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FILTRATION



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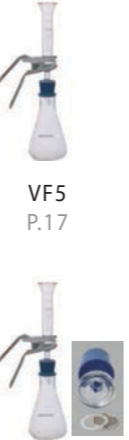



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MRC.9.16

LABORATORY FILTRATION

Filtration Set Selection Guide

	Ø 25 mm	Ø 47 mm	Ø 90 mm	
PES (Polyethersulfone)		 <p>LF 30 P.23</p> <p>LF 31 P.23</p>		<p>PES filter holder</p>  <p>LF 3 P.25</p> <p>LF 3a P.25</p> <p>LF 5 P.25</p> <p>LF 5a P.25</p>
Stainless Steel 316		 <p>LF 32 P.22</p> <p>LF 33 P.22</p>  <p>VF 2 P.21</p> <p>VF 11 P.21</p>		<p>Magnetic filter holder</p>  <p>MF 3 P.26</p> <p>MF 3a P.26</p> <p>MF 5 P.26</p> <p>MF 5a P.26</p>
Glass	 <p>VF 5 P.17</p> <p>VF 8 P.17</p>	 <p>VF 3 P.19</p> <p>VF 7 P.18</p>	 <p>VF 6 P.18</p> <p>VF 12 P.20</p>	<p>S.S. filter holder</p>  <p>100ml P.24</p> <p>300ml P.24</p> <p>500ml P.24</p>

** Filter holders are used for Ø 47 mm membrane

25 mm Glass Microanalysis Filtration Sets



VF5



VF8

Applications

Ideal for small volume vacuum filtration for biological or particulate contamination analysis.

Specifications

Material	VF5	VF8
Filter funnel	Borosilicate glass	Borosilicate glass
Funnel support base	Borosilicate glass	Borosilicate glass
Membrane support	Sintered glass	S.S. screen with PTFE seal
Clamp	Anodized aluminum	Anodized aluminum
Stopper	Silicone rubber (No.5)	Silicone rubber (No.5)
Receiver flask	Borosilicate glass	Borosilicate glass

Specifications

Funnel capacity	15 ml	15 ml
Flask capacity	125 ml	125 ml
Filter diameter	25 mm	25 mm
Effective filtration area	2.2 cm ²	2.2 cm ²
Port thread (I.D. tubing)	5/16 inch (8 mm)	5/16 inch (8 mm)

Ordering Information

VF5, 25mm Glass Microanalysis Filtration Set 167200-05

15 ml Glass filter holder (1+2+3) 167120-32

1	Glass funnel, 15 ml	167220-15
2	Anodized aluminum clamp	167240-05
3	Glass support base (Including No.5 silicone stopper)	167230-04

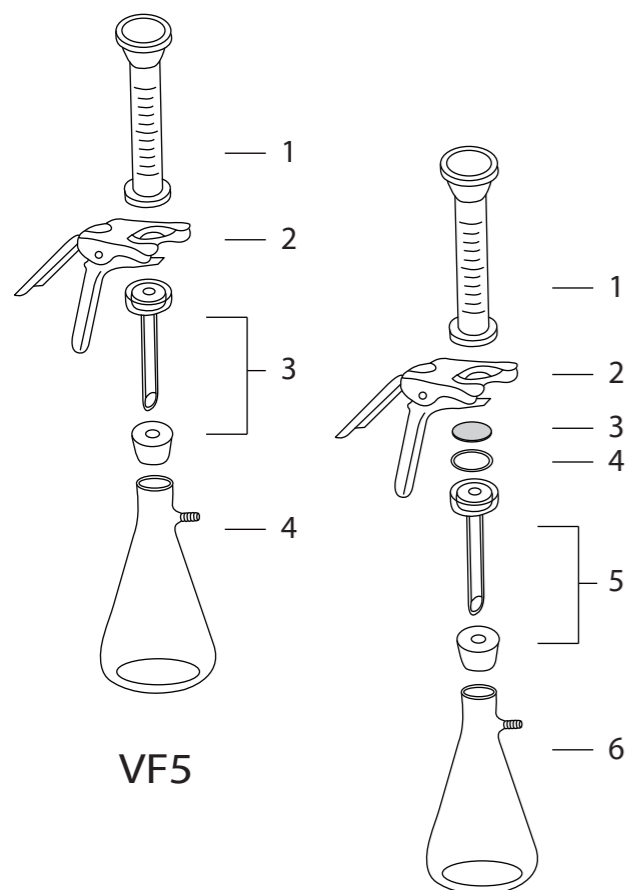
4 Receiver flask, 125 ml 167250-05

VF8, 25 mm Glass Microanalysis Filtration Set 167200-08

15 ml Glass filter holder (1+2+3+4+5) 167120-34

1	Glass funnel, 15 ml	167220-15
2	Anodized aluminum clamp	167240-05
3	Stainless steel 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



VF5

VF8

47 mm Glass Filtration Sets



VF6



VF7

Applications

Ideal for solvent purification and general filtration for microbiology, suspended solid analysis etc.

Specifications

Material	VF6	VF7
Filter funnel	Borosilicate glass	Borosilicate glass
Funnel support base	Borosilicate glass	Borosilicate glass
Membrane support	Sintered glass	S.S. screen with PTFE seal
Clamp	Anodized aluminum	Anodized aluminum
Stopper	Silicone rubber (No.8)	Silicone rubber (No.8)
Receiver flask	Borosilicate glass	Borosilicate glass

Specifications

Funnel capacity	300 ml	300 ml
Flask capacity	1000 ml	1000 ml
Filter diameter	47 mm	47 mm
Effective filtration area	9.6 cm ²	9.6 cm ²
Port thread (I.D. tubing)	5/16 inch (8 mm)	5/16 inch (8 mm)

Ordering Information

VF6, 47 mm Glass Filtration Set 167200-06

300 ml Glass filter holder (1+2+3) 167120-31

1	Glass funnel, 15 ml	167210-03
2	Anodized aluminum clamp	167240-01
3	Glass support base (Including No.8 silicone stopper)	167230-03

4 Receiver flask, 1000 ml 167250-03

5 Silicone fixing sucker 167200-45

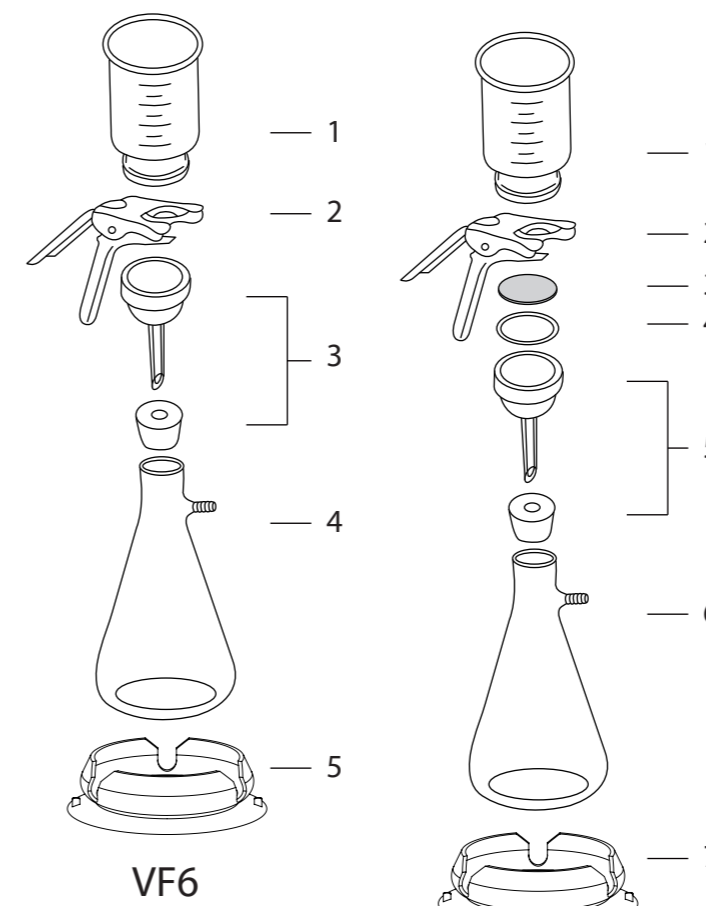
VF7, 47 mm Glass Filtration Set 167200-07

300 ml Glass filter holder (1+2+3+4+5) 167120-33

1	Glass funnel, 300 ml	167210-03
2	Anodized aluminum clamp	167240-01
3	Stainless steel 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 167250-03

7 Silicone fixing sucker 167200-45



VF6

VF7

47 mm, 90 mm Glass Filtration Sets

47 mm Glass Filtration Sets



VF3



VF10

Applications

Ideal for the purification of organic, corrosive liquid such as solvent (mobile phase) for HPLC analysis.

Specifications

Material	VF3	VF10
Filter funnel	Borosilicate glass	Borosilicate glass
Funnel support base	Borosilicate glass	Borosilicate glass
Membrane support	Sintered glass	S.S. screen with PTFE seal
Clamp	Anodized aluminum	Anodized 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 ²	40.6 cm ²
Port thread (I.D. tubing)	5/16 inch (8 mm)	5/16 inch (8 mm)

Ordering Information

VF3, 47 mm Glass Filtration Set	167200-03
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300 ml Glass filter holder (1+2+3)	167120-30
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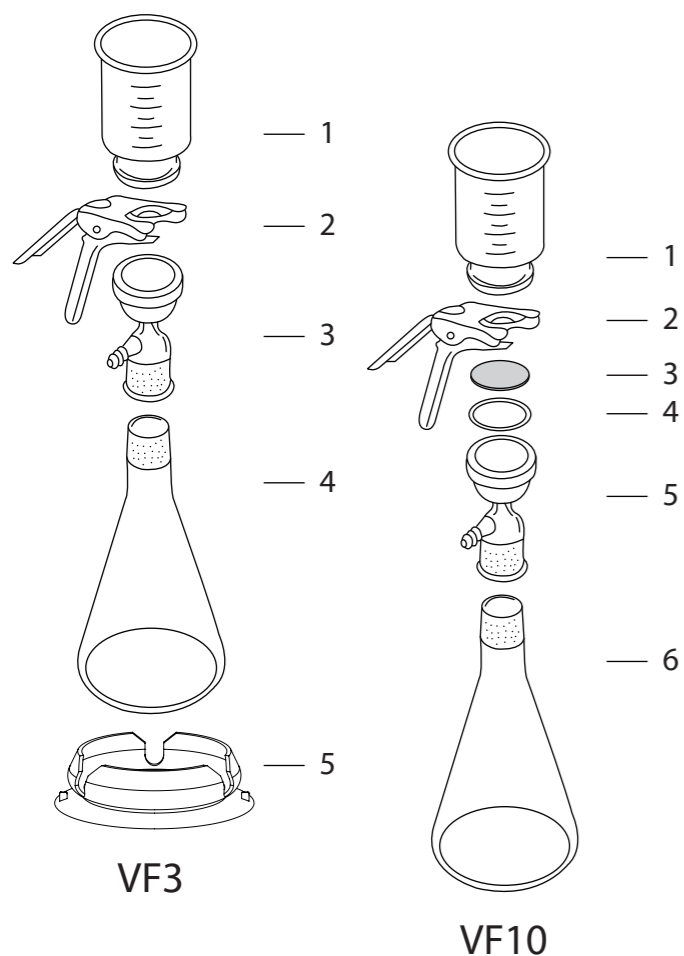
1	Glass funnel, 300 ml	167210-03
2	Anodized aluminum clamp	167240-01
3	Glass support base & tubulated cap	167230-01
4	Ground joint flask, 1000 ml	167250-01
5	Silicone fixing sucker	167200-45

VF10, 90 mm Glass Filtration Set	167200-10
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1000 ml Glass filter holder (1+2+3+4+5)	167120-35
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1	Glass funnel, 1000 ml	167210-10
2	Anodized aluminum clamp	167240-02
3	PTFE coating support screen	167230-33
4	PTFE gasket	167230-43
5	Glass support base & tubulated cap	167230-09

6	Ground joint flask, 4000 ml	167250-06
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VF3

VF10



VF12

Features

- Unique filtration adaptor design can connect with GL45 storage bottle.
- VF12 can filtrate and store solution directly in GL45 storage bottle without the need of being transferred from the filtering flask.

Applications

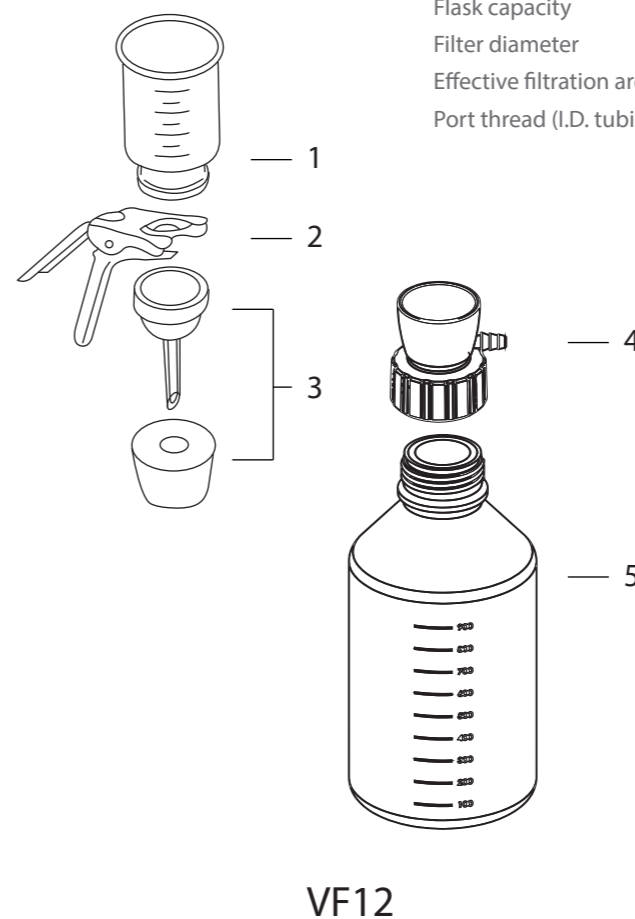
Ideal for the purification of organic, corrosive liquid such as solvent (mobile phase) for HPLC analysis.

Specifications

Material	VF12
Filter funnel	Borosilicate glass
Funnel support base	Borosilicate glass
Membrane support	Borosilicate glass
Clamp	Anodized aluminum
Filtration Adaptor	PP (Autoclavable)
Storage Bottle	Borosilicate glass

Specifications

Funnel capacity	300 ml
Flask capacity	1000 ml
Filter diameter	47 mm
Effective filtration area	9.6 cm ²
Port thread (I.D. tubing)	5/16 inch (8 mm)



VF12

Ordering Information

VF12, 47 mm Glass Filtration Set	167200-12
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300 ml Glass filter holder (1+2+3)	167120-31
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1	Glass funnel, 300 ml	167210-03
2	Anodized aluminum clamp	167240-01
3	Glass support base (Including No.8 silicone stopper)	167230-03

4	Filtration Adaptor	197000-65
5	1000ml Storage Bottle	197000-59

47 mm Stainless Steel Filtration Sets



VF2

Applications

For filtration requiring the sterilization such as microbiology test or use for purification of corrosive liquid, solvent etc.

Specifications

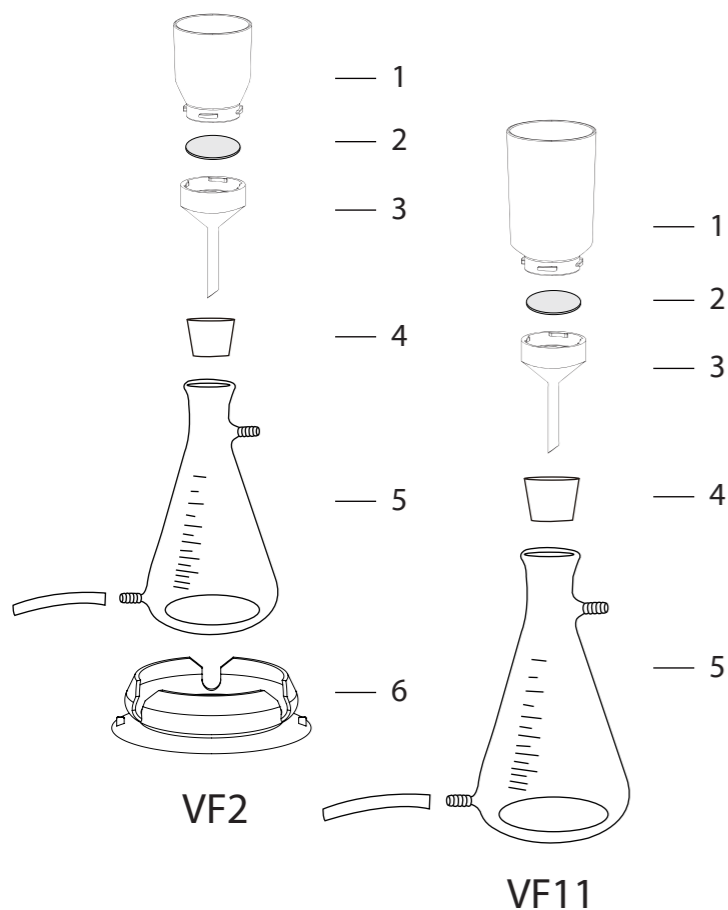
Material	VF2	VF11
Filter funnel	SUS316	SUS316
Funnel support base	SUS316	SUS316
Membrane support	SUS316	SUS316
Stopper	Silicone rubber (No.16)	Silicone rubber (No.18)
Receiver flask	Borosilicate glass	Borosilicate glass
Drain hose	Rubber (non-autoclavable)	Rubber (non-autoclavable)

Specifications

Funnel capacity	100 ml	500 ml
Flask capacity	1000 ml	2000 ml
Filter diameter	47 mm	47 mm
Effective filtration area	9.6 cm ²	9.6 cm ²
Port thread (I.D. tubing)	5/16 inch (8 mm)	5/16 inch (8 mm)



VF11



Ordering Information

VF2, 47 mm Stainless Steel Filtration Set 167200-02

100 ml Stainless steel filter holder (1+2+3+4)	167103-10
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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.16)	167110-17

5	Receiver flask with drain, 1000 ml	167300-08
6	Silicone fixing sucker	167200-45

VF11, 47 mm Stainless Steel Filtration Set 167200-11

500 ml Stainless steel filter holder (1+2+3+4)	167103-50
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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	167200-13
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47 mm Stainless Steel Filtration Sets



LF 32

Features

- Spin-lock connection facilitates fast and stable installation without clamp.
- Stainless steel funnel offers excellent chemical resistance and can be fastly sterilized by flame.
- Built-in overflow protection to keep the filtrate from overflowing when waste bottle is full.

Specifications

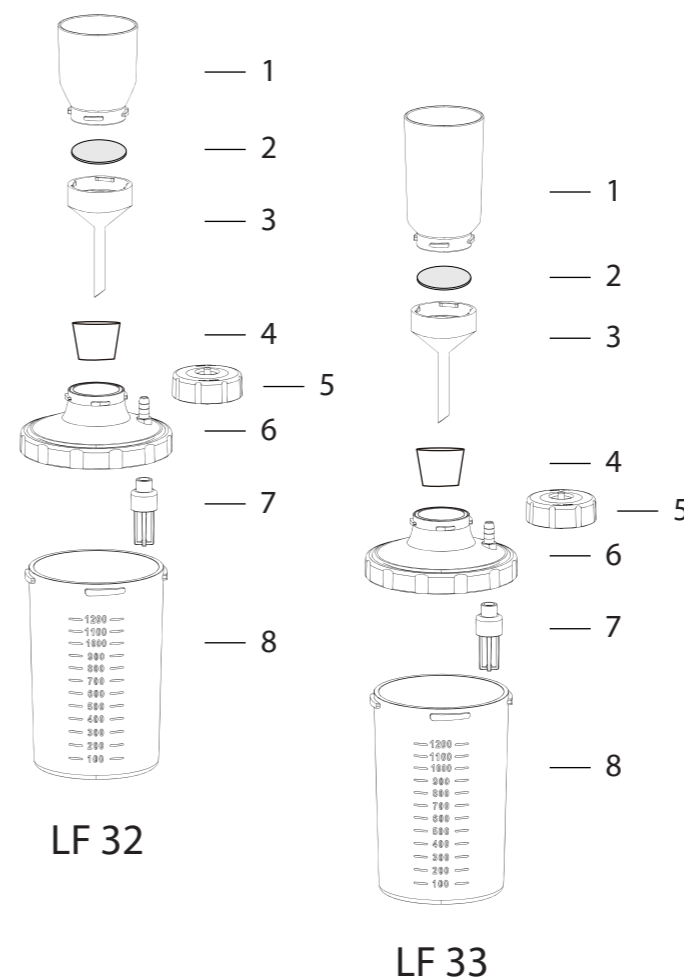
Material	LF 32	LF 33
Filter funnel	SUS316	SUS316
Funnel support base	SUS316	SUS316
Membrane support	SUS316	SUS316
Waste bottle	PC	PC

Specifications

Funnel capacity	100 ml	300 ml
Flask capacity	1200 ml	1200 ml
Filter diameter	47 mm / 50 mm	47 mm / 50 mm
Effective filtration area	9.6 cm ²	9.6 cm ²
Port thread (I.D. tubing)	5/16 inch (8 mm)	5/16 inch (8 mm)
Funnel graduation	50 ml / 100ml	100 ml / 300ml



LF 33



Ordering Information

LF 32, 47 mm Stainless Steel Filtration Set 197010-32

100 ml Stainless steel filter holder (1+2+3+4)	167103-10
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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.16)	167110-17

PC waste bottle with cover, 1200 ml 197000-11-PC (5+6+7+8)

5	Black PP cap	197000-40
6	PC cover	197000-32-PC
7	Overflow protection	197000-39
8	PC bottle, 1200 ml	197000-31-PC

LF 33, 47 mm Stainless Steel Filtration Set 197010-33

300 ml Stainless steel filter holder (1+2+3+4)	167103-30
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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.16)	167110-17

PC waste bottle with cover, 1200 ml 197000-11-PC (5+6+7+8)

5	Black PP cap	197000-40
6	PC cover	197000-32-PC
7	Overflow protection	197000-39
8	PC bottle, 1200 ml	197000-31-PC

47 mm Filtration Sets



LF 30



MF 31

Features

- LF 30 spin-lock connection facilitates fast and stable installation without clamp.
- MF 31 strong magnetic seal allows one-handed operation
- Excellent smash, high temperature resistance and autoclavable.
- Funnel graduated in 50ml, receiver in 100ml increments for easy measurement.

Specifications

Material	LF 30	MF 31
Filter funnel	PES	PES
Funnel support base	PC	PES
Membrane support	PP	PES
Syringe filter	PTFE	PTFE
Receiver flask	PC	Borosilicate glass
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 / 50 mm	47 mm / 50 mm
Effective filtration area	12.5 cm ²	13.1 cm ²
Port thread (I.D. tubing)	5/16 inch (8 mm)	5/16 inch (8 mm)
Syringe filter	25 mm, 0.2 μm	4-8 mm
Drain device	—	Yes
Overflow protection	Yes	—

Ordering Information

LF 30, 47 mm Filtration Set 197010-30

LF 3, PES filter holder (300 ml) (1+2+3+4) 197000-01

1	PP lid kit	197000-36
2	PES funnel, 300 ml	197000-34
3	PC support base	197000-35
4	Silicone stopper (No.16)	167110-17

PC waste bottle with cover, 1200 ml (5+6+7+8) 197000-11-PC

5	Black PP cap	197000-40
6	PC cover	197000-32-PC
7	Overflow protection	197000-39
8	PC bottle, 1200 ml	197000-31-PC

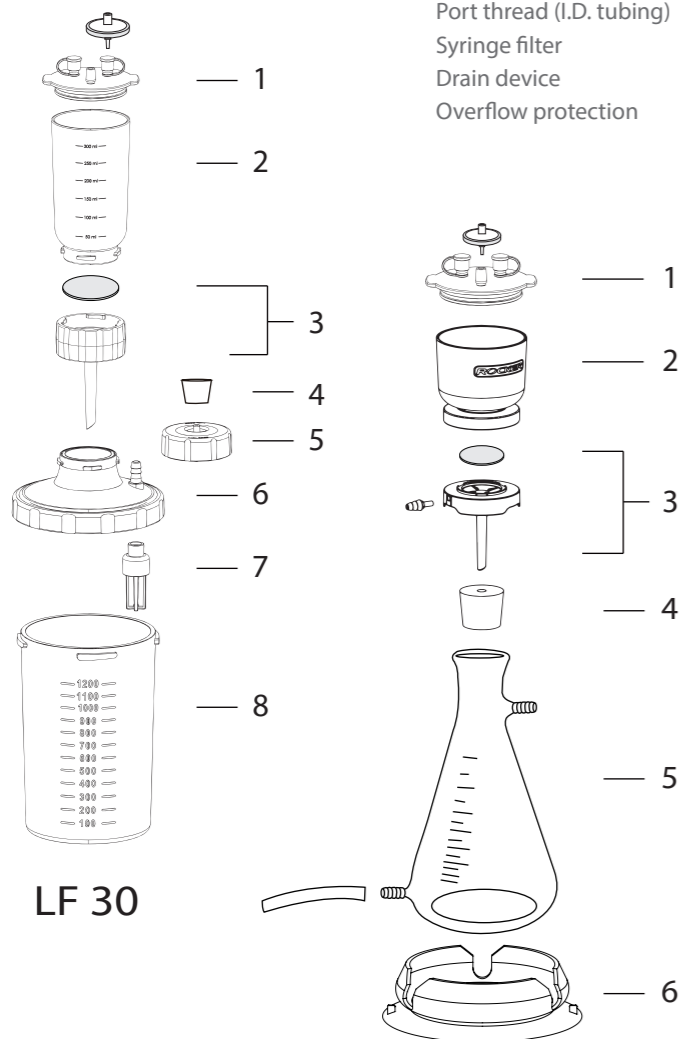
MF 31, 47 mm Filtration Set 200320-31

MF 3, Magnetic filter holder (300ml) (1+2+3+4) 200300-01

1	PP lid kit for Magnetic funnel	200300-36
2	PES magnetic funnel, 300ml	200300-30
3	PES support base	200300-32
4	Silicone stopper (No.16)	167110-17

5 Receiver flask with drain, 1000 ml 167300-08

6 Silicone fixing sucker 167200-45



LF 30

MF 31

47 mm Stainless Steel Filter Holder



Features

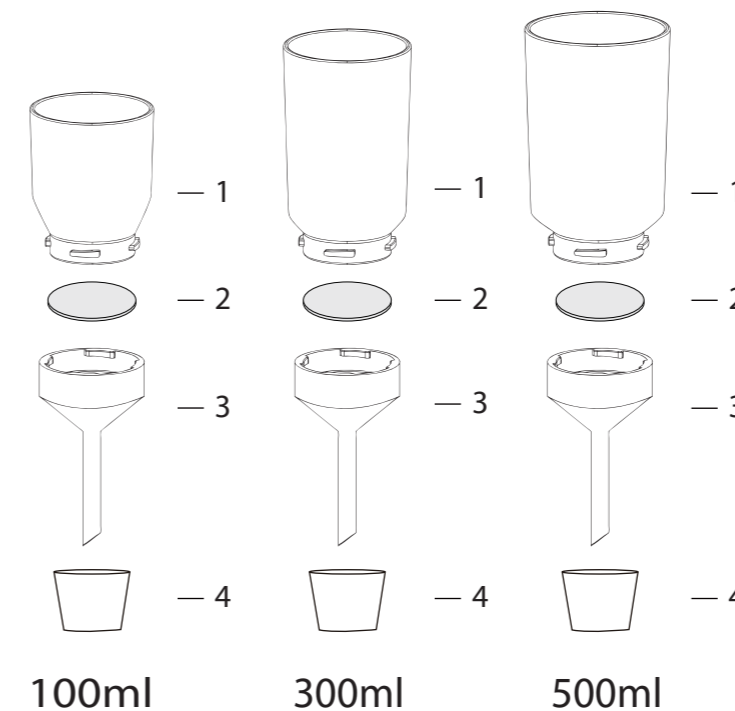
- Spin-lock connection facilitates fast and stable installation without clamp.
- Stainless steel funnel offers excellent chemical resistance and can be fastly sterilized by flame.

Specifications

Material	167103-10	167103-30	167103-50
Filter funnel	SUS316	SUS316	SUS316
Funnel support base	SUS316	SUS316	SUS316
Membrane support	SUS316	SUS316	SUS316
Funnel lid	SUS316	SUS316	SUS316

Specifications

	100 ml	300 ml	500 ml
Funnel capacity	100 ml	300 ml	500 ml
Filter diameter	47 mm / 50 mm	47 mm / 50 mm	47 mm / 50 mm
Effective filtration area	9.6 cm ²	9.6 cm ²	9.6 cm ²



100ml

300ml

500ml

Ordering Information

100 ml, 47 mm Stainless Steel Filter Holder 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.16)	167110-17

300 ml, 47 mm Stainless Steel Filter Holder 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.16)	167110-17

500 ml, 47 mm Stainless Steel Filter Holder 167103-50

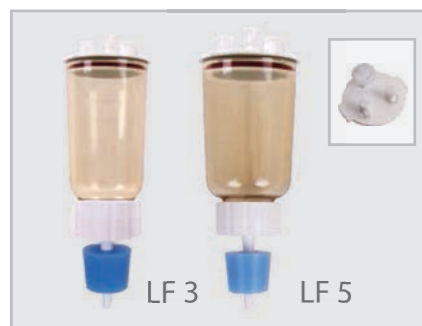
1	Stainless steel funnel, 500 ml	167103-65
2	Stainless steel support screen	167100-31
3	Stainless steel support base	167103-60
4	Silicone stopper (No.16)	167110-17

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 Filter Holder

(Polyethersulfone)



Features

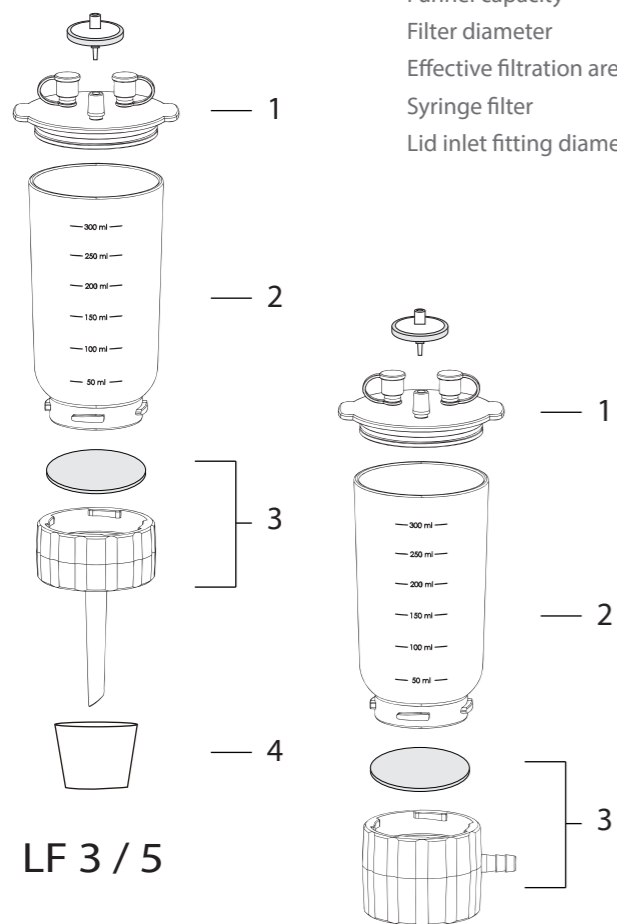
- Spin-lock connection facilitates fast and stable installation without clamp.
- PES structure offers excellent smash, high temperature (180°C) resistance and autoclavable.
- Reusable, friendly to the earth and save your money.
- Funnel graduated in 50ml increments for easy measurement.
- LF 3/5 equips with No.16 stopper that allows it to fit other receiver flasks.
- LF 3a/5a is available to fit different tissue bottle.

Specifications

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

Specifications

	LF 3 / LF 5	LF 3a / LF 5a
Funnel capacity	300 ml / 500 ml	300 ml / 500 ml
Filter diameter	47 mm / 50 mm	47 mm / 50 mm
Effective filtration area	12.5 cm ²	12.5 cm ²
Syringe filter	25 mm, 0.2 μm	25 mm, 0.2 μm
Lid inlet fitting diameter	7 mm	7 mm



Ordering Information

LF 3, 47 mm PES Filter Holder (300ml)	197000-01
LF 5, 47 mm PES Filter Holder (500ml)	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.16)	167110-17
LF 3a, 47 mm PES Filter Holder (300ml)	197000-02
LF 5a, 47 mm PES Filter Holder (500ml)	197000-07
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 Storage bottle adaptor	197000-38

47 mm PES Magnetic Filter Holder

(Polyethersulfone)



Features

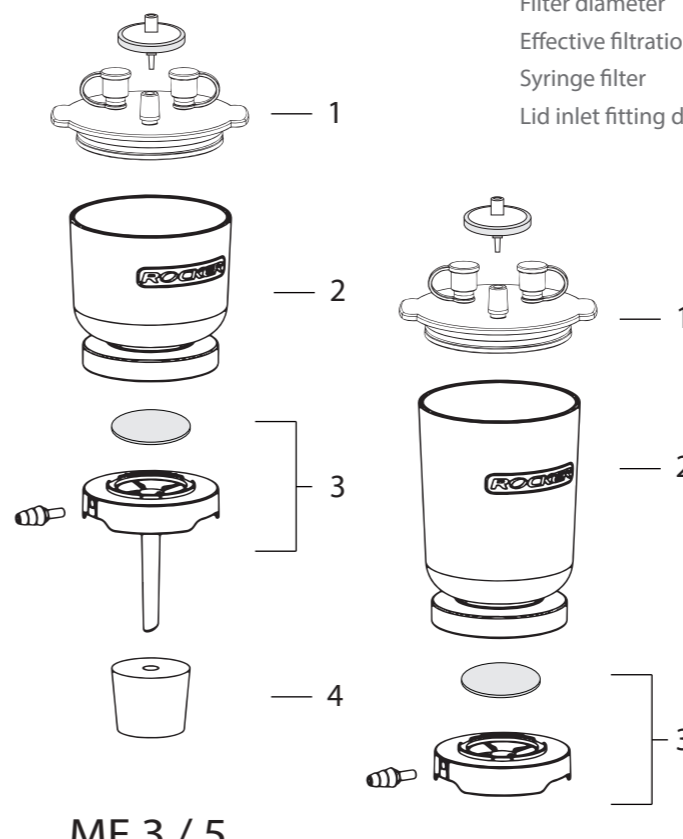
- Compatible with various kinds of bottle, vacuum flask with or without side arm to collect filtrate directly.
- Strong magnetic seal allows one-handed operation, prevents possible twisting and tearing of the membrane. Membrane guide on the base helps position membrane easily.
- PES (Polyether sulfone) construction, resistant to a wide range of chemicals and high temperature, sturdy and unbreakable.
- Withstands autoclave cycles (121°C, 20 minutes).
- MF magnetic filter holder was awarded the United States and Taiwan invention patent.

Specifications

Material	MF 3 / MF 5	MF 3a / MF 5a
Filter funnel	PES	PES
Funnel 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 ²	13.1 cm ²
Syringe filter	25 mm, 0.2 μm	25 mm, 0.2 μm
Lid inlet fitting diameter	4-8 mm	4-8 mm



Ordering Information

MF 3, 47 mm PES Magnetic Filter Holder (300ml)	200300-01
MF 5, 47 mm PES Magnetic Filter Holder (500ml)	200500-01
1 PP lid kit for Magnetic funnel	200300-36
2 PES magnetic funnel, 300ml	200300-30
2 PES magnetic funnel, 500ml	200500-30
3 PES support base	200300-32
4 Silicone stopper (No.16)	167110-17
MF 3a, 47 mm PES Magnetic Filter Holder (300ml)	200310-01
MF 5a, 47 mm PES Magnetic Filter Holder (500ml)	200510-01
1 PP lid kit for Magnetic funnel	200300-36
2 PES magnetic funnel, 300ml	200300-30
2 PES magnetic funnel, 500ml	200500-30
3 PES support base	200310-32

Vacuum Filtration System

Two-Year Warranty

Features

- **Compact and safe operation**
Lafil 400 series is a unique filtration system by combining vacuum source with filtration ware. Its compact design can save much bench space than the traditional ones. With a fence-like platform design, it can prevent user's negligence from tipping over the waste bottle.
- **The patented spin-lock design**
The filter holder can be connected with waste bottle by patented spin-lock connection giving a fast and stable installation without clamp.
- **Overflow protection**
Waste bottle comes with a built-in overflow protection to keep the filtrate from overflowing when waste bottle is full.
- **Autoclavable**
Waste bottle and filter holder is made of engineering plastics which are shatterproof, high temperature resistance and autoclavable.
- **International safety certification**
CE certification

Applications

- Filtration for microbiology test
- Suspended solid test
- Vacuum filtration

Ordering Information

- 197401-11(22)**
Lafil 400 - LF 30, Vacuum Filtration System, AC110V, 60Hz (AC220V, 50Hz)
- 197402-11(22)**
Lafil 400 - LF 32, Vacuum Filtration System, AC110V, 60Hz (AC220V, 50Hz)
- 197400-11(22)**
Lafil 400, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)



Lafil 400 - LF 30



Lafil 400 - LF 32

Specification

Model	Lafil 400 - LF 30		Lafil 400 - LF 32	
Voltage	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. power (W)	100	80	100	80
Max. current (A)	1.0	0.4	1.0	0.4
Max. vacuum	- 720 mmHg		- 720 mmHg	
Max. flow rate	25 l/min	22 l/min	25 l/min	22 l/min
Motor rotation	1750 RPM	1450 RPM	1750 RPM	1450 RPM
Port thread	5/16 inch (8 mm)		5/16 inch (8 mm)	
Dimension (LxWxH)	33.5 x 23 x 45 cm		33.5 x 23 x 40 cm	
Part	Material		Material	
Filter funnel	PES (300 ml, 47 mm / 50 mm)		SUS316 (100 ml, 47 mm / 50 mm)	
Waste bottle	PC (1200 ml)		PC (1200 ml)	
Funnel support base	PP (for Ø47 mm / Ø50 mm membrane)		SUS316 (for Ø47 mm / Ø50 mm membrane)	
Funnel lid	PP (Containing PTFE syringe filter,) 25 mm, 0.2 µm		—	
Overflow protection	PP		PP	

Vacuum Filtration System

Two-Year Warranty

Features

- **Compact and safe operation**
Lafil 400 series is a unique filtration system by combining vacuum source with filtration ware. Its compact design can save much bench space than the traditional ones. With a fence-like platform design, it can prevent user's negligence from tipping over the waste bottle.
- **The patented spin-lock design**
The filter holder can be connected with waste bottle by patented spin-lock connection giving a fast and stable installation without clamp.
- **Autoclavable**
LF 5a is made of engineering plastics which shatterproof, high temperature resistance and autoclavable.
- **International safety certification**
CE certification

Applications

- Sample pretreatment
- Medium and buffer purification
- Vacuum filtration

Ordering Information

- 197404-11(22)**
Lafil 400 - LF 5a - 500, Vacuum Filtration System, AC110V, 60Hz (AC220V, 50Hz)
- 197400-11(22)**
Lafil 400, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)
- ROU-1152-RLS**
Autofil, 500ml Disposable Funnel, 24PK
- ROU-1153-RLS**
Autofil, 1000ml Disposable Funnel, 24PK



Lafil 400 - LF 5a - 500



Specification

Model	Lafil 400 - LF 5a - 500	
Voltage	110V/60Hz	220V/50Hz
Max. power (W)	100	80
Max. current (A)	1.0	0.4
Max. vacuum	- 720 mmHg	- 720 mmHg
Max. flow rate	25 l/min	22 l/min
Motor rotation	1750 RPM	1450 RPM
Port thread	5/16 inch (8 mm)	
Dimension (LxWxH)	33.5 x 23 x 43 cm	
Part	Material	Material
Filter funnel	PES (500ml)	PE (500ml, 1000ml)
Storage bottle	Borosilicate glass (500 ml)	Borosilicate glass (500 ml, *1000 ml)
Funnel support base	PP (for Ø47 mm / Ø50 mm membrane)	—
Membrane filter	—	PES (0.22 µm, Ø90 mm)
Funnel lid	PP	PE

* 1000ml tissue bottle is optional

Vacuum Filtration System

Two-Year Warranty

Features

- **No air pollution, maintenance free**
VP series pumps are piston-driven, no need of lubricant, regular oil changes and maintenance; with no oil pollution.
- **The patented spin-lock design**
VP-17 - LF 30 filter holder can be connected with waste bottle by patented spin-lock connection giving a fast and stable installation without clamp.
- **The patented magnetic design**
VP-17 - MF 31 strong magnetic seal allows one-handed operation, prevents possible twisting and tearing of the membrane.
- **Overflow protection**
VP-17 - LF 30 waste bottle comes with a built-in overflow protection to keep the filtrate from overflowing when waste bottle is full.

Applications

- Air sampling
- Suspended solid test
- Vacuum Filtration

Ordering Information

167305-11(22)
VP-17 - LF 30, Vacuum Filtration System, complete set includes :
* VP-17, Vacuum Pump

* LF 30, Filtration Set
* Silicone Tube (1m)

167311-11(22)
VP-17 - MF 31, Vacuum Filtration System, complete set includes :
* VP-17, Vacuum Pump
* MF 31, Filtration Set
* Silicone Tube (1m)



VP-17- LF 30



VP-17- MF 31

Specification

Model	VP-17 - LF 30		VP-17-MF31	
Voltage	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. flow rate	23 l/min	20 l/min	23 l/min	20 l/min
Max. vacuum	- 680 mmHg		- 680 mmHg	
Capacity (Funnel / Waste bottle)	300 ml / 1200 ml		300 ml / 1000 ml	
Filter diameter	47 mm / 50 mm		47 mm / 50 mm	
Effective filtration area	12.5 cm ²		13.1 cm ²	
Port thread	5/16 inch (8 mm)		5/16 inch (8 mm)	
Part	Material		Material	
Filter funnel	PES		PES	
Funnel support base	PC		PES	
Membrane support	PP		PES	
Waste bottle	PC		Borosilicate glass	
Funnel lid	PP		PP	
Overflow protection	PP		-	

Vacuum Filtration System

Features

- **No air pollution, maintenance free**
VP series pumps are piston-driven, no need of lubricant, regular oil changes and maintenance; with no oil pollution.
- **Save Time**
VF 12 can filtrate and store solution directly in GL45 storage bottle without the need of being transferred from the filtering flask.
- **Suitable for all GL45 storage bottle**
Unique filtration adaptor design can connect with GL45 storage bottle (1000ml, 2000ml, 5000ml...etc.)

Applications

- Ideal for the purification of organic, corrosive liquid such as solvent (mobile phase) for HPLC analysis.

Ordering Information

189302-11(22)
VP-17C - VF 12, Vacuum Filtration System, complete set includes :
* VP-17C, Vacuum Pump
* VF 12, Filtration Set
* Silicone Tube (1m)

169302-11(22)
CVP-14 - VF 12, Vacuum Filtration System, complete set includes :
* CVP-14, Vacuum Pump
* VF 12, Filtration Set
* Silicone Tube (1m)



VP-17C - VF 12



CVP-14 - VF 12

Specification

Model	VP-17C - VF12		CVP-14 - VF12	
Voltage	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. flow rate	23 l/min	20 l/min	20 l/min	18 l/min -
Max. vacuum	- 630 mmHg		670 mmHg	
Capacity (Funnel / Waste bottle)	300 ml / 1000 ml		300 ml / 1000 ml	
Filter diameter	47 mm		47 mm	
Effective filtration area	9.6 cm ²		9.6 cm ²	
Port thread	5/16 inch (8 mm)		5/16 inch (8 mm)	
Part	Material		Material	
Filter funnel	Borosilicate glass		Borosilicate glass	
Funnel support base	Borosilicate glass		Borosilicate glass	
Membrane support	Borosilicate glass		Borosilicate glass	
Clamp	Anodized aluminum		Anodized aluminum	
Filtration Adaptor	PP		PP	
Storage Bottle	Borosilicate glass		Borosilicate glass	

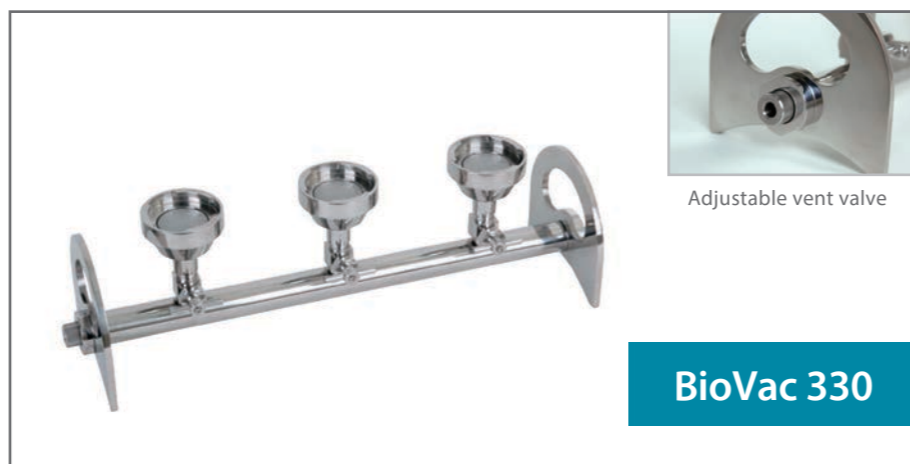
Multi-Branch Manifold

Features

- **The whole set is made of SUS316**
All parts of BioVac 330, 320 manifold are made of SUS316.
- **Adjustable vent valve design**
The adjustable vent valve design can avoid "Water Hammer" and help to drain residual liquid off the tube.
- **Individual control valve**
Each branch permits individual control.
- **The patented spin-lock design**
BioVac 330 manifold uses a patented spin-lock connection which allows for fast and stable installation without clamp.
- **Compatible with different sizes of funnels**
BioVac 330 manifold is available for MRC standard 100, 300, 500ml funnel at option.



* MRC standard S.S. funnels * MRC magnetic filter holder



BioVac 330



BioVac 320

Specification

Model	BioVac 330	BioVac 320
Number of branch	3	3
Filter diameter	47 mm / 50 mm	Optional
Funnel capacity	100 ml / 300 ml / 500 ml	Optional
Effective filtration area	9.6 cm ²	Optional
Port thread	5/16 inch (8 mm)	5/16 inch (8 mm)
Dimension (LxWxH)	44.5 x 12.9 x 12.5 cm	44.5 x 12.9 x 15 cm
Part	Material	Material
Body	SUS316	SUS316
Control valve	SUS316	SUS316
Funnel support base	SUS316	SUS316
Handle	SUS316	SUS316
Connector	SUS316	SUS316

Applications

- Filtration for microbiology test
- Chemistry Experiments
- General laboratory filtration

Ordering Information

- 167103-23** BioVac 330, 3 Places Stainless Steel Manifold (without S.S. funnel)
- 167110-23** BioVac 320, 3 Places Stainless Steel Manifold
- 167103-61** 100ml Stainless Steel Funnel
- 167103-63** 300ml Stainless Steel Funnel
- 167103-65** 500ml Stainless Steel Funnel
- 200300-01** MF 3, 300ml Magnetic filter holder with lid kit
- 200500-01** MF 5, 500ml Magnetic filter holder with lid kit

Vacuum Filtration System

Two-Year Warranty

Features

- **Special design for microbiology filtration**
BioVac 330B is designed for a large number of samples filtration in microbiology test. The complete system includes vacuum pump, manifold, burner, waste bottle and filter.
- **The manifold is made of SUS316**
All parts of manifold are made of SUS316 which offer excellent chemical resistance and can be fast sterilized by flame, steam and oven etc. .
- **The patented spin-lock design**
The manifold uses a patented spin-lock connection which allows for fast and stable installation without clamp.
- **4 liter PP waste bottle with drain**
The large capacity of 4000ml waste bottle with drain offers convenience of collecting and draining waste solution.
- **Adjustable vent valve design**
The adjustable vent valve design can avoid "Water Hammer" and help to drain residual liquid off the tube.



BioVac 330B



The adjustable vent valve design can avoid "Water Hammer" and help to drain residual liquid off the tube.

Specification

Model	BioVac 330B	
Voltage	110V/60Hz	220V/50Hz
Max. flow rate	37 l/min	34 l/min
Max. vacuum	- 680 mmHg	
Waste bottle	4000 ml, made of PP with drain	
Number of branch	3	
Filter diameter	47mm / 50mm	
Funnel capacity	100ml	
Effective filtration area	9.6 cm ²	
Port thread	5/16 inch (8 mm)	
Manifold Part	Material	
Body	SUS316	
Control valve	SUS316	
Filter funnel	SUS316	
Funnel support base	SUS316	
Connector	SUS316	

Applications

- Filtration for microbiology test
- Chemical experiment
- General laboratory filtration

Ordering Information

- 167403-11(22)** BioVac 330B, Vacuum Filtration System, complete set includes :
 - * VP-34, Oil Free Vacuum Pump
 - * BioVac 331, 3 Places Stainless Steel Manifold Set
 - * 4000 ml PP Waste Bottle with drain
 - * Dragon 100, Torch Burner
 - * MCE Membrane, 47 mm, 0.45 μm, 200/PK

Alumium Multi-Branch Manifold

Features

- **Light and handy aluminum design**
All parts of MultiVac 310-MS are made of anodized aluminum which is light, cost-effective and autoclavable.
- **Quick-Fit hose barb**
Detachable hose barb can be connected to either side of the manifold quickly towards the vacuum source.
- **Individual control valve**
Each branch permits individual control.
- **Compatible with different sizes of filter holders**
MultiVac 310-MS manifold include no.8 silicone stoppers which can accept various types of filter holders at option.



MultiVac 310-MS



The tubing to the vacuum source can be connected to the other side of manifold.

Applications

- Filtration for suspended solid test
- Filtration for microbiology test
- General laboratory filtration

Ordering Information

180310-01
MultiVac 310-MS, 3 Places Aluminum Manifold with No. 8 stopper x 3

Specification

Model	MultiVac 310-MS
Number of branch	3
Filter diameter	Optional
Funnel capacity	Optional
Effective filtration area	Optional
Port thread	5/16 inch (8 mm)
Dimension (LxWxH)	47 x 13 x 16 cm
Part	Material
Body	Anodized aluminum
Control valve	Anodized aluminum
Handle	Anodized aluminum
Hose barb	Anodized aluminum

Vacuum Filtration System

Two-Year Warranty

Features

- **Special design for large number samples**
MultiVac 310-MS-T is an economical model for large sample filtration. This system includes vacuum pump, manifold, waste bottle and filter holders.
- **Light and handy aluminum design**
The manifold is made of anodized aluminum which is autoclavable, light and cost-effective.
- **Magnetic filter holder is included**
Magnetic filter holder allows for one-handed operation, and can prevent the membrane from being twisted or torn.
- **4 liter PP waste bottle with drain**
The large capacity of 4000ml waste bottle with drain offers convenience of collecting and draining waste solution.



MultiVac 310-MS-T

Applications

- Filtration for suspended solid test
- Filtration for microbiology test
- General laboratory filtration

Ordering Information

180311-11(22)-T
MultiVac 310-MS-T Vacuum Filtration System, complete set includes :
* VP-34, Oil Free Vacuum Pump
* MultiVac 310-MS, 3 Places Aluminum Manifold
* MF 3, 300ml Magnetic filter holder with lid kid (3 pcs)
* 4000 ml PP Waste Bottle with drain

Specification

Model	MultiVac 310-MS-T	
Voltage	110V/60Hz	220V/50Hz
Max. flow rate	37 l/min	34 l/min
Max. vacuum	- 680 mmHg	
Waste bottle	4000 ml, made of PP with drain	
Number of branch	3	
Filter diameter	47mm	
Funnel capacity	300ml	
Effective filtration area	13.1 cm ²	
Port thread	5/16 inch (8 mm)	
Manifold Part	Material	
Body	Anodized aluminum	
Control valve	Anodized aluminum	
Handle	Anodized aluminum	
Hose barb	Anodized aluminum	

Stainless Steel Spin-Lock Design Multi-Branch Manifold

Features

- Quick-assembly and disassembly**
 Each component can be removed easily by hand for cleaning and autoclaving to prevent biofilms and eliminate sources of contamination.
- Convertible funnel adaptor**
 Convertible funnel adaptor design allows user to fit the desired funnel (reusable or disposable) easily.
- Innovative vent valve design**
 An adjustable vent valve integrated with the pipe can eliminate water hammer phenomenon and help drain out residual waste water.
- Quick-Fit hose barb**
 Detachable hose barb can be connected to either side of the manifold quickly towards the vacuum source.
- Individual control valve**
 Each branch permits individual control.
- Compatible with different sizes of funnels**
 MultiVac 300-MB / 600-MB manifolds can accept VP standard S.S. 100, 300, 500ml funnel at option.

Applications

- Filtration for microbiology test
- Chemical experiment
- General laboratory filtration

Ordering Information

- 180300-02** MultiVac 300-MB, 3 Places S.S. Manifold with MRC S.S. funnel adaptor
- 180600-02** MultiVac 600-MB, 6 Places S.S. Manifold with MRC S.S. funnel adaptor
- 167103-61** 100ml S.S. filter funnel
- 167103-63** 300ml S.S. filter funnel
- 167103-65** 500ml S.S. filter funnel



Specification

Model	MultiVac 300-MB	MultiVac 600-MB
Number of branch	3	6
Filter diameter	47 mm / 50 mm	47 mm / 50 mm
Funnel capacity	100 ml / 300 ml / 500 ml	100 ml / 300 ml / 500 ml
Effective filtration area	9.6 cm ²	9.6 cm ²
Port thread	5/16 inch (8 mm)	5/16 inch (8 mm)
Dimension (LxWxH)	48 x 13 x 11 cm	85 x 13 x 11 cm
Part	Material	Material
Body	SUS316	SUS316
Control valve	Anodized aluminum	Anodized aluminum
Funnel support base	SUS316	SUS316
Membrane support	SUS316	SUS316
Handle	Anodized aluminum	Anodized aluminum
Connector	SUS316	SUS316

Stainless Steel Multi-Branch Manifold

Features

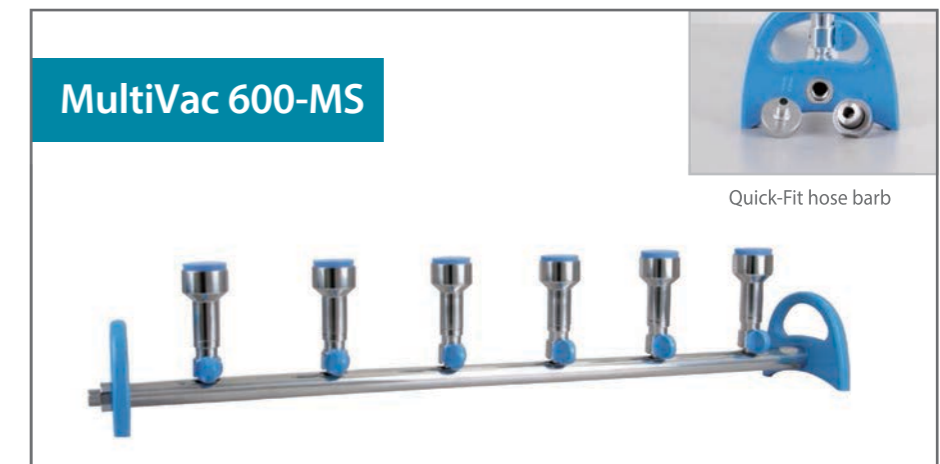
- Quick-assembly and disassembly**
 Each component can be removed easily by hand for cleaning and autoclaving to prevent biofilms and eliminates sources of contamination.
- Convertible funnel adaptor**
 Convertible funnel adaptor design allows user to fit the desired funnel (reusable or disposable) easily.
- Innovative vent valve design**
 An adjustable vent valve integrated with the pipe can eliminate water hammer phenomenon and help drain out residual waste water.
- Quick-Fit hose barb**
 Detachable hose barb can be connected to either side of the manifold quickly towards the vacuum source.
- Individual control valve**
 Each branch permits individual control.

Applications

- Filtration for microbiology test
- Chemical experiment
- General laboratory filtration

Ordering Information

- 180300-01** MultiVac 300-MS, 3 Places S.S. Manifold with No. 8 stopper funnel adaptor
- 180600-01** MultiVac 600-MS, 6 Places S.S. Manifold with No. 8 stopper funnel adaptor
- 200300-01** MF 3, 300ml Magnetic filter holder with lid kit
- 200500-01** MF 5, 500ml Magnetic filter holder with lid kit
- 167110-16** No.8 silicone stopper



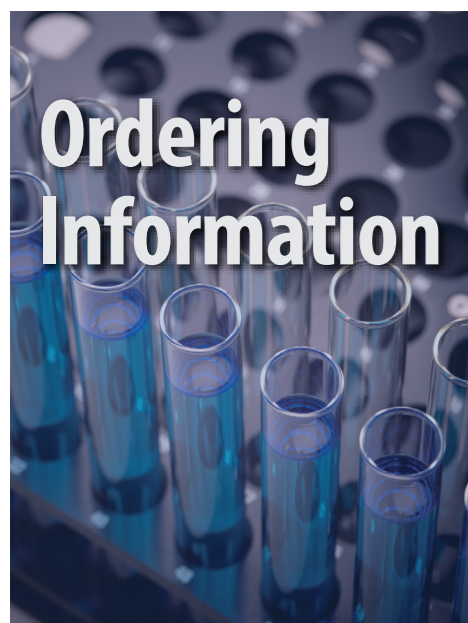
Specification

Model	MultiVac 300-MS	MultiVac 600-MS
Number of branch	3	6
Filter diameter	Optional	Optional
Funnel capacity	Optional	Optional
Effective filtration area	Optional	Optional
Port thread	5/16 inch (8 mm)	5/16 inch (8 mm)
Dimension (LxWxH)	48 x 13 x 16 cm	85 x 13 x 16 cm
Part	Material	Material
Body	SUS316	SUS316
Control valve	Anodized aluminum	Anodized aluminum
Funnel support base	SUS316	SUS316
Handle	Anodized aluminum	Anodized aluminum
Connector	SUS316	SUS316

Specification

Model	MultiVac 300 - MB	MultiVac 600 -MB
Number of branch	3	6
Effective filtration area	47 mm / 50 mm	47 mm / 50 mm
Port thread	5/16 inch (8 mm)	5/16 inch (8 mm)
Dimension(LxWxH)	48 cm x 13 cm x H (depend on funnel adaptor)	85 cm x 13 cm x H (depend on funnel adaptor)
Autoclaving conditions	121°C for 30 min	

Material	Part
Stainless steel #316	Pipe \ Control valve \ Vent valve \ Hose barb
Aluminum	Handles \ Knob of control valve
FKM	Seals of control valve \ Vent valve \ Hose barb



Combination A

- 180300-02** MultiVac 300-MB, 3 Places S.S. Manifold with adaptor (for Rocker's S.S. funnel)
- 180600-02** MultiVac 600-MB, 6 Places S.S. Manifold with adaptor (for Rocker's S.S. funnel)
- 167103-61** Stainless steel funnel 100ml
- 167103-63** Stainless steel funnel 300ml
- 167103-65** Stainless steel funnel 500ml
- 167103-11** Stainless steel cover for 100ml funnel
- 167103-13** Stainless steel cover for 300ml funnel
- 167103-15** Stainless steel cover for 500ml funnel

Combination B

- 180300-01** MultiVac 300-MS, 3 Places S.S. manifold with daptor (for #8 silicone stopper)
- 180600-01** MultiVac 600-MS, 6 Places S.S. manifold with daptor (for #8 silicone stopper)
- 200300-01** MF3, Magnetic Filter Holder 300ml with lid kit
- 200500-01** MF5, Magnetic Filter Holder 500ml with lid kit
- 167120-31** Glass Filter Holder 300m

Combination C

- 180300-00** MultiVac 300, 3 Places S.S. Manifold without adaptor
- 180600-00** MultiVac 600, 6 Places S.S. Manifold without adaptor
- 190100-73** Adaptor for Millipore MIACFD101 (100ml), MIACFD201 (250ml) plastic funnel
- 190100-74** Adaptor for Sartorius 16A07 (100ml) plastic funnel
- 190100-75** Adaptor for Pall 4870 (100ml) , 4871 (250ml) plastic funnel

MultiVac Stainless Steel Manifold



MultiVac Stainless Steel Manifold

Introduction

MultiVac stainless steel manifold family is especially developed for microbiological tests in the pharmaceutical , food, beverage, and biotech industry.

"Flexibility" is the main concept of designing MultiVac manifold. The flexible filtration head design make funnel adaptor convertible and user can change funnel adaptor to fit to Rocker's stainless steel funnel or other major brands' disposable funnels easily.

Applications

- Microbiology test filtration in food, pharmaceutical, beverage industries
- Suspended Solid test filtration for municipal, surface, ground and drinking water
- General filtration for aqueous sample

Benefits:

- **Quick-assembly and disassembly**
Each component can be removed easily by hand for cleaning and autoclaving to prevent biofilms and eliminates sources of contamination.
- **Convertible funnel adaptor**
Convertible funnel adaptor design allows user to fit their desired funnel (reusable or disposable) easily.
- **Innovative vent valve design**
An adjustable vent valve integrated with the pipe can eliminate water hammer phenomenon and help drain out residual waste water.
- **Quick-Fit hose barb**
Detachable hose barb can be connected to either side of the manifold quickly towards the vacuum source.

How to order?

You can select **Combination A, B or C** to complete your order

A Step 1. Choose the manifold



Step 2. Choose the S.S. funnel



B Step 1. Choose the manifold



Step 2. Choose the filter holder



C Step 1. Choose the manifold

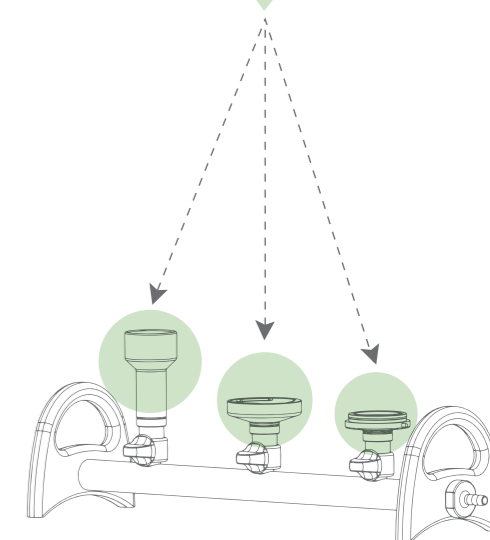


Step 2. Choose the disposable funnel and adaptor



Customized Design

We can offer customized adaptor for your funnel



Vacuum Filtration System

Two-Year Warranty

Features

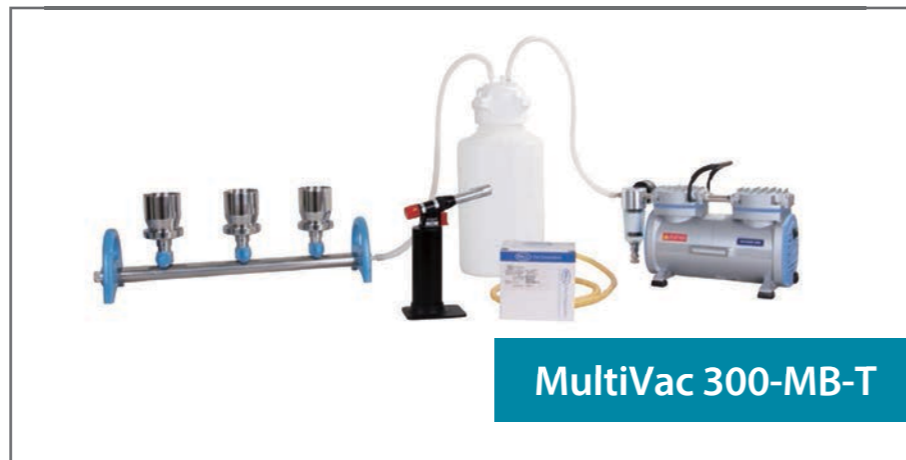
- **Special design for microbiology filtration**
MultiVac 330-MB-T / 600-MB-T are designed for a large number of samples filtration in microbiology test. Each system includes vacuum pump, manifold, burner, waste bottle and filter.
- **Innovative vent valve design**
An adjustable vent valve integrated with the pipe can eliminate water hammer phenomenon and help drain out residual waste water.
- **Quick-Fit hose barb**
Detachable hose barb can be connected to either side of the manifold quickly towards the vacuum source.
- **Individual control valve**
Each branch permits individual control.

Applications

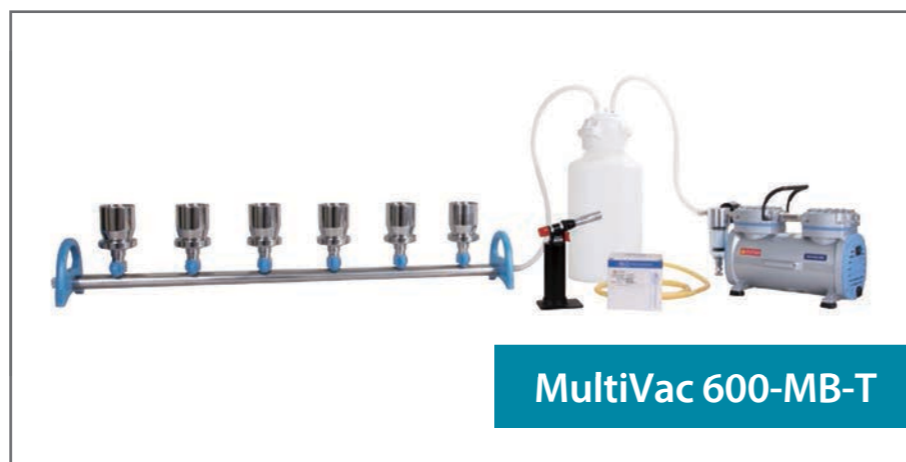
- Filtration for microbiology test
- Chemical experiment
- General laboratory filtration

Ordering Information

- 180300-11-T (22-T)**
MultiVac 300-MB-T, Vacuum Filtration System, complete set includes :
* VP-34, Oil Free Vacuum Pump
* MultiVac 300-MB, 3 Places Stainless Steel Manifold
* 3 stainless steel funnels
* 4000 ml PP Waste Bottle with drain
* Dragon 100, Torch Burner
* MCE Membrane, 47 mm, 0.45 μm, 200/PK
* Silicone Tube (2m)
- 180600-11-T (22-T)**
MultiVac 600-MB-T, Vacuum Filtration System, complete set includes :
* VP-34, Oil Free Vacuum Pump
* MultiVac 600-MB, 6 Places Stainless Steel Manifold
* 6 stainless steel funnels
* 4000 ml PP Waste Bottle with drain
* Dragon 100, Torch Burner
* MCE Membrane, 47 mm, 0.45 μm, 200/PK
* Silicone Tube (2m)



MultiVac 300-MB-T



MultiVac 600-MB-T

Specification

Model	MultiVac 300-MB-T		MultiVac 600-MB-T	
Voltage	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. flow rate	37 l/min	34 l/min	37 l/min	34 l/min
Max. vacuum	- 680 mmHg		- 680 mmHg	
Waste bottle	4000 ml, made of PP with drain		4000 ml, made of PP with drain	
Number of branch	3		6	
Filter diameter	47mm / 50mm		47mm / 50mm	
Funnel capacity	100ml		100ml	
Effective filtration area	9.6 cm ²		9.6 cm ²	
Port thread	5/16 inch (8 mm)		5/16 inch (8 mm)	
Manifold Part	Material		Material	
Body	SUS316		SUS316	
Control valve	Anodized aluminum		Anodized aluminum	
Filter funnel / base	SUS316		SUS316	
Handle	Anodized aluminum		Anodized aluminum	
Connector / vent valve	SUS316		SUS316	

WaterVac100 Vacuum Filtration System

Features

- **Save 70% bench space**
The compact design of WaterVac 100 vacuum filtration system is ideal for use on the work bench or in the laminar flow hood where its small size can save much precious space.
- **Filtration without need of waste bottle**
No suction flask and waste bottle design can save lots of bench space and time to empty waste bottle.
- **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.

Applications

- Microbiological Filtration Technique for analyzing aqueous-based fluids for microbial contamination.
- Suspended Solid test for municipal, surface, ground and drinking water.
- General filtration without the need of collecting filtrate.

Ordering Information

- 190100-01/02**
WaterVac 100, Vacuum Filtration System with AC100-240V adaptor, US /EU plug
- 190110-01/02**
WaterVac 100-MS, Vacuum Filtration System with No. 8 stopper funnel adaptor, AC100-240V adaptor, US /EU plug
- 190120-01/02**
WaterVac 100-MB, Vacuum Filtration System with MRC S.S. funnel adaptor, AC100-240V adaptor, US /EU plug



WaterVac 100-MS



WaterVac 100-MB

Specification

Model	WaterVac 100 - MS	WaterVac 100 - MB
Voltage	DC 12 V, 1.5A	
Max. flow rate	2.2 LPM (air) / 0.5 LPM (liquid)	
Max. vacuum	540 mmHg	
Weight	1.16 kg	
Effective filtration area	optional	
Dimension (LxWxH)	170 x 120 x 96 mm	
Suppose base	silicone stopper	Spin-Lock design
Part	Material	
Housing	SUS304	
Valve plate	EPDM (Ethylene Propylene Diene Monomer)	
Diaphragm	EPDM (Ethylene Propylene Diene Monomer)	
Inlet / outlet port	SUS316	
O-ring	FKM	
Tube	silicon, Ø4x8mm, 2m	

Specification

- Max. vacuum : 540 mmHg
- Max. flowrate (air) : 2.2 LPM
- Max. flowrate (clean water) : 0.5 LPM
- Weight : 1.16 Kg
- Power : DC 12 V, 1.5A,
- Transformer : 100-240VAC, 50/60Hz
- Max. ambient temperature : 5 - 40 °C
- Dimension : 170 x 120 x 96 mm (LxWxH)
- Materials :
- Housing material - stainless steel with powder painting
- Valve plate - EPDM(Ethylene Propylene Diene Monomer)
- Diaphragm - EPDM(Ethylene Propylene Diene Monomer)
- Fluid Path inlet / outlet port - Stainless steel # 316
- O-ring - FKM
- Fluid path hose - silicone tube
- Draining hose - silicone , Ø4/Ø8mm, 2 meter.

Features



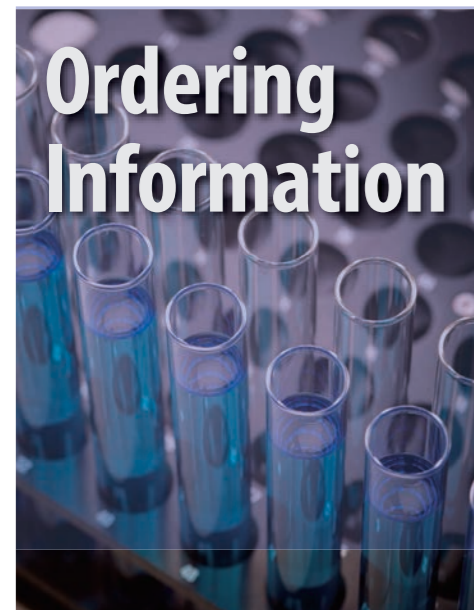
➤ **Save space** : No need of suction flask and waste bottle saving much bench space



➤ **Save Time** : No need of taking time to empty waste bottle



➤ **Easy Operation** : Simply put on membrane on filter holder and push on/off button to start filtration easily



Ordering Information

Combination A

- 190120-01** WaterVac 100-MB with US plug (with MRC's SS filter holder base, need funnel)
- 190120-02** WaterVac 100-MB with EU plug (with MRC's SS filter holder base, need funnel)
- 167103-61** Stainless steel funnel 100ml
- 167103-63** Stainless steel funnel 300ml
- 167103-65** Stainless steel funnel 500ml
- 167103-11** Stainless steel cover for 100ml funnel
- 167103-13** Stainless steel cover for 300ml funnel
- 167103-15** Stainless steel cover for 500ml funnel

Combination B

- 190110-01** WaterVac 100-MS with US plug (include silicone stopper No.8 adaptor)
- 190110-02** WaterVac 100-MS with EU plug (include silicone stopper No.8 adaptor)
- 200300-01** MF3, Magnetic Filter Holder 300ml with lid kit
- 200500-01** MF5, Magnetic Filter Holder 500ml with lid kit

Combination C

- 190100-01** WaterVac 100 vacuum filtration system (needs adaptor) with US plug
- 190100-02** WaterVac 100 vacuum filtration system (needs adaptor) with EU plug
- 190100-73** Adaptor for Millipore MIACFD101 (100ml), MIACFD201 (250ml) plastic funnel
- 190100-74** Adaptor for Sartorius 16A07 (100ml) plastic funnel
- 190100-75** Adaptor for Pall 4870 (100ml) , 4871 (250ml) plastic funnel
- 199100-68** Silicone Tube Ø4.2-8 mm, 200cm
- 190100-76** Adaptor for hose barb (Ø4-8mm)

WaterVac 100 Vacuum Filtration System



WaterVac 100 vacuum filtration system

Introduction

The WaterVac 100 is an unique vacuum filtration system which can generate sufficient vacuum for filtration through built-in air/water pump and drain the waste liquid directly. Compared with traditional filtration equipment, WaterVac 100 doesn't need additional suction flasks or bottles to collect the waste liquid which can help save much bench space to make it ideal for work in Laminar Flow Cabinet.

The WaterVac 100 is ideal for sample filtration in many laboratory applications such as Microbiology Test in food, pharmaceutical, beverage industries and Suspended Solid test for municipal, surface, ground and drinking water. Also meets Membrane Filter (MF) Technique filtration parameters described in U.S. EPA, ISO and ASTM standards .

Applications

- MF Technique for analyzing aqueous-based fluids for microbial contamination.
- Suspended Solid test for municipal, surface, ground and drinking water.
- General filtration which no need to collect filtrate

Benefits:

- **Save Space:**
No need of suction flask and waste bottle saving much bench space
- **Save Time:**
No need of taking time to empty waste bottle
- **Safety:**
No worry about waste liquid being sucked into pump
- **Versatile:**
Replaceable funnel base design makes it compatible with various kinds of filter holder
- **Easy Operation:**
Simply put on membrane on filter holder and push on/off button to start filtration easily



WaterVac 100 with disposable funnel



WaterVac 100 with stainless steel funnel



WaterVac 100 with Magnetic filter holder

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) (U.S. plug / EU plug)

B



WaterVac 100-MS vacuum filtration system (190110-01/02) (U.S. plug / EU plug)

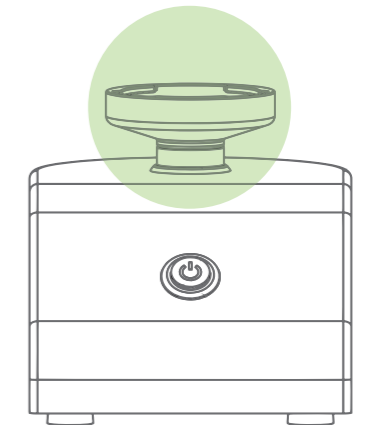
C



WaterVac 100 vacuum filtration system (190100-01/02) (U.S. plug / EU plug)

Customized Design

We can offer customized adaptor for your funnel



100ml Stainless steel funnel (167103-61) 300ml Stainless steel funnel (167103-63) 500ml Stainless steel funnel (167103-65)



Stainless steel cover for 100ml funnel (167103-11) Stainless steel cover for 300ml funnel (167103-13) Stainless steel cover for 500ml funnel (167103-15)



300ml MF 3, Magnetic filter holder (200300-01) 500ml MF 5, Magnetic filter holder (200500-01)



Sartorius, 100ml disposable plastic funnel (16A07)



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



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



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

+

+

+

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Adaptor for Sartorius disposable plastic funnel (190100-74)



Adaptor for Millipore disposable plastic funnel (190100-73)



Adaptor for Pall disposable plastic funnel (190100-75)



Adaptor for Hose barb (Φ 4-8mm) (190100-76)

Specification

Model	MF 3 / MF 3a	MF 5 / MF 5a
Funnel Capacity	300 ml	500 ml
Effective Filtration Area	13.1 cm ²	13.1 cm ²
Effective Diameter	41 mm	41 mm
Filter Size	47 mm	47 mm
Fitting Size (Tubing)	Ø 4 – 8 mm	Ø 4 – 8 mm
Graduation Increment	50ml	50ml
Size (Diameter x H)	Ø 9 x 17 cm / Ø 9 x 10.4 cm	Ø 9 x 21.6 cm / Ø 9 x 14.6 cm
Packing Size (LxWxH)	19.5 x 10.2 x 10.2 cm	19.5 x 10.2 x 10.2 cm
Net Weight	350g / 300g	400g / 350g
Gross Weight	450g / 400g	500g / 450g

Part	Material
Funnel body	Polyether sulfone
Funnel base	Polyether sulfone
Hose fitting	Polyether sulfone
Support screen	Polyether sulfone
Sealing gasket	Silicone rubber
sealing plug	Silicone rubber
Lid kit	PP (Poly Propylene) construction with PTFE syringe filter



MF 5, 500ml Magnetic Filter Holder with lid kit

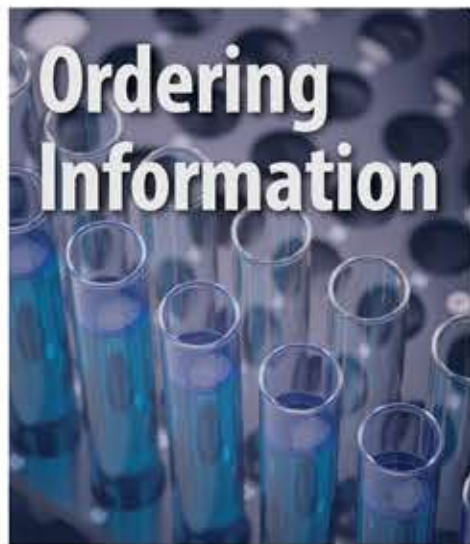
MF 3, 300ml Magnetic Filter Holder with lid kit



MF 5a, 500ml Magnetic Filter Holder (short stem) with lid kit

MF 3a, 300ml Magnetic Filter Holder (short stem) with lid kit

MF Magnetic Filter Holder



Ordering Information

200300-01	MF 3, 300ml Magnetic Filter Holder with lid kit
200310-01	MF 3a, 300ml Magnetic Filter Holder (short stem) with lid kit
200500-01	MF 5, 500ml Magnetic Filter Holder with lid kit
200510-01	MF 5a, 500ml Magnetic Filter Holder (short stem) with lid kit
200300-36	PP lid kit for MF3, MF3a, MF5, MF5a Filter Holder
200300-37	Membrane support screen
194225-01	Syringe filter
167110-17	#16 Silicone stopper
167100-20	PALL 61631, Type A/ E Glass Fiber Discs, 1 um
167100-52	PALL 66278, GN-6 Metrcel Membrane Disc Filter, 0.45um, grid(200/PK)

Introduction

MRC MF series magnetic filter holders are designed with double-layer magnets to ensure a tight seal between the funnel and support base. The user-friendly design can allow one-handed operation and prevent possible twisting and tearing of the membrane. Innovative design of a hose fitting detachable to the support base can allow a direct connection to vacuum source and a flexible use with various kinds of vacuum flask and bottle. Constructed of Polyether sulfone (PES) material, MF series filter holders can be resistant to a wide range of solvents, sturdy and autoclavable.

Applications

- Suspended Solid test filtration for municipal, surface, ground and drinking water
- Microbiology test filtration in food, pharmaceutical, beverage industries
- Medium purification in life science laboratory
- General filtration for aqueous sample

Benefits:

- **One to many:** Compatible with various kinds of bottle, vacuum flask with or without hose barb to collect filtrate directly
- **Easy to use:** Strong magnetic seal allows one-handed operation and prevents possible twisting and tearing of the membrane. Membrane guide helps position membrane easily
- **Safety:** PES (Polyether sulfone) construction, resistant to a wide range of chemicals and high temperature, sturdy and unbreakable
- **Reusable:** Withstands autoclave cycles (121°C, 15 minutes), save money and energy consumption



Easy to use

Compatible with suction flask

Compatible with general flask

Compatible with tissue bottle

Waste Bottle Accessories



1200 ml PES Waste Bottle (197000-11)

Specification		Material	
Port thread (I.D. tubing)	5/16 in. (8 mm)	Container	PES
Graduated increment	100 ml	Cover	PES
Overflow protection	Yes	Overflow protection	PP
Cap with suction fitting	Yes		
Autoclavable	Yes		



1200 ml PC Waste Bottle (197000-11-PC)

Specification		Material	
Port thread (I.D. tubing)	5/16 in. (8 mm)	Container	PC
Graduated increment	100 ml	Cover	PC
Overflow protection	Yes	Overflow protection	PP
Cap with suction fitting	Yes		
Autoclavable	Yes		



1000 ml Receiver Flask with Drain & Silicone Fixing Sucker (167100-15)

Specification		Material	
Port thread (I.D. tubing)	5/16 in. (8 mm)	Container	Borosilicate glass
Graduated increment	100 ml	Connector	PP
Drain	Yes		
Stopper	No.16 (option)		
Silicone fixing sucker	Yes		



4000 ml PP Waste Bottle (167200-47)

Specification		Material	
Port thread (I.D. tubing)	1/4 in. (6.5 mm)	Container	PP
Graduated increment	500 ml	Cover	PP
Overflow protection	Yes	Overflow protection	PP
Autoclavable	Yes		



4000 ml PP Waste Bottle with Drain (167200-48)

Specification		Material	
Port thread (I.D. tubing)	1/4 in. (6.5 mm)	Container	PP
Graduated increment	500 ml	Cover	PP
Overflow protection	Yes	Overflow protection	PP
Drain	Yes	Tube	Rubber
Autoclavable	Yes		

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

Waste Bottle Accessories



HDPE Waste Bottle

Specification	2000ml waste bottle	4000ml waste bottle
Catalog number	162-2102-OEM	167200-46
Port thread (I.D. tubing)	1/4 in. (6.5 mm)	1/4 in. (6.5 mm)
Graduated increment	500 ml	500 ml
Overflow protection	No	Yes
Material of cover	PP	PP



PP Funnel Lid

Specification	For LF3 /3a	For LF 5/5a, MF 3/3a/5/5a
Catalog number	197000-36	200300-36
Syringe filter	Ø25 mm, 0.2 µm	Ø25 mm, 0.2 µm
Material of body	PP	PP
Material of cap	Silicone	Silicone
Material of Syringe filter	PTFE	PTFE



Syringe Filters

Specification	Syringe filter	Small disc filter	Large disc filter
Catalog number	194225-01	167200-35	167200-36
Brand	Pall	Pall	Pall
Filter diameter/ pore size	25 mm / 0.2 µm	35 mm / 0.2 µm	50 mm / 0.2 µm
Shell diameter	30 mm	45 mm	72 mm
Material of filter	PTFE	PTFE	PTFE
Material of shell	PP	PP	PP



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	1 µm	0.45 µm
Material of filter	Glass fiber	MCE
Package	100/PK	200/PK



Silicone Fixing Sucker (167200-45)

Specification		Material	
Suitable flask size	1000 ml	Fixing sucker	Silicone

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