

# WaterVac100 Vacuum Filtration System



## Features

- **Save 70% bench space**  
The compact design of WaterVac 100 vacuum filtration system can save much workbench space by simplifying procedure and tools needed in membrane filtration method.
- **Improve operation time**  
Direct drainage design saves a lot of time to empty waste liquid and make the filtration more efficient.
- **Versatile**  
Replaceable funnel adaptor design makes WaterVac 100 compatible with various kinds of filter holder.
- **Easy Operation**  
Simply put membrane on filter holder and push on/off button to start filtration easily.
- **International certification**  
CE certification
- **One-Year Warranty**



Improve operation time



Compatible with various kinds of adaptor and filter holder

## Specification

Model	WaterVac 100
Input voltage	DC 12 V, 1.5A
Max. vacuum	313 mbar / 70 kPa / 20.7 inHg
Max. liquid flow rate	0.5 L/min
Motor	12W Brushless DC Motor
Hose barb	1/4 inch (6 mm)
Material contact with filtrate	SS316, FKM, Silicone, PP, PA66
Weight	1.16 Kg
Dimension (LxWxH)	17 x 12 x 9.6 cm
WaterVac 100 - MS	
Adaptor	No. 8 stopper
Filter holder	MF 3 / MF 5, magnetic filter holder (optional)

## Applications

- Microbiological test
- Vacuum filtration

## Ordering Information

- 190100-01(02)**  
WaterVac 100, Vacuum Filtration System with AC100-240V adaptor, US plug(EU plug)
- 190110-01(02)**  
WaterVac 100 - MS, Vacuum Filtration System with No. 8 stopper funnel adaptor, AC100-240V adaptor, US plug (EU plug)
- 200300-01**  
MF3, 300 ml Magnetic Filter Holder with lid kit
- 200500-01**  
MF5, 500 ml Magnetic Filter Holder with lid kit

# WaterVac100 Vacuum Filtration System



## Features

- **Save 70% bench space**  
The compact design of WaterVac 100 vacuum filtration system can save much workbench space by simplifying procedure and tools needed in membrane filtration method.
- **Improve operation time**  
Direct drainage design saves a lot of time to empty waste liquid and make the filtration more efficient.
- **Compatible with Rocker SS funnel**  
WaterVac 100-MB can accept Rocker SS funnel,100/300/500 ml funnel at option.
- **SS316 funnel**  
SS funnel is made of SS316 stainless steel which offers excellent chemical resistance.
- **International certification**  
CE certification
- **One-Year Warranty**



## Applications

- Microbiological test
- Vacuum filtration

## Ordering Information

- 190100-01(02)**  
WaterVac 100, Vacuum Filtration System with AC100-240V adaptor, US plug(EU plug)
- 190120-01(02)**  
WaterVac 100 - MB, Vacuum Filtration System with Rocker SS funnel adaptor, AC100-240V adaptor, US plug(EU plug)
- 190121-01(02)**  
WaterVac 101 - MB, Vacuum Filtration System with Rocker SS funnel adaptor, 100ml SS funnel, AC100-240V adaptor, US plug (EU plug)

## Specification

Model	WaterVac 100	
Input voltage	DC 12 V, 1.5A	
Max. vacuum	313 mbar / 70 kPa / 20.7 inHg	
Max. liquid flow rate	0.5 L/min	
Motor	12W Brushless DC Motor	
Hose barb	1/4 inch (6 mm)	
Material contact with filtrate	SS316, FKM, Silicone, PP, PA66	
Weight	1.16 Kg	
Dimension (LxWxH)	17 x 12 x 9.6 cm	
WaterVac 100 - MB		
Adaptor	Spin-lock design	Spin-lock design
Funnel	SS stainless steel funnel (optional)	SS stainless steel funnel (100 ml)

# How to order?

You can select Combination A, B or C to

complete your order

**A**



WaterVac 100 - MB  
Vacuum Filtration System  
(190120-01/02) (US plug / EU plug)

**B**



WaterVac 100 - MS  
Vacuum Filtration System  
(190110-01/02) (US plug / EU plug)

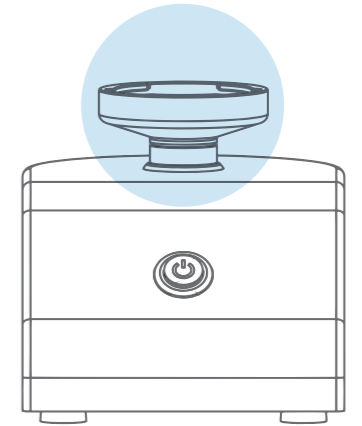
**C**



WaterVac 100  
Vacuum Filtration System  
(190100-01/02) (US plug / EU plug)

## Customized Design

We can offer customized adaptor for your funnel



Rocker, 100 ml SS Stainless Steel Funnel (167103-61)  
Rocker, 300 ml SS Stainless Steel Funnel (167103-63)  
Rocker, 500 ml SS Stainless Steel Funnel (167103-65)



Stainless Steel Cover for SS 100 ml funnel (167103-11)  
Stainless Steel Cover for SS 300 ml funnel (167103-13)  
Stainless Steel Cover for SS 500 ml funnel (167103-15)



Rocker, 300 ml MF 3, Magnetic Filter Holder (200300-01)  
Rocker, 500 ml MF 5, Magnetic Filter Holder (200500-01)



Sartorius, 100 ml disposable plastic funnel (16A07)

Millipore, 100 ml / 250 ml Microfil, disposable plastic funnel (MIACFD101 / MIACFD201)

Pall, 100 ml / 250 ml disposable plastic funnel (4870 / 4871)

Silicone Tube Ø 4.2 - 8 mm, 200 cm (199100-68)

+

+

+

+



SS316 Adaptor for Sartorius disposable plastic funnel (190100-74)



SS316 Adaptor for Millipore disposable plastic funnel (190100-73)



SS316 Adaptor for Pall disposable plastic funnel (190100-75)



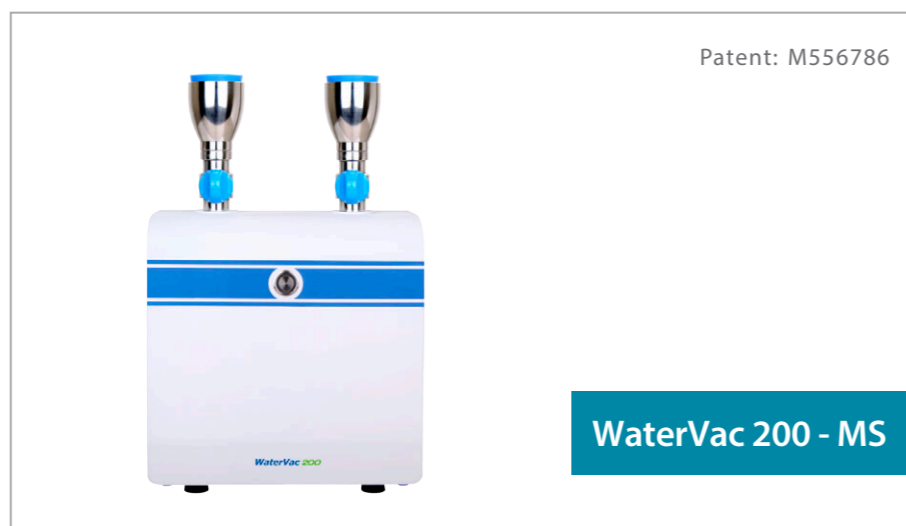
SS316 Hose barb for silicone tube (Ø 4 - 8 mm) (190100-76)

\* SS316 adaptor is only available for above-mentioned disposable funnels.

# WaterVac 200 Vacuum Filtration System

## Features

- Save time**  
 A built-in liquid pump can transfer filtered liquid directly to waste, save time by simplifying filtration process.
- Save 70% bench space**  
 Integrates liquid pump and filter holders into an instrument, no need of waste bottle and connecting tubing which is necessary for traditional air pump.
- Compliance with ISO 8199**  
 WaterVac 200 complies with ISO 8199 regulation and is ideal for microbiological sample filtration. (\*ISO 8199: Water quality – General guidance for microbiological examinations by culture).
- Versatile**  
 Replaceable funnel adaptor makes it compatible with various kinds of filter holder.
- International certification**  
 CE certification  
 IP 41 protection  
 RoHS certification
- One-Year Warranty**



360° Rotational L - type hose barb



Compatible with various kinds of adaptor and filter holder

## Specification

Model	WaterVac 200
Input voltage	DC 24V, 2.5A
Max. vacuum	313 mbar / 70 kPa / 20.7 inHg
Max. liquid flow rate	4.5 L/min
Motor	60W Brushless DC Motor
Noise level	60 dB
Hose barb	5/16 inch (8 mm)
Material contact with filtrate	Stainless steel, FKM, Silicone, PP, PPS
Weight	2.8 Kg
Dimension (LxWxH)	21.4 x 18.3 x 26.4 cm
	WaterVac 200 - MS
Adaptor	No. 8 stopper
Filter holder	MF 3 / MF 5, magnetic filter holder (optional)

## Applications

- Microbiological test
- Suspended solid test
- Vacuum filtration

## Ordering Information

- 190210-01(02)**  
WaterVac 200 - MS, Vacuum Filtration System with AC100-240V adaptor, US plug (EU plug)
- 200300-01**  
MF3, 300 ml Magnetic Filter Holder with lid kit
- 200500-01**  
MF5, 500 ml Magnetic Filter Holder with lid kit

# WaterVac 200 Vacuum Filtration System

## Features

- Save time**  
 A built-in liquid pump can transfer filtered liquid directly to waste, save time by simplifying filtration process.
- Save 70% bench space**  
 Integrates liquid pump and filter holders into an instrument, no need of waste bottle and connecting tubing which is necessary for traditional air pump.
- Compliance with ISO 8199**  
 WaterVac 200 complies with ISO 8199 regulation and is ideal for microbiological sample filtration. (\*ISO 8199: Water quality – General guidance for microbiological examinations by culture).
- Compatible with Rocker SF funnel**  
 WaterVac 200 - MB can accept Rocker SF funnel – 100 / 300 / 500 ml. SF funnel is made of SS316 stainless steel which can be fast sterilized by flame.
- International certification**  
 CE certification  
 IP 41 protection  
 RoHS certification
- One-Year Warranty**



## Specification

Model	WaterVac 200	
Input voltage	DC 24V, 2.5A	
Max. vacuum	313 mbar / 70 kPa / 20.7 inHg	
Max. liquid flow rate	4.5 L/min	
Motor	60W Brushless DC Motor	
Noise level	60 dB	
Hose barb	5/16 inch (8 mm)	
Material contact with filtrate	Stainless steel, FKM, Silicone, PP, PPS	
Weight	2.8 Kg	
Dimension (LxWxH)	21.4 x 18.3 x 26.4 cm	
	WaterVac 200 - MB	WaterVac 201 - MB
Adaptor	Spin-lock design	Spin-lock design
Funnel	SF Stainless Steel Funnel (Optional)	SF stainless steel funnel (100 ml x 2)

## Applications

- Microbiological test
- Suspended solid test
- Vacuum filtration

## Ordering Information

- 190220-01(02)**  
WaterVac 200 - MB, Vacuum Filtration System with AC100-240V adaptor, US plug (EU plug)
- 190221-01(02)**  
WaterVac 201 - MB, Vacuum Filtration System with Rocker SF funnel adaptor, 100 ml SF funnel, AC100-240V adaptor, US plug (EU plug)

# How to order?

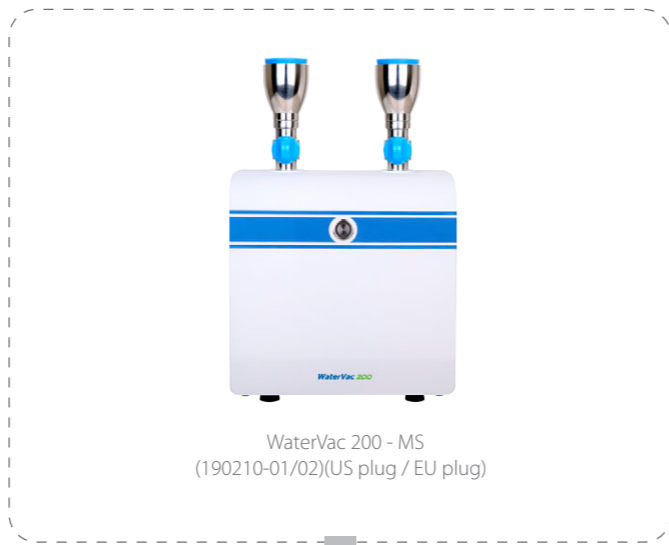
You can select Combination A, B or C to

complete your order

**A**



**B**

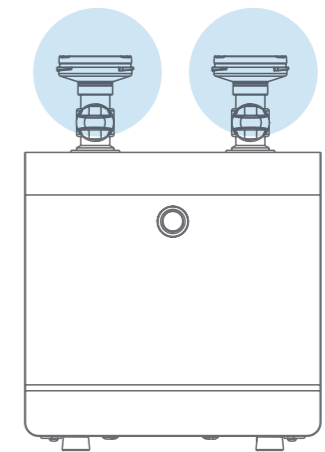


**C**



## Customized Design

We can offer customized adaptor for your funnel



# Filtration Accessories



## PES / PC Waste Bottles

Specification	1200 ml, PES waste bottle	1200 ml, PC waste bottle
Catalog number	197000-11	197000-11-PC
Graduated increment	100 ml	100 ml
Overflow protection	Yes	Yes
Cap with suction fitting	Yes	Yes
Hose barb	5/16 (8 mm)	5/16 (8 mm)
Autoclavable	Yes	Yes



## GL45 Suction Cap / Filtration Adaptor

Specification	GL45 suction cap	GL45 filtration adaptor
Catalog number	197000-60	197000-65
Material of cap	PP	PP
Material of gasket	-	PTFE
Stopper	-	No. 8 stopper
Hose barb	1/4 inch (6 mm)	4 - 8 mm
Autoclavable	Yes	Yes



## Membrane Filters

Specification	Glass fiber filter	MCE membrane
Catalog number	167100-20	167100-52
Brand	Pall	Pall
Filter diameter	47 mm	47 mm
Pore size	1µm	0.45µm
Material of filter	Glass fiber	MCE
Package	100/PK	200/PK



## Silicone Fixing Sucker

Specification	Silicone fixing sucker
Catalog number	167200-45
Material	Silicone
Compatible receiver flask	1000 ml receiver flask
Autoclavable	Yes



\* PES : Polyethersulfone, PC : Polycarbonate, PP : Polypropylene

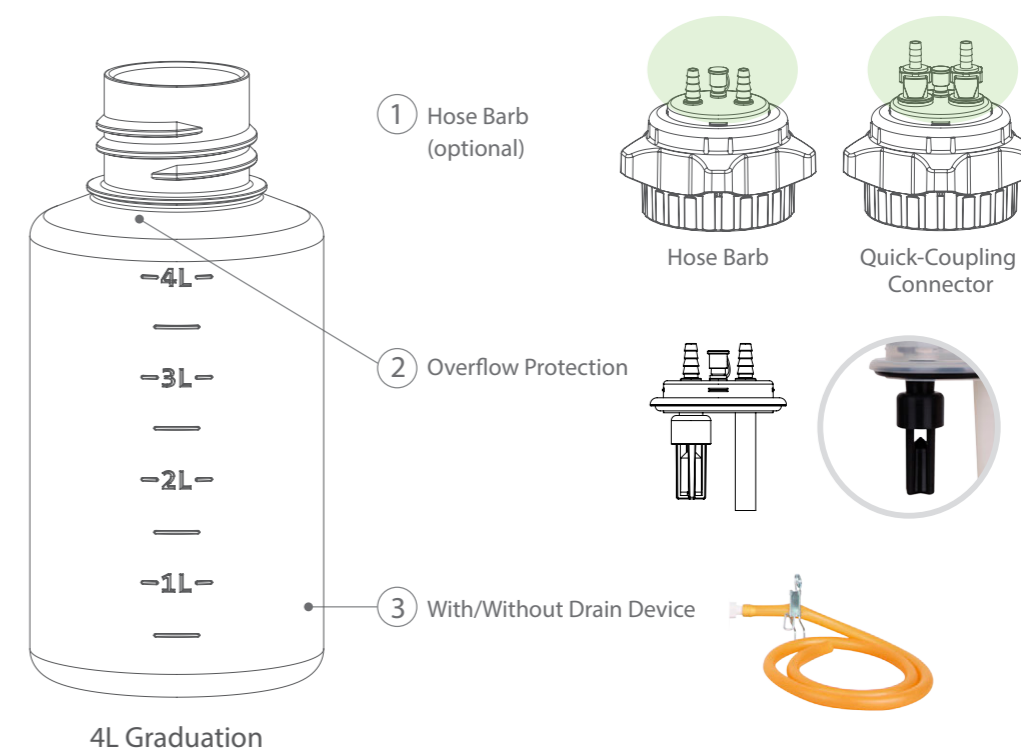
# Filtration Accessories

## PP Heavy-Duty Vacuum Bottle

Specification	4000 ml, PP vacuum bottle	4000 ml, PP vacuum bottle with drain	4000 ml, PP vacuum bottle with quick-coupling connector
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Catalog number	197200-47	197200-48	197200-53
Hose barb	1/4 inch hose barb	1/4 inch hose barb	1/4 inch quick-coupling connector
Graduated increment	500 ml	500 ml	500 ml
Overflow protection	Yes	Yes	Yes
Hose barb	1/4 inch (6 mm)	1/4 inch (6 mm)	1/4 inch (6 mm)
Drain device	-	Yes	-
Autoclavable	Yes	Yes	Yes



\* PES : Polyethersulfone, PC : Polycarbonate, PP : Polypropylene

# LABORATORY FILTRATION

## Filtration Apparatus Selection Guide

### Filter Holder

MF 3 / MF 3a / MF 5 / MF 5a

LF 3 / LF 3a / LF 5 / LF 5a

### Stainless Steel Filter Holder

SF 1 / SF 3 / SF 5

SS 1 / SS 3 / SS 5

### Filtration Apparatus

LF 30 / MF 31

VF 2 / VF 11

VF 5 / VF 8 / VF 6 / VF 7

VF 3 / VF 10 / VF 12 / VF 15

### Filtration System

Rocker 300 - LF 30 / Rocker 300 - MF 31

Rocker 300C - VF 12 / Chemker300 - VF 12

Lafil 300C - VF 12

Lafil 300 - LF 30 / Lafil 300 - LF 32

Lafil 400 - LF 30 / Lafil 400 - LF 32

### Manifold

MutilVac 310 - MS / MutilVac 610 - MS

MutilVac 300 - MS / MutilVac 600 - MS

MutilVac 300 - MB / MutilVac 600 - MB

MutilVac 301 - MB / MutilVac 601 - MB

MultiVac 310 - MS - A / MultiVac 610 - MS - A

MultiVac 301 - MB - A / MultiVac 601 - MB - A

MutilVac 310 - MS - T / MutilVac 610 - MS - T

MutilVac 301 - MB - T / MutilVac 601 - MB - T

### Filtration System

WaterVac 100 - MS / WaterVac 100 - MB / WaterVac 101 - MB

WaterVac 200 - MS / WaterVac 200 - MB / WaterVac 201 - MB

# Filtration Apparatus Selection Guide

PES	SS316 Stainless Steel	Borosilicate Glass
 <p>LF 30 P.23</p>	 <p>VF 2 P.24</p>	 <p>VF 5 P.25</p>  <p>VF 8 P.25</p>
 <p>MF 31 P.23</p>	 <p>VF 11 P.24</p>	 <p>VF 6 P.26</p>  <p>VF 7 P.26</p>
MF, Magnetic Filter Holder		SF, Outer Spin-Lock Filter Holder
 <p>MF 3 P.19</p>  <p>MF 3a P.19</p>	 <p>SF 1 P.21</p>  <p>SF 3 P.21</p>  <p>SF 5 P.21</p>	 <p>VF 3 P.27</p>  <p>VF 10 P.27</p>
 <p>MF 5 P.19</p>  <p>MF 5a P.19</p>		
LF, Spin-Lock Filter Holder		SS, Inner Spin-Lock Filter Holder
 <p>LF 3 P.20</p>  <p>LF 3a P.20</p>	 <p>SS 1 P.22</p>  <p>SS 3 P.22</p>  <p>SS 5 P.22</p>	 <p>VF 12 P.28</p>  <p>VF 15 P.28</p>
 <p>LF 5 P.20</p>  <p>LF 5a P.20</p>		

\*PES : Polyethersulfone

# MF, Magnetic Filter Holder



## Features

- Compatible with various kinds of bottle, vacuum flask with or without side arm to collect filtrate directly.
- Strong magnetic seal allows one-handed operation, prevents possible twisting and tearing of the membrane.
- Membrane guide on the base helps position membrane easily.
- PES (Polyethersulfone) construction, resistant to a wide range of chemicals and high temperature, sturdy and unbreakable.
- MF magnetic filter holder was awarded the United States (US 9.452.373B1), Taiwan (I551337) and China (ZL 2015 2 0050109.6) invention patent.
- International environmental declaration: RoHS certification

## Specifications

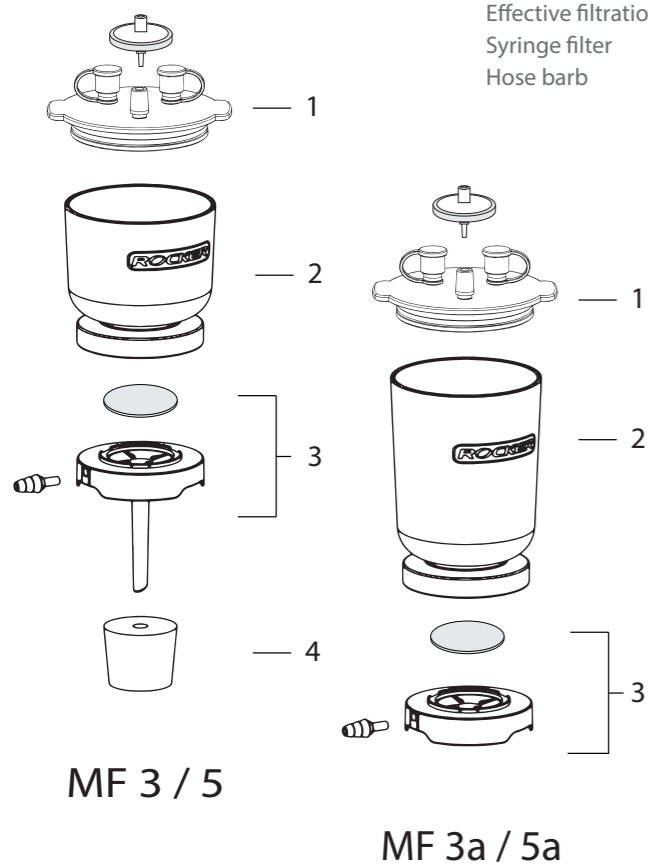
Material	MF 3 / MF 5	MF 3a / MF 5a
Funnel	PES	PES
Support base	PES	PES
Membrane support	PES	PES
Funnel lid	PP	PP
Hose barb	PES	PES
Syringe filter	PTFE	PTFE

Specifications	MF 3 / MF 5	MF 3a / MF 5a
Funnel capacity	300 ml / 500 ml	300 ml / 500 ml
Filter diameter	47 mm	47 mm
Effective filtration area	13.1 cm <sup>2</sup>	13.1 cm <sup>2</sup>
Syringe filter	25 mm, 0.2 μm	25 mm, 0.2 μm
Hose barb	4-8 mm	4-8 mm

## Ordering Information

MF 3, Magnetic Filter Holder (300 ml)	200300-01
MF 5, Magnetic Filter Holder (500 ml)	200500-01
1 PP lid kit	200300-36
2 PES magnetic funnel, 300 ml	200300-30
2 PES magnetic funnel, 500 ml	200500-30
3 PES magnetic support base	200300-32
4 Silicone stopper (No.8)	167110-16
MF 3a, Magnetic Filter Holder (300 ml)	200310-01
MF 5a, Magnetic Filter Holder (500 ml)	200510-01
1 PP lid kit	200300-36
2 PES magnetic funnel, 300 ml	200300-30
2 PES magnetic funnel, 500 ml	200500-30
3 PES magnetic support base (short)	200310-32



# LF, Spin-Lock Filter Holder



## Features

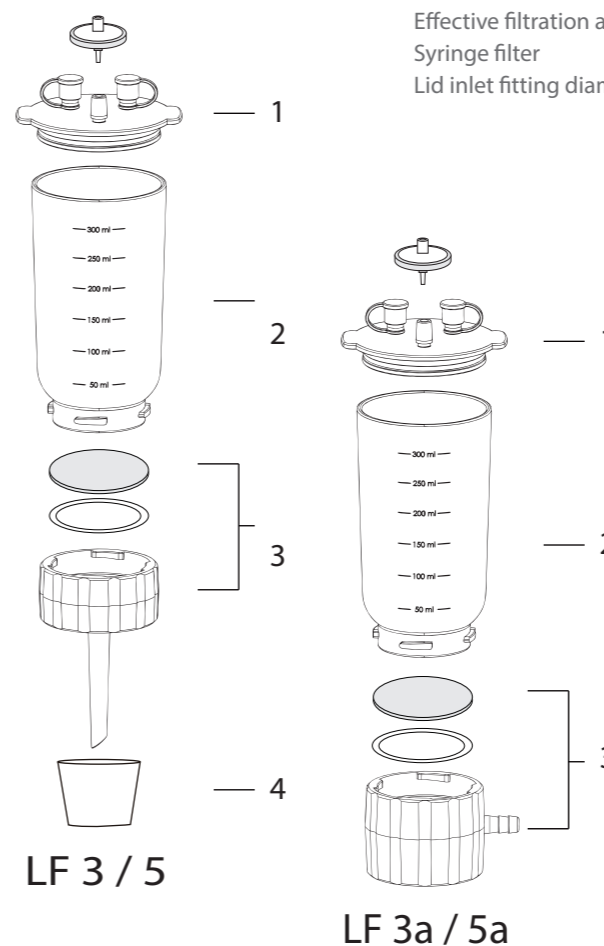
- Spin-lock connection (M381450) facilitates fast and stable installation without clamp.
- PES structure offers excellent smash, high temperature (180°C) resistance and autoclavable.
- Groove design on membrane support facilitates filtration speed.
- Reusable, friendly to the earth and save your money.
- Funnel graduated in 50ml increments for easy measurement.
- LF 3 / 5 equips with No. 8 stopper that allows it to fit other receiver flasks.
- LF 3a / 5a is available to fit any GL45 laboratory glass bottle.

## Specifications

Material	LF 3 / LF 5	LF 3a / LF 5a
Funnel	PES	PES
Support base	PC	PC
Membrane support	PP	PP
Funnel lid	PP	PP
Cap of lid	Silicone	Silicone
Syringe filter	PTFE	PTFE

## Specifications

Specifications	LF 3 / LF 5	LF 3a / LF 5a
Funnel capacity	300 ml / 500 ml	300 ml / 500 ml
Filter diameter	47 mm	47 mm
Effective filtration area	12.5 cm <sup>2</sup>	12.5 cm <sup>2</sup>
Syringe filter	25 mm, 0.2 μm	25 mm, 0.2 μm
Lid inlet fitting diameter	7 mm	7 mm



## Ordering Information

LF 3, Spin-Lock Filter Holder (300 ml)	197000-01
LF 5, Spin-Lock Filter Holder (500 ml)	197000-06
1 LF 3, PP lid kit	197000-36
1 LF 5, PP lid kit	200300-36
2 PES funnel, 300 ml	197000-34
2 PES funnel, 500 ml	197000-56
3 PC support base	197000-35
4 Silicone stopper (No. 8)	167110-16
LF 3a, Spin-Lock Filter Holder (300 ml)	197000-02
LF 5a, Spin-Lock Filter Holder (500 ml)	197000-07
1 LF 3a, PP lid kit	197000-36
1 LF 5a, PP lid kit	200300-36
2 PES funnel, 300 ml	197000-34
2 PES funnel, 500 ml	197000-56
3 Storage bottle adaptor	197000-38

# SF, Stainless Steel Filter Holder



### Features

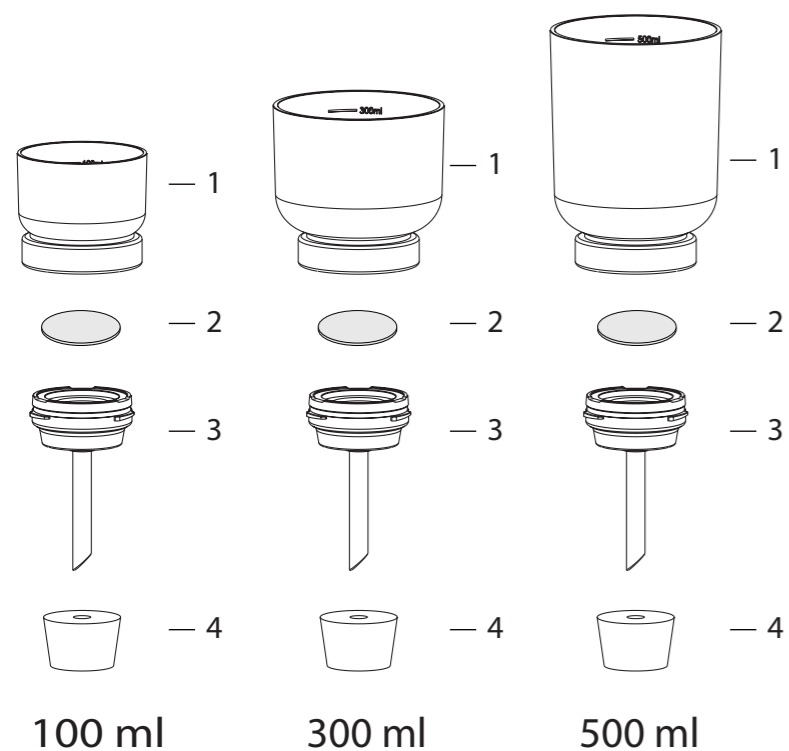
- New outer spin-lock connection facilitates fast and stable installation without clamp.
- Laser-marked graduation helps accurately sample addition.
- Forceps access points on support base help retrieve membrane easily.
- SS316 funnel offers excellent chemical resistance and can be fast sterilized by flame.

### Specifications

Material	100 ml	300 ml	500 ml
Funnel	SS316	SS316	SS316
Support base	SS316	SS316	SS316
Membrane support	SS316	SS316	SS316
Funnel lid	SS316	SS316	SS316

### Specifications

Funnel capacity	100 ml	300 ml	500 ml
Filter diameter	47 mm	47 mm	47 mm
Effective filtration area	11.6 cm <sup>2</sup>	11.6 cm <sup>2</sup>	11.6 cm <sup>2</sup>
Support pore size	70 μm	70 μm	70 μm



### Ordering Information

SF 1, Stainless Steel Filter Holder (100 ml) 180100-10

- |   |                                |           |
|---|--------------------------------|-----------|
| 1 | Stainless steel funnel, 100 ml | 180100-01 |
| 2 | Stainless steel support screen | 180100-31 |
| 3 | Stainless steel support base   | 180100-00 |
| 4 | Silicone stopper (No.8)        | 167110-16 |

SF 3, Stainless Steel Filter Holder (300 ml) 180100-30

- |   |                                |           |
|---|--------------------------------|-----------|
| 1 | Stainless steel funnel, 300 ml | 180100-03 |
| 2 | Stainless steel support screen | 180100-31 |
| 3 | Stainless steel support base   | 180100-00 |
| 4 | Silicone stopper (No.8)        | 167110-16 |

SF 5, Stainless Steel Filter Holder (500 ml) 180100-50

- |   |                                |           |
|---|--------------------------------|-----------|
| 1 | Stainless steel funnel, 500 ml | 180100-05 |
| 2 | Stainless steel support screen | 180100-31 |
| 3 | Stainless steel support base   | 180100-00 |
| 4 | Silicone stopper (No.8)        | 167110-16 |

SF, Stainless Steel Lid

- |                                     |           |
|-------------------------------------|-----------|
| 100 ml Stainless steel lid          | 180100-11 |
| 300 ml / 500 ml Stainless steel lid | 180100-13 |

# SS, Stainless Steel Filter Holder



### Features

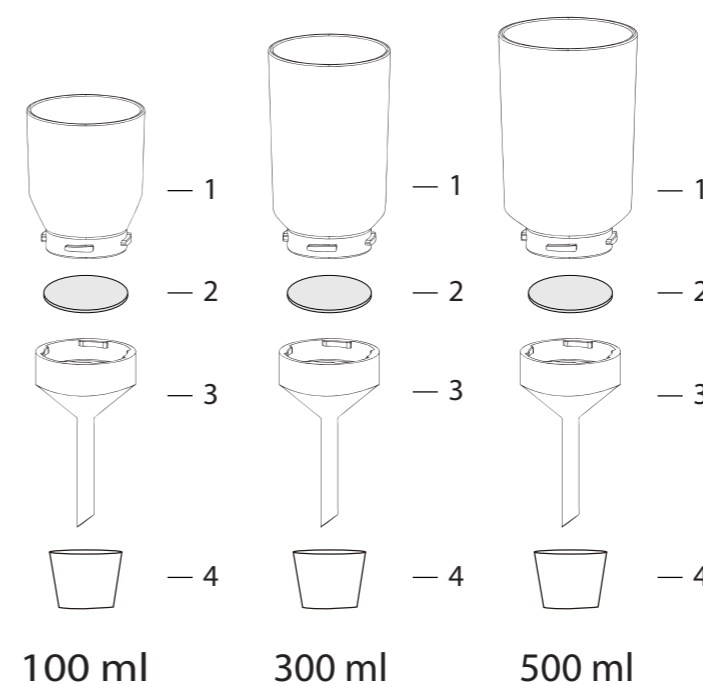
- Inner spin-lock connection (M381450) facilitates fast and stable installation without clamp.
- Intuitive operation by 360° ring graduation mark.
- SS316 funnel offers excellent chemical resistance and can be fast sterilized by flame.

### Specifications

Material	100 ml	300 ml	500 ml
Funnel	SS316	SS316	SS316
Support base	SS316	SS316	SS316
Membrane support	SS316	SS316	SS316
Funnel lid	SS316	SS316	SS316

### Specifications

Funnel capacity	100 ml	300 ml	500 ml
Filter diameter	47 mm	47 mm	47 mm
Effective filtration area	9.6 cm <sup>2</sup>	9.6 cm <sup>2</sup>	9.6 cm <sup>2</sup>
Support pore size	70 μm	70 μm	70 μm



### Ordering Information

SS 1, Stainless Steel Filter Holder (100 ml) 167103-10

- |   |                                |           |
|---|--------------------------------|-----------|
| 1 | Stainless steel funnel, 100 ml | 167103-61 |
| 2 | Stainless steel support screen | 167100-31 |
| 3 | Stainless steel support base   | 167103-60 |
| 4 | Silicone stopper (No.8)        | 167110-16 |

SS 3, Stainless Steel Filter Holder (300 ml) 167103-30

- |   |                                |           |
|---|--------------------------------|-----------|
| 1 | Stainless steel funnel, 300 ml | 167103-63 |
| 2 | Stainless steel support screen | 167100-31 |
| 3 | Stainless steel support base   | 167103-60 |
| 4 | Silicone stopper (No.8)        | 167110-16 |

SS 5, Stainless Steel Filter Holder (500 ml) 167103-50

- |   |                                |           |
|---|--------------------------------|-----------|
| 1 | Stainless steel funnel, 500 ml | 167103-65 |
| 2 | Stainless steel support screen | 167100-31 |
| 3 | Stainless steel support base   | 167103-60 |
| 4 | Silicone stopper (No.8)        | 167110-16 |

SS, Stainless Steel Lid

- |                            |           |
|----------------------------|-----------|
| 100 ml Stainless steel lid | 167103-11 |
| 300 ml Stainless steel lid | 167103-13 |
| 500 ml Stainless steel lid | 167103-15 |



# 47 mm PES Filtration Apparatus



LF 30



MF 31

### Features

- LF 30: Spin-lock connection (M381450) and built-in overflow protection provide a fast, stable and safe operation.
- MF 31: Strong magnetic seal (I5551337) allows one-handed operation and can drain the filtrate away directly without removing tubes.

### Applications

General filtration, such as microbiological test, suspended solid analysis etc.

### Specifications

Material	LF 30	MF 31
Funnel	PES	PES
Support base	PC	PES
Membrane support	PP	PES
Receiver flask	PC	Borosilicate glass
Syringe filter	PTFE	PTFE
Drain hose	-	Rubber (non-autoclavable)

### Specifications

	LF 30	MF 31
Funnel capacity	300 ml	300 ml
Flask capacity	1200 ml	1000 ml
Filter diameter	47 mm	47 mm
Effective filtration area	12.5 cm <sup>2</sup>	13.1 cm <sup>2</sup>
Hose barb	5/16 inch (8 mm)	5/16 inch (8 mm)
Syringe filter	25 mm, 0.2 μm	25 mm, 0.2 μm
Drain device	-	Yes
Overflow protection	Yes	-

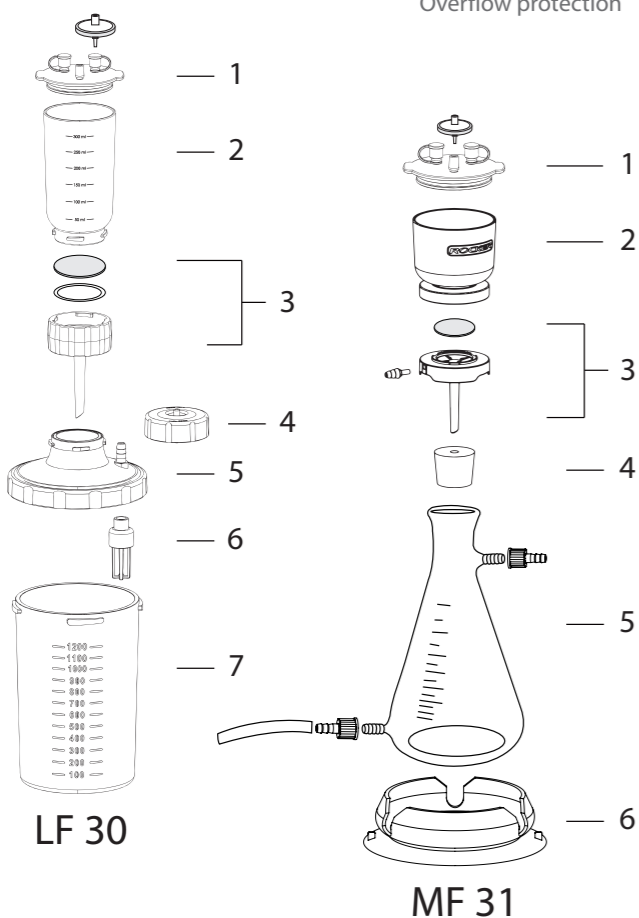
### Ordering Information

#### LF 30, 47 mm Filtration Set 197010-30

1	PP lid kit	197000-36
2	PES funnel, 300 ml	197000-34
3	PC support base	197000-35
4	Black PP cap	197000-40
5	PC cover	197000-32-PC
6	Overflow protection	197000-39
7	PC bottle, 1200 ml	197000-31-PC

#### MF 31, 47 mm Filtration Set 200320-31

1	PP lid kit for magnetic funnel	200300-36
2	PES magnetic funnel, 300ml	200300-30
3	PES magnetic support base	200300-32
4	Silicone stopper (No.8)	167110-16
5	Receiver flask with drain, 1000 ml (with screwthread connector)	167300-08
6	Silicone fixing sucker	167200-45



# 47 mm Stainless Steel Filtration Apparatus



VF 2



VF 11

### Features

- Spin-lock connection (M381450) facilitates fast and stable installation without clamp.
- SS316 funnel offers excellent chemical resistance and can be fast sterilized by flame.
- Drains the filtrate away directly without removing the tubes.

### Applications

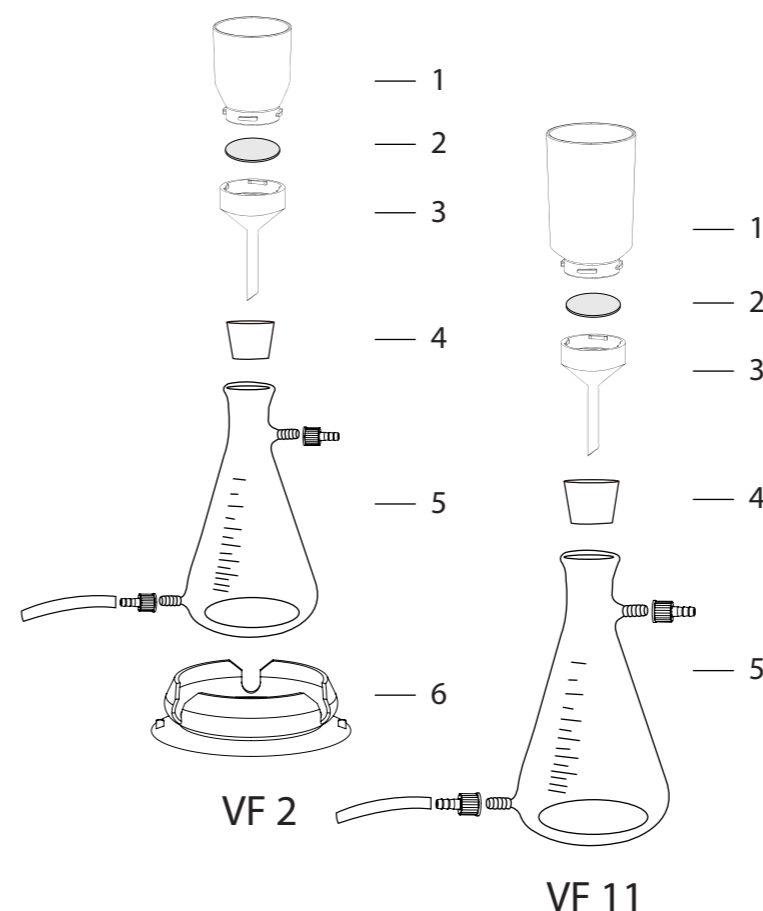
Microbiological test and purification of corrosive liquid, solvent etc.

### Specifications

Material	VF 2	VF 11
Funnel	SS316	SS316
Support base	SS316	SS316
Membrane support	SS316	SS316
Stopper	Silicone rubber (No.8)	Silicone rubber (No.18)
Receiver flask	Borosilicate glass	Borosilicate glass
Drain hose	Rubber (non-autoclavable)	Rubber (non-autoclavable)

### Specifications

	VF 2	VF 11
Funnel capacity	100 ml	500 ml
Flask capacity	1000 ml	2000 ml
Filter diameter	47 mm	47 mm
Effective filtration area	9.6 cm <sup>2</sup>	9.6 cm <sup>2</sup>
Hose barb	5/16 inch (8 mm)	5/16 inch (8 mm)
Funnel graduation	50 ml / 100 ml	300 ml / 500 ml



### Ordering Information

#### VF 2, 47 mm Stainless Steel Filtration Set 167200-02

#### SS 1, Stainless Steel Filter Holder (100 ml) 167103-10

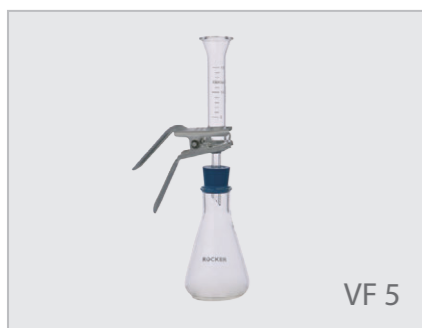
1	Stainless steel funnel, 100 ml	167103-61
2	Stainless steel support screen	167100-31
3	Stainless steel support base	167103-60
4	Silicone stopper (No.8)	167110-16
5	Receiver flask with drain, 1000 ml (with screwthread connector)	167300-08
6	Silicone fixing sucker	167200-45

#### VF 11, 47 mm Stainless Steel Filtration Set 167200-11

#### SS 5, Stainless Steel Filter Holder (500 ml) 167103-50

1	Stainless steel funnel, 500 ml	167103-65
2	Stainless steel support screen	167100-31
3	Stainless steel support base	167103-60
4	Silicone stopper (No.18)	167110-18
5	Receiver flask with drain, 2000 ml (with screwthread connector)	167200-13

# 25 mm Microanalysis Glass Filtration Apparatus



VF 5



VF 8

### Features

- Clearly-marked graduations in funnel are convenient for sample addition.
- Sintered glass or stainless steel screen membrane support to meet your needs.

### Applications

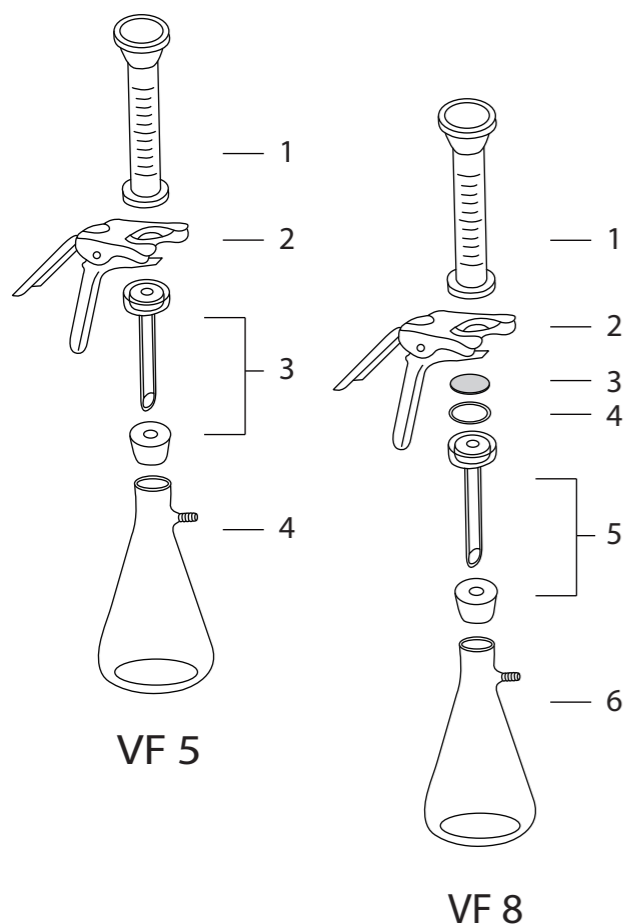
Small volume vacuum filtration for biological or particulate contamination analysis.

### Specifications

Material	VF 5	VF 8
Funnel	Borosilicate glass	Borosilicate glass
Support base	Borosilicate glass	Borosilicate glass
Membrane support	Sintered glass	SS screen with PTFE gasket
Clamp	Aluminum	Aluminum
Stopper	Silicone rubber (No.5)	Silicone rubber (No.5)
Receiver flask	Borosilicate glass	Borosilicate glass

### Specifications

	VF 5	VF 8
Funnel capacity	15 ml	15 ml
Flask capacity	125 ml	125 ml
Filter diameter	25 mm	25 mm
Effective filtration area	2.2 cm <sup>2</sup>	2.2 cm <sup>2</sup>
Hose barb	5/16 inch (8 mm)	5/16 inch (8 mm)



### Ordering Information

#### VF 5, 25mm Microanalysis Glass Filtration Set 167200-05

15 ml Glass filter holder 167120-32		
1	Glass funnel, 15 ml	167220-15
2	Aluminum clamp	167240-05
3	Sintered glass support base (Including No.5 silicone stopper)	167230-04
4	Receiver flask, 125 ml	167250-05

#### VF 8, 25 mm Microanalysis Glass Filtration Set 167200-08

15 ml Glass filter holder 167120-34		
1	Glass funnel, 15 ml	167220-15
2	Aluminum clamp	167240-05
3	SS support screen	167230-32
4	PTFE gasket	167230-42
5	Glass support base (Including No.5 silicone stopper)	167230-08
6	Receiver flask, 125 ml	167250-05

# 47 mm Glass Filtration Apparatus



VF 6



VF 7

### Features

- The screwthread connector helps remove the silicone tube quickly.
- The silicone fixing sucker prevents the receiver flask from tipping over accidentally.

### Applications

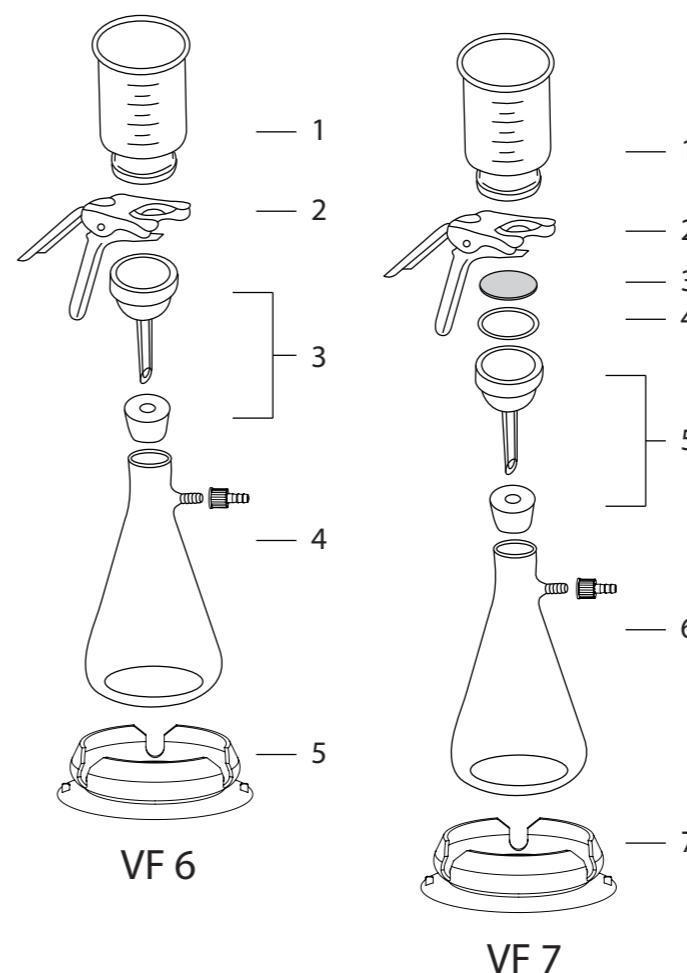
Solvent purification and general filtration such as microbiology, suspended solid analysis etc.

### Specifications

Material	VF 6	VF 7
Funnel	Borosilicate glass	Borosilicate glass
Support base	Borosilicate glass	Borosilicate glass
Membrane support	Sintered glass	SS screen with PTFE gasket
Clamp	Aluminum	Aluminum
Stopper	Silicone rubber (No.8)	Silicone rubber (No.8)
Receiver flask	Borosilicate glass	Borosilicate glass

### Specifications

	VF 6	VF 7
Funnel capacity	300 ml	300 ml
Flask capacity	1000 ml	1000 ml
Filter diameter	47 mm	47 mm
Effective filtration area	9.6 cm <sup>2</sup>	9.6 cm <sup>2</sup>
Hose barb	5/16 inch (8 mm)	5/16 inch (8 mm)



### Ordering Information

#### VF 6, 47 mm Glass Filtration Set 167200-06

300 ml Glass filter holder 167120-31		
1	Glass funnel, 300 ml	167210-03
2	Aluminum clamp	167240-01
3	Sintered glass support base (Including No.8 silicone stopper)	167230-03
4	Receiver flask, 1000 ml (with screwthread connector)	167250-03
5	Silicone fixing sucker	167200-45

#### VF 7, 47 mm Glass Filtration Set 167200-07

300 ml Glass filter holder 167120-33		
1	Glass funnel, 300 ml	167210-03
2	Aluminum clamp	167240-01
3	SS support screen	167230-31
4	PTFE gasket	167230-41
5	Glass support base (Including No.8 silicone stopper)	167230-07
6	Receiver flask, 1000 ml (with screwthread connector)	167250-03
7	Silicone fixing sucker	167200-45

# 47 mm, 90 mm Glass Filtration Apparatus



VF 3

### Features

- ◆ The screwthread connector helps remove the silicone tube quickly.
- ◆ The silicone fixing sucker prevents the receiver flask from tipping over accidentally.
- ◆ The filter holder and flask, connected by sintered glass, have better resistance of corrosive liquid.

### Applications

Purification of organic, corrosive liquid such as solvent (mobile phase) for HPLC and GC analysis.

### Specifications

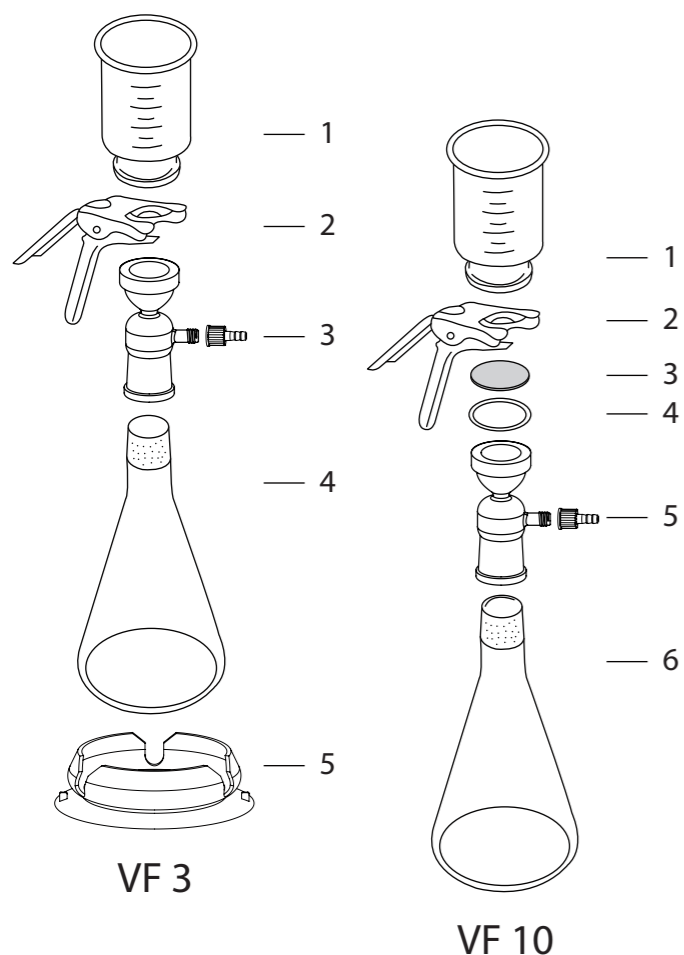
Material	VF 3	VF 10
Funnel	Borosilicate glass	Borosilicate glass
Support base	Borosilicate glass	Borosilicate glass
Membrane support	Sintered glass	Metal coating PTFE
Clamp	Aluminum	Aluminum
Receiver flask	Borosilicate glass	Borosilicate glass

### Specifications

Funnel capacity	300 ml	1000 ml
Flask capacity	1000 ml	4000 ml
Filter diameter	47 mm	90 mm
Effective filtration area	9.6 cm <sup>2</sup>	40.6 cm <sup>2</sup>
Hose barb	5/16 inch (8 mm)	5/16 inch (8 mm)



VF 10



VF 3

VF 10

### Ordering Information

VF 3, 47 mm Glass Filtration Set 167200-03

300 ml Glass filter holder 167120-30

1	Glass funnel, 300 ml	167210-03
2	Aluminum clamp	167240-01
3	Sintered glass support base w/ tubulated cap (with screwthread connector)	167230-01
4	Ground joint flask, 1000 ml	167250-01
5	Silicone fixing sucker	167200-45

VF 10, 90 mm Glass Filtration Set 167200-10

1000 ml Glass filter holder 167120-35

1	Glass funnel, 1000 ml	167210-10
2	Aluminum clamp	167240-02
3	PTFE coating support screen	167230-33
4	PTFE gasket	167230-43
5	Glass support base w/ tubulated cap (with screwthread connector)	167230-09
6	Ground joint flask, 4000 ml	167250-06

# 47 mm, 90 mm Glass Filtration Apparatus



VF 12

### Features

- ◆ Unique filtration adaptor design can be connected with GL45 storage bottle.
- ◆ VF 12 / VF 15 can filtrate and store solution directly in GL45 storage bottle without the need of being transferred from the filtering flask.

### Applications

Purification of organic, corrosive liquid such as solvent (mobile phase) for HPLC and GC analysis.

### Specifications

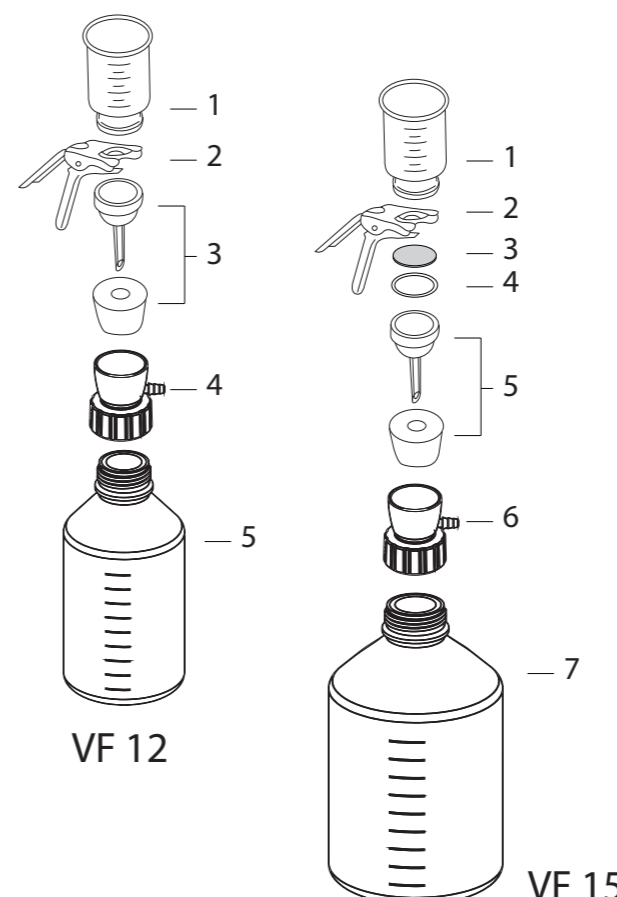
Material	VF 12	VF 15
Funnel	Borosilicate glass	Borosilicate glass
Support base	Borosilicate glass	Borosilicate glass
Membrane support	Sintered glass	Metal coating PTFE
Clamp	Aluminum	Aluminum
Filtration Adaptor	PP (Autoclavable)	PP (Autoclavable)
Storage Bottle	Borosilicate glass	Borosilicate glass

### Specifications

Funnel capacity	300 ml	1000ml
Flask capacity	1000 ml	5000 ml
Filter diameter	47 mm	90 mm
Effective filtration area	9.6 cm <sup>2</sup>	40.6 cm <sup>2</sup>
Hose barb	5/16 inch (8 mm)	5/16 inch (8 mm)



VF 15



VF 12

VF 15

### Ordering Information

VF 12, 47 mm Glass Filtration Set 167200-12

300 ml Glass filter holder 167120-31

1	Glass funnel, 300 ml	167210-03
2	Aluminum clamp	167240-01
3	Sintered glass support base (Including No.8 silicone stopper)	167230-03
4	Filtration Adaptor for GL45 Bottle	197000-65
5	1000ml laboratory glass bottle	197000-59

VF 15, 90 mm Glass Filtration Set 167200-15

1000 ml Glass filter holder 167120-37

1	Glass funnel, 1000 ml	167210-10
2	Aluminum clamp	167240-02
3	PTFE coating support screen	167230-33
4	PTFE gasket	167230-43
5	Glass support base (Including No.8 silicone stopper)	167230-10
6	Filtration Adaptor for GL45 Bottle	197000-65
7	5000ml laboratory glass bottle	197000-55