fiber
Weight	19G	36G	45G	41G
Sampling Port	YES	YES	YES	YES
Flex Tube	NO	NO	YES	NO
Case Quantity	50	50	25	25

Heat and Moisture Exchange Filters



REF: BA1004
HMEF 1000 (s)



REF: BA1005
HMEF 1000 (s) with Flex Tube



REF: BA1006
HMEF 1000



REF: BA1007
HMEF 1000 with Flex Tube

	ADULT HMEF BA1004	ADULT BA1005	ADULT BA1006	ADULT BA1007
Tidal Volume	150 - 1000ML	150 - 1000ML	150 - 1000ML	150 - 1000ML
Bacterial Filtration Efficiency	> 99.999%	> 99.999%	> 99.999%	> 99.999%
Viral Filtration Efficiency	> 99.99%	> 99.99%	> 99.99%	> 99.99%
Moisture Output	250ml, mg/L: 35.0 500ml, mg/L: 33.0 1000ml, mg/L: 31.0	250ml, mg/L: 35.0 500ml, mg/L: 33.0 1000ml, mg/L: 31.0	250ml, mg/L: 36.0 500ml, mg/L: 34.0 1000ml, mg/L: 33.0	250ml, mg/L: 36.0 500ml, mg/L: 34.0 1000ml, mg/L: 33.0
Pressure Resistance (cmH2O)	30L/min: 0.8 60L/min: 1.9	30L/min: 0.8 60L/min: 1.9	30L/min: 0.8 60L/min: 1.9	30L/min: 0.8 60L/min: 1.9
Dead Space	43ML	83(43ML)	70ML	105(70ML)
Connectors	Patient Side : 22M/15F Machine Side: 22F/15M	Patient Side : 15F Machine Side: 22F/15M	Patient Side : 22M/15F Machine Side: 22F/15M	Patient Side : 15F Machine Side: 22F/15M
Media	Foam+Flat Media	Foam+Flat Media	Foam+Flat Media	Foam+Flat Media
Weight	21G	30.5	24.5	33
Sampling Port	YES	YES	YES	YES
Flex Tube	NO	YES	NO	YES
Case Quantity	25	30	25	30

Heat and Moisture Exchangers (HME)

Biotronix Healthcare's Heat and Moisture Exchangers (HME) are the perfect choice to address common concerns like proper humidification associated with mechanical ventilation. Our Biotronix HME's are a high performance HME's using unique shell welding technology, medical K-resin for greater strength and polyester foam moisture exchanger elements.

Features and Benefits:

- Unique shell welding technology
- Medical K-Resin shell
- Luer design gas sampling port
- Low resistance
- Small dead space
- Available in adult, pediatric and tracheostomy

Heat and Moisture Exchangers (HME)

Heat and Moisture Exchangers (HME)



REF: BA2001
Pediatric HME



REF: BA2002
Pediatric
Tracheostomy HME



REF: BA2003
Tracheostomy HME

	PEDIATRIC HME BA2001	PEDIATRIC TRACH HME BA2002	ADULT HME BA2003
Tidal Volume	70-600	5-50	150-1500
Bacterial Filtration Efficiency	N/A	N/A	N/A
Viral Filtration Efficiency	N/A	N/A	N/A
Moisture Output	250ml, mg/L: 34.5 500ml, mg/L: 32.5	250ml, mg/L: 29.4	250ml, mg/L: 37.7 500ml, mg/L: 35.5 1000ml, mg/L: 33.5
Pressure Resistance (cmH2O)	30L/min: 0.8 60L/min: 2.2	15L/min: 0.4 30L/min: 2.0	30L/min: 1.0 60L/min: 2.8
Dead Space	21ML	2.2ML	34ML
Connectors	Patient Side : 22M/15F Machine Side: 15M	Patient Side : 15F Machine Side: 15M	Patient Side : 22M/15F Machine Side: 15M
Media	Foam	Foam	Foam
Weight	9G	1.6G	15G
Port	Gas Sampling	N/A	Gas Sampling
Flex Tube	NO	NO	NO
Case Quantity	50	50	50

Heat and Moisture Exchangers (HME)



REF: BA2004
Tracheostomy HME



REF: BA2005
Tracheostomy HME



REF: BA2008
Heat and Moisture
Exchanger

	ADULT HME BA2004	ADULT TRACH HME BA2005	ADULT HME BA2008
Tidal Volume	150-1500	150-1250	150-1500
Bacterial Filtration Efficiency	N/A	N/A	N/A
Viral Filtration Efficiency	N/A	N/A	N/A
Moisture Output	250ml, mg/L: 37.7 500ml, mg/L: 35.5 1000ml, mg/L: 33.5	500ml, mg/L: 30.3	250ml, mg/L: 37.7 500ml, mg/L: 35.5 1000ml, mg/L: 33.5
Pressure Resistance (cmH2O)	30L/min: 1.0 60L/min: 2.8	60L/min: 0.2	30L/min: 1.0 60L/min: 2.6
Dead Space	62 (34)ML	16ML	34ML
Connectors	Patient Side : 15F Machine Side: 15M	Patient Side : 15F	Patient Side : 22M/15F Machine Side: 15M
Media	Foam	Foam	Foam
Weight	24G	5.6	15G
Port	Gas Sampling	Integral Oxygen port	Gas Sampling
Flex Tube	YES	NO	NO
Case Quantity	50	50	50

Heat and Moisture Exchangers (HME)



REF: BA2009
HME with Flex Tube



REF: BA1010
Heat and Moisture Exchanger



REF: BA4001
HME integrated Flex Tube

	ADULT HME BA2009	ADULT HME BA1010	ADULT HME INTERGRATED BA4001
Tidal Volume	150-1500	250-1500	250-1500
Bacterial Filtration Efficiency	N/A	N/A	N/A
Viral Filtration Efficiency	N/A	N/A	N/A
Moisture Output	250ml, mg/L: 37.7 500ml, mg/L: 35.7 1000ml, mg/L: 33.5	1000ml, mg/L: 30.0	1000ml, mg/L: 30.0
Pressure Resistance (cmH2O)	30L/min: 1.1 60L/min: 3.0	30L/min: 1.0 60L/min: 2.5	30L/min: 0.5 60L/min: 1.4
Dead Space	62(34)	38ML	90ML
Connectors	Patient Side : 15F Machine Side: 15M	Patient Side : 22M/15F Machine Side: 15M	Patient Side : 15F Machine Side: 22F
Media	Foam	Foam	Foam
Weight	24G	9G	15.5G
Port	Gas Sampling	N/A	N/A
Flex Tube	YES	NO	Integrated
Case Quantity	50	50	50

Bacterial/Viral Filters

Bacterial/Viral filters are intended to help prevent the transmission of bacteria and viruses and prevent cross infection to and from the patient during anesthesia or other types of ventilation. Filter medium is constructed of permanently charged bipolar rectangular split fibers which are able to capture airborne particles at a 99.999% efficiency.



REF: BA3002
B/V Mechanical Filter (HEPA)



REF: BA3003
Bacterial/Viral Breathing Filter



REF: BA3004
Bacterial/Viral Breathing Filter

Features and Benefits:

- Bacterial Filtration Efficiency of > 99.999%
- Viral Filtration Efficiency of > 99.99%
- Unique shell welding technology
- Medical K-Resin shell
- Luer design gas sampling port
- Low resistance
- Small dead space

	ADULT B/V Mechanical HEPA BA3002 VR012	ADULT B/V BA3003 VR010	ADULT B/V BA3004 VR092
Tidal Volume	250-1500	250-1500	250-1500
Bacterial Filtration Efficiency	> 99.9999%	> 99.999%	> 99.999%
Viral Filtration Efficiency	> 99.99%	> 99.99%	> 99.99%
Moisture Output	N/A	N/A	N/A
Pressure Resistance (cmH2O)	30L/min: 1.5 60L/min: 3.0	30L/min:0.8 60L/min: 1.6	30L/min:0.8 60L/min: 1.6
Dead Space	62ML	32ML	32ML
Connectors	Patient Side : 22M/15F Machine Side: 22F/15M	Patient Side : 22M/15F Machine Side: 22F/15M	Patient Side : 22M/15F Machine Side: 22F
Media	Pleated Glass Fiber	Flat Media	Flat Media
Weight	36	23	21
Port	Gas Sampling	N/A	N/A
Flex Tube	NO	NO	NO
Case Quantity	50	50	50



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