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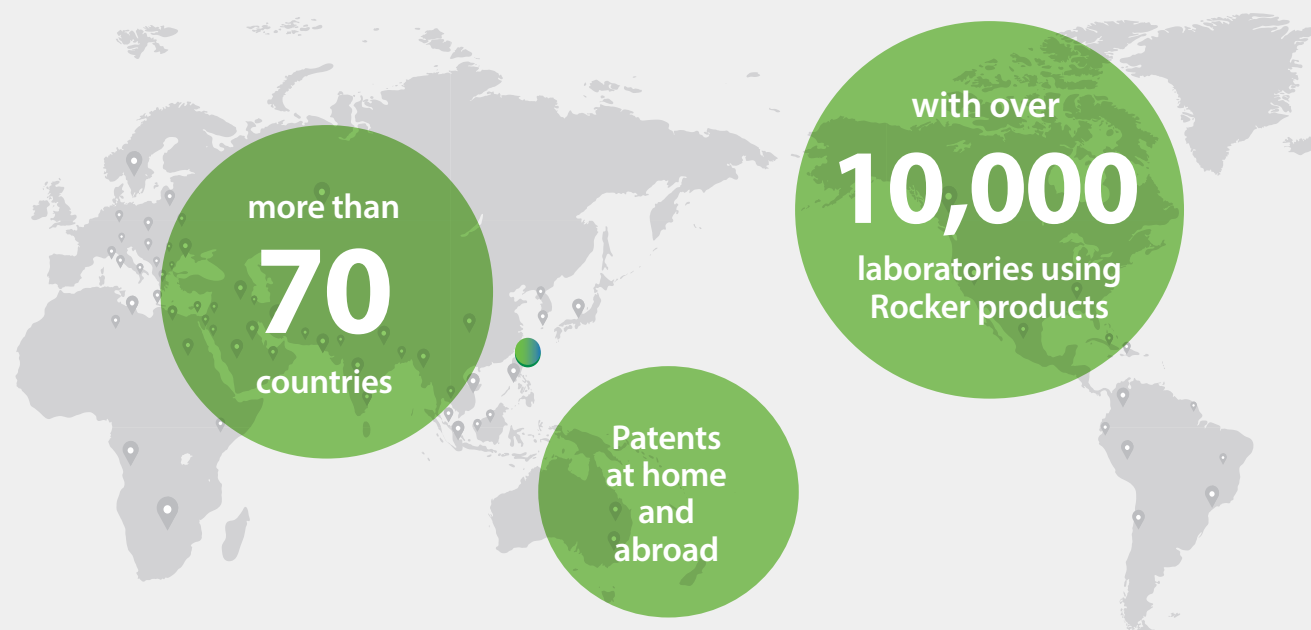


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About Rocker®

Established in 2007, Rocker Scientific Co., Ltd. provides a variety of professional vacuum filtration solutions for laboratory and industrial customers in the fields of food, water, micro-organisms testing, molecular biology lab and purification. Rocker Scientific fulfills in-house R&D, manufacture and distribution in compliance with ISO 9001-2015 quality management system; the majority of products are CE/CSA/RoHS certified. MF magnetic filter holder wins "Taiwan Excellence Award 2019".

Through devoting to R&D constantly, Rocker Scientific has been granted numerous patents in various countries and has successfully established a sales network covering more than 70 countries with over 10,000 laboratories using Rocker products. "Rocker" has become the world-leading brand of laboratory vacuum filtration system by our commitment to continuous innovation to provide customers with safe, efficient and eco-friendly solutions.

Company Philosophy

Passion
Enthusiasm to succeed at everything we do

Innovation
Creating new ways to solve challenges

Integrity
Consistently providing solutions according to our values

Insight
Full understanding of what the customer and user requires

ROCKER Scientific Co., Ltd.

President
William Horng, Nov. 2019

LABORATORY PUMP

Oil Free Vacuum Pump

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PTFE Coated Chemical Resistant Vacuum Pump
Rocker 300C / Lafil 300C [P.9](#)
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Chemical Resistant Vacuum Pump

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LIFE SCIENCES

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LABORATORY PUMP

Oil Free Vacuum Pump

Rocker 300 / 300DC

Rocker 400 / 410

Rocker 800 / 801 / 810 / 811

Lafil 300 / 400

PTFE Coated Chemical Resistant Vacuum Pump

Lafil 300C / Rocker 300C

Rocker 400C / 410C

Chemical Resistant Vacuum Pump

Chemker 300 / 400

Chemker 410 / 411

Chemker 600 / 610 / 611

Oil Free Compressor

Rocker 320 / 420

Air Supply System

Rocker 440

Oil Free Vacuum Pump / Compressor

Rocker 430

Rotary Vane Vacuum Pump

Tanker 130 / 150 / 215 / 230

Diaphragm Liquid Pump

Alligator 200

Accessories

Oil Free Vacuum Pump Guide

Oil Free Vacuum Pump



Rocker 300

Max. vacuum : 105 mbar
Max. flow rate : 23 (20) L/min



Rocker 300DC

Max. vacuum : 145 mbar
Max. flow rate : 25 L/min



Rocker 400

Max. vacuum : 105 mbar
Max. flow rate : 37 (34) L/min



Rocker 410

Max. vacuum : 30 mbar
Max. flow rate : 23 (20) L/min



Rocker 800

Max. vacuum : 120 mbar
Max. flow rate : 100 (80) L/min



Rocker 801

Max. vacuum : 120 mbar
Max. flow rate : 80 (68) L/min



Rocker 810

Max. vacuum : 30 mbar
Max. flow rate : 60 (50) L/min



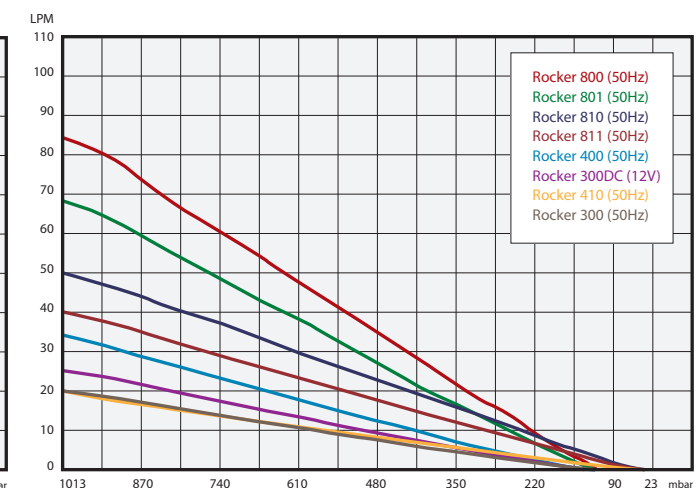
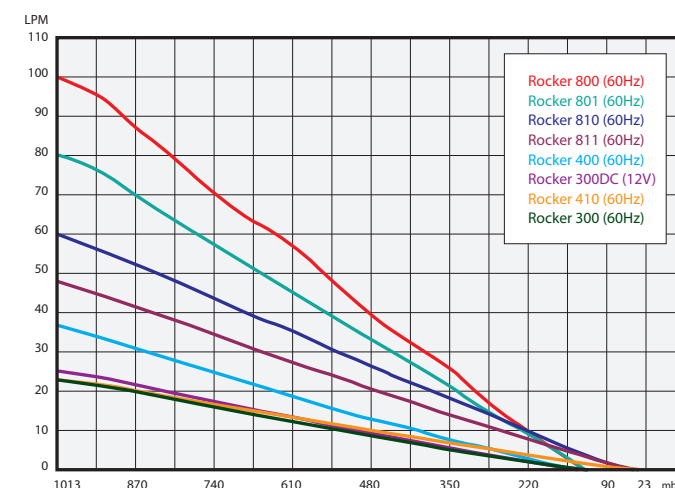
Rocker 811

Max. vacuum : 30 mbar
Max. flow rate : 48 (40) L/min

* The value in () is the max. flow rate at 50Hz.

** The mbar value is the gas particles left in the system, the less particles left in, the higher vacuum it is.

Pumping Speed Graph



PTFE Coated Chemical Resistant Vacuum Pump



Rocker 300C
Max. vacuum : 145 mbar
Max. flow rate : 23 (20) L/min



Rocker 400C
Max. vacuum : 105 mbar
Max. flow rate : 34 (31) L/min



Rocker 410C
Max. vacuum : 25 mbar
Max. flow rate : 23 (20) L/min

Chemical Resistant Vacuum Pump



Chemker 300
Max. vacuum : 105 mbar
Max. flow rate : 20 (18) L/min



Chemker 400
Max. vacuum : 105 mbar
Max. flow rate : 38 (33) L/min



Chemker 410
Max. vacuum : 10 mbar
Max. flow rate : 20 (18) L/min



Chemker 411
Max. vacuum : 10 mbar
Max. flow rate : 20 (18) L/min



Chemker 600
Max. vacuum : 65 mbar
Max. flow rate : 65 (60) L/min



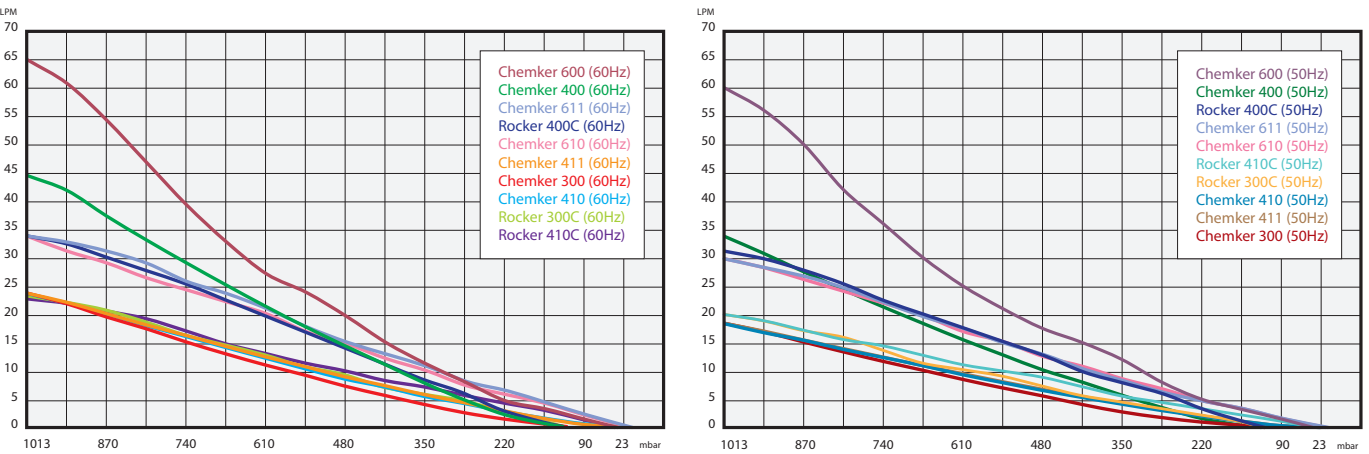
Chemker 610
Max. vacuum : 7 mbar
Max. flow rate : 34 (30) L/min



Chemker 611
Max. vacuum : 7 mbar
Max. flow rate : 34 (30) L/min

* The value in () is the max. flow rate at 50Hz.
** The mbar value is the gas particles left in the system, the less particles left in, the higher vacuum it is.

Pumping Speed Graph



Oil Free Vacuum Pump



Features

- ▶ **No air pollution, maintenance free**
Rocker series pumps are driven by piston, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.
- ▶ **Prote™ overflow protection**
Rocker series pumps are equipped with Prote™ overflow protection which can prevent a large amount of liquid from being sucked into the pump.
- ▶ **Moisture trap with filter cartridge**
Rocker series pumps are equipped with filter cartridge at the air inlet to filter particle and moisture to prolong the life of pump.
- ▶ **Vacuum regulator**
Rocker series pumps are equipped with vacuum regulator to adjust vacuum.
- ▶ **Thermal protection device**
Every motor of Rocker series pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.
- ▶ **International certification**
CE certification
CSA certification (Rocker 300)
IP 30 protection (Rocker 300)
RoHS certification
- ▶ **Two-Year Warranty**

Applications

- ▶ Vacuum filtration
- ▶ Suspended solid test
- ▶ Microbiological test
- ▶ Air sampling

Ordering Information

167300-11(22)
Rocker 300, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

167330-00
Rocker 300DC, DC Power Vacuum Pump (DC12 V)

Patent : M491731



Rocker 300



Rocker 300DC

Specification

Model	Rocker 300		Rocker 300DC
Voltage / Freq.	110V/60Hz	220V/50Hz	DC12V
Max. power	65W	60W	35W
Max. current	0.7A	0.3A	3A
Max. vacuum	105 mbar		145 mbar
Max. flow rate	23 L/min	20 L/min	25 L/min
Motor rotation speed	1750 RPM	1450 RPM	1800 RPM
Horse power	1/8 HP		1/8 HP
Noise level	50 dB		50 dB
Hose barb	ID8		ID8
Vacuum regulator	Yes		Yes
Overflow protection/ Filter cartridge	Yes		Yes
Safety	Thermal Protection		Thermal Protection
Net weight	4.1 Kg		3.5 Kg
Dimension (LxWxH)	26.8 x 13.5 x 20.4 cm		27.2 x 12.1x 16.5 cm

Oil Free Vacuum Pump



Features

- ▶ **No air pollution, maintenance free**
Rocker series pumps are driven by piston, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.
- ▶ **Prote™ overflow protection**
Rocker series pumps are equipped with Prote™ overflow protection which can prevent a large amount of liquid from being sucked into the pump.
- ▶ **Moisture trap with filter cartridge**
Rocker series pumps are equipped with filter cartridge at the air inlet to filter particle and moisture to prolong the life of pump.
- ▶ **Vacuum regulator**
Rocker series pumps are equipped with vacuum regulator to adjust vacuum.
- ▶ **Thermal protection device**
Every motor of Rocker series pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.
- ▶ **International certification**
CE certification
CSA certification
IP 30 protection
RoHS certification
- ▶ **Two-Year Warranty**

Applications

- ▶ Suspended solid test
- ▶ Vacuum filtration
- ▶ Microbiological test
- ▶ Air sampling

Ordering Information

167400-11(22)
Rocker 400, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

167410-11(22)
Rocker 410, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

Patent : M491731



Prote™ overflow protection

Rocker 400



Rocker 410

Specification

Model	Rocker 400		Rocker 410	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. power	100W	80W	100W	80W
Max. current	1.0A	0.4A	1.0A	0.4A
Max. vacuum	105 mbar		30 mbar	
Max. flow rate	37 L/min	34 L/min	23 L/min	20 L/min
Motor rotation speed	1750 RPM	1450 RPM	1750 RPM	1450 RPM
Horse power	1/6 HP		1/6 HP	
Noise level	52 dB		52 dB	
Hose barb	ID8		ID8	
Vacuum regulator	Yes		Yes	
Overflow protection/ Filter cartridge	Yes		Yes	
Safety	Thermal Protection		Thermal Protection	
Net weight	5.2 Kg		5.2 Kg	
Dimension (LxWxH)	31 x 13.5 x 20.4 cm		31 x 13.5 x 20.4 cm	

Oil Free Vacuum Pump



Features

- ▶ **No air pollution, maintenance free**
Rocker series pumps are driven by piston, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.
- ▶ **Vacuum regulator**
Rocker series pumps are equipped with vacuum regulator to adjust vacuum.
- ▶ **Thermal protection device**
Every motor of Rocker series pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.
- ▶ **Moisture trap with filter cartridge**
Rocker 801 pump is equipped with filter cartridge at the air inlet to filter particle and moisture to prolong the life of pump.
- ▶ **International certification**
CE certification
RoHS certification
- ▶ **Two-Year Warranty**

Applications

- ▶ Vacuum filtration
- ▶ Vacuum drying / oven / defoaming
- ▶ Suspended solid test
- ▶ Microbiological test
- ▶ Air sampling

Ordering Information

167800-11(22)
Rocker 800, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

167801-11(22)
Rocker 801, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)



Rocker 800



Rocker 801

Specification

Model	Rocker 800		Rocker 801	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. power	220W	200W	220W	200W
Max. current	2A	1.2A	2A	1.2A
Max. vacuum	120 mbar		120 mbar	
Max. flow rate	100 L/min	80 L/min	80 L/min	68 L/min
Motor rotation speed	1750 RPM	1450 RPM	1750 RPM	1450 RPM
Horse power	1/3 HP		1/3 HP	
Noise level	68 dB		68 dB	
Hose barb	ID10		ID8	
Vacuum regulator	Yes		Yes	
Filter cartridge	-		Yes	
Safety	Thermal Protection		Thermal Protection	
Net weight	7.6 Kg		7.9 Kg	
Dimension (LxWxH)	34.5 x 17.5 x 20 cm		34.5 x 17.5 x 20 cm	

* Moisture Trap / Vacuum Regulator doesn't include overflow protection.

Oil Free Vacuum Pump



Features

- **No air pollution, maintenance free**
Rocker series pumps are driven by piston, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.
- **Vacuum regulator**
Rocker series pumps are equipped with vacuum regulator to adjust vacuum.
- **Thermal protection device**
Every motor of Rocker series pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.
- **Moisture trap with filter cartridge**
Rocker 811 pump is equipped with filter cartridge at the air inlet to filter particle and moisture to prolong the life of pump.
- **International certification**
CE certification
RoHS certification
- **Two-Year Warranty**



Rocker 810



Rocker 811

Applications

- Vacuum filtration
- Vacuum drying / oven / defoaming
- Suspended solid test
- Microbiological test
- Air sampling

Ordering Information

167810-11(22)
Rocker 810, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

167811-11(22)
Rocker 811, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

Specification

Model	Rocker 810		Rocker 811	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. power	220W	200W	220W	200W
Max. current	2A	1.2A	2A	1.2A
Max. vacuum	30 mbar		30 mbar	
Max. flow rate	60 L/min	50 L/min	48 L/min	40 L/min
Motor rotation speed	1750 RPM	1450 RPM	1750 RPM	1450 RPM
Horse power	1/3 HP		1/3 HP	
Noise level	68 dB		68 dB	
Hose barb	ID10		ID8	
Vacuum regulator	Yes		Yes	
Filter cartridge	-		Yes	
Safety	Thermal Protection		Thermal Protection	
Net weight	7.6 Kg		7.9 Kg	
Dimension (LxWxH)	34.5 x 17.5 x 20 cm		34.5 x 17.5 x 20 cm	

* Moisture Trap / Vacuum Regulator doesn't include overflow protection.

Oil Free Vacuum Pump



Features

- **Compact and safe operation**
Lafil 300 and Lafil 400 are unique filtration units by combining vacuum source with optional filtration ware. Its compact design saves 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.
- **No air pollution, maintenance free**
Lafil 300 and Lafil 400 pumps are driven by piston, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.
- **Thermal protection device**
Every motor of Lafil series pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.
- **International certification**
CE certification
- **Two-Year Warranty**



Lafil 300 - LF 30

Lafil 300



Lafil 400 - SF 10

Lafil 400

Applications

- Vacuum filtration
- Microbiological test
- Suspended solid test

Ordering Information

197300-11(22)
Lafil 300, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

197400-11(22)
Lafil 400, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

197010-30
LF 30, PES Filtration Set

197010-32
SF 10, Stainless Steel Filtration Set

197010-33
SF 30, Stainless Steel Filtration Set

Specification

Model	Lafil 300		Lafil 400	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. power	65W	60W	100W	80W
Max. current	0.7A	0.3A	1.0A	0.4A
Max. vacuum	105 mbar		30 mbar	
Max. flow rate	23 L/min	20 L/min	23 L/min	20 L/min
Motor rotation speed	1750 RPM	1450 RPM	1750 RPM	1450 RPM
Horse power	1/8 HP		1/6 HP	
Noise level	50 dB		52 dB	
Hose barb	ID8		ID8	
Vacuum regulator	Yes		Yes	
Safety	Thermal Protection		Thermal Protection	
Net weight	5.9 Kg		7.0 Kg	
Dimension (LxWxH)	33.5 x 24.5 x 30 cm		33.5 x 24.5 x 30 cm	

PTFE Coated Chemical Resistant Vacuum Pump

Features

- **Good chemical resistance**
The PTFE-coated diaphragm and chamber can offer good resistance to a wide range of chemical gases except strong acid and alkali.
- **No air pollution, maintenance free**
Rocker 300C and Lafil 300C vacuum pumps are driven by diaphragm, without the need of lubricant, regular oil changes and maintenance ; with no oil pollution.
- **Quiet and low vibration**
The mechanism technique and quality vibration-proof assemblies make pumps run at the lowest noise with stable.
- **Thermal protection device**
The motor of Rocker 300C and Lafil 300C vacuum pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.
- **Compact and safe operation**
Lafil 300C is a unique filtration unit by combining vacuum source with optional filtration ware. Its compact design saves 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.
- **International certification**
CE certification
IP 30 protection (Rocker 300C)
RoHS certification (Rocker 300C)
- **One-Year Warranty**

Applications

- Solvent purification
- Solid-Phase Extraction (SPE)
- Vacuum filtration

Ordering Information

189300-11(22)

Rocker 300C, PTFE Coated Chemical Resistant Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

197330-11(22)

Lafil 300C, PTFE Coated Chemical Resistant Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)



Rocker 300C

Lafil 300C - VF 12

Lafil 300C

Specification

Model	Rocker 300C		Lafil 300C	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. power	65W	60W	65W	60W
Max. current	0.7A	0.3A	0.7A	0.3A
Max. vacuum	145 mbar		145 mbar	
Max. flow rate	23 L/min	20 L/min	23 L/min	20 L/min
Motor rotation speed	1750 RPM	1450 RPM	1750 RPM	1450 RPM
Horse power	1/8 HP		1/8 HP	
Noise level	50 dB		50 dB	
Hose barb	ID8		ID8	
Vacuum regulator	Yes		Yes	
Moisture Trap	Yes		-	
Safety	Thermal Protection		Thermal Protection	
Net weight	4.1 Kg		5.9 Kg	
Dimension (LxWxH)	28.5 x 13.5 x 20.4 cm		35 x 24.3 x 29 cm	

PTFE Coated Chemical Resistant Vacuum Pump

Features

- **Good chemical resistance**
The PTFE-coated diaphragm and chamber can offer good resistance to a wide range of chemical gases except strong acid and alkali.
- **No air pollution, maintenance free**
Rocker 400C / 410C vacuum pumps are driven by diaphragm, without the need of lubricant, regular oil changes and maintenance ; with no oil pollution.
- **Quiet and low vibration**
The mechanism technique and quality vibration-proof assemblies make pumps run at the lowest noise with stable.
- **Thermal protection device**
The motor of Rocker 400C / 410C vacuum pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.
- **International certification**
CE certification
IP 30 protection
RoHS certification
- **One-Year Warranty**

Applications

- Solvent purification
- Gel dryer
- Vacuum desiccator
- Vacuum filtration

Ordering Information

189400-11(22)

Rocker 400C, PTFE Coated Chemical Resistant Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

189410-11(22)

Rocker 410C, PTFE Coated Chemical Resistant Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)



Rocker 400C

Rocker 410C

Specification

Model	Rocker 400C		Rocker 410C	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. power	100W	80W	100W	80W
Max. current	1.0A	0.4A	1.0A	0.4A
Max. vacuum	105 mbar		25 mbar	
Max. flow rate	34 L/min	31 L/min	23 L/min	20 L/min
Motor rotation speed	1750 RPM	1450 RPM	1750 RPM	1450 RPM
Horse power	1/6 HP		1/6 HP	
Noise level	52 dB		52 dB	
Hose barb	ID8		ID8	
Moisture Trap / Vacuum regulator	Yes		Yes	
Safety	Thermal Protection		Thermal Protection	
Net weight	5.7 Kg		5.6 Kg	
Dimension (LxWxH)	31 x 13.5 x 20.4 cm		31 x 13.5 x 20.4 cm	

Chemical Resistant Vacuum Pump



Features

- **High chemical resistance**
All wetted parts of Chemker series pump are made of PTFE material which can resist most of corrosive gases.
- **No air pollution, maintenance free**
Chemker series pumps are driven by diaphragm, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.
- **Quiet and low vibration**
Driven directly by motor with no additional belt-driven transmission; the quality of vibration-proof assembly makes Chemker series pumps run at the lowest noise level among all other equivalent pumps.
- **Thermal protection device**
Every motor of Chemker series pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.
- **International certification**
CE certification
- **One-Year Warranty**



Chemker 300



Chemker 400

Applications

- Solvent purification
- Solid-Phase Extraction (SPE)
- Gel electrophoresis
- Vacuum filtration

Ordering Information

169300-11(22)
Chemker 300,
Chemical Resistant Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

169400-11(22)
Chemker 400,
Chemical Resistant Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

Specification

Model	Chemker 300		Chemker 400	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. power	70W	60W	90W	90W
Max. current	0.8A	0.32A	1.1A	0.5A
Max. vacuum	105 mbar		105 mbar	
Max. flow rate	20 L/min	18 L/min	38 L/min	33 L/min
Motor rotation speed	1700 RPM	1450 RPM	1700 RPM	1450 RPM
Horse power	1/8 HP		1/6 HP	
Noise level	50 dB		52 dB	
Hose barb	ID8		ID8	
Moisture Trap / Vacuum regulator	-		-	
Safety	Thermal Protection		Thermal Protection	
Net weight	5.0 Kg		7.0 Kg	
Dimension (LxWxH)	20.3 x 11.2 x 20.9 cm		26.7 x 11.2 x 18.1 cm	

Chemical Resistant Vacuum Pump



Features

- **High chemical resistance**
All wetted parts of Chemker series pump are made of PTFE material which can resist most of corrosive gases.
- **No air pollution, maintenance free**
Chemker series pumps are driven by diaphragm, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.
- **Quiet and low vibration**
Driven directly by motor with no additional belt-driven transmission; the quality of vibration-proof assembly makes Chemker series pumps run at the lowest noise level among all other equivalent pumps.
- **Thermal protection device**
Every motor of Chemker series pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.
- **International certification**
CE certification
- **One-Year Warranty**



Chemker 410



Chemker 411

Applications

- Solvent purification
- Gel dryer
- Rotary evaporator
- Vacuum filtration

Ordering Information

169410-11(22)
Chemker 410,
Chemical Resistant Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

169411-11(22)
Chemker 411,
Chemical Resistant Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

Specification

Model	Chemker 410		Chemker 411	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. power	90W	90W	90W	90W
Max. current	1.2A	0.5A	1.2A	0.5A
Max. vacuum	10 mbar		10 mbar	
Max. flow rate	20 L/min	18 L/min	20 L/min	18 L/min
Motor rotation speed	1700 RPM	1450 RPM	1700 RPM	1450 RPM
Horse power	1/6 HP		1/6 HP	
Noise level	52 dB		52 dB	
Hose barb	ID8		ID8	
Moisture Trap / Vacuum regulator	-		Yes	
Safety	Thermal Protection		Thermal Protection	
Net weight	7.0 Kg		7.4 Kg	
Dimension (LxWxH)	26.2 x 14.8 x 18.2 cm		26.2 x 23.6 x 19.3 cm	

* Glass Moisture Trap / Vacuum Regulator doesn't include filter cartridge

Chemical Resistant Vacuum Pump



Features

- **High chemical resistance**
All wetted parts of Chemker series pump are made of PTFE material which can resist most of corrosive gases.
- **Start against vacuum**
Chemker 600 series pumps, designed to start against vacuum, are ideal for various kinds of laboratory instruments which need to stop and restart pump repeatedly during operating process.
- **No air pollution, maintenance free**
Chemker series pumps are driven by diaphragm, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.
- **Quiet and low vibration**
Driven directly by motor and vibration-proof assembly make Chemker series pumps run at the lowest noise.
- **Thermal protection device**
The motor with thermal protection will shut off when overheated and resume working when cools down.
- **International certification**
CE certification
- **One-Year Warranty**

Applications

- Rotary evaporator
- Concentrator
- Vacuum drying / oven / defoaming
- Solvent purification
- Vacuum filtration

Ordering Information

169600-11(22)
Chemker 600,
Chemical Resistant Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)



Chemker 600

Specification

Model	Chemker 600	
Voltage / Freq.	110V/60Hz	220V/50Hz
Max. power	220W	200W
Max. current	2A	1.2A
Max. vacuum	65 mbar	
Max. flow rate	65 L/min	60 L/min
Motor rotation speed	1750 RPM	1450 RPM
Horse power	1/3 HP	
Noise level	60 dB	
Hose barb	ID10	
Moisture trap / Vacuum regulator	-	
Safety	Thermal Protection	
Net weight	13.2 Kg	
Dimension (LxWxH)	35 x 15.4 x 22.5 cm	

Chemical Resistant Vacuum Pump



Features

- **High chemical resistance**
All wetted parts of Chemker series pump are made of PTFE material which can resist most of corrosive gases.
- **Start against vacuum**
Chemker 600 series pumps, designed to start against vacuum, are ideal for various kinds of laboratory instruments which need to stop and restart pump repeatedly during operating process.
- **Vacuum regulator / Moisture trap**
Chemker 611 equipped with vacuum regulator and moisture trap used to adjust vacuum level and collect condensation to prolong the life of pump.
- **No air pollution, maintenance free**
Chemker series pumps are driven by diaphragm, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.
- **Quiet and low vibration**
Driven directly by motor and vibration-proof assembly make Chemker series pumps run at the lowest noise.
- **Thermal protection device**
The motor with thermal protection will shut off when overheated and resume working when cools down.
- **International certification**
CE certification
- **One-Year Warranty**

Applications

- Rotary evaporator
- Concentrator
- Vacuum drying / oven / defoaming
- Solvent purification
- Vacuum filtration

Ordering Information

169610-11(22)
Chemker 610,
Chemical Resistant Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

169611-11(22)
Chemker 611,
Chemical Resistant Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)



Chemker 610



Chemker 611

Specification

Model	Chemker 610		Chemker 611	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. power	220W	200W	220W	200W
Max. current	2A	1.2A	2A	1.2A
Max. vacuum	7 mbar		7 mbar	
Max. flow rate	34 L/min	30 L/min	34 L/min	30 L/min
Motor rotation speed	1750 RPM	1450 RPM	1750 RPM	1450 RPM
Horse power	1/3 HP		1/3 HP	
Noise level	60 dB		60 dB	
Hose barb	ID10		ID10	
Moisture trap / Vacuum regulator	-		Yes	
Safety	Thermal Protection		Thermal Protection	
Net weight	13.3 Kg		13.7 Kg	
Dimension (LxWxH)	35 x 16.2 x 22.5 cm		35 x 20.3 x 23.5 cm	

* Glass Moisture Trap / Vacuum Regulator doesn't include filter cartridge

Oil Free Compressor



Features

- **No pollution, maintenance free**
Rocker series pumps are driven by piston, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.
- **Quiet and low vibration**
Driven directly by motor with no additional belt-driven transmission; the quality of vibration-proof assembly makes Rokcer series pumps run at the lowest noise level among all other equivalent pumps.
- **Thermal protection device**
Every motor of Rocker series pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.
- **Air outlet filter device**
Every Rocker series compressor is equipped with filter cartridge at the air outlet to filter particle, moisture and supply clean air.
- **International certification**
CE certification
CSA certification
IP 30 protection
RoHS certification
- **Two-Year Warranty**

Applications

- Aeration
- Pressure filtration

Ordering Information

167320-11(22)
Rocker 320, Compressor
AC110V, 60Hz (AC220V, 50Hz)

167420-11(22)
Rocker 420, Compressor
AC110V, 60Hz (AC220V, 50Hz)



Specification

Model	Rocker 320		Rocker 420	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. power	90W	85W	147W	125W
Max. current	0.9A	0.4A	1.5A	0.6A
Max. pressure (w/o moisture trap)	100 psi		100 psi	
Max. pressure (w. moisture trap)	80 psi		80 psi	
Max. flow rate	14 L/min	12 L/min	27 L/min	25 L/min
Moisture trap / Pressure regulator	Yes		Yes	
Motor rotation speed	1700 RPM	1400 RPM	1700 RPM	1400 RPM
Horse power	1/8 HP		1/6 HP	
Noise level	50 dB		52 dB	
Hose barb	ID8		ID8	
Safety	Thermal Protection		Thermal Protection	
Net weight	4.1 Kg		5.2 Kg	
Dimension (LxWxH)	27.2 x 13.6 x 16.5 cm		29.8 x 14.3 x 17.2 cm	

Air Supply System



Features

- **No pollution, maintenance free**
Rocker series pumps are driven by piston, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.
- **Quiet and low vibration**
Driven directly by motor with no additional belt-driven transmission; the quality of vibration-proof assembly makes Rokcer series pumps run at the lowest noise level among all other equivalent pumps.
- **Thermal protection device**
Every motor of Rocker series pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.
- **Air outlet filter device**
Every Rocker series compressor is equipped with filter cartridge at the air outlet to filter particle, moisture and supply clean air.
- **International certification**
CE certification
CSA certification
IP 30 protection
RoHS certification
- **Two-Year Warranty**

Applications

- Fermenter
- Bioreactor
- Gas Chromatograph

Ordering Information

167440-11(22)
Rocker 440, Air Supply System
AC110V, 60Hz (AC220V, 50Hz)



* The capacity of air tank, made of SS304 stainless steel, is 2.5 liters.

Specification

Model	Rocker 440						
Voltage / Freq.	110V/60Hz			220V/50Hz			
Max. power	147W			125W			
Max. current	1.5A			0.6A			
Pressure range	40~60 psi			40~60 psi			
Motor rotation speed	1700 RPM			1400 RPM			
Max. flow rate (without air tank)	27 L/min			25 L/min			
Max. flow rate with air tank	20 psi	0~15 sec. 40 L/min	15~30 sec. Decreasing	after 30 sec. 27 L/min	0~15 sec. 40 L/min	15~30 sec. Decreasing	after 30 sec. 25 L/min
	40 psi	0~10 sec. 52 L/min	10~25 sec. Decreasing	after 25 sec. 27 L/min	0~10 sec. 50 L/min	10~25 sec. Decreasing	after 25 sec. 25 L/min
	60 psi	0~8 sec. 65 L/min	8~22 sec. Decreasing	after 22 sec. 27 L/min	0~8 sec. 60 L/min	8~22 sec. Decreasing	after 22 sec. 25 L/min
Moisture trap	Yes			Yes			
Horse power	1/6 HP			1/6 HP			
Noise level	52 dB			52 dB			
Hose barb	ID8			ID8			
Safety	Thermal Protection			Thermal Protection			
Net weight	8.4 Kg			8.4 Kg			
Dimension (LxWxH)	29.3 x 31.1 x 25.1 cm			29.3 x 31.1 x 25.1 cm			

PS: The pressure can be changed to 60~80 psi

Oil Free Vacuum Pump / Compressor

Features

- **Vacuum / Pressure in one machine**
Rocker 430 works as both vacuum pump and compressor. Equipped with gauges and regulators for easy monitoring and adjusting the vacuum level or delivery pressure.
- **No air pollution, maintenance free**
Rocker series pumps are driven by piston, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.
- **Prote™ overflow protection**
Rocker 430 is equipped with Prote™ overflow protection which can prevent a large amount of liquid from being sucked into the pump.
- **Thermal protection device**
Every motor of Rocker series pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.
- **Moisture trap with filter cartridge**
Rocker 430 is equipped with filter cartridge at the air inlet and outlet to filter particle and moisture to prolong the life of pump.
- **International certification**
CE certification
IP 30 protection
RoHS certification
- **Two-Year Warranty**

Applications

- Vacuum filtration
- Microbiological test
- Suspended solid test
- Air sampling
- Pressure filtration

Ordering Information

167430-11(22)
Rocker 430, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)



Patent : M491731



Prote™ overflow protection

Rocker 430

Specification

Model	Rocker 430	
Voltage / Freq.	110V/60Hz	220V/50Hz
Max. power	147W	125W
Max. current	1.5A	0.6A
Max. vacuum	170 mbar	
Max. pressure	80 psi	
Max. flow rate	34 L/min	28 L/min
Motor rotation speed	1750 RPM	1450 RPM
Horse power	1/6 HP	
Noise level	52 dB	
Hose barb	ID8	
Vacuum / Pressure regulator	Yes	
Vacuum / Pressure gauge	Yes	
Overflow protection/ Filter cartridge	Yes	
Safety	Thermal Protection	
Net weight	5.5 Kg	
Dimension (LxWxH)	24.7 x 23.5 x 20.4 cm	

Rotary Vane Vacuum Pump

Features


- **High vacuum, high flow rate**
Tanker series pumps are driven by rotary vane, with high flow rate, vacuum can reach over 10⁻¹ torr. Suitable for the laboratory that needs high / medium flow rate and vacuum capacity for experiment.
- **Quiet and low vibration**
Tanker series pumps feature low noise level, low vibration and long product life.
- **Thermal protection device**
Every motor of Tanker series pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.
- **International certification**
CE certification
- **One-Year Warranty**

Applications


- Vacuum filtration
- Vacuum drying / oven / defoaming
- Various vacuum applications

Ordering Information


187130-11(22)
Tanker 130, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)
187150-11(22)
Tanker 150, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)
187215-11(22)
Tanker 215, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)
187230-11(22)
Tanker 230, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)
187100-05 Lubricant (500ml / PK)
187100-30 Exhaust Filter
187100-25 Oil Mist Outlet




Tanker SC Lubricant



Tanker Series





187100-30 Exhaust filter (optional)
Exhaust filter with stainless steel housing can be used to prevent oil mist from being sprayed into the room and keep laboratory clean.

187100-25 Oil mist outlet (optional)
It is used to exhaust the oil mist out of a room by connecting an optional hose barb (Thread 1/8 PT) and a proper tube.

Specification

Model	Tanker 130		Tanker 150		Tanker 215		Tanker 230	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. power	250W	250W	375W	375W	250W	250W	375W	375W
Max. current	4.2A	2.5A	6.5A	3A	4.2A	2.5A	6.5A	3A
Max. vacuum	1 x 10 ⁻¹ torr		1 x 10 ⁻¹ torr		5 x 10 ⁻² torr		5 x 10 ⁻² torr	
Max. flow rate	85 L/min	70 L/min	142 L/min	127 L/min	42 L/min	36 L/min	85 L/min	70 L/min
Motor rotation speed	1725 RPM	1440 RPM	1725 RPM	1440 RPM	1725 RPM	1440 RPM	1725 RPM	1440 RPM
Horse power	1/3 HP		1/2 HP		1/3 HP		1/2 HP	
Noise level	52 dB		52 dB		52 dB		52 dB	
Hose barb	ID10		ID10		ID10		ID10	
Safety	Thermal Protection		Thermal Protection		Thermal Protection		Thermal Protection	
Net weight	9.6 Kg		13 Kg		11.4 Kg		14 Kg	
Dimension (LxMxH)	31.5 x 12 x 36 cm		33.5 x 12.5 x 37.5 cm		31.5 x 12 x 36 cm		33.5 x 12.5 x 37.5 cm	

Diaphragm Liquid Pump



Features

- **Save time**
Alligator 200 comes with a built-in liquid pump to transfer the filtered liquid directly to waste. It saves time by simplifying filtration process.
- **Save 40% bench space**
Alligator 200 does not need to connect any additional waste bottle necessary for traditional filtration pump. It saves space by getting rid of tubing and waste bottle.
- **Compliance with ISO 8199**
Alligator 200 complies with ISO 8199 regulation and is ideal for microbiological sample filtration. (*ISO 8199: Water quality - General guidance for microbiological examinations by culture).
- **No air pollution, high efficiency**
Alligator 200 is driven by diaphragm with no oil pollution. Built-in 60W brushless DC motor offers a stable flow rate and prolongs the life of pump.
- **International certification**
CE certification
IP 64 protection
RoHS certification
- **One-Year Warranty**

Applications

- Microbiological test
- Suspended solid test
- General filtration without collecting filtrate

Ordering Information

181200-01(02)
Alligator 200, Diaphragm Liquid Pump with AC100~240V adaptor, US plug (EU plug)

Alligator 200

Patent : I653396



Specification

Model	Alligator 200
Power	DC24V, 1.8A
Max. vacuum	313 mbar
Max. liquid flow rate	4.5 L/min
Motor	60W Brushless DC Motor
Noise level	60 dB
Hose barb	ID8
Material contact with filtrate	SS316, FKM, Silicone, PP, PPS
Safety	Thermal protection
Net weight	2.4 Kg
Dimension (LxWxH)	23.5 x 19 x 20.2 cm

Pump Accessories

Hose Barb



Cat. No.:	167300-20	167300-21	167300-63	167300-23	167300-24	187100-32	187100-31	187100-34	167300-25
ID:	3/8 inch	5/16 inch	1/4 inch	3/16 inch	1/8 inch	1/2 inch	3/8 inch	1/4 inch	5/16 inch
	ID10	ID8	ID6	ID5	ID3	ID12	ID10	ID6	ID8
Thread:	1/8 PT	1/8 PT	1/8 PT	1/8 PT	1/8 PT	1/4 SAE	1/4 SAE	1/4 SAE	1/8 PT

Moisture Trap / Vacuum Regulator / Pressure Regulator



167301-06 For Rocker 300/400/ 410/430	167801-06 For Rocker 801/811	169411-06 For Chemker 410/411	169611-06 For Chemker 610/611	189300-06 For Rocker 300C/400C/410C	167320-06 For Rocker 320/420	167440-06 For Rocker 440
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Filter Cartridge



167301-07 For Rocker 300/400/410/430 (with Prote™ overflow protection)	167801-07 For Rocker 801/811 (without Prote™ overflow protection)
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Chemical Resistant Hose Barb



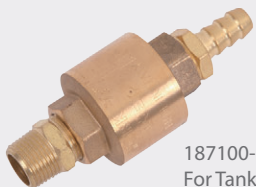
169300-21 5/16 inch ID8 1/4 NPS	169300-20 3/8 inch ID10 1/4 NPS
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Air Outlet (Copper Muffler)



167300-42 For Rocker 300/400/410/430	167600-42 For Rocker 800/801/810/811
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Check Valve



187100-33
For Tanker
130/150/215/230
ID10
1/4 SAE

Silicone Tube



167200-38 Ø 6 x 12 mm Length: 1 m	199100-68 Ø 4.2 x 8 mm Length: 2 m	180300-68 Ø 8 x 14 mm Length: 2 m
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Universal Foot Switch



167200-41 Momentary action	167200-41-1 Maintained action
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LABORATORY FILTRATION

Filtration Apparatus Selection Guide

PES 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

Filtration Apparatus

LF 30 / MF 31

SF 10 / SF 30 / SF 11 / SF 52

VF 5 / VF 8 / VF 6 / VF 7

VF 3 / VF 12 / VF 15 / VF 16

Filtration System

Rocker 300 - LF 30 / Rocker 300 - MF 31

Rocker 300C - VF 12 / Chemker 300 - VF 12

Lafil 300C - VF 12

Lafil 300 - LF 30 / Lafil 300 - SF 10

Lafil 400 - LF 30 / Lafil 400 - SF 10

Filtration System

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

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

Manifold and Filtration System

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 Apparatus Selection Guide

PES	SS316 Stainless Steel	Borosilicate Glass
MF, Magnetic Filter Holder	SF, Spin-Lock Filter Holder	
 MF 3 P.23	 SF 1 P.25	 VF 5 P.29
 MF 3a P.23	 SF 3 P.25	 VF 8 P.29
 MF 5 P.23	 SF 5 P.25	
 MF 5a P.23		
LF, Spin-Lock Filter Holder		
 LF 3 P.24	 SF 10 P.27	 VF 6 P.30
 LF 3a P.24	 SF 30 P.27	 VF 7 P.30
 LF 5 P.24		
 LF 5a P.24		
 LF 30 P.26	 SF 11 P.28	 VF 3 P.31
 MF 31 P.26	 SF 52 P.28	 VF 12 P.31
		 VF 15 P.32
		 VF 16 P.32

MF, Magnetic Filter Holder

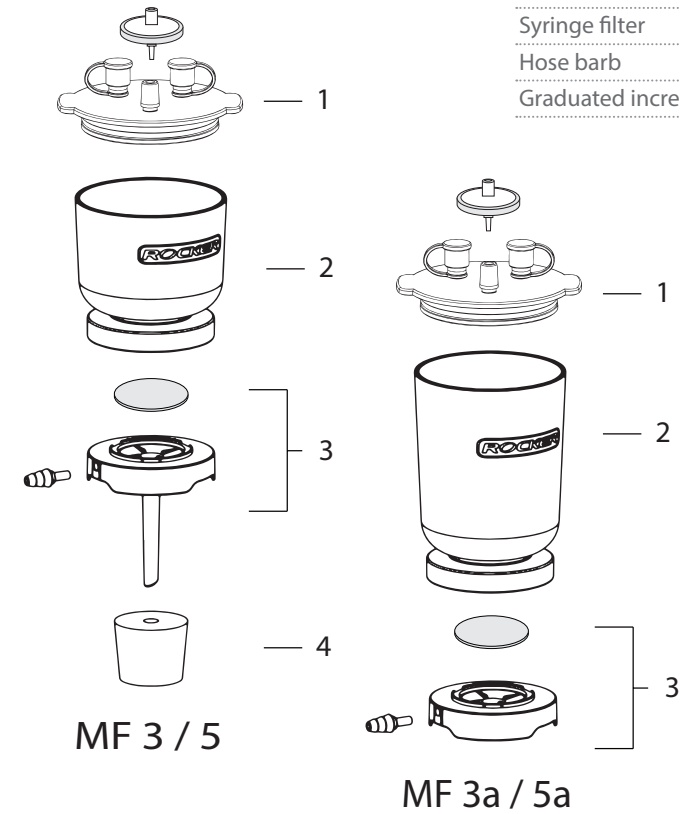


Features

- ▶ 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
Cap of lid	Silicone	Silicone
Syringe filter	PTFE	PTFE
Specifications		
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
Hose barb	ID4 ~ ID8	ID4 ~ ID8
Graduated increment	50 ml	50 ml



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

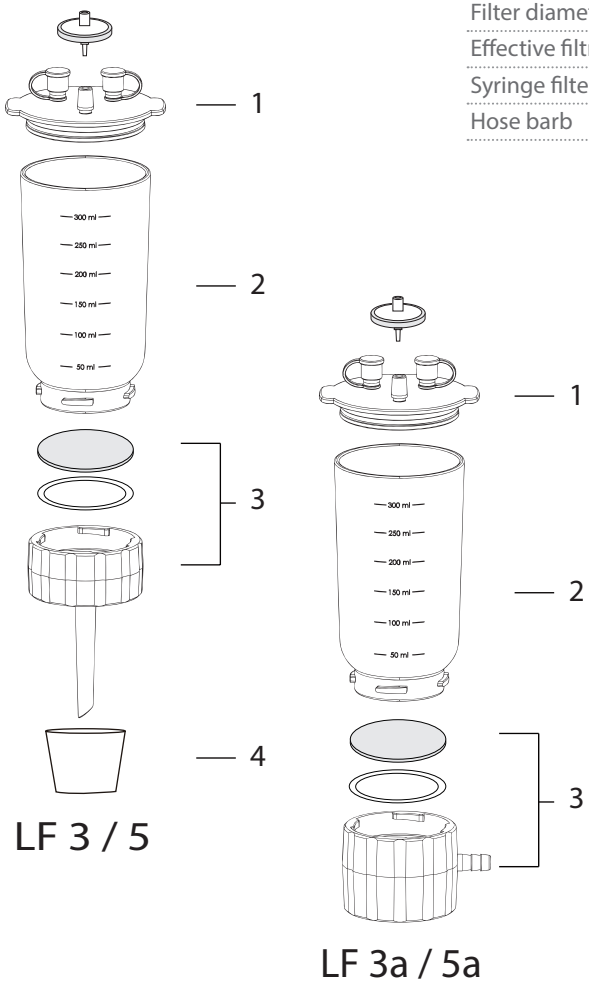


Features

- ▶ 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.
- ▶ 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		
Funnel capacity	300 ml / 500 ml	300 ml / 500 ml
Filter diameter	47 mm	47 mm
Effective filtration area	12.5 cm ²	12.5 cm ²
Syringe filter	25 mm, 0.2 μm	25 mm, 0.2 μm
Hose barb	-	ID8



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

- ▶ Spin-lock connection (M577346) facilitates fast and stable installation without clamp.
- ▶ Laser-marked graduation helps accurately sample addition.
- ▶ Membrane guide on the support base helps position membrane easily.
- ▶ Forceps access points on support base help retrieve membrane without damage.
- ▶ SS316 funnel is shatterproof, durable 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 ²	11.6 cm ²	11.6 cm ²
Graduated increment	50 / 100 ml	100 / 250 / 300 ml	250 / 500 ml

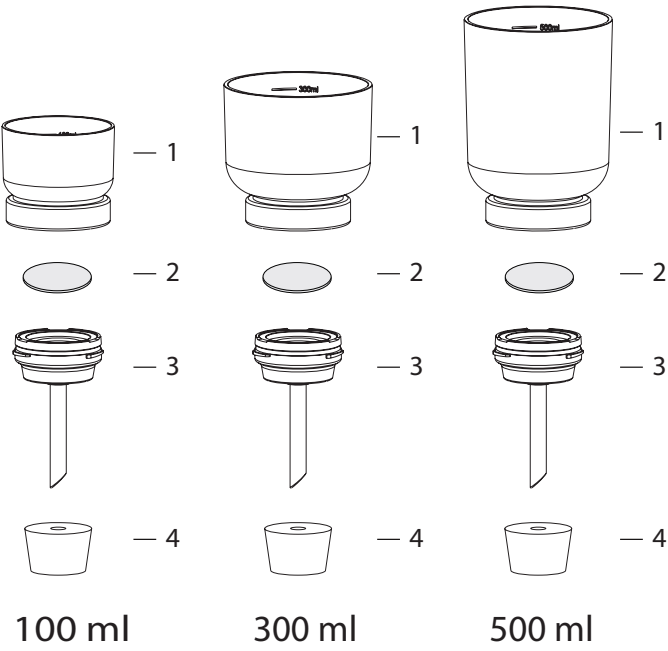
Ordering Information

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



PES Filtration Apparatus



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.

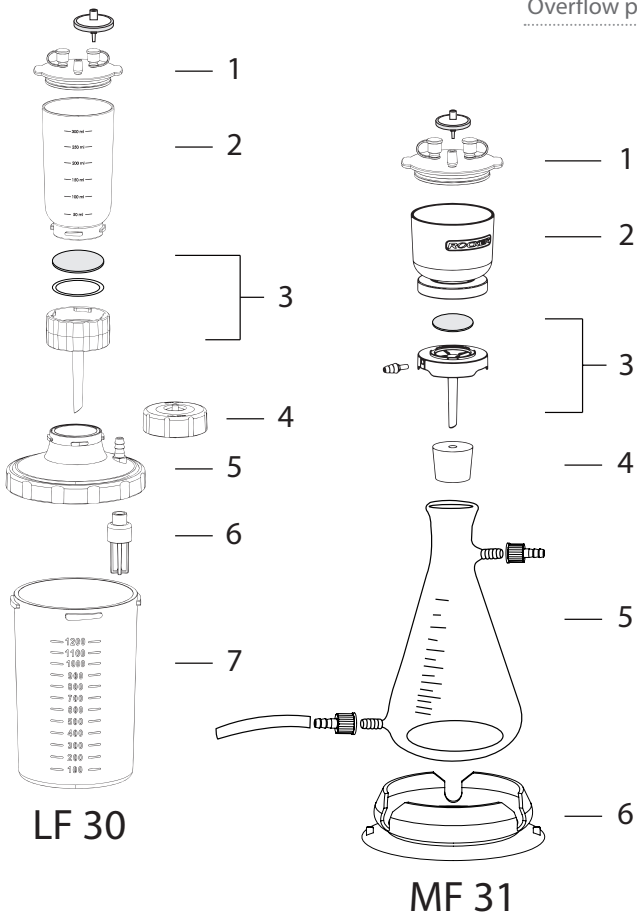
Applications

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		
Funnel capacity	300 ml	300 ml
Flask capacity	1200 ml	1000 ml
Filter diameter	47 mm	47 mm
Hose barb	ID8	ID8
Drain device	-	Yes
Overflow protection	Yes	-



Ordering Information

LF 30, 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, 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

Stainless Steel Filtration Apparatus



SF 10



SF 30

Features

- ▶ Spin-lock connection (M577346) facilitates fast and stable installation without clamp.
- ▶ SS316 funnel is shatterproof, durable and can be fast sterilized by flame.
- ▶ Built-in overflow protection to keep the filtrate from overflowing when waste bottle is full.

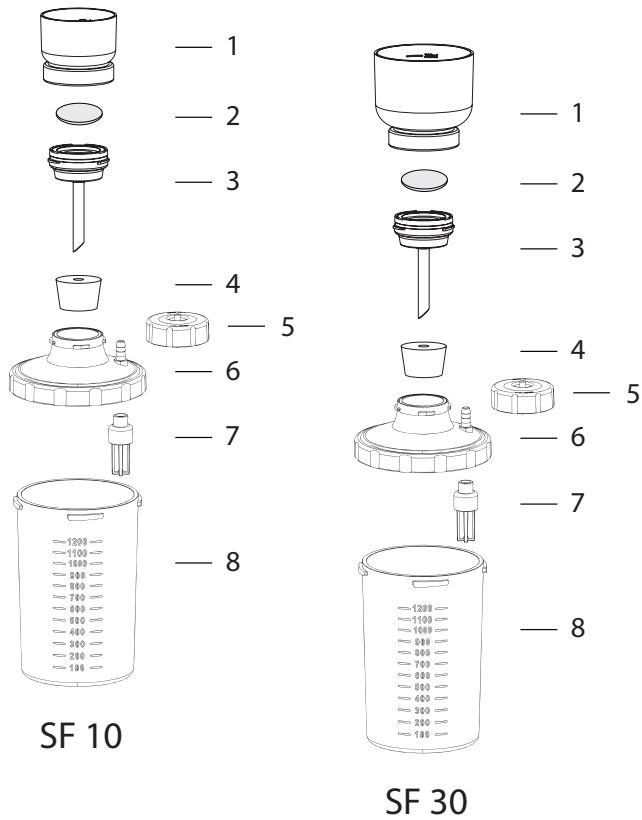
Applications

General filtration, such as medium purification, microbiological test etc.

Specifications

Material	SF 10	SF 30
Funnel	SS316	SS316
Support base	SS316	SS316
Membrane support	SS316	SS316
Receiver bottle	PC	PC

Specifications		
Funnel capacity	100 ml	300 ml
Bottle capacity	1200 ml	1200 ml
Filter diameter	47 mm	47 mm
Hose barb	ID8	ID8
Overflow protection	Yes	Yes



Ordering Information

SF 10, Stainless Steel Filtration Set			197010-32
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.16)	167110-17	
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	

SF 30, Stainless Steel Filtration Set			197010-33
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.16)	167110-17	
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	

Stainless Steel Filtration Apparatus



SF 11



SF 52

Features

- ▶ Spin-lock connection (M577346) facilitates fast and stable installation without clamp.
- ▶ SS316 funnel is shatterproof, durable and can be fast sterilized by flame.
- ▶ Drains the filtrate away directly without removing the tubes.

Applications

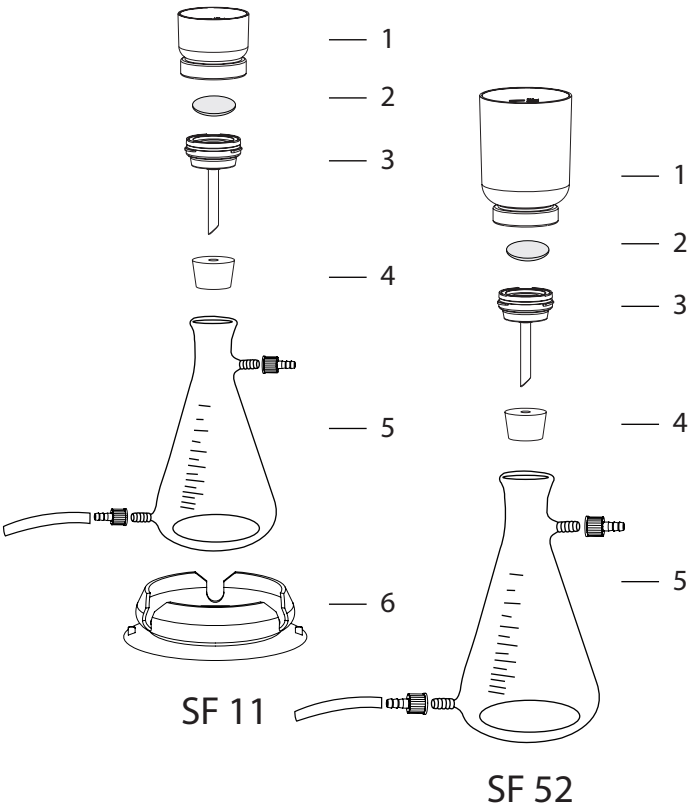
General filtration, such as medium purification, microbiological test etc.

Specifications

Material	SF 11	SF 52
Funnel	SS316	SS316
Support base	SS316	SS316
Membrane support	SS316	SS316
Stopper	Silicone rubber	Silicone rubber
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
Hose barb	ID8	ID8
Drain device	Yes	Yes

* The flask withstands nearly full vacuum for use in vacuum filtration.

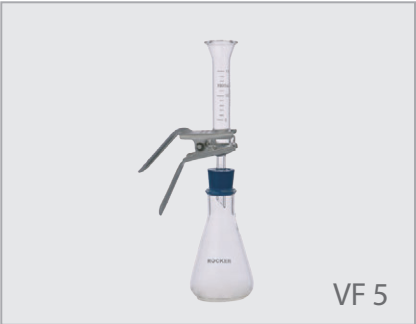


Ordering Information

SF 11, Stainless Steel Filtration Set			167200-02
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	
5	Receiver flask with drain, 1000 ml (with screwthread connector)	167300-08	
6	Silicone fixing sucker	167200-45	

SF 52, Stainless Steel Filtration Set			167200-11
Stainless Steel Filter Holder (500 ml)			
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.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

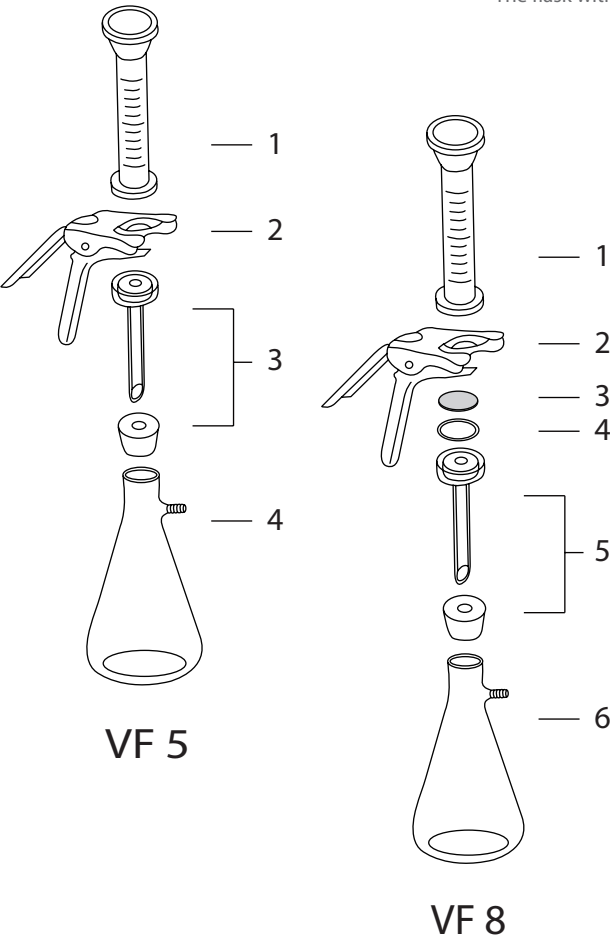
Small volume vacuum filtration for biological or particulate contamination analysis.

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	Silicone rubber
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
Hose barb	ID8	ID8

*The flask withstands nearly full vacuum for use in vacuum filtration.



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

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

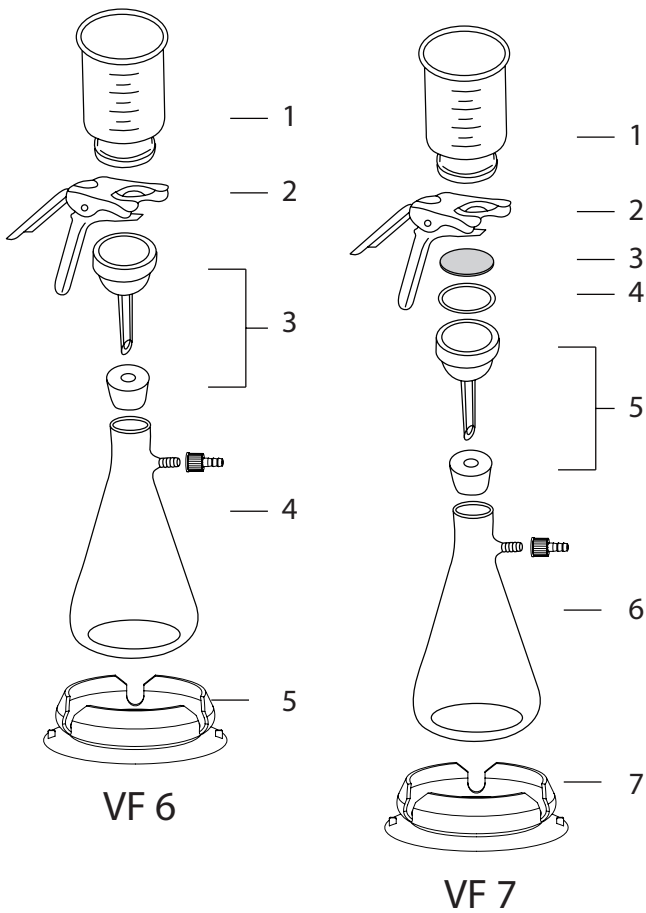
Solvent purification and general filtration such as microbiology, suspended solid analysis etc.

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	Silicone rubber
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
Hose barb	ID8	ID8

*The flask withstands nearly full vacuum for use in vacuum filtration.



Ordering Information

VF 6, 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, 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

Glass Filtration Apparatus



VF 3



VF 12

Features

- ▶ VF 3 : The filter holder and flask, connected by sintered glass, have better resistance to corrosive liquid.
- ▶ VF 12 can filtrate and store solution directly in GL45 storage bottle without the need of being transferred from the receiver flask.

Applications

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

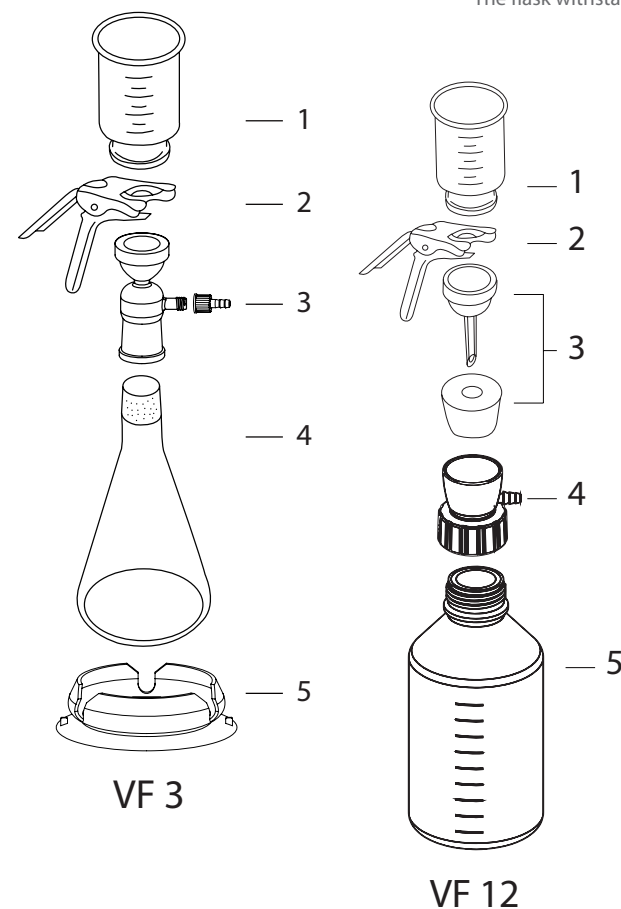
Specifications

Material	VF 3	VF 12
Funnel	Borosilicate glass	Borosilicate glass
Support base	Borosilicate glass	Borosilicate glass
Membrane support	Sintered glass	Sintered glass
Clamp	Aluminum	Aluminum
Filtration adaptor	-	PP (Autoclavable)
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
Hose barb	ID8	ID 4~ID8

*The flask withstands nearly full vacuum for use in vacuum filtration.



Ordering Information

VF 3, 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 12, 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	Laboratory glass bottle, 1000 ml	197000-59

90 mm Glass Filtration Apparatus



VF 15



VF 16

Features

- ▶ Unique filtration adaptor design can be connected with GL45 storage bottle.
- ▶ VF 15 / VF 16 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, GC and AA analysis.

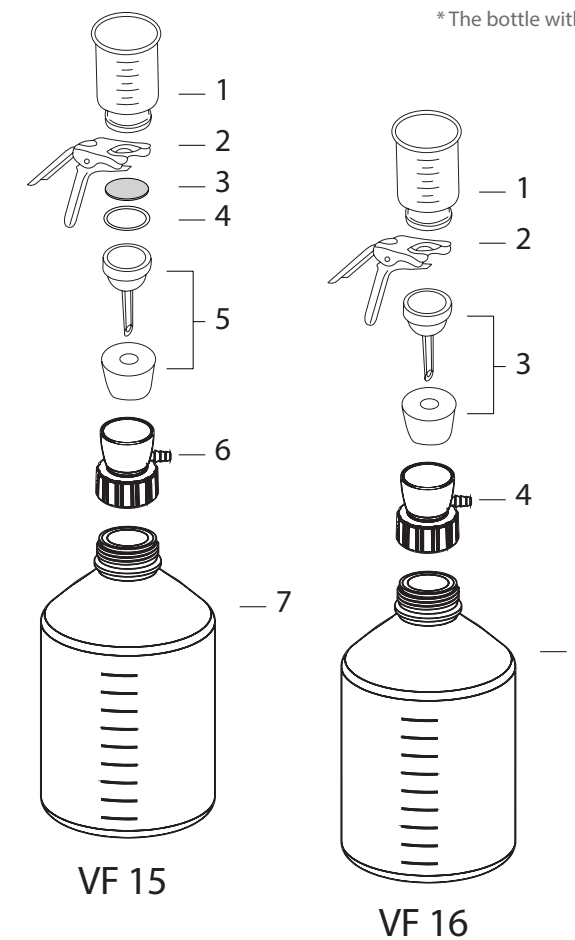
Specifications

Material	VF 15	VF 16
Funnel	Borosilicate glass	Borosilicate glass
Support base	Borosilicate glass	Borosilicate glass
Membrane support	Metal coating PTFE	Sintered glass
Clamp	Aluminum	Aluminum
Filtration adaptor	PP (Autoclavable)	PP (Autoclavable)
Storage bottle	Borosilicate glass	Borosilicate glass

Specifications

Funnel capacity	1000 ml	1000ml
Bottle capacity	5000 ml	5000 ml
Filter diameter	90 mm	90 mm
Hose barb	ID4 ~ ID8	ID4 ~ ID8

*The bottle withstands nearly full vacuum for use in vacuum filtration.



Ordering Information

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	Laboratory glass bottle, 5000 ml	197000-55
VF 16, 90 mm Glass Filtration Set		167200-16
1000 ml Glass filter holder		167120-38
1	Glass funnel, 1000 ml	167210-10
2	Aluminum clamp	167240-02
3	Sintered glass support base (Including No.8 silicone stopper)	167230-11
4	Filtration adaptor for GL45 bottle	197000-65
5	Laboratory glass bottle, 5000 ml	197000-55

Vacuum Filtration System



Features

- **No air pollution, maintenance free**
Rocker series pumps are piston-driven, no need of lubricant, regular oil changes and maintenance; with no oil pollution.
- **The patented spin-lock design**
LF 30 filter holder can be connected with waste bottle by patented spin-lock connection (M381450) giving a fast and stable installation without clamp.
- **Drain out directly**
MF 31 can drain the filtrate away directly without disassembly.
- **The patented magnetic design**
MF 31 strong magnetic seal (I551337) allows one-handed operation, prevents possible twisting and tearing of the membrane.
- **International certification**
CE certification
CSA certification (Rocker 300)
IP30 protection (Rocker 300)
RoHS certification (Rocker 300)
- **Two-Year Warranty (Rocker 300)**

Applications

- Suspended solid test
- Vacuum filtration

Ordering Information

167305-11(22)

Rocker 300 - LF 30, Vacuum Filtration System, complete set includes :

- * Rocker 300, Vacuum Pump
- * LF 30, Filtration Set
- * Silicone Tube (1m)

167311-11(22)

Rocker 300 - MF 31, Vacuum Filtration System, complete set includes :

- * Rocker 300, Vacuum Pump
- * MF 31, Filtration Set
- * Silicone Tube (1m)

Rocker 300 - LF 30



Rocker 300 - MF 31



Specification

Model	Rocker 300 - LF 30		Rocker 300 - MF 31	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. vacuum	105 mbar			
Max. flow rate	23 L/min	20 L/min	23 L/min	20 L/min
Vacuum regulator	Yes			
Overflow protection	Yes			
Hose barb	ID8			
Model	LF 30		MF 31	
Funnel	300 ml		300 ml	
Receiver flask	1200 ml		1000 ml	
Filter diameter	47 mm		47 mm	
Overflow protection	Yes		-	
Drain device	-		Yes	

Solvent Purification System

Features

- **No air pollution, maintenance free**
Rocker 300C / Chemker 300 / Lafil 300C vacuum pumps are driven by diaphragm, no need of lubricant, regular oil changes and maintenance; with no oil pollution.
- **Good chemical resistance**
Rocker 300C / Chemker 300 / Lafil 300C-VF12 systems all can offer good resistance to a wide range of chemical gases except strong acid and alkali.
- **One-step filtration**
VF 12 can filtrate and store solution directly in GL45 storage bottle without transferring from the flask and hence preventing cross-contamination.
- **Suitable for all GL45 storage bottle**
Unique filtration adaptor is designed to be compatible with any GL45 storage bottle (1000 ml, 2000 ml, 5000 ml, etc.)
- **International certification**
CE certification
IP 30 protection (Rocker 300C)
RoHS certification (Rocker 300C)
- **One-Year Warranty**
(Rocker 300C / Chemker 300 / Lafil 300C)

Applications

- Solvent purification
- HPLC mobile phase purification
- Vacuum filtration

Ordering Information

189302-11(22)

Rocker 300C - VF 12, Solvent Purification System, complete set includes :

- * Rocker 300C, Vacuum Pump
- * VF 12, Filtration Set
- * Silicone Tube (1m)

169302-11(22)

Chemker 300 - VF 12, Solvent Purification System, complete set includes :

- * Chemker 300, Vacuum Pump
- * VF 12, Filtration Set
- * Silicone Tube (1m)

197331-11(22)

Lafil 300C - VF 12, Solvent Purification System, complete set includes :

- * Lafil 300C, Vacuum Pump
- * VF 12, Filtration Set
- * Silicone Tube (1m)

Rocker 300C - VF 12



Chemker 300 - VF 12



Lafil 300C - VF 12

Specification

Model	Rocker 300C - VF 12		Chemker 300 - VF 12		Lafil 300C - VF 12	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. vacuum	145 mbar		105 mbar		145 mbar	
Max. flow rate	23 L/min	20 L/min	20 L/min	18 L/min	23 L/min	20 L/min
Vacuum regulator	Yes		-		Yes	
Hose barb	ID8					
Model	VF 12					
Funnel	300 ml					
Storage bottle	1000 ml					
Filter diameter	47 mm					

Vacuum Filtration System



Features

- **Compact and safe operation**
Lafil 300 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**
The waste bottle comes with a built-in overflow protection to keep the filtrate from overflowing when it is full.
- **Autoclavable and shatterproof**
The waste bottle and filter holder are made of engineering plastics and SS316 stainless steel which are shatterproof, high temperature resistance and autoclavable.
- **International certification**
CE certification
- **Two-Year Warranty (Lafil 300)**



Applications

- Vacuum filtration
- Suspended solid test
- Microbiological test

Ordering Information

197301-11(22)
Lafil 300 - LF 30, Vacuum Filtration System, AC110V, 60Hz (AC220V, 50Hz)

197302-11(22)
Lafil 300 - SF 10, Vacuum Filtration System, AC110V, 60Hz (AC220V, 50Hz)

197300-11(22)
Lafil 300, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

180100-11
100 ml Stainless steel funnel lid

Specification

Model	Lafil 300 - LF 30		Lafil 300 - SF 10	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. vacuum	105 mbar			
Max. flow rate	23 L/min	20 L/min	23 L/min	20 L/min
Vacuum regulator	Yes			
Noise level	50 dB			
Hose barb	ID8			
Dimension (LxWxH)	33.5 x 24.5 x 30 cm			
Model	LF 30		SF 10	
Funnel	300 ml		100 ml	
Receiver bottle	1200 ml		1200 ml	
Filter diameter	47 mm		47 mm	
Funnel lid	Yes		Optional	
Overflow protection	Yes		Yes	

Vacuum Filtration System



Features

- **Compact and safe operation**
Lafil 400 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**
The waste bottle comes with a built-in overflow protection to keep the filtrate from overflowing when it is full.
- **Autoclavable and shatterproof**
The waste bottle and filter holder are made of engineering plastics and SS316 stainless steel which are shatterproof, high temperature resistance and autoclavable.
- **International certification**
CE certification
- **Two-Year Warranty (Lafil 400)**



Applications

- Vacuum filtration
- Suspended solid test
- Microbiological test

Ordering Information

197401-11(22)
Lafil 400 - LF 30, Vacuum Filtration System, AC110V, 60Hz (AC220V, 50Hz)

197402-11(22)
Lafil 400 - SF 10, Vacuum Filtration System, AC110V, 60Hz (AC220V, 50Hz)

197400-11(22)
Lafil 400, Vacuum Pump
AC110V, 60Hz (AC220V, 50Hz)

Specification

Model	Lafil 400 - LF 30		Lafil 400 - SF 10	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. vacuum	30 mbar			
Max. flow rate	23 L/min	20 L/min	23 L/min	20 L/min
Vacuum regulator	Yes			
Noise level	52 dB			
Hose barb	ID8			
Dimension (LxWxH)	33.5 x 24.5 x 30 cm			
Model	LF 30		SF 10	
Funnel	300 ml		100 ml	
Receiver bottle	1200 ml		1200 ml	
Filter diameter	47 mm		47 mm	
Funnel lid	Yes		Optional	
Overflow protection	Yes		Yes	

WaterVac 100 Vacuum Filtration System



Features

- **Save 70% bench space**
The compact design of WaterVac 100 vacuum filtration system can save much bench 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 bottle and make the filtration more efficient.
- **Versatile**
Replaceable funnel adaptor design makes WaterVac 100 compatible with various kinds of filter holder.
- **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)
- 190110-01(02)**
WaterVac 100 - MS, Vacuum Filtration System with No. 8 stopper funnel adaptor, AC100~240V adaptor, US plug (EU plug)
- 200300-01**
MF 3, 300 ml Magnetic Filter Holder with lid kit
- 200500-01**
MF 5, 500 ml Magnetic Filter Holder with lid kit



Specification

Model	WaterVac 100
Power	DC12V, 1.0A
Max. vacuum	313 mbar
Max. liquid flow rate	0.5 L/min
Motor	12W Brushless DC Motor
Hose barb	ID6
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
Number of branch	1
Adaptor	No. 8 stopper
Filter holder	MF 3 / MF 5, 300 ml / 500 ml magnetic filter holder (optional)

WaterVac 100 Vacuum Filtration System



Features

- **Save 70% bench space**
The compact design of WaterVac 100 vacuum filtration system can save much bench 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 bottle and make the filtration more efficient.
- **Versatile**
Replaceable funnel adaptor design makes WaterVac 100 compatible with various kinds of filter holder.
- **Compatible with Rocker SF funnel**
WaterVac 100 - 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
- **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 SF funnel adaptor, AC100~240V adaptor, US plug (EU plug)
- 190121-01(02)**
WaterVac 101 - MB, Vacuum Filtration System with Rocker SF funnel adaptor, 100 ml SF funnel, AC100~240V adaptor, US plug (EU plug)
- 180100-01**
SF, 100 ml Stainless Steel Funnel
- 180100-03**
SF, 300 ml Stainless Steel Funnel
- 180100-05**
SF, 500 ml Stainless Steel Funnel



Specification

Model	WaterVac 100	
Power	DC12V, 1.0A	
Max. vacuum	313 mbar	
Max. liquid flow rate	0.5 L/min	
Motor	12W Brushless DC Motor	
Hose barb	ID6	
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	WaterVac 101 - MB
Number of branch	1	1
Adaptor	Spin-lock design	Spin-lock design
Funnel	SF stainless steel funnel, 100 / 300 / 500 ml (optional)	SF stainless steel funnel, 100 ml (standard)

How to order?

You can select Combination A, B or C

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)

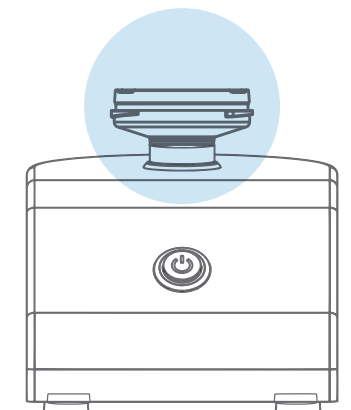
C



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
SF Stainless Steel Funnel
(180100-01)

Rocker, 300 ml
SF Stainless Steel Funnel
(180100-03)

Rocker, 500 ml
SF Stainless Steel Funnel
(180100-05)



Stainless Steel Cover
for SF 100 ml funnel
(180100-11)

Stainless Steel Cover
for SF 300 / 500 ml funnel
(180100-13)



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

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



Sartorius, 100 ml / 250 ml
Microsart® disposable plastic funnel
(16A07--10-----N/
16A07--25-----N)



Millipore, 100 ml / 250 ml
Microfil® disposable plastic funnel
(MIHAWG100 / MIHAWG250)



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



Silicone Tube
Ø 4.2 x 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 (ID4~ID8)
(190100-76)

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

WaterVac 200 Vacuum Filtration System



Features

- **Save 70% bench space**
Integrates liquid pump and filter holders into an instrument, no need of waste bottle and connecting tubes which is necessary for traditional air pump.
- **Save time**
A built-in liquid pump can transfer filtered liquid directly to waste, save time by simplifying filtration process.
- **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**

Patent: I653396

WaterVac 200 - MS

360° Rotational L - type hose barb

Compatible with various kinds of adaptor and filter holder

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
MF 3, 300 ml Magnetic Filter Holder with lid kit

200500-01
MF 5, 500 ml Magnetic Filter Holder with lid kit

Specification

Model	WaterVac 200
Power	DC24V, 1.8A
Max. vacuum	313 mbar
Max. liquid flow rate	4.5 L/min
Motor	60W Brushless DC Motor
Noise level	60 dB
Hose barb	ID8
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	
Number of branch	2
Adaptor	No. 8 stopper
Filter holder	MF 3 / MF 5, 300 ml / 500 ml magnetic filter holder (optional)

WaterVac 200 Vacuum Filtration System



Features

- **Save 70% bench space**
Integrates liquid pump and filter holders into an instrument, no need of waste bottle and connecting tubes which is necessary for traditional air pump.
- **Save time**
A built-in liquid pump can transfer filtered liquid directly to waste, save time by simplifying filtration process.
- **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**

Patent: I653396

WaterVac 200 - MB

Patent: I653396

WaterVac 201 - MB

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)

180100-01
SF, 100 ml Stainless Steel Funnel

180100-03
SF, 300 ml Stainless Steel Funnel

180100-05
SF, 500 ml Stainless Steel Funnel

Specification

Model	WaterVac 200	
Power	DC24V, 1.8A	
Max. vacuum	313 mbar	
Max. liquid flow rate	4.5 L/min	
Motor	60W Brushless DC Motor	
Noise level	60 dB	
Hose barb	ID8	
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
Number of branch	2	2
Adaptor	Spin-lock design	Spin-lock design
Funnel	SF stainless steel funnel, 100 / 300 / 500 ml (optional)	SF stainless steel funnel, 100 ml x 2 (standard)

How to order?

You can select Combination A, B or C

A



B

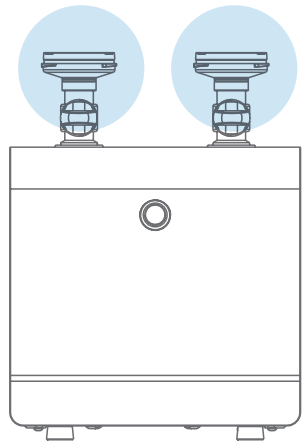


C



Customized Design

We can offer customized adaptor for your funnel



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

Aluminum Multi-Branch Manifold

Features

- **Quick-assembly and disassembly**
Each component can be easily removed for cleaning and autoclaving .
- **Light and handy aluminum**
All parts of MultiVac 310 / 610 manifold are made of 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 kinds of filter holders**
MultiVac 310 / 610 - MS manifold includes No.8 silicone stoppers which can accept various types of filter holders at option.

Applications

- Suspended solid test
- Microbiological test
- Vacuum filtration

Ordering Information

- 180310-01**
MultiVac 310 - MS, 3 Places Aluminum Manifold with No. 8 stopper funnel adaptor
- 180610-01**
MultiVac 610 - MS, 6 Places Aluminum Manifold with No. 8 stopper funnel adaptor
- 200300-01**
MF 3, 300 ml Magnetic Filter Holder with lid kit
- 167110-16**
No.8 Silicone Stopper



Specification

Model	MultiVac 310 - MS	MultiVac 610 - MS
Number of branch	3	6
Filter diameter	Optional	Optional
Funnel capacity	Optional	Optional
Hose barb	ID8	ID8
Dimension (LxWxH)	48 x 13 x 16 cm	85 x 13 x 16 cm
Part	Material	Material
Body	Aluminum	Aluminum
Control valve	Aluminum	Aluminum
Adaptor	Aluminum	Aluminum
Hose barb	Aluminum	Aluminum
Handle	Aluminum	Aluminum

Stainless Steel Multi-Branch Manifold



Features

- **Quick-assembly and disassembly**
Each component can be easily removed for cleaning and autoclaving .
- **SS316 Stainless Steel**
All wetted parts of MultiVac 300 / 600 manifold are made of SS316 stainless steel, which is more durable.
- **Quick-Fit hose barb**
Detachable hose barb can be connected to either side of the manifold quickly towards the vacuum source.
- **Innovative vent valve design**
An adjustable vent valve integrated with the pipe can eliminate water hammer phenomenon and help drain out residual waste water.
- **Individual control valve**
Each branch permits individual control.
- **Compatible with different kinds of filter holders**
MultiVac 300 / 600 - MS manifold includes No.8 silicone stoppers which can accept various types of filter holders at option.

Applications

- Microbiological test
- Suspended solid test
- Vacuum filtration

Ordering Information

- 180300-01**
MultiVac 300 - MS, 3 Places SS Manifold with No. 8 stopper funnel adaptor
- 180600-01**
MultiVac 600 - MS, 6 Places SS Manifold with No. 8 stopper funnel adaptor
- 200300-01**
MF 3, 300 ml 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
Hose barb	ID8	ID8
Dimension (LxWxH)	48 x 13 x 16 cm	85 x 13 x 16 cm
Part	Material	Material
Body	SS316	SS316
Control valve	SS316	SS316
Adaptor	SS316	SS316
Hose barb / Vent valve	SS316	SS316
Handle / Knob	Aluminum	Aluminum

Stainless Steel Spin-Lock Design Multi-Branch Manifold



Features

- **Quick-assembly and disassembly**
Each component can be easily removed for cleaning and autoclaving .
- **SS316 Stainless Steel**
All wetted parts of MultiVac 300 / 600 manifold are made of SS316 stainless steel, which is more durable.
- **Quick-Fit hose barb**
Detachable hose barb can be connected to either side of the manifold quickly towards the vacuum source.
- **Innovative vent valve design**
An adjustable vent valve integrated with the pipe can eliminate water hammer phenomenon and help drain out residual waste water.
- **Individual control valve**
Each branch permits individual control.
- **Compatible with different sizes of funnels**
MultiVac 300 / 600 - MB manifolds can accept Rocker SF stainless steel funnel - 100 / 300 / 500 ml at option.

Applications

- Microbiological test
- Suspended solid test
- Vacuum filtration

Ordering Information

- 180300-02**
MultiVac 300 - MB, 3 Places SS Manifold with Rocker SF funnel adaptor
- 180600-02**
MultiVac 600 - MB, 6 Places SS Manifold with Rocker SF funnel adaptor
- 180100-01**
SF, 100 ml Stainless Steel Funnel
- 180100-03**
SF, 300 ml Stainless Steel Funnel
- 180100-05**
SF, 500 ml Stainless Steel Funnel



Specification

Model	MultiVac 300 - MB	MultiVac 600 - MB
Number of branch	3	6
Filter diameter	47 mm	47 mm
Funnel capacity	100 ml / 300 ml / 500 ml (optional)	100 ml / 300 ml / 500 ml (optional)
Hose barb	ID8	ID8
Dimension (LxWxH)	48 x 13 x 11 cm	85 x 13 x 11 cm
Part	Material	Material
Body	SS316	SS316
Control valve	SS316	SS316
Adaptor	SS316	SS316
Membrane support	SS316	SS316
Hose barb / Vent valve	SS316	SS316
Handle / Knob	Aluminum	Aluminum

Stainless Steel Spin-Lock Design Multi-Branch Manifold



Features

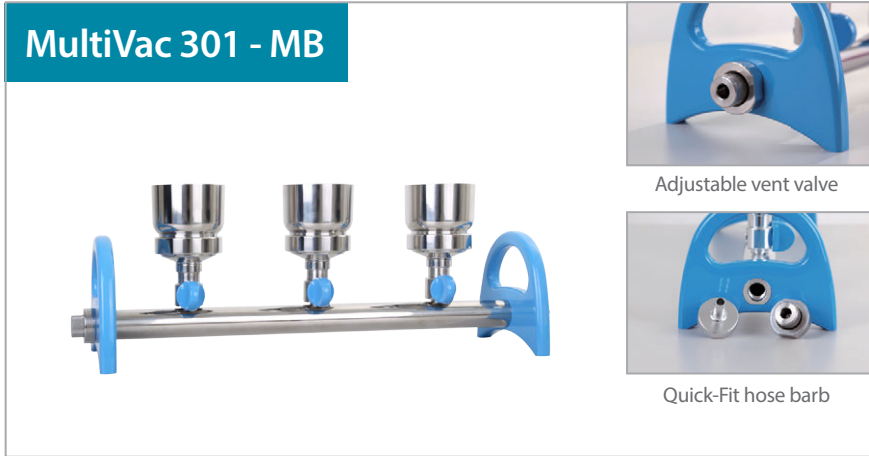
- **Quick-assembly and disassembly**
Each component can be easily removed for cleaning and autoclaving .
- **SS316 Stainless Steel**
All wetted parts of MultiVac 300 / 600 manifold are made of SS316 stainless steel, which is more durable.
- **Quick-Fit hose barb**
Detachable hose barb can be connected to either side of the manifold quickly towards the vacuum source.
- **Innovative vent valve design**
An adjustable vent valve integrated with the pipe can eliminate water hammer phenomenon and help drain out residual waste water.
- **Individual control valve**
Each branch permits individual control.

Applications

- Microbiological test
- Suspended solid test
- Vacuum filtration

Ordering Information

- 180301-02**
MultiVac 301 - MB, 3 Places SS Manifold with Rocker SF funnel adaptor, 100 ml SF funnel x 3
- 180601-02**
MultiVac 601 - MB, 6 Places SS Manifold with Rocker SF funnel adaptor, 100 ml SF funnel x 6
- 180100-01**
SF, 100 ml Stainless Steel Funnel
- 180100-03**
SF, 300 ml Stainless Steel Funnel
- 180100-05**
SF, 500 ml Stainless Steel Funnel



Specification

Model	MultiVac 301 - MB	MultiVac 601 - MB
Number of branch	3	6
Filter diameter	47 mm	47 mm
Funnel capacity	100 ml	100 ml
Hose barb	ID8	ID8
Dimension (LxWxH)	48 x 13 x 14.3 cm	85 x 13 x 14.3 cm
Part	Material	Material
Body	SS316	SS316
Control valve	SS316	SS316
Adaptor	SS316	SS316
Membrane support	SS316	SS316
Hose barb / Vent valve	SS316	SS316
Handle / Knob	Aluminum	Aluminum
Funnel	SS316	SS316

Vacuum Filtration System

Features

- **For large number of samples**
MultiVac 310 / 610 - MS - A are economical models for large sample filtration. Each system includes Alligator 200 diaphragm liquid pump, manifold and magnetic filter holders.
- **Time-saving and space-saving**
The vacuum source has built in a liquid pump which can be connected directly to manifold without waste bottle. Save 40% bench space and simplify filtration process.
- **Light and handy aluminum**
The manifold is made of aluminum which is autoclavable, light and cost-effective.
- **Magnetic filter holder is included**
Magnetic filter holder allows one-handed operation and prevents the membrane from being twisted or torn.
- **International certification**
CE certification
IP 64 protection (Alligator 200)
RoHS certification (Alligator 200)
- **One-Year Warranty (Alligator 200)**

Applications

- Suspended solid test
- Microbiological test
- Vacuum filtration

Ordering Information

180311-01(02)-A
180611-01(02)-A
MultiVac 310 / 610 - MS - A, Vacuum Filtration System, complete set includes:
*Alligator 200, Diaphragm Liquid Pump
*MultiVac 310 / 610 - MS, 3/6 Places Aluminum Manifold
*MF 3, 300 ml Magnetic Filter Holder with lid kit (3/6 pcs)
*Silicone Tube (2 pcs)

MultiVac 310 - MS - A



MultiVac 610 - MS - A



Specification

Model	MultiVac 310 - MS - A	MultiVac 610 - MS - A
Power	DC24V, 1.8A	
Max. vacuum	313 mbar	
Max. liquid flow rate	4.5 L/min	
Motor	60W Brushless DC Motor	
Noise level	60 dB	
Hose barb	ID8	
Material contact with filtrate	SS316, FKM, Silicone, PP, PPS	
Model	MultiVac 310 - MS	MultiVac 610 - MS
Number of branch	3	6
Filter holder	MF 3, 300 ml x 3	MF 3, 300 ml x 6
Filter diameter	47 mm	47 mm
Material contact with filtrate	Aluminum	Aluminum

Vacuum Filtration System

Features

- **For microbiological filtration**
MultiVac 301 / 601 - MB - A , include Alligator 200 diaphragm liquid pump, manifold, burner, stainless steel funnels and MCE membrane, are designed for a large number of samples in microbiological test. All wetted parts of manifold are made of SS316 stainless steel, which can be fast sterilized by flame.
- **Time-saving and space-saving**
The vacuum source has built in a liquid pump which can be connected directly to manifold without waste bottle. Save 40% bench space and simplify filtration process.
- **Quick-assembly and disassembly**
Each component of manifold can be easily removed for cleaning and autoclaving.
- **Innovative vent valve design**
An adjustable vent valve integrated with the pipe can eliminate water hammer phenomenon and help drain out residual waste water.
- **International certification**
CE certification
IP 64 protection (Alligator 200)
RoHS certification (Alligator 200)
- **One-Year Warranty (Alligator 200)**

Applications

- Suspended solid test
- Microbiological test
- Vacuum filtration

Ordering Information

180301-01(02)-A
180601-01(02)-A
MultiVac 301 / 601 - MB - A, Vacuum Filtration System, complete set includes:
*Alligator 200, Diaphragm Liquid Pump
*MultiVac 300 / 600 - MB, 3/6 Places Stainless Steel Manifold
*SF, 100 ml Stainless Steel Funnel (3/6 pcs)
*Dragon 100, Torch Burner
*MCE Membrane, 47 mm, 0.45 µm, 200/PK
*Silicone Tube (2 pcs)

MultiVac 301 - MB - A



MultiVac 601 - MB - A



Specification

Model	MultiVac 301 - MB - A	MultiVac 601 - MB - A
Power	DC24V, 1.8A	
Max. vacuum	313 mbar	
Max. liquid flow rate	4.5 L/min	
Motor	60W Brushless DC Motor	
Noise level	60 dB	
Hose barb	ID8	
Material contact with filtrate	SS316, FKM, Silicone, PP, PPS	
Model	MultiVac 301 - MB	MultiVac 601 - MB
Number of branch	3	6
Funnel	SF stainless steel funnel, 100 ml x 3	SF stainless steel funnel, 100 ml x 6
Filter diameter	47 mm	47 mm
Material contact with filtrate	SS316	SS316

Vacuum Filtration System



Features

- **For large number of samples**
MultiVac 310 / 610 - MS - T are economical models for large sample filtration. Each system includes vacuum pump, manifold, waste bottle and filter holders.
- **Light and handy aluminum**
All parts are made of aluminum which is light, cost-effective and autoclavable. Each component can be easily removed for cleaning and autoclaving.
- **Magnetic filter holder is included**
Magnetic filter holder allows for one-handed operation, and can prevent the membrane from being twisted or torn.
- **4000 ml PP vacuum bottle with drain**
The large capacity of 4000 ml vacuum bottle with drain offers convenience of collecting and draining waste solution.
- **International certification**
CE certification
CSA certification (Rocker 400)
IP 30 protection (Rocker 400)
RoHS certification (Rocker 400)
- **Two-Year Warranty (Rocker 400)**

Applications

- Suspended solid test
- Microbiological test
- Vacuum filtration

Ordering Information

180311-11(22)-T
180611-11(22)-T
MultiVac 310 / 610 - MS - T, Vacuum Filtration System, complete set includes :
* Rocker 400, Oil Free Vacuum Pump
* MultiVac 310 / 610 - MS, 3/6 Places Aluminum Manifold
* MF 3, 300 ml Magnetic Filter Holder with lid kit (3/6 pcs)
* 4000 ml PP Vacuum Bottle with drain
* Silicone Tube (1m x 2pcs)

MultiVac 310 - MS - T



MultiVac 610 - MS - T



Specification

Model	MultiVac 310 - MS - T		MultiVac 610 - MS - T	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. vacuum	105 mbar			
Max. flow rate	37 L/min	34 L/min	37 L/min	34 L/min
Overflow protection / Filter cartridge	Yes			
Vacuum regulator	Yes			
Noise level	52 dB			
Hose barb	ID8			
Model	MultiVac 310 - MS		MultiVac 610 - MS	
Number of branch	3		6	
Filter holder	MF 3, 300 ml x 3		MF 3, 300 ml x 6	
Filter diameter	47 mm		47 mm	
Material contact with filtrate	Aluminum		Aluminum	

Vacuum Filtration System



Features

- **For microbiological filtration**
MultiVac 301 / 601 - MB - T, include Rocker 400 vacuum pump, manifold, waste bottle, burner and MCE membrane, are designed for a large number of samples in microbiological test. All wetted parts of manifold are made of SS316 stainless steel, which can be fast sterilized by flame.
- **Quick-assembly and disassembly**
Each component can be easily removed for cleaning and autoclaving .
- **Innovative vent valve design**
An adjustable vent valve integrated with the pipe can eliminate water hammer phenomenon and help drain out residual waste water.
- **4000 ml PP vacuum bottle with drain**
The large capacity of 4000 ml vacuum bottle with drain offers convenience of collecting and draining waste solution.
- **International certification**
CE certification
CSA certification (Rocker 400)
IP 30 protection (Rocker 400)
RoHS certification (Rocker 400)
- **Two-Year Warranty (Rocker 400)**

Applications

- Microbiological test
- Vacuum filtration

Ordering Information

180300-11-T (22-T)
180600-11-T (22-T)
MultiVac 301 / 601 - MB - T, Vacuum Filtration System, complete set includes :
* Rocker 400, Oil Free Vacuum Pump
* MultiVac 300 / 600 - MB, 3/6 Places Stainless Steel Manifold
* SF, 100 ml Stainless Steel Funnel (3/6 pcs)
* 4000 ml PP Vacuum Bottle with drain
* Dragon 100, Torch Burner
* MCE Membrane, 47 mm, 0.45 µm, 200/PK
* Silicone Tube (1m x 2pcs)

MultiVac 301 - MB - T



MultiVac 601 - MB - T



Specification

Model	MultiVac 301 - MB - T		MultiVac 601 - MB - T	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. vacuum	105 mbar			
Max. flow rate	37 L/min	34 L/min	37 L/min	34 L/min
Overflow protection / Filter cartridge	Yes			
Vacuum regulator	Yes			
Noise level	52 dB			
Hose barb	ID8			
Model	MultiVac 301 - MB		MultiVac 601 - MB	
Number of branch	3		6	
Funnel	SF stainless steel funnel, 100 ml x 3		SF stainless steel funnel, 100 ml x 6	
Filter diameter	47 mm		47 mm	
Material contact with filtrate	SS316		SS316	

How to order?

You can select Combination A, B or C

A

Step 1. Choose the manifold



MultiVac 300 - MB
3 Places Stainless Steel Manifold
(180300-02)



MultiVac 600 - MB
6 Places Stainless Steel Manifold
(180600-02)

Step 2. Choose the SF funnel



Rocker, 100 ml
SF Stainless Steel Funnel
(180100-01)



Rocker, 300 ml
SF Stainless Steel Funnel
(180100-03)



Rocker, 500 ml
SF Stainless Steel Funnel
(180100-05)



Stainless Steel Cover
for SF 100 ml funnel
(180100-11)



Stainless Steel Cover
for SF 300 ml / 500 ml funnel
(180100-13)

B

Step 1. Choose the manifold



MultiVac 300 - MS
3 Places Stainless Steel Manifold
(180300-01)



MultiVac 600 - MS
6 Places Stainless Steel Manifold
(180600-01)

Step 2. Choose the filter holder



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



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



Rocker, 300 ml
VF 6, Glass Filter Holder
(167120-31)

C

Step 1. Choose the manifold



MultiVac 300
3 Places Stainless Steel Manifold Base
(180300-00)



MultiVac 600
6 Places Stainless Steel Manifold Base
(180600-00)

Step 2. Choose the disposable funnel and adaptor



Sartorius, 100 ml / 250 ml
Microsart® disposable plastic funnel
(16A07-10-N / 16A07-25-N)



Millipore, 100 ml / 250 ml
Microfil® disposable plastic funnel
(MIHAWG100 / MIHAWG250)



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

+

+

+



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



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

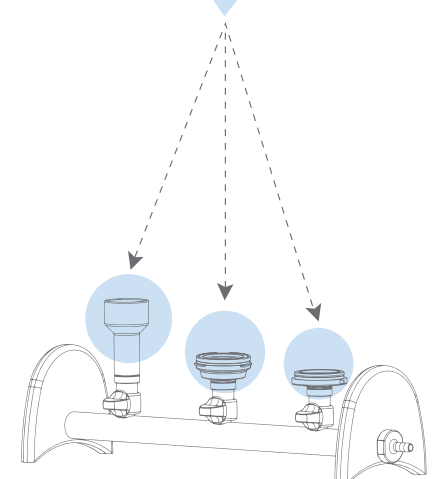


SS316 Adaptor for Pall
disposable plastic funnel
(190100-75)

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

Customized Design

We can offer customized adaptor for your funnel



Filtration Accessories



PES / PC Vacuum Bottle

Specification	1200 ml, PES vacuum bottle	1200 ml, PC vacuum 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	ID8	ID8
Autoclavable	Yes	Yes



PP Heavy-Duty Vacuum Bottle **NEW**

Specification	4000 ml, PP vacuum bottle	4000 ml, PP vacuum bottle with drain
Catalog number	197200-47	197200-48
Connector	Hose barb	Hose barb
Graduated increment	500 ml	500 ml
Overflow protection	Yes	Yes
Hose barb	ID4 ~ ID8	ID4 ~ ID8
Drain device	-	Yes
Autoclavable	Yes	Yes



Multilayer Filtration Adaptor **NEW**

Specification	Multilayer filtration adaptor
Catalog number	167230-05
Main material	Borosilicate glass
Material of membrane support	SS screen
Filter diameter	47 mm
Filter holder	300 ml glass filter holder (optional)



Continuous Filtration Kit **NEW**

Specification	Continuous filtration kit
Catalog number	167210-36
Main material	PTFE
Material of hose barb	PTFE
Filter holder	300 ml glass filter holder (optional)
Hose barb	ID6



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

Filtration Accessories



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



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	ID6	ID4 ~ ID8
Autoclavable	Yes	Yes

Application for GL45 Suction Cap

Waste Bottle

Suitable for collecting waste media by using GL45 bottle in connection with suction pump and accessories.



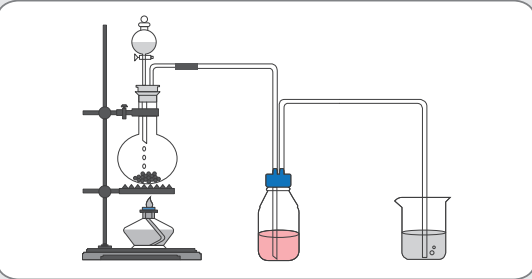
Moisture Trap Bottle

Available to absorb moisture with desiccant which turns pink when saturated.



Vapor Absorption (Neutralization) Bottle

Ideal for absorbing acid or alkaline vapor to prevent harmful vapors from spreading into the environment or pump.



Safety Bottle

Works as a safety bottle to prevent liquid from being sucked into pump.



* Please refer to P.66 to select GL45 Laboratory Glass Bottle

LIFE SCIENCES

Suction Kit
Plus / BioDolphin
Suction System
Lafil 100 / Lafil 100^{eco}

Lafil 200 - Plus / Lafil 200 - BioDolphin
Lafil 200^{eco} - Plus / Lafil 200^{eco} - BioDolphin
Lafil 300 - Plus / Lafil 300 - BioDolphin
Lafil 400 - Plus / Lafil 400 - BioDolphin

Accessories
Microplate Vacuum Manifold
WelVac 200 / 210

Lab Burner
Dragon 100 / 200 / 220
Dragon 300 / 320

Dry Bath
Sahara 310 / 320
Colony Counter
Galaxy 330

BioDolphin Suction Kit



Features

- **Quick Connection**
Quick connection between handle and adaptor can make any fitting adaptors replaced quickly.
- **Single-handed tip ejection**
The innovative tip ejection design enables tip ejection by single hand easily.
- **User-friendly lock switch design**
BioDolphin's ergonomic handle and friendly designed lock switch can keep continuous suction without pressing button all the time.
- **Multi-functional storage rack**
Exclusive designed rack can accommodate all the adaptors in order. A built-in liquid collection tray can receive liquid residue dripping from the adaptors.
- **Autoclavable**
The complete kit except rack are made of POM or SS304 material available for autoclave.

Applications

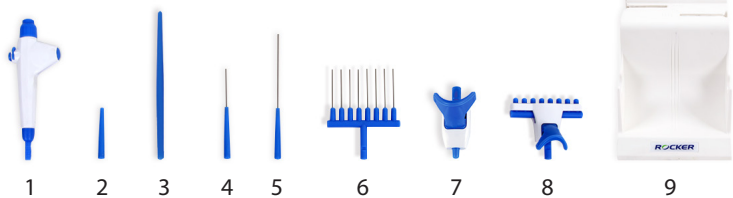
- Cell culture aspiration
- Laboratory waste suction

Ordering Information

199100-00 BioDolphin Suction Kit
199200-00 Plus Suction Kit

BioDolphin

Patent : M429771



Standard accessory :

1. 199100-30 Handle

2. 199100-46 1-channel tip adaptor (50 mm)

3. 199100-76 1-channel tip adaptor (150 mm)

4. 199100-47 1-channel SS adaptor (40 mm)

5. 199100-48 1-channel SS adaptor (80 mm)
6. 199100-49 8-channel SS adaptor (40 mm)

7. 199100-75 1-channel tip adaptor with ejector

8. 199100-50 8-channel tip adaptor with ejector

9. 199100-61 Rack

Specification

Model	BioDolphin	Plus
Operation	Press to suck	
Hose barb	ID6	
Suction kit material	POM, SS304	POM
Rack material	ABS	-
Dimension (LxWxH)	15 x 15.2 x 19.5 cm	15 x 7.5 x 5.5 cm
Suction kit	1. Handle 2. 1-channel tip adaptor (50 mm) 3. 1-channel tip adaptor (150 mm) 4. 1-channel SS adaptor (40 mm) 5. 1-channel SS adaptor (80 mm) 6. 8-channel SS adaptor (40 mm) 7. 1-channel tip adaptor with ejector 8. 8-channel tip adaptor with ejector 9. Rack	1. Handle 3. 1-channel tip adaptor (150 mm) 7. 1-channel tip adaptor with ejector 8. 8-channel tip adaptor with ejector

Portable Suction System



Features

- **All in One, space-saving**
Lafil 100 series suction system integrates vacuum sources, waste bottle and suction kit into a system. Saves 65% bench space.
- **Ideal for operation in laminar flow**
The compact size of Lafil 100 series suction system allows for work in laminar flow. Anti-UV cloth cover is optional.
- **Safe and convenient**
 - (1) Fence-like platform design prevents negligence from tipping over the waste bottle.
 - (2) Syringe filter prevents liquid from overflowing when bottle is full.
 - (3) Storage rack provides a smart solution for suction adaptors accommodation.
- **Eco control feature (Lafil 100^{eco})**
Energy-saving Lafil 100^{eco} will stop operating when achieving the maximum vacuum, and resume working when operated again. The pump performance can be fully optimized by reducing electricity consumption and keeping the workplace quiet.
- **International certification**
CE certification
- **One-Year Warranty**

Applications

- Cell culture aspiration
- Laboratory waste suction

Ordering Information

197100-01(02)

Lafil 100, Portable Suction System with AC100~240V adaptor, US plug (EU plug)

197110-01(02)

Lafil 100^{eco}, Portable Suction System with AC100~240V adaptor, US plug (EU plug)

197100-03

Lafil 100, Portable Suction System built-in battery with AC100~240V adaptor, US plug

197100-10

1000 ml PP vacuum bottle

197000-60-500

500 ml glass bottle with GL45 suction cap

Lafil 100



*The appearance difference between Lafil 100 / 100^{eco} is switch color.



197100-48 Anti-UV Cloth Cover (Optional)



Lafil 100 with 500 ml glass bottle (Optional)

Specification

Model	Lafil 100	Lafil 100 ^{eco}
Power	DC12V, 0.5A	
Max. vacuum	345 mbar	480 mbar*
Max. flow rate	4.0 L/min	
Aspiration rate	9 mL/sec	
Waste bottle	1000 ml PP vacuum bottle / 500 ml glass bottle (optional)	
Auto shut-off	-	Yes
Noise level	50 dB	
Net weight	1.3 Kg	1.5 kg
Dimension (LxWxH)	26.5 x 13 x 28 cm	
Suction Kit	<ul style="list-style-type: none"> • Handle • 1-channel tip adaptor with ejector • 8-channel tip adaptor with ejector 	

* Lafil 100^{eco} is automatically shut off at 480 mbar and restarted at 813 mbar.

Portable Suction System

- 1. Compact size**
Allows for operation in laminar flow.
- 2. 1000 ml PP vacuum bottle**
500 ml laboratory glass bottle is optional (Catalog number: 197000-60-500)
- 3. Fence-like platform**
Prevents users from tipping over the waste bottle.
- 4. Ergonomic handle**
Patented lock switch (M429771) keeps continuous suction without pressing the button all the time.
- 5. Single-handed tip ejection**
Enables tip ejection by single hand easily.
- 6. Liquid collection tray**
Collects waste liquid dripping from the suction adaptors.
- 7. Storage rack**
Keeps the bench space-saving and clean by accommodating suction adaptors on the storage rack.

The product can be disinfected with 70% Ethanol or isopropanol (IPA).

Lafil 200 Suction System



Features

- ▶ **All in One, space-saving**
Lafil 200 series suction system integrates vacuum source, waste bottle and suction kit into single one system. Saves 50% bench space.
- ▶ **Large volume, time-saving**
4L PP vacuum bottle is ideal for cell culture aspiration and reducing the number of times of emptying the waste bottle. (3.5L laboratory glass bottle is optional.)
- ▶ **Safe operation**
 - (1) Quick-coupling connector helps remove vacuum bottle quickly and easily.
 - (2) Fence-like platform design prevents negligence from tipping over the waste bottle.
 - (3) Overflow protection prevents the liquid from overflowing when bottle is full.
- ▶ **Eco control feature (Lafil 200^{eco})**
Energy-saving Lafil 200^{eco} will stop operating when achieving the maximum vacuum, and resume working when operated again. The pump performance can be fully optimized by reducing electricity consumption and keeping the workplace quiet.
- ▶ **International certification**
 - CE certification
 - IP 41 protection (Lafil 200 & Lafil 200^{eco})
 - RoHS certification (Lafil 200 & Lafil 200^{eco})
- ▶ **One-Year Warranty (Lafil 200 & Lafil 200^{eco})**

Applications

- ▶ Cell culture aspiration
- ▶ Laboratory waste suction

Ordering Information

- 197205-01(02)**
Lafil 200 - Plus, Suction System with AC100~240V adaptor, US plug (EU plug)
- 197203-01(02)**
Lafil 200 - BioDolphin, Suction System with AC100~240V adaptor, US plug (EU plug)
- 197215-01(02)**
Lafil 200^{eco} - Plus, Suction System with AC100~240V adaptor, US plug (EU plug)
- 197213-01(02)**
Lafil 200^{eco} - BioDolphin, Suction System with AC100~240V adaptor, US plug (EU plug)
- 197000-60-3500**
3.5L Laboratory Glass Bottle with GL45 Suction Cap
- 197200-53**
4L PP Vacuum Bottle with Quick-coupling Connector

Lafil 200 - Plus



Lafil 200 - BioDolphin



* The appearance difference between Lafil 200 / 200^{eco} is the name-plate.

Specification

Model	Lafil 200 - Plus / BioDolphin		Lafil 200 ^{eco} - Plus / BioDolphin
Power	DC12V, 1.5A		
Vacuum range	1013 ~ 213 mbar		880 ~ 370 mbar
Max. flow rate	10 L/min		
Aspiration rate	17 mL/sec		
Waste bottle	4L PP vacuum bottle / 3.5L laboratory glass bottle (optional)		
Auto shut-off	-		Yes
Noise level	55 dB		
Weight	2.1 Kg		2.3 Kg
Dimension (LxWxH)	37.5 x 25.8 x 21.7 cm		
	Plus	BioDolphin	
Suction Kit	<ul style="list-style-type: none">• Handle• 1-channel tip adaptor (150 mm)• 1-channel tip adaptor with ejector• 8-channel tip adaptor with ejector	<ul style="list-style-type: none">• Handle• 1-channel tip adaptor (50 mm)• 1-channel tip adaptor (150 mm)• 1-channel SS adaptor (40 mm)• 1-channel SS adaptor (80 mm)• 8-channel SS adaptor (40 mm)• 1-channel tip adaptor with ejector• 8-channel tip adaptor with ejector• Rack	

Lafil 200 Suction System

X2 2 suction kits at the same time
Improves experimental efficiency.

Overflow protection
Protects the pump from liquid overflowing.

Quick-coupling connector
Accelerates removal of waste bottle.

4L PP heavy-duty vacuum bottle
3.5L laboratory glass bottle is optional
(Catalog number : 197000-60-3500)

Fence-like platform
Prevents users from tipping over the waste bottle.

Ergonomic handle
Patented lock switch (M429771) keeps continuous suction without pressing the button all the time.

Single-handed tip ejection
Enables tip ejection by single hand easily.

Multi-functional storage rack
Accommodates all the adaptors in the rack and avoids cross-contamination.

Foldable handle
Easy to carry.

The product can be disinfected with 70% Ethanol or isopropanol (IPA).

Suction System



Features

- **All in One, space-saving**
Lafil 300 - Plus / BioDolphin integrates vacuum source, waste bottle and suction kit into single one system. Saves 50% bench space.
- **Safe operation**
(1)The fence-like platform design prevents negligence from tipping over the waste bottle.
(2)The overflow protection prevents the liquid from overflowing when bottle is full.
- **No air pollution, maintenance free**
Built-in oil free vacuum pump, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.
- **Autoclavable**
The waste bottle and all supplied fittings are made of PES or POM material available for autoclave.
- **International certification**
CE certification
- **Two-Year Warranty (Lafil 300)**

Applications

- Cell culture aspiration
- Laboratory waste suction

Ordering Information

197305-11(22)
Lafil 300 - Plus, Suction System
AC110V, 60Hz (AC220V, 50Hz)

197303-11(22)
Lafil 300 - BioDolphin, Suction System
AC110V, 60Hz (AC220V, 50Hz)

Lafil 300 - Plus



Lafil 300 - BioDolphin



Specification

Model	Lafil 300 - Plus		Lafil 300 - BioDolphin	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. vacuum	105 mbar			
Max. flow rate	23 L/min	20 L/min	23 L/min	20 L/min
Aspiration rate	18 mL/sec			
Waste bottle	1200 ml PES vacuum bottle			
Noise level	50 dB			
Net weight	5.9 Kg			
Dimension (LxWxH)	33.5 x 24.5 x 30 cm			
	Plus		BioDolphin	
Suction Kit	• Handle • 1-channel tip adaptor (150 mm) • 1-channel tip adaptor with ejector • 8-channel tip adaptor with ejector		• Handle • 1-channel tip adaptor (50 mm) • 1-channel tip adaptor (150 mm) • 1-channel SS adaptor (40 mm) • 1-channel SS adaptor (80 mm) • 8-channel SS adaptor (40 mm) • 1-channel tip adaptor with ejector • 8-channel tip adaptor with ejector • Rack	

Suction System



Features

- **All in One, space-saving**
Lafil 400 - Plus / BioDolphin integrates vacuum source, waste bottle and suction kit into single one system. Saves 50% bench space.
- **Safe operation**
(1)The fence-like platform design prevents negligence from tipping over the waste bottle.
(2)The overflow protection prevents the liquid from overflowing when bottle is full.
- **No air pollution, maintenance free**
Built-in oil free vacuum pump, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.
- **Autoclavable**
The waste bottle and all supplied fittings are made of PES or POM material available for autoclave.
- **International certification**
CE certification
- **Two-Year Warranty (Lafil 400)**

Applications

- Cell culture aspiration
- Laboratory waste suction

Ordering Information

197405-11(22)
Lafil 400 - Plus, Suction System
AC110V, 60Hz (AC220V, 50Hz)

197403-11(22)
Lafil 400 - BioDolphin, Suction System
AC110V, 60Hz (AC220V, 50Hz)

Lafil 400 - Plus



Lafil 400 - BioDolphin




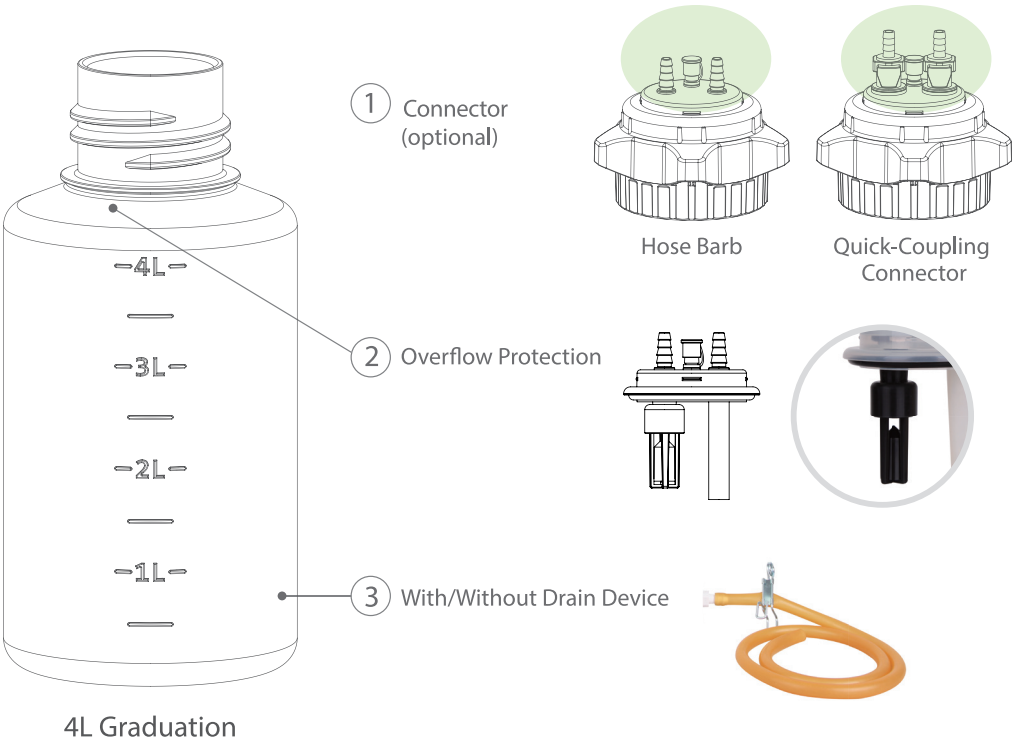
Specification

Model	Lafil 400 - Plus		Lafil 400 - BioDolphin	
Voltage / Freq.	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Max. vacuum	30 mbar			
Max. flow rate	23 L/min	20 L/min	23 L/min	20 L/min
Aspiration rate	19 mL/sec			
Waste bottle	1200 ml PES vacuum bottle			
Noise level	50 dB			
Net weight	7 Kg			
Dimension (LxWxH)	33.5 x 24.5 x 30 cm			
	Plus		BioDolphin	
Suction Kit	• Handle • 1-channel tip adaptor (150 mm) • 1-channel tip adaptor with ejector • 8-channel tip adaptor with ejector		• Handle • 1-channel tip adaptor (50 mm) • 1-channel tip adaptor (150 mm) • 1-channel SS adaptor (40 mm) • 1-channel SS adaptor (80 mm) • 8-channel SS adaptor (40 mm) • 1-channel tip adaptor with ejector • 8-channel tip adaptor with ejector • Rack	

Suction 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
			
Catalog number	197200-47	197200-48	197200-53
Connector	Hose barb	Hose barb	Quick-coupling connector
Graduated increment	500 ml	500 ml	500 ml
Overow protection	Yes	Yes	Yes
Hose barb	ID4 ~ ID8	ID4 ~ ID8	ID6
Drain device	-	Yes	-
Autoclavable	Yes	Yes	Yes



* PP : Polypropylene

Suction Accessories

PES Vacuum Bottle

Specification	1200 ml, PES vacuum bottle	1200 ml, PES vacuum bottle
Catalog number	197000-11	197000-12
Graduated increment	100 ml	100 ml
Overflow protection	Yes	Yes
Cap with suction fitting	Yes	-
Hose barb	ID8	ID4 ~ ID8
Autoclavable	Yes	Yes



PP Vacuum Bottle NEW

Specification	1000 ml, PP vacuum bottle	2000 ml, PP vacuum bottle
Catalog number	197100-10	196100-0406
Graduated increment	250 ml	-
Overflow protection	-	-
Hose barb	ID6	ID6
Autoclavable	Yes	Yes



Quick-Coupling Connector NEW

Specification	1/4 inch Male Fitting	1/4 inch Female Fitting
Catalog number	197201-38	197201-39
Hose barb	ID6	ID6
Material	POM, Viton	POM, SS316, Viton
Autoclavable	Yes	Yes



GL45 Laboratory Glass Bottle

Specification	500 ml, glass bottle	1000 ml, glass bottle	3500 ml, glass bottle
Catalog number	197000-60-500	197000-60-1000	197000-60-3500
Cap	GL45 suction cap	GL45 suction cap	GL45 suction cap
Graduated increment	100 ml	100 ml	500 ml
Hose barb	ID6	ID6	ID6
Autoclavable	Yes	Yes	Yes



* PES : Polyethersulfone, PP : Polypropylene

Suction Accessories



GL45 Suction Cap

Specification	GL45 suction cap
Catalog number	197000-60
Hose barb	ID6
Material	PP
Autoclavable	Yes



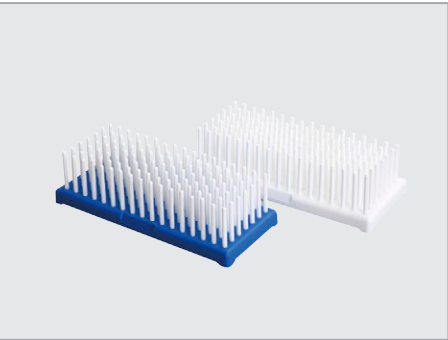
BioDolphin Suction Kit

Specification	BioDolphin
Catalog number	199110-00 Deep Blue 199120-00 Pink 199130-00 Green
Hose barb	ID6
Material	POM, SS304
Autoclavable	Yes
Suction Kit	<ul style="list-style-type: none">• Handle• 1-channel tip adaptor (50 mm)• 1-channel SS adaptor (40 mm)• 1-channel SS adaptor (80 mm)• 8-channel SS adaptor (40 mm)• 8-channel tip adaptor with ejector• Rack



Disposable Nitrile Glove (blue) **NEW**

Specification	Disposable Nitrile Glove (blue)
Catalog number	207-1126NFB-XS 207-1126NFB-S 207-1126NFB-M 207-1126NFB-L 207-1126NFB-XL
Size	XS / S / M / L / XL
Weight (gm/pcs)	4.5 / 5.1 / 5.6 / 6.2 / 6.7
Package	100 pcs / box, 10 boxes / carton



Multi-Function Test Tube Rack

Specification	White base rack	Blue base rack
Catalog number	197010-36	197010-36-1
Material	PP	PP
Autoclavable	Yes	Yes

Microplate Vacuum Manifold



Features

- **Simplifying operation**
WeVac 200 is designed to replace traditional centrifuges with vacuum source to simplify purification process of plasmid DNA, ssDNA, RNA, genomic DNA, viral nucleic acids, etc.
- **Time-saving**
By connecting manifold to vacuum source, the system can give a rapid continuous separation without dispensing solution, running and stopping centrifuge.
- **Multi-use of one machine**
Uniquely designed column adapter board and luer connector make WeVac 200 highly compatible with various kinds of spin column and 96-well microplate.
- **International certification**
CE certification
CSA certification (Rocker 300)
IP 30 protection (Rocker 300)
RoHS certification (Rocker 300)
- **Two-Year Warranty (Rocker 300)**

Applications

- DNA Purification
- RNA Purification
- Gel Purification
- PCR Clean Up

Ordering Information

195200-00
WeVac 200, Microplate Vacuum Manifold, complete set includes the following 4 fitting parts:
195200-42 Spin Column Adapter Board (24 hole)
195200-43 Luer Connector (25/pk)
195200-44 Luer Stopper (25/pk)
195200-45 Waste Tray
195210-11(22)
WeVac 210, Microplate Vacuum Manifold System, AC110V, 60Hz (AC220V, 50Hz), complete set includes:
*Rocker 300, Vacuum Pump
*WeVac 200, Microplate Vacuum Manifold
*Silicone Tube (30 cm)
197000-12
1200 ml PES Vacuum Bottle

WeVac 200



WeVac 210



Specification

Model	WeVac 200	
Vacuum manifold material	Aluminum	
Column adapter board material	PC	
Gasket / O-ring material	Rubber	
Luer connector / stopper material	Silicone	
Hose barb	ID8	
Manifold internal dim. (LxWxH)	12.8 x 8.6 x 7.3 cm	
Manifold external dim. (LxWxH)	23.2 x 12.4 x 10.2 cm	
Net weight	2.6 Kg	

Model	WeVac 210	
Voltage / Freq.	110V/60Hz	220V/50Hz
Max. vacuum	105 mbar	
Max. flow rate	23 L/min	20 L/min
Microplate manifold	WeVac 200 Microplate vacuum manifold	
Vacuum bottle	1200 ml PES vacuum bottle (optional)	
Hose barb	ID8	

Lab Burner

Features

- ▶ Piezo ignition
- ▶ Max. temperature: 1300°C
- ▶ Adjustable flame
- ▶ Refillable butane tank
- ▶ International certification
CE certification
- ▶ One-Year Warranty

Applications

- ▶ Sterilizing
- ▶ Welding
- ▶ Heating
- ▶ Cooking

Ordering Information

177100-00
Dragon 100, Torch Burner
177200-00
Dragon 200, Lab Burner
177220-00
Dragon 220, Lab Burner





Dragon 100



Dragon 200



Dragon 220



Specification

Model	Dragon 100	Dragon 200	Dragon 220
Max. temperature	1300°C	1300°C	1300°C
Fuel tank capacity	40 g	35 g	35 g
Working time	60 min	60 min	60 min
Safe switch	Yes	Yes	Yes
Dimension (LxWxH)	7.9 x 13.7 x 16.1 cm	7.9 x 11.5 x 9.2 cm	7.8 x 11.5 x 9.4 cm
Net weight	380 g	407 g	425 g

Electric Sterilizer

Features

- ▶ **No fuel combustion**
Dragon 300 / 320 is used to rapidly sterilize loop, needle and culture tube by electric heating inside the chamber. No spattering of microorganisms and cross contamination through an open flame generated from fuel combustion.
- ▶ **Adjustable temperature**
Equipped with a powerful heating element enabling Dragon 300 / 320 to reach up to 850°C fast and the temperature is adjustable.
- ▶ **Wide mouth design**
Dragon 320's wide mouth design suits the sterilized objects in diameter up to 37 mm.
- ▶ **Humanized design and convenient operation**
Dragon 300 / 320's heavier base, friendly loop rack and adjustable angle of heating chamber up or down from 45 to 75 degrees make them the best mates with laminar flow hood and anaerobic chamber.
- ▶ **International certification**
CE certification
- ▶ **One-Year Warranty**

Applications

- ▶ Culture tube sterilization
- ▶ Inoculating loops and needles sterilization

Ordering Information

177300-11(22)
Dragon 300, Electric Sterilizer
AC110V, 60Hz (AC220V, 50Hz)
177320-11(22)
Dragon 320, Electric Sterilizer
AC110V, 60Hz (AC220V, 50Hz)

Dragon 300



Dragon 320



Specification

Model	Dragon 300	Dragon 320
Temp. range	R.T. + 20~850°C	R.T. + 20~850°C
Power	180W	180W
Chamber diameter	16 mm	37 mm
Dimension (LxWxH)	17 x 9 x 21 cm	19 x 9 x 21.5 cm
Net weight	1128 g	1098 g

Dry Bath

Features

► A Multi-function machine

Sahara 310 / 320's heating chamber is made of one-piece aluminum with PTFE coating and can work with aluminum blocks, armor beads or work as a small water bath.

► 3 heating programs

Built-in 3 heating programs setting available for users to store and execute as needed. The timer can be set from 00:01 up to 99:59 (HH:MM).

► Auto shut off and audio alarm

Sahara series dry bath can stop heating then shut off automatically with audio alarm when the program is completed.

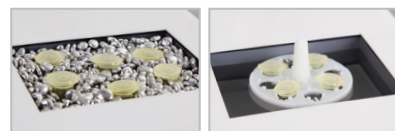
► International certification

CE certification

► One-Year Warranty

Applications

- Molecular biology experiment
- Biochemistry experiment
- Bead bath / Water bath



Ordering Information

179310-11(22)

Sahara 310, Dry Bath (without block)
AC110V, 60Hz (AC220V, 50Hz)

179320-11(22)

Sahara 320, Dry Bath (without block)
AC110V, 60Hz (AC220V, 50Hz)

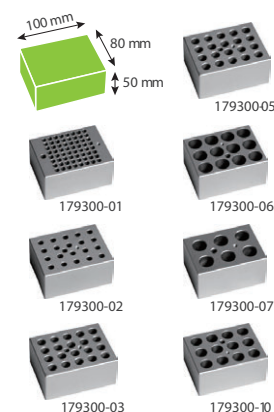
179300-00

Armor Beads (1 block capacity)

Sahara 310 / 320



The optional blocks



Aluminum Block Dimension (LxWxH): 80 x 100 x 50 mm

	Hole Diameter	Hole Depth	Max. Capacity	Applicable Tube
179300-01	6.4 mm	17 mm	64 well	0.2 ml
179300-02	8.2 mm	25 mm	20 well	0.5 ml
179300-03	10.2 mm	33 mm	20 well	1.5 ml, 2.0 ml
179300-05	13 mm	36 mm	20 well	
179300-06	20 mm	45 mm	12 well	
179300-07	25 mm	45 mm	6 well	
179300-10	17 mm	45 mm	12 well	5 ml, 15 ml

Specification

Model	Sahara 310	Sahara 320
Capacity	1 block	2 blocks
Display	OLED	
Temperature range	R.T. +5 ~ 150°C	
Resolution	0.1°C	
Temperature accuracy*	± 0.2°C	
Temperature homogeneity*	± 0.2°C	
Timer	(1) Countdown timer: 00:01~99:59 (HH:MM) (2) Counter: 00:00 (HH:MM)	
Case material	Stainless steel	
Power	120W	240W
Safety	Thermal protection (170°C)	
Net weight	2.3 Kg	3 Kg
Dimension	26.5 x 19 x 11 cm	34.5 x 19 x 11 cm

* The test is conducted at 37°C.

Colony Counter



Features

► Pressure sensor design, no contamination

Pressure sensor design allows users to operate with any marking pens. No worry about sample spoiled or contaminated.

► 4 panel displays

4 panel displays offers convenience of showing the present and previous three count values.

► User-friendly design

- (1) Multi-counting average: Makes average count from multiple counting automatically.
- (2) Exclusive BACK button: Offers the convenience of deducting data when over counting.
- (3) Suitable for Petri-dishes in various diameters.

► International certification

CE certification

► Two-Year Warranty

Applications

► Microbiology colony counting

Total bacteria counting
Total coliform counting

Ordering Information

175330-01(02)

Galaxy 330, Colony Counter with
AC100~240V adaptor, US plug (EU plug)

175331-01(02)

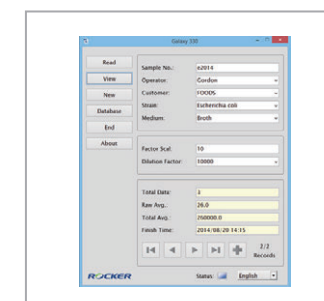
Galaxy 330, Colony Counter with software,
AC100~240V adaptor, US plug (EU plug)

175330-12

Software Package for Galaxy330 (Include
a 8G USB and connecting cable)

Galaxy 330

Patent : M483958



Galaxy 330, PC Software (optional)

In addition to recording and tracing data, the Galaxy 330 PC software can help user add, delete, search, print out and save data as Excel format (csv file).

Specification

Model	Galaxy 330
Display	3-digit, LED panel
Magnification	2~3 X
Petri dish diameter	60 mm or 90 ~ 150 mm (adjustable)
Storage	100 records
Operating buttons	Average, Zero reset, Count back
Illumination	LED (adjustable)
Pressure sensitivity	Adjustable
Acoustical counting signal	Adjustable
Output	USB
Net weight	5.6 Kg
Dimension (LxWxH)	35.1 x 30.2 x 37 cm

WATER ANALYSIS

COD Reactor / Detector
CR 25
CD 200
Multiparameter Colorimeter
WD 100
Portable pH / Cond. / Res. Meter
EC 200 / 210 / 220 / 230
Accessories

COD Reactor



Features

- **Compliance with regulations**
CR25 COD reactor is used to digest closed reflux COD vial according to ST-COD method (ISO 15705:2002) and can meet USEPA 410.4. It is easier and safer than traditional open reflux titrimetric method.
- **Special COD program**
Press start button, the reactor heats up to set temperature and countdown automatically.
Stored program:
(1) COD : 150°C, 120 min (Standard mode)
(2) COD2 : 165°C, 20 min (Preheated mode)
- **2 additional user programs**
Temperature setting range from 30 ~ 200°C and timer from 1 ~ 999 min. Built-in 2 additional heating program settings available for users to store and execute as needed.
- **Auto shut off and audio alarm**
CR25 can stop heating then shut off automatically with audio alarm when every program is completed.
- **International certification**
CE certification
- **One-Year Warranty**

Applications

- Waste water test from factories
- Water quality test in lake, pond and river

Ordering Information

179250-11/22
CR 25, COD Reactor
AC110V, 60Hz (AC220V, 50Hz)
179250-43
Protective Lid
197010-36
Multi-Function Test Tube Rack - White Base
197010-36-1
Multi-Function Test Tube Rack - Blue Base

CR 25



179250-43 Protective lid (optional)
Protect users from splattering reagents in case vials are broken during digestion.



Multi-Function Test Tube Rack (optional)
*Rack Only, Glass Tubes NOT Included

Specification

Model	CR25
Display	OLED
Temperature range	Fixed program <ul style="list-style-type: none"> • 150° C / 120 min (COD program) • 165° C / 20 min (COD2 program) • 150° C / 30 min (TP program) • 105° C / 30 min (TN program) • 120° C / 30 min (TPN program) • 105° C / 120 min (TOC program) • 30° C~200° C adjustable
Accuracy	±2° C
Stability	±1° C
Environmental temperature	5 ~ 40° C (Relative humidity: 10 ~ 90%)
Timer	• 20 / 30 / 120 min (via fixed program) • 1 ~ 999 min and continuous mode
Case material	Stainless steel
Number of vials	25 holes for φ16 mm vials
Power	350W (AC110V / AC220V)
Safety	• Anti-heat PTFE plate on the surface of heating block • Auto shut off when block temperature is over 220° C
Dimension (LxWxH)	30.5 x 19 x 11.5 cm

COD Detector



Features

► Ideal for major brands of reagents

CD 200 detector is equipped with multi-curve in single one unit offering not only built-in standard curve for Hach, Lovibond, Chemetrics reagents but also a simple method to set up standard curves for other brands of reagents.

► Wide measure range

CD 200 can measure COD value within 3 ranges of 10 ~ 150, 100 ~ 1500 and 1000 ~ 15000 mg/L.

► Fast detection

CD 200 can detect and save COD value in 3 seconds.

► Data storage up to 100 records

The built-in memory can store up to 100 records for convenient access.

► International certification

CE certification

► One-Year Warranty

Applications

- Wastewater analysis from factories
- Water monitoring, such as surface water and groundwater
- Environment monitoring in lake, pond and river

Ordering Information

198200-01 (02)

CD200, COD detector, AC100~240V adaptor, US plug (EU plug)

HAC-2125825

HACH COD reagent vial 150 mg/L (25/PK)

HAC-2125815

HACH COD reagent vial 150 mg/L (150/PK)

HAC-2125925

HACH COD reagent vial 1500 mg/L (25/PK)

HAC-2125915

HACH COD reagent vial 1500 mg/L (150/PK)

HAC-2415925

HACH COD reagent vial 15000 mg/L (25/PK)

AWE770110

Pipette (1000-5000 ul)

SSI 5000-50

5 ml Pipette tip (50/PK)

CD 200



Specification

Model	CD 200
Power	DC12V, 1.0A
Brands of reagents	HACH, Lovibond, CHEMetrics and 6 user-defined reagent curves
Measure range	• 10 ~ 150 mg/L • 100 ~ 1500 mg/L • 1000 ~ 15000 mg/L
Display	LCD with backlight
Light source	LED
Working wavelength	420 nm , 610 nm
Wavelength choosing	Automatic
Detecting time	3 sec
Optical stability	≤ 0.005 Abs / 30 min
Storage	100 records
Data information	Concentration, sample number, time
Power supply	DC 9V battery or power adapter
Dimension (LxWxH)	23 x 12.5 x 8.5 cm

Multiparameter Colorimeter



Features

► 4 parameters in one instrument

Built-in 4 standard curves including COD, Total Phosphorus, Total Nitrogen and Ammonia Nitrogen in one portable instrument.

► Ideal for multiple users

Up to 11 curves can be set up and saved in WD 100 so that it can be used by multiple users for different measurement.

► High-efficiency measurement

Detect and save testing records in 3 seconds without preheating. Up to 100 data can be stored automatically.

► User-friendly setting

The favorite setting helps access the commonly used curves quickly.

► International certification

CE certification

► One-Year Warranty

Applications

- Wastewater analysis from factories
- Water monitoring, such as surface water and groundwater
- Environment monitoring in lake, pond and river

Ordering Information

191100-01(02)

WD 100, Multiparameter Colorimeter with AC100~240V adaptor, US plug (EU plug)

WD 100



Specification

Model	WD 100
Power	DC12V, 1.0A
Brand of reagent	HACH
Standard program	COD, NH ₃ -N, TP, TN
Display	LCD with backlight
Light source	LED
Working wavelength	420 nm, 610 nm
Wavelength choosing	Automatic
Detecting time	3 sec
Optical stability	≤ 0.005 Abs / 30 min
Storage	100 records
Data information	Item, wavelength, concentration, sample number, time
Power supply	DC 9V battery or power adaptor
Dimension (LxWxH)	23 x 12.5 x 8.5 cm

Portable Water Testing Meter



Features

- ▶ Slope display after calibration (EC 210)
- ▶ Large LCD display for dual parameters
- ▶ Splash-proof housing, IP65
- ▶ Low battery indication (except EC 200)
- ▶ Automatic or manual temperature compensation
- ▶ **One-Year Warranty**

Applications

- ▶ Domestic water
- ▶ Industrial water
- ▶ Aquaculture water
- ▶ Swimming pool

Ordering Information

- 168200-01**
EC 200 pH meter
- 168210-01**
EC 210 pH meter
- 171220-01**
EC 220 Cond. meter
- 171230-01**
EC 230 Resis. meter

Specification

Model	EC 200	EC 210	EC 220	EC 230
Parameter	pH/ORP	pH/ORP	Conductivity	Resistivity
Range				
pH	0.00~14.00	0.00~14.00	-	-
ORP (mV)	-1999~1999	-1999~1999	-	-
Conductivity	-	-	0~20.00, 200.0 μs/cm	-
	-	-	0~2,000, 20.00 ms/cm	-
	-	-	Auto Range	-
Resistivity(MΩ)	-	-	-	1.00~18.2 MΩ
Temperature	-	0.00~99.9°C	0.00~99.9°C	0.00~99.9°C
Accuracy				
pH	0.01±1 digit	0.01±1 digit	-	-
ORP (mV)	1±1 digit	1±1 digit	-	-
Conductivity	-	-	±1% full scale	-
Resistivity(MΩ)	-	-	-	±1% full scale
Temperature	-	±0.5°C	±0.5°C	±0.5°C
Temp. compensation	Manual	Auto	Auto	Auto
Calibration point	2	2	1	-
Power	DC9V	DC9V	DC9V	DC9V

* Each unit includes an electrode, standard solution 30ml (Except EC 230), carry case is optional.

Accessories

Features

- ▶ High Accuracy: ± 0.01pH
- ▶ COA certificate is supplied with each bottle.



Specification

pH Electrodes							
Cat. No.	Type	Application	Connector	Internal element	Juction	Size	Cable
168210-13	Glass	General Purpose	BNC	Ag/Agcl	Ceramic	φ 12 x 155 mm	1m
168210-16	ATC probe						

pH Buffer		
Cat. No.	Description	Shelf year
168400-50	pH 4.01 ± 0.01, 500 ml	2 years
168700-50	pH 7.00 ± 0.01, 500 ml	2 years
168100-50	pH 10.01 ± 0.01, 500 ml	1 year

KCL Buffer		
Cat. No.	Description	Shelf year
168103-50	3M KCl, 500 ml	2 years

Conductivity Electrode	
Cat. No.	Description
171220-30	Conductivity Electrode, K=1.0, 1 meter (For EC 220)

Resistivity Electrode	
Cat. No.	Description
171230-30	Resistivity Electrode, 1 meter . (For EC 230)

Carry case	
Cat. No.	Description
168106-01	Carry case

ULTRASONIC CLEANER

Ultrasonic Cleaner
Soner 203 / 203H
Soner 206 / 206H
Soner 210 / 210H
Soner 220 / 220H
Accessories
Bracket
Basket

Ultrasonic Cleaner

Features

- **Degas**
Soner's family are standard with degas function to keep powerful cavitation effect.
- **Industrial transducer**
The Soner's benchtop cleaners adopt high power, rugged industrial transducer, durable and superior.
- **Higher Frequency**
Soner series feature 53 KHz frequency to get more precise cleaning of parts that contaminated in small and hard-to-reach crevices.
- **Stainless Steel construction**
Both tank and housing are constructed of SS304, durable and easy to clean.
- **International certification**
CE certification
- **One-Year Warranty**

Applications

- Solvent degas
- Cleaning for cuvette and test tube
- Cleaning for optical lenses and scientific Instruments
- Cleaning for various parts and PCB

Ordering Information

188203-11(22)
Soner 203 Ultrasonic Cleaner
AC110V, 60Hz (AC220V, 50Hz)

188204-11(22)
Soner 203H Ultrasonic Cleaner
(with heating function)
AC110V, 60Hz (AC220V, 50Hz)

188206-11(22)
Soner 206 Ultrasonic Cleaner
AC110V, 60Hz (AC220V, 50Hz)

188207-11(22)
Soner 206H Ultrasonic Cleaner
(with heating function)
AC110V, 60Hz (AC220V, 50Hz)



Soner 203



Soner 203H



Soner 206



Soner 206H

Specification

Model	Soner 203	Soner 203H	Soner 206	Soner 206H
Frequency	53KHz	3KHz	53KHz	53KHz
Heating	-	Yes (Max. 60°C)	-	Yes (Max. 60°C)
Degas	Yes	Yes	Yes	Yes
Timer	1 ~ 99 min	1 ~ 99 min	1 ~ 99 min	1 ~ 99 min
Tank size (LxWxD)	24 x 14 x 10 cm	24 x 14 x 10 cm	30 x 15 x 15 cm	30 x 15 x 15 cm
Overall size (LxWxD)	27 x 16 x 24 cm	27 x 16 x 24 cm	33 x 18 x 29 cm	33 x 18 x 29 cm
Tank capacity	3L	3L	6L	6L
Housing	SS304	SS304	SS304	SS304
Drain	-	-	-	-
Stainless steel cover	Yes	Yes	Yes	Yes
Ultrasonic power	100W	100W	180W	180W
Heating power	-	75W	-	150W
Degas power	100W	100W	180W	180W
Packing size (LxWxD)	36.5 x 27.5 x 34.5 cm	36.5 x 27.5 x 34.5 cm	43.5 x 28.5 x 40 cm	43.5 x 28.5 x 40 cm
Net weight	4.0 Kg	4.2 Kg	5.0 Kg	5.6 Kg
Gross weight	4.6 Kg	4.8 Kg	6.0 Kg	6.6 Kg

Ultrasonic Cleaner

Features

- **Degas**
Soner's family are standard with degas function to keep powerful cavitation effect.
- **Industrial transducer**
The Soner's benchtop cleaners adopt high power, rugged industrial transducer, durable and superior.
- **Higher Frequency**
Soner series feature 53 KHz frequency to get more precise cleaning of parts that contaminated in small and hard-to-reach crevices.
- **Stainless Steel construction**
Both tank and housing are constructed of SS304, durable and easy to clean.
- **One-Year Warranty**

Applications

- Solvent degas
- Cleaning for cuvette and test tube
- Cleaning for optical lenses and scientific Instruments
- Cleaning for various parts and PCB

Ordering Information

- 188210-11(22)**
Soner 210 Ultrasonic Cleaner
AC110V, 60Hz (AC220V, 50Hz)
- 188211-11(22)**
Soner 210H Ultrasonic Cleaner
(with heating function)
AC110V, 60Hz (AC220V, 50Hz)
- 188220-11(22)**
Soner 220 Ultrasonic Cleaner
AC110V, 60Hz (AC220V, 50Hz)
- 188221-11(22)**
Soner 220H Ultrasonic Cleaner
(with heating function)
AC110V, 60Hz (AC220V, 50Hz)



Soner 210



Soner 210H



Soner 220

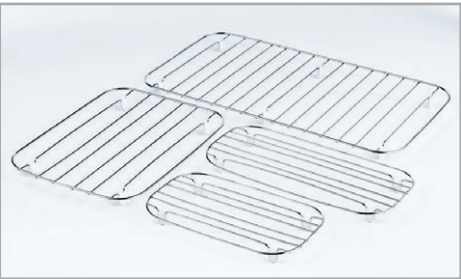


Soner 220H

Specification

Model	Soner 210	Soner 210H	Soner 220	Soner 220H
Frequency	53KHz	53KHz	53KHz	53KHz
Heating	-	Yes (Max. 60°C)	-	Yes (Max. 60°C)
Degas	Yes	Yes	Yes	Yes
Timer	1 ~ 99 min	1 ~ 99 min	1 ~ 99 min	1 ~ 99 min
Tank size (LxWxD)	30 x 24 x 15 cm	30 x 24 x 15 cm	50 x 30 x 15 cm	50 x 30 x 15 cm
Overall size (LxWxD)	36 x 27 x 31 cm	36 x 27 x 31 cm	57 x 33 x 33 cm	57 x 33 x 33 cm
Tank capacity	10L	10L	20L	20L
Housing	SS304	SS304	SS304	SS304
Drain	Yes	Yes	Yes	Yes
Stainless steel cover	Yes	Yes	Yes	Yes
Ultrasonic power	200W	200W	500W	500W
Heating power	-	270W	-	520W
Degas power	200W	200W	500W	500W
Packing size (LxWxD)	43.5 x 37.5 x 40 cm	43.5 x 37.5 x 40 cm	66.5 x 43.5 x 43 cm	66.5 x 43.5 x 43 cm
Net weight	6.8 Kg	7.0 Kg	13.6 Kg	13.8 Kg
Gross weight	8.4 Kg	8.6 Kg	15.4 Kg	15.6 Kg

Accessories



Bracket
Ideal for big parts
(Standard accessory)



Basket
Ideal for small parts
(Optional accessory)



Beaker positioning cover
Used to position beaker
for indirect cleaning
(Optional accessory)

Ordering Information

- 188203-31** Bracket for Soner 203/203H
- 188206-31** Bracket for Soner 206/206H
- 188210-31** Bracket for Soner 210/210H
- 188220-31** Bracket for Soner 220/220H
- 188203-30** Basket for Soner 203/203H
- 188206-30** Basket for Soner 206/206H
- 188210-30** Basket for Soner 210/210H
- 188220-30** Basket for Soner 220/220H
- 188200-31** Beaker positioning cover (S) for Soner 203/203H/206/206H
- 188200-32** Beaker positioning cover (M) for Soner 210/210H
- 188200-33** Beaker positioning cover (L) for Soner 220/220H

Pressure Conversion Table (Ultimate Vacuum)

psi	atmosphere	mbar	kPa	Kg/cm ²	oz/in ²	in. Hg	mmHg (Torr)	in. H ₂ O
1	0.068	68.947	6.895	0.07	16	2.036	51.72	27.68
14.7	1	1013.2	101.3	1.033	235.1	29.92	760	406.8
0.0145	0.00098	1	0.1	0.00102	0.2321	0.02953	0.75006	0.40146
0.145	0.01	0.00001	1	0.01	2.321	0.295	7.501	4.015
14.22	0.968	980.664	98.07	1	227.6	28.96	735.6	393.7
0.063	0.004	4.309	0.431	0.004	1	0.127	3.232	1.73
0.491	0.033	33.863	3.386	0.035	7.858	1	25.4	13.6
0.019	0.001	1.333	0.133	0.001	0.309	0.039	1	0.535
0.036	0.002	2.4909	0.249	0.003	0.578	0.074	1.868	1

Flow Rate Table

liter / min	CFM	m ³ / h	liter / sec
1	0.03531	0.06	0.01666
28.316	1	1.69896	0.47193
16.667	0.58857	1	0.27778
60	2.11893	3.6	1

Cubic Measure Table

Milliliter	Liter	U.S. ounce	U.S. pint	U.S. gal
1	0.001	0.033814	0.0021134	0.00026417
1000	1	33.814	2.1134	0.26417
29.574	0.029574	1	0.0625	0.007813
473.176	0.473176	16	1	0.125
3785.4	3.7854	128	8	1

Chemical Resistant of Commonly Used Materials Table

	Weak Acids	Weak Bases	Temperature (°C) (Prolonged use)	Temperature (°C) (Short-term use)	Izod Impact Strength (kg-cm/cm)	Ultraviolet Ray	Specific Gravity
ABS	E	E	75	100	21	P	1.06
PP	E	E	85	100	20	F	0.92
PC	E	F	130	140	12	F	1.20
POM	P	F	90	110	19.1	P	1.42
Nylon6	G	E	80	120	6	F	1.15
PSU	E	E	160	180	20	F	1.24
PES	E	E	180	220	8.7	F	1.37
PVDF	E	E	105	150	19.6	G	1.78
PTFE	E	E	260	260	16.3	G	2.25

E: Excellent G: Good F: Fairish P: Poor

Sterilization Method

	Autoclavable (121°C, 20min)	Dry (160°C)	Ultraviolet Ray	Gamma Radiatio
ABS	P	P	P	G
PP	F	P	F	P
PC	G	P	F	G
POM	F	P	P	P
Nylon6	G	P	F	F
PSU	E	G	F	G
PES	E	E	F	G
PVDF	G	P	G	G
PTFE	E	E	G	G

E: Excellent G: Good F: Fairish P: Poor

Note : Above information is based on experience to date.
It is intended as a reference for use at your own
discretion and risk