

VentiShield™

Breathing Filters

Product Data Sheet

PRODUCT: VentiShield™ Bacterial/ Viral Filters**DESCRIPTION / FUNCTION**

The Flexicare VentiShield™ Bacterial/ Viral Filters are intended to help prevent the transmission of bacteria and viruses and prevent cross infection to and from the patient during anaesthesia, artificial respiration and other types of assisted ventilation such as in the critical care environment.

Flexicare's VentiShield™ Filters use an electrostatic filter medium constructed of permanently charged bipolar rectangular split fibres which are able to capture airborne particles. In anaesthesia applications, an electrostatic breathing filter is normally positioned at the patient end of the breathing system between the circuit Y-piece and the patient airway.

This type of filter is recommended for applications where high efficiency and low pressure drops are required. The adult VentiShield™ range of Bacterial/ Viral Filters provide 99.999% efficiency within a compact, lightweight, rounded design ideal for patient end use with an ET Tube or Laryngeal Mask Airway.

VentiShield™ Bacterial/ Viral Filters are designed to be used in pre-hospital, hospital and homecare environments by trained personnel.

WARNINGS

- Do not use between patient and a humidification device (e.g Active Humidifier) or Nebuliser device.
- Change the filter after a maximum period of use of 24 hours.
- REPLACE this device if it becomes soiled or otherwise unfit for its application.
- NEVER attempt to 'dry out' a breathing system or a breathing system filter.
- DISPOSE of all breathing system components immediately after use on highly infectious patients regardless of option of multiple use (e.g. Tuberculosis (TB), HIV, Hepatitis C, Creutzfeldt-Jacob variant (CJD) and for all ICU patients).
- Breathing systems and components must be removed after use and safely discarded, even if a filter is used.

SPECIFICATION / KEY FEATURES

- Electrostatic filter media provide a high degree of efficiency.
- 22M/15F connectors complying with ISO 5356 providing universal connections.
- The design of the filter conical connectors provides unidirectional fitting of the filter and prevents errors in connection.
- Patient side clearly marked on device housing for correct fitting.
- Lightweight design of VentiShield™ filters reduces drag on the breathing system.
- Rounded ergonomic shape with no sharp edges reduces the risk of pressure marking.
- Optional luer port allows easy ETCO2 sampling.
- Available Sterile or Non-sterile.
- Available as Adult or Mini (for short term Adult use and/or Paediatric)

Performance characteristics:

VentiShield™

	038-41-360	038-41-340	038-41-365	038-41-345	038-41-365LS	038-41-345LS	038-41-366	038-41-366LS
Description	Filter	Angled Filter	Filter	Angled Filter	Filter	Angled Filter	Filter & Elbow	Filter & Elbow
Brand	VentiShield	VentiShield	VentiShield	VentiShield	VentiShield - LuerSafe	VentiShield - LuerSafe	VentiShield	VentiShield - LuerSafe
Efficiency	99.999%	99.999%	99.999%	99.999%	99.999%	99.999%	99.999%	99.999%
Humidification on (Moisture Output) 1 - 3 hr 1 - 24hr (g/m3)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Type (eg: Hydrophobic mechanical filter)	Adult electrostatic Bacterial / Viral Filter	Adult electrostatic Bacterial / Viral Filter	Adult electrostatic Bacterial / Viral Filter	Adult electrostatic Bacterial / Viral Filter	Adult electrostatic Bacterial / Viral Filter	Adult electrostatic Bacterial / Viral Filter	Adult electrostatic Bacterial / Viral Filter	Adult electrostatic Bacterial / Viral Filter
Expiratory resistance	(cmH2O)	(cmH2O)	(cmH2O)	(cmH2O)	(cmH2O)	(cmH2O)	(cmH2O)	(cmH2O)
Before use:	1.2	1.4	1.2	1.4	1.2	1.4	1.5	1.5
30L/min	3.5	3.8	3.5	3.8	3.5	3.8	4.5	4.5
60L/min	7.0	7.7	7.0	7.7	7.0	7.7	9.4	9.4
90L/min								
Dead Space	66ml	52ml	66ml	52ml	66ml	52ml	76ml	96ml
Minimum Recommended Vt	198ml	156ml	198ml	156ml	198ml	156ml	228ml	228ml
Weight (g)	30g	31g	32g	33g	33g	31g	38g	38g
CO2 Monitoring Port	No	No	Yes Tethered Cap	Yes Tethered Cap	Yes LuerSafe Valve	Yes LuerSafe Valve	Yes Tethered Cap	Yes LuerSafe Valve

VentiShield™ Mini

	038-42-360	038-42-365	038-42-366	038-42-365LS	038-43-360
Description	Filter	Filter	Filter & Elbow	Filter	Filter
Brand	VentiShield - Mini	VentiShield - Mini	VentiShield - Mini	VentiShield Mini - LuerSafe	VentiShield Neonatal
Efficiency	99.99%	99.99%	99.99%	99.99%	99.999%
Humidification on (Moisture Output) 1 - 3 hr 1 - 24hr (g/m3)	N/A	N/A	N/A	N/A	N/A
Type (eg: Hydrophobic mechanical filter)	Mini electrostatic Bacterial / Viral Filter	Mini electrostatic Bacterial / Viral Filter	Mini electrostatic Bacterial / Viral Filter	Mini electrostatic Bacterial / Viral Filter	Neonatal electrostatic Anti-Bacterial / Viral Filter
Expiratory resistance Before use:	(cmH2O)	(cmH2O)	(cmH2O)	(cmH2O)	(cmH2O)
30L/min					
60L/min	1.9	1.9	2.2	1.9	0.8 at flow rate of 7.5 LPM
90L/min					
Dead Space	25ml	25ml	35ml	25ml	8ml
Minimum Recommended Vt	75ml	75ml	105ml	75ml	>35ml
Weight (g)	19g	20g	28g	21g	9g
CO2 Monitoring Port	No	Yes Tethered Cap	Yes Tethered Cap	Yes LuerSafe Valve	Yes Tethered Cap

PRODUCT RANGE & PART NUMBERS

Product Code	Description	Quantity
VentiShield™		
038-41-360	Adult Bacterial / Viral Filter	50
038-41-340	Adult Angled Bacterial / Viral Filter	50
038-41-365	Adult Bacterial / Viral Filter (with tethered cap port)	50
038-41-345	Adult Angled Bacterial / Viral Filter (with tethered cap port)	50
038-41-365LS	LuerSafe Adult Bacterial / Viral Filter (with self sealing port)	50
038-41-345LS	LuerSafe Adult Angled Bacterial / Viral Filter (with self sealing port)	50
038-41-366	Adult Bacterial / Viral Filter (with tethered cap port) + Low Profile Elbow (22M/15F)	50
038-41-366LS	LuerSafe Adult Bacterial / Viral Filter (with self sealing port) + Low Profile Elbow (22M/15F)	50
VentiShield™ Mini		
038-42-360	Mini Bacterial / Viral Filter	50
038-42-365	Mini Bacterial / Viral Filter (with tethered cap port)	50
038-42-365LS	LuerSafe Mini Bacterial / Viral Filter	50
038-42-366	Mini Bacterial / Viral Filter (with tethered cap port) + Low Profile Elbow (22M/15F)	50
038-42-366LS	LuerSafe Mini Bacterial / Viral Filter (with self sealing port) + Low Profile Elbow (22M/15F)	50
VentiShield™ Sterile		
038-41-360STR	Adult Bacterial / Viral Filter	50
038-41-340STR	Adult Angled Bacterial / Viral Filter	50
038-41-365STR	Adult Bacterial / Viral Filter (with tethered cap port)	50
038-41-345STR	Adult Angled Bacterial / Viral Filter (with tethered cap port)	50
VentiShield™ Sterile Mini		
038-42-365STR	Mini Bacterial / Viral Filter (with tethered cap port)	50

MATERIALS

Component	Material
Filter Housing	Polypropylene (PP)
Luer Port Tethered Cap	Polyvinylchloride (PVC)
Internal Filter Pad	Polypropylene (PP)/ synthetic fibre blend
LuerSafe™ Port	Polypropylene (PP), Silicone

LATEX CONTENT

Flexicare's VentiShield™ Bacterial/ Viral Filters do not contain natural rubber latex.

DEHP CONTENT

Flexicare's VentiShield™ Bacterial/ Viral Filters do not contain phthalate DEHP.

SINGLE USE

Flexicare's VentiShield™ Bacterial/ Viral Filters are Single Use devices and should be disposed of after use. Do not re-sterilise (if applicable) or autoclave.

STERILITY

Flexicare's VentiShield™ Bacterial/ Viral Filters are available in both non-sterile/clinically clean and sterile states. Sterile variants are identified by "STR" suffix on part number and relevant symbols on device packaging. Sterile product is sterilised by gaseous ethylene oxide (EO).

STORAGE

Store in a cool, dry place out of direct sunlight.

SHELF LIFE

Flexicare declares a shelf life of five years from the date of sterilisation or manufacture. This is based on the stability of the devices' components and raw materials sourced. Expiry date is clearly marked on individual product pouch.

DISPOSAL CONSIDERATIONS

Dispose as clinical waste, in accordance with hospital policy, local guidelines and regulations.

PACKAGING MATERIALS**Non-sterile**

Primary – Polybag – Low Density Polyethylene (LDPE)

Sterile

Primary - Top Web – EO Permeable Paper

Blister Pack – Polyvinylchloride (PVC)

All variants

Secondary – Carton / Box - Cardboard