

STERILE FILTER DEVICE

Vacufl

Introduction

Membrane Solutions (MS) Vacufl Disposable Vacuum Filtration units are a standalone filtration unit that combines a graduated funnel-top, filter assembly and graduated reservoir. They are ideal for when a self-contained, pre-sterilized, disposable filtration unit is required. Available with PES, cellulose acetate and PVDF membranes in various pore sizes for the sterile filtration of biological and aqueous fluids, tissue culture media and buffers. Comes in two funnel sizes (250 and 500ml) and 3 reservoir bottle volumes (250, 500 and 1000ml).

Glass fiber pre-filter is available.



Features and Benefits

- Disposable and pre-sterilized by gamma irradiation for rapid and convenient use.
- Wide base provides stability during use.
- Sterile graded 0.2µm membrane: LRV > 7 for *Brevundimonas diminuta*, ATCC19146.
- Non-pyrogenic, low extractables and surfactant-free ensures purity of filtrate.
- Engineered support structure maximizes flow rate and throughput.
- Available with 250 and 500mL filter funnels, and 250, 500 and 1000mL receiver bottles to meet various filtered volume requirements.
- Reservoir has textured areas for improved grip when handling and opening and sealing the bottle.
- GL45 threads accepts commonly used bottle style.

Glass Fiber prefilter

	Glass fiber type	Diameter (mm)	Pore Size (µm)	Receiver Volume (mL)
SP	GFB	090	100	S
	GFB	050=50mm 090=90mm	100=1.0	S=Sterile, individual wrap packed

* SPGFB090100S= Sterilized glass fiber disc, 90mm, 1µm, individual packing

Part Number Matrix

	Membrane Material	Funnel Volume (mL)	Pore Size(µm)	Receiver Volume (mL)	
VF	PES	1	22	250	F
	PES (0.1-0.45µm) CA (0.2/0.45µm) PVDF (0.2/0.45µm) NYLON (0.2/0.45µm) PTFE (0.2/0.45µm)	1=250 mL 2=500 mL	10=0.1 22=0.22 45=0.45	250=250 mL 500=500 mL 1000=1000 mL	(blank)=whole set; F=Funnel only

* VFPPES122250= Vacufl bottle top filter units, PES, 0.22µm, 250ml

* 250ml version comes with 50mm assembly.

* 500ml version comes with 90mm assembly.

SteriBell50™ Filtration Device

Introduction

Membrane Solutions (MS) SteriBell 50™ PES devices offer a convenient and efficient way to sterile filter large volumes using a peristaltic pump or other pressurized source. SteriBell 50 is ideal for biological products when low protein binding is required and also for broad range (pH 1 – 14) of acid and base solutions. SteriBell 50 is also available with GF (glass fiber) or PP microfiber prefilter for samples with high particulates.



Features and Benefits

- Superior flow rates compared to most competitive products - offers reduced filtration times.
- Optional glass fiber prefilter layer offers superior throughput for difficult to filter solutions, buffers, media and serums - fewer changeouts and fewer devices required.
- Sterile Filtration - eliminates the need for post-filtration sterilization.
- Integrity testable - to ensure sterility.
- Can be used as an inline or POU filter - offers convenient use.
- Available with detachable filling bell - helps prevent splashing and contamination.
- Tapered hose barb accepts different tubing sizes - offers connection flexibility.
- Pre-sterilized by gamma irradiation - eliminates cytotoxicity associated with ETO.
- Sterile packaged - eliminates for pre-sterilization.
- Disposable - offers convenience versus replacing discs in disc holders.
- pH range: 1-14

Specification

	SteriBell 50™ PES	SteriBell 50™ PES Plus
Housing	Polypropylene	
Filling bell	Polycarbonate bell with polypropylene cap	
Membrane	PES	Glass fiber prefilter+PES
Housing OD	64 mm	
Pore size	0.2 µm	
Filtration area	20 cm²	
Pre-sterilized by	Gamma irradiation	
Typical Sample Volume	Up to 5L	
Water Flow Rate	400 mL/min with water at 14.5 psi (1 bar)	
Typical Hold-Up Volume (with 10 psi air purge)	≤ 1.0 mL	≤ 1.5 mL
Recommended inlet pressure	≤43.5 psi (3.0 bar)	
Burst pressure	73 psi (5.0 bar)	
Bubble point	≥46.4 psi (3.2 bar)	
Connections	1/4-1/2" (7-13mm) stepped HB. Inlet will accept male luer slip tip. O outlet comes with detachable filling bell and cap.	
Endotoxin Level	< 0.25 EU/mL	
Protein adsorption(Filtration of BSA)	No detectable loss of protein	<80 µg/cm²
Bacterial Retention	>10 ⁷ CFU/cm² of B. diminuta	
Biosafety	USP Class VI Plastics Test	

Part Number Matrix

	Membrane Material	Filter Diameter(mm)	Pore Size(µm)	Pre-Sterilized	Optional Pre-filter layer	Series
SF	PES	050	022	N/S	G	B
	PES (0.1-1.0µm) CA (0.2-5.0µm) MCE (0.2-5.0µm) Nylon (0.2-5.0µm) PTFE (0.2-5.0µm)	050=50	022=0.2 045=0.45 100=1.0	N=No S=Yes	(blank)=None P=PP microfiber G=Glass fiber	(blank)=without bell B=with bell

* SUPES050022SB= SteriBell 50™ sterile PES filter will filling bell, 1/4-1/2" (7-13mm) stepped HB inlet and outlet, 50mm,0.22µm

GLASS FILTER HOLDERS

Introduction

Membrane Solutions Glass Filter Holders are high-quality ideal for aqueous, acid, base and solvent applications. Standard 47mm/50mm filtration funnels mount on filtration flask using a ground glass joint.

Features and Benefits

- Made of 100% borosilicate glass, assures resistance to even the most aggressive solvents
- Available in 250mL/300mL/500mL glass funnel volume and 0.5L/1L/2L flask volume for various applications
- Support assembly's unique base design with integral vacuum connection prevents contamination of the vacuum line with filtrate

Applications

- Vacuum filtration and degassing of aqueous, biological, organic or corrosive liquids
- Ideal for mobile phase particulate removal



Part Number Matrix

Part No	Name	Description	Packaging
VFG025005	Glass Vacuum Filters	250ml Glass Funnel, 500ml Filter Flask, Anodized Aluminum Clamp, Solid Glass Frit with 8#Silicone Stopper	1 set
VFG025010	Glass Vacuum Filters	250ml Glass Funnel, 1000ml Filter Flask, Anodized Aluminum Clamp, Solid Glass Frit with 8#Silicone Stopper	1 set
VFG025020	Glass Vacuum Filters	250ml Glass Funnel, 2000ml Filter Flask, Anodized Aluminum Clamp, Solid Glass Frit with 8#Silicone Stopper	1 set
VFG030005	Glass Vacuum Filters	300ml Glass Funnel, 500ml Filter Flask, Anodized Aluminum Clamp, Solid Glass Frit with 8#Silicone Stopper	1 set
VFG030010	Glass Vacuum Filters	300ml Glass Funnel, 1000ml Filter Flask, Anodized Aluminum Clamp, Solid Glass Frit with 8#Silicone Stopper	1 set
VFG030020	Glass Vacuum Filters	300ml Glass Funnel, 2000ml Filter Flask, Anodized Aluminum Clamp, Solid Glass Frit with 8#Silicone Stopper	1 set
VFG050020	Glass Vacuum Filters	500ml Glass Funnel, 2000ml Filter Flask, Anodized Aluminum Clamp, Solid Glass Frit with 8#Silicone Stopper	1 set
VFG030010P	Glass Vacuum Filters	300ml Glass Funnel, 1000ml Glass Solvent Collection, Anodized Aluminum Clamp, Solid Glass Frit	1 set
VFG030020P	Glass Vacuum Filters	300ml Glass Funnel, 2000ml Glass Solvent Collection, Anodized Aluminum Clamp, Solid Glass Frit	1 set
VFG050020P	Glass Vacuum Filters	500ml Glass Funnel, 2000ml Glass Solvent Collection, Anodized Aluminum Clamp, Solid Glass Frit	1 set
VFG1000	Glass Filter Flask	Glass Filter Flask 1000ml, with 3/8" OD vacuum tubing	1 pcs
VFG2000	Glass Filter Flask	Glass Filter Flask 2000ml, with 3/8" OD vacuum tubing	1 pcs
VFG1000RB	Glass Solvent Collection	1000ml	1 pcs
VFG2000RB	Glass Solvent Collection	2000ml	1 pcs
VFG030F	Glass Filter Holders	All-Glass Microanalysis Filter Holder 47mm;300mL	1 pcs
VFG0500GF	Glass Funnel	500ml	1 pcs
VFG047SS	Vacuum Base	Working with 2000ml collection	1 pcs
VFG147SS	Vacuum Base	Working with 1000ml collection	1 pcs

GLASS AND STAINLESS-STEEL FILTRATION HARDWARE

Introduction

Membrane Solutions Filtration Hardware (Funnel and Base) is available in both Glass and 304. Funnel and Funnel Base Glass Solvent Filters, all-glass design restricts contact with reactive surfaces such as steel or rubber to minimize contamination of sample or filtrate. Standard 47/50 mm filtration funnels mount on filtration flask using a ground glass joint.



Features and Benefits

- Glass Vacuum Filter aqueous, organic or corrosive liquids for particulate contamination analysis
- It is recommended for HPLC solvent filtration and it has the function of out-gas to guarantee the clean of mobile phase and avoid the blockage of HPLC liquid flow path.

Part Number Matrix

Item#	Description	Packaging
VFM0101S	1) Stainless Steel Manifold	1set
	2) One Stainless Steel Filtration Units	
	3) One Glass Collect Bottle	
	4)Two pieces of hosepipe	
VFM0101G	1) Stainless Steel Manifold	1set
	2) One Glass Filtration Units	
	3) One Glass Collect Bottle	
	4)Two pieces of hosepipe	
VFM0103S	1) Stainless Steel Manifold	1set
	2)Three Stainless Steel Filtration Units	
	3) One Glass Collect Bottle	
	4)Two pieces of hosepipe	
VFM0103G	1) Stainless Steel Manifold	1set
	2) Three Glass Filtration Units	
	3) One Glass Collect Bottle	
	4)Two pieces of hosepipe	
VFM0106S	1) Stainless Steel Manifold	1set
	2) Six Stainless Steel Filtration Units	
	3) One Glass Collect Bottle	
	4)Two pieces of hosepipe	
VFM0106G	1) Stainless Steel Manifold	1set
	2) Six Glass Filtration Units	
	3) One Glass Collect Bottle	
	4)Two pieces of hosepipe	
VFMSM01	Stainless Steel Manifold, single	1pcs
VFMSM03	Stainless Steel Manifold, Three Units	1pcs
VFMSM06	Stainless Steel Manifold, Six Units	1pcs
VFMF100G	Glass Funnel, 100ml	1pcs
VFMF300G	Glass Funnel, 300ml	1pcs
VFMF300S	Stainless Steel Funnel, 300ml	1pcs

HARDWARE AND PUMPS

Introduction

Membrane Solutions (MS) Supervac™ Vacuum Pump has premium, corrosion-resistant wetted parts and is fitted with a patented multi-port valve system that increases performance and tolerates liquids accidentally drawn into the system without loss of performance. It is a compact, lightweight, and easy to use pump. This vacuum pump combines all the advantages of lower pressure pumps with the perfect uniformity of diaphragm type operation. It compresses air by means of a long-life diaphragm, which flexes within the compressor. The fan-cooled, ball-bearing motor is permanently lubricated and has a single-use (fuse) overload protector. This pump is designed for small volume/aqueous flask filtration applications, intended for filtration of liquids or gases, or for other continuous or intermittent use, with all types of filter holders.



Features and Benefits

- Unit is light weight, easy to move and can work smoothly, which can guarantee the ideal vacuum and high rate of air flowing.
- It adopts the operation containing no friction, producing no calories and having no friction exhausts.
- The diaphragm is made of Nitrile Rubber, which resists the corrosion and has long operating life.
- Steady running, low noise and high operating efficiency

Application

- Vacuum filtration
- Vacuum distillation
- Vacuum drying
- On rotary evaporators
- To extract and transfer gases

Part Number Matrix

Part No	Description	Qty/pK
VPJ0332	Vacuum Pump, 250 mbar, 20 L/min	1
VPJ0201	Vacuum Pump, 300mbar, 12L/min	1
VPJ0501	Vacuum Pump,250mbar, 30L/min	1
VPJ0502	Vacuum Pump,50mbar 30L/min	1
VPJ1001	Vacuum Pump, 250mbar, 60L/min	1
VPJ0333	Vacuum Pump, 50mbar, 20L/min	1