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Laboratory Filtration / Laboratory Pump Life Sciences / Water Analysis

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ROCKER

Global Distribution Network



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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 ecofriendly 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

LIFE SCIENCES

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Oil Free Vacuum Pump Guide



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

* 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.



LABORATORY **PUMP**

Accessories

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

Oil Free Vacuum Pump



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



Chemker 600

Chemker 610

Chemker 611

Max. vacuum : 7 mbar

Max. vacuum : 7 mbar

Max. vacuum : 65 mbar

Max. flow rate : 65 (60) L/min

Max. flow rate : 34 (30) L/min

Max. flow rate : 34 (30) 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

* 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 certication

CSA certication (Rocker 300) IP 30 protection (Rocker 300) **RoHS** certication

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 (DC12V)



Patent : M491731



| Model |
|----------------------|
| Voltage / Freq. |
| Max. power |
| Max. current |
| Max. vacuum |
| Max. flow rate |
| Motor rotation speed |
| Horse power |
| Noise level |
| Hose barb |
| Vacuum regulator |
| Overflow protection/ |
| Filter cartridge |
| Safety |
| Net weight |
| Dimension (LxWxH) |





| Rocker 300 | | Rocker 300DC |
|-----------------------|-----------|----------------------|
| 110V/60Hz | 220V/50Hz | DC12V |
| 65W | 60W | 35W |
| 0.7A | 0.3A | 3A |
| 105 mbar | | 145 mbar |
| 23 L/min | 20 L/min | 25 L/min |
| 1750 RPM | 1450 RPM | 1800 RPM |
| 1/8 HP | | 1/8 HP |
| 50 dB | | 50 dB |
| ID8 | | ID8 |
| Yes | | Yes |
| Yes | | Yes |
| Thermal Protection | | Thermal Protection |
| 4.1 Kg | | 3.5 Kg |
| 26.8 x 13.5 x 20.4 cm | | 27.2 x 12.1x 16.5 cm |



Oil Free Vacuum Pump



- 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 certication CSA certication IP 30 protection **RoHS** certication
- ► 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)



Z YEAR

WARRANTY



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 | 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 certication **RoHS** certication
- 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)





Specification Model

| Voltage / Freq. |
|----------------------|
| Max. power |
| Max. current |
| Max. vacuum |
| Max. flow rate |
| Motor rotation speed |
| Horse power |
| Noise level |
| Hose barb |
| Vacuum regulator |
| Filter cartridge |
| Safety |
| Net weight |
| Dimension (LxWxH) |
| |







Rocker 800

| Rocker 800 | | Rocker 801 | | |
|---------------------|-------------------|---------------------|-----------|--|
| 110V/60Hz | 220V/50Hz | 110V/60Hz | 220V/50Hz | |
| 220W | 200W | 220W | 200W | |
| 2A | 1.2A | 2A | 1.2A | |
| 120 mbar | | 120 mbar | | |
| 100 L/min | 80 L/min | 80 L/min | 68 L/min | |
| 1750 RPM | 1750 RPM 1450 RPM | | 1450 RPM | |
| 1/3 HP | | 1/3 HP | | |
| 68 dB | | 68 dB | | |
| ID10 | | ID8 | | |
| Yes | | Yes | | |
| - | | Yes | | |
| Thermal Protection | | Thermal Protection | | |
| 7.6 Kg | | 7.9 Kg | | |
| 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 certication **RoHS** certication

Two-Year Warranty

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 | - | - | | |
| 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 34.5 x 17.5 x 20 cm | | |

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

ROCKER

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

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



Hose barb Vacuum regulator Safety

Net weight

Dimension (LxWxH)



| Lafil 300 | | Lafil 400 | | |
|---------------------|-----------|---------------------|-----------|--|
| 110V/60Hz | 220V/50Hz | 110V/60Hz | 220V/50Hz | |
| 65W | 60W | 100W | 80W | |
| 0.7A | 0.3A | 1.0A | 0.4A | |
| 105 mbar | | 30 mbar | | |
| 23 L/min | 20 L/min | 23 L/min | 20 L/min | |
| 1750 RPM | 1450 RPM | 1750 RPM | 1450 RPM | |
| 1/8 HP | | 1/6 HP | | |
| 50 dB | | 52 dB | | |
| ID8 | | ID8 | | |
| Yes | | Yes | | |
| Thermal Protection | | Thermal Protection | | |
| 5.9 Kg | | 7.0 Kg | | |
| 33.5 x 24.5 x 30 cm | | 33.5 x 24.5 x 30 cm | | |

Lafil 400



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)
- Ono-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)



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 cr | n | 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)

Moisture Trap / Vacuum regulato

Specification

Model

Max. power

Max. current

Max. vacuum

Max. flow rate

Horse power

Noise level

Hose barb

Motor rotation spe

Safety Net weight

Dimension (LxWxH





| | Rocker 400C | | Rocker 410C | | |
|----|---------------------|-----------|---------------------|-----------|--|
| | 110V/60Hz | 220V/50Hz | 110V/60Hz | 220V/50Hz | |
| | 100W | 80W | 100W | 80W | |
| | 1.0A | 0.4A | 1.0A | 0.4A | |
| | 105 mbar | | 25 mbar | | |
| | 34 L/min | 31 L/min | 23 L/min | 20 L/min | |
| ed | 1750 RPM | 1450 RPM | 1750 RPM | 1450 RPM | |
| | 1/6 HP | | 1/6 HP | | |
| | 52 dB | | 52 dB | | |
| | ID8 | | ID8 | | |
| | Yes | | Yes | | |
| | Thermal Protection | | Thermal Protection | | |
| | 5.7 Kg | | 5.6 Kg | | |
| 1) | 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

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 cr | 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

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 |
|----------------------|
| Voltage / Freq. |
| Max. power |
| Max. current |
| Max. vacuum |
| Max. flow rate |
| Motor rotation speed |
| Horse power |
| Noise level |
| Hose barb |
| Moisture Trap / |
| Vacuum regulator |
| Safety |
| Net weight |
| |

Dimension (LxWxH)





Chemker 410



Chemker 411

| Chemker 410 | | Chemker 411 | | |
|-----------------------|-----------|-----------------------|-----------|--|
| 110V/60Hz | 220V/50Hz | 110V/60Hz | 220V/50Hz | |
| 90W | 90W | 90W | 90W | |
| 1.2A | 0.5A | 1.2A | 0.5A | |
| 10 mbar | | 10 mbar | | |
| 20 L/min | 18 L/min | 20 L/min | 18 L/min | |
| 1700 RPM | 1450 RPM | 1700 RPM | 1450 RPM | |
| 1/6 HP | | 1/6 HP | | |
| 52 dB | | 52 dB | | |
| ID8 | | ID8 | | |
| - | | Yes | | |
| Thermal Protection | | Thermal Protection | | |
| 7.0 Kg | | 7.4 Kg | | |
| 26.2 x 14.8 x 18.2 cr | n | 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 vibrationproof 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)



Specification

| opeemeation | | |
|----------------------|---------------------|-----------|
| 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 vibrationproof 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)





Specification

Model

| Voltage / Freq. |
|----------------------|
| Max. power |
| Max. current |
| Max. vacuum |
| Max. flow rate |
| Motor rotation speed |
| Horse power |
| Noise level |
| Hose barb |
| Moisture trap / |
| Vacuum regulator |
| Safety |
| Net weight |
| Dimension (LxWxH) |





Chemker 611

| Chemker 610 | | Chemker 611 | | |
|---------------------|-----------|---------------------|-----------|--|
| 110V/60Hz | 220V/50Hz | 110V/60Hz | 220V/50Hz | |
| 220W | 200W | 220W | 200W | |
| 2A | 1.2A | 2A | 1.2A | |
| 7 mbar | | 7 mbar | | |
| 34 L/min | 30 L/min | 34 L/min | 30 L/min | |
| 1750 RPM | 1450 RPM | 1750 RPM | 1450 RPM | |
| 1/3 HP | | 1/3 HP | | |
| 60 dB | | 60 dB | | |
| ID10 | | ID10 | | |
| - | | Yes | | |
| Thermal Protection | | Thermal Protection | | |
| 13.3 Kg | | 13.7 Kg | | |
| 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)





Rocker 420

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 cr | n | 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

Two-Year Warranty

Applications

- Fermenter
- Bioreactor
- Gas Chromatograph

Ordering Information

167440-11(22)



Specification

Model

Max. power

Max. current

Pressure range

Max. flow rate

Max. flow

Safety

Net weight

(without air tank)

Motor rotation speed

20 psi

RoHS certification

Rocker 440, Air Supply System AC110V, 60Hz (AC220V, 50Hz)

rate with 40 psi air tank 60 psi Moisture trap Horse power Noise level Hose barb

Dimension (LxWxH)





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

| Rocker 44 | 0 | | | | |
|-----------------------|--------------------------|---------------------------|-----------------------|--------------------------|---------------------------|
| 110V/60Hz | | | 220V/50Hz | | |
| 147W | | | 125W | | |
| 1.5A | | | 0.6A | | |
| 40~60 psi | | | 40~60 psi | | |
| 1700 RPM | | | 1400 RPM | | |
| 27 L/min | | | 25 L/min | | |
| 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 |
| 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 |
| 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 |
| Yes | | | Yes | | |
| 1/6 HP | | | 1/6 HP | | |
| 52 dB | | | 52 dB | | |
| ID8 | | | ID8 | | |
| Thermal P | rotection | | Thermal Protection | | |
| 8.4 Kg | | | 8.4 Kg | | |
| 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)



VIDEO

Z YEAR

WARRANTY

Specification

| 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





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 laboraotry clean.

| - | | | | | | | | | |
|----------------------|---------------------------|--------------------|---------------------------|---|-------------------|--------------------|-------------------------|--------------------|--|
| 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 | 1 x 10 ⁻¹ torr 5 x 10 ⁻² torr | | | 5 x 10 ⁻² to | r | |
| 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 | 1/3 HP | | 1/2 HP | |
| Noise level | 52 dB | | 52 dB | | 52 dB | | 52 dB | | |
| Hose barb | ID10 | | ID10 | | ID10 | | ID10 | | |
| Safety | Thermal Prot | 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 | 5 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 | | |
| | | | | | | | | | |



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.



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.

| Inter | natio | onal | 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)



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 Ba | rb | | | | |
|---------|---|------------------|-----------------|------------------|-----------------|
| | | | | | C.C.C. |
| ID : | 167300-20 3/8 inch ID10 1/8 PT | 5/16 inch ID8 | 1/4 inch ID6 | 3/16 inch ID5 | 1/8 inch ID3 |

Moisture Trap / Vacuum Regulator / Pressure Regulator



For Rocker 300/400/ 410/430

For Rocker 801/811

For Chemker

410/411





199100-68 167200-38

Silicone Tube



187100-32 1/2 inch ID12 1/4 SAE



187100-31 3/8 inch ID10 1/4 SAE



187100-34 1/4 inch ID6 1/4 SAE



167300-25 5/16 inch ID8 1/8 PT





169611-06 For Chemker 610/611

189300-06 For Rocker 300C/400C/410C



167320-06 For Rocker 320/420



167440-06 For Rocker 440



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 VF5/VF8/VF6/VF7 VF 3 / VF 12 / VF 15 / VF 16 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





MF, Magnetic Filter Holder









MF 3a / 5a



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 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 200300-36 3 PE Smagnetic 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 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 PES magnetic funnel, 500 ml 200500-30 | MF 3, | MF 3, Magnetic Filter Holder (300 ml) 200300-01 | | | | | | | |
| 2 PES magnetic funnel, 300 ml 200300-30 3 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 PES magnetic funnel, 500 ml 200500-30 | MF 5, | Magnetic Filter Holder (500 ml) | 200500-01 | | | | | | |
| 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 PES magnetic funnel, 500 ml 200500-30 | 1 | PP lid kit | 200300-36 | | | | | | |
| 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 PES magnetic funnel, 500 ml 200500-30 | 2 | PES magnetic funnel, 300 ml | 200300-30 | | | | | | |
| 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 PES magnetic funnel, 500 ml 200500-30 | | PES magnetic funnel, 500 ml | 200500-30 | | | | | | |
| 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 PES magnetic funnel, 500 ml 200500-30 | 3 | PES magnetic support base | 200300-32 | | | | | | |
| MF 5a, Magnetic Filter Holder (500 ml) 200510-01 1 PP lid kit 200300-36 2 PES magnetic funnel, 300 ml 200300-30 PES magnetic funnel, 500 ml 200500-30 | 4 | Silicone stopper (No.8) | 167110-16 | | | | | | |
| 1 PP lid kit 200300-36 2 PES magnetic funnel, 300 ml 200300-30 PES magnetic funnel, 500 ml 200500-30 | MF 3a, Magnetic Filter Holder (300 ml) 20031 | | | | | | | | |
| 2 PES magnetic funnel, 300 ml 200300-30 PES magnetic funnel, 500 ml 200500-30 | MF 5a, Magnetic Filter Holder (500 ml) 2005 | | | | | | | | |
| PES magnetic funnel, 500 ml 200500-30 | 1 | PP lid kit | 200300-36 | | | | | | |
| 5 | 2 | PES magnetic funnel, 300 ml | 200300-30 | | | | | | |
| | | PES magnetic funnel, 500 ml | 200500-30 | | | | | | |
| 3 PES magnetic support base (short) 200310-32 | 3 | PES magnetic support base (short) | 200310-32 | | | | | | |

LF, Spin-Lock Filter Holder



LF 3a

LF 5a



- clamp.
- autoclavable.

Specifications

Material Funnel Support base Membrane sup Funnel lid Cap of lid Syringe filter

Specifications

Funnel capacit Filter diameter Effective filtrat Syringe filter Hose barb



LF 3a / 5a



— 2

3





Spin-lock connection (M381450) facilitates fast and stable installation without

▶ PES structure offers excellent smash, high temperature (180°C) resistance and

• 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.

| | LF 3 / LF 5 | LF 3a / LF 5a |
|-------|-----------------|-----------------|
| | PES | PES |
| | PC | PC |
| pport | PP | PP |
| | PP | PP |
| | Silicone | Silicone |
| | PTFE | PTFE |
| 5 | | |
| tv | 300 ml / 500 ml | 300 ml / 500 ml |

| ty | 300 ml / 500 ml | 300 ml / 500 ml |
|-----------|----------------------|----------------------|
| r | 47 mm | 47 mm |
| tion area | 12.5 cm ² | 12.5 cm ² |
| | 25 mm, 0.2 μm | 25 mm, 0.2 μm |
| | - | ID8 |

| 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 |
| | LF 5, PP lid kit | 200300-36 |
| 2 | PES funnel, 300 ml | 197000-34 |
| | 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 |
| | LF 5a, PP lid kit | 200300-36 |
| 2 | PES funnel, 300 ml | 197000-34 |
| | PES funnel, 500 ml | 197000-56 |
| 3 | Storage bottle adaptor | 197000-38 |



MF 31

SF, Stainless Steel Filter Holder

S



PES Filtration Apparatus



SF, Stainless Steel Funnel Lid (optional)

| 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

| opeenieutions | | | |
|---------------------------|----------------------|----------------------|----------------------|
| 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 |





Features

Applications

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 capaci Flask capacity Filter diameter Hose barb Drain device Overflow prot



| | _ | |
|---------|--|-----------|
| SF 1, 2 | 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, 2 | 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, 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, St | ainless Steel Lid | |
| 100 | ml Stainless steel lid | 180100-11 |
| 300 | ml / 500 ml Stainless steel lid | 180100-13 |
| | | |





MF 31

ROCKER

25

ROCKER





▶ 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.

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

| ty | 300 ml | 300 ml |
|---------|---------|---------|
| r | 1200 ml | 1000 ml |
| r | 47 mm | 47 mm |
| | ID8 | ID8 |
| | - | Yes |
| tection | Yes | - |
| | | |

| LF 3 | 0, 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 3 | 1, Filtration Set | 200320-31 |
| MF 3 | 1, Filtration Set PP lid kit for magnetic funnel | 200320-31 200300-36 |
| | | |
| 1 | PP lid kit for magnetic funnel | 200300-36 |
| 1 2 | PP lid kit for magnetic funnel PES magnetic funnel, 300ml | 200300-36 200300-30 |
| 1 2 3 | PP lid kit for magnetic funnel PES magnetic funnel, 300ml PES magnetic support base | 200300-36 200300-30 200300-32 |
| 1 2 3 4 | PP lid kit for magnetic funnel PES magnetic funnel, 300ml PES magnetic support base Silicone stopper (No.8) | 200300-36 200300-30 200300-32 167110-16 |



Stainless Steel Filtration Apparatus



SF 30



- 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

— 1

— 2

— 3

_ 4

- 6

— 7

— 8

SF 30

---- 5

| • | | | |
|---------------------|---------|---------|--|
| 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 | |
| | | | |





| SF 1 | 0, 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 3 | 0, Stainless Steel Filtration Set | 197010-33 |
| SF 3 | 0, Stainless Steel Filtration Set Stainless steel funnel, 300 ml | 197010-33 180100-03 |
| | | |
| 1 | Stainless steel funnel, 300 ml | 180100-03 |
| 1 2 | Stainless steel funnel, 300 ml Stainless steel support screen | 180100-03 180100-31 180100-00 |
| 1 2 3 | Stainless steel funnel, 300 ml Stainless steel support screen Stainless steel support base | 180100-03 180100-31 |
| 1 2 3 4 | Stainless steel funnel, 300 ml Stainless steel support screen Stainless steel support base Silicone stopper (No.16) | 180100-03 180100-31 180100-00 167110-17 |
| 1 2 3 4 5 | Stainless steel funnel, 300 ml Stainless steel support screen Stainless steel support base Silicone stopper (No.16) Black PP cap | 180100-03 180100-31 180100-00 167110-17 197000-40 |



SF 52



Features

- **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 |

| Funnel capacity |
|-----------------|
| Flask capacity |
| Filter diameter |
| Hose barb |
| Drain device |
| |

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



ROCKER

SF 10



▶ 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.

| SF 1 | I, 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 | 167300-08 |
| | (with screwthread connector) | |
| 6 | Silicone fixing sucker | 167200-45 |
| 0 | Silicone fixing sucker | 107200-45 |
| | 2, Stainless Steel Filtration Set | 167200-11 |
| SF 52 | 5 | |
| SF 52 | 2, Stainless Steel Filtration Set | |
| SF 52 Stair | 2, Stainless Steel Filtration Set | 167200-11 |
| SF 52 Stair 1 | 2, Stainless Steel Filtration Set aless Steel Filter Holder (500 ml) Stainless steel funnel, 500 ml | 167200-11 180100-05 |
| SF 52 Stair 1 2 | 2, Stainless Steel Filtration Set aless Steel Filter Holder (500 ml) Stainless steel funnel, 500 ml Stainless steel support screen | 167200-11 180100-05 180100-31 |
| SF 52 Stair 1 2 3 | 2, Stainless Steel Filtration Set aless Steel Filter Holder (500 ml) Stainless steel funnel, 500 ml Stainless steel support screen Stainless steel support base | 167200-11 180100-05 180100-31 180100-00 |



VF 5

VF 8

25 mm Microanalysis Glass Filtration Apparatus



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 |

Ordering Information

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



VF 5, 25mm Microanalysis Glass Filtration Set 167200-05 15 ml Glass filter holder 167120-32 Glass funnel, 15 ml 167220-15 1 2 Aluminum clamp 167240-05 3 Sintered glass support base 167230-04 (Including No.5 silicone stopper) Receiver flask, 125 ml 4 167250-05 VF 8, 25 mm Microanalysis Glass Filtration Set 167200-08 15 ml Glass filter holder 167120-34 Glass funnel, 15 ml 1 167220-15 2 Aluminum clamp 167240-05 SS support screen 167230-32 PTFE gasket 167230-42 4 5 167230-08 Glass support base (Including No.5 silicone stopper) Receiver flask, 125 ml 167250-05 6

Glass Filtration Apparatus

VF 7



Features

Applications

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 |

| Funnel | capacity |
|------------|-------------|
| Flask ca | apacity |
| Filter di | ameter |
| Hose ba | arb |
| * The flag | sk withstar |



VF 7





> The screwthread connector helps remove the silicone tube quickly.

> The silicone fixing sucker prevents the receiver flask from tipping over accidentally.

Solvent purification and general filtration such as microbiology, suspended solid

ands nearly full vacuum for use in vacuum filtration.

| 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 | 167230-03 |
| | (Including No.8 silicone stopper) | |
| 4 | Receiver flask, 1000 ml | 167250-03 |
| | (with screwthread connector) | |
| 5 | Silicone fixing sucker | 167200-45 |
| VF 7 | , Glass Filtration Set | 167200-07 |
| 200 | | |
| 300 | ml Glass filter holder | 167120-33 |
| 300 | ml Glass filter holder Glass funnel, 300 ml | 167120-33 167210-03 |
| | | |
| 1 | Glass funnel, 300 ml | 167210-03 |
| 1 2 | Glass funnel, 300 ml Aluminum clamp | 167210-03 167240-01 |
| 1 2 3 | Glass funnel, 300 ml Aluminum clamp SS support screen | 167210-03 167240-01 167230-31 |
| 1 2 3 4 | Glass funnel, 300 ml Aluminum clamp SS support screen PTFE gasket | 167210-03 167240-01 167230-31 167230-41 |
| 1 2 3 4 | Glass funnel, 300 ml Aluminum clamp SS support screen PTFE gasket Glass support base | 167210-03 167240-01 167230-31 167230-41 |
| 1 2 3 4 5 | Glass funnel, 300 ml Aluminum clamp SS support screen PTFE gasket Glass support base (Including No.8 silicone stopper) | 167210-03 167240-01 167230-31 167230-41 167230-07 |



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 | | |

_ 1

| 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.

| I | I | I | ____ 1 — 2 — 3 ____ 4 5 VF 3

| | 2 |
|-------|-----|
| | 3 |
| Q, | |
| | ł |
| | |
| - | - 5 |
| | |
| VF 12 | |

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 | 167230-01 |
| | w/ tubulated cap | |
| | (with screwthread connector) | |
| 4 | Ground joint flask, 1000 ml 167250-01 | |
| 5 | 5 Silicone fixing sucker 167200-45 | |
| VF 1 | 2, 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 167230-03 | |
| | (Including No.8 silicone stopper) | |
| 4 | Filtration adaptor for GL45 bottle 197000-65 | |
| - | | |



Features

Applications

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 |
| | | |

| Funnel capacity |
|-----------------|
| Bottle capacity |
| Filter diameter |
| Hose barb |
| |



VF 16

90 mm Glass Filtration Apparatus





▶ 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.

Purification of organic, corrosive liquid such as solvent, mobile phase for HPLC, GC

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

| VF 1 | VF 15, 90 mm Glass Filtration Set 167200-15 | | | | | |
|------------------------|---|--|--|--|--|--|
| 1000 | 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 | 167230-10 | | | | |
| | (Including No.8 silicone stopper) | | | | | |
| 6 | Filtration adaptor for GL45 bottle | 197000-65 | | | | |
| | | | | | | |
| 7 | Laboratory glass bottle, 5000 ml | 197000-55 | | | | |
| | 6, 90 mm Glass Filtration Set | 197000-55 167200-16 | | | | |
| VF 1 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | |
| VF 1 | 6, 90 mm Glass Filtration Set | 167200-16 | | | | |
| VF 1 | 6, 90 mm Glass Filtration Set | 167200-16 167120-38 | | | | |
| VF 1 1000 | 6, 90 mm Glass Filtration Set 9 ml Glass filter holder Glass funnel, 1000 ml | 167200-16 167120-38 167210-10 | | | | |
| VF 1 1000 1 2 | 6, 90 mm Glass Filtration Set) ml Glass filter holder Glass funnel, 1000 ml Aluminum clamp | 167200-16 167120-38 167210-10 167240-02 | | | | |
| VF 1 1000 1 2 | 6, 90 mm Glass Filtration Set 0 ml Glass filter holder Glass funnel, 1000 ml Aluminum clamp Sintered glass support base | 167200-16 167120-38 167210-10 167240-02 | | | | |



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)



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 | Hose barb ID8 | | | | |
| Hose barb | | | | | |
| Model | | | MF 31 | | |
| Funnel | 300 ml | 300 ml | | 300 ml | |
| Receiver flask | iver 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)



| Nodel | |
|------------------|---|
| /oltage / Freq. | |
| /lax. vacuum | |
| Nax. flow rate | |
| /acuum regulator | , |
| lose barb | |
| Nodel | |
| unnel | |
| itorage bottle | |
| ilter diameter | |
| | |





| Rocker 300 | C - VF 12 | Chemker 300 - VF 12 | | Lafil 300C - VF 12 | |
|------------|-----------|---------------------|----------|--------------------|-----------|
| 110V/60Hz | 220V/50Hz | 110V/60Hz 220V/50Hz | | 110V/60Hz | 220V/50Hz |
| 145 mbar | | 105 mbar | | 145 mbar | |
| 23 L/min | 20 L/min | 20 L/min | 18 L/min | 23 L/min | 20 L/min |
| Yes | | - | | Yes | |
| D8 | | | | | |
| VF 12 | | | | | |
| 300 ml | | | | | |
| 1000 ml | | | | | |
| 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 spinlock 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) | Dimension (LxWxH) 33.5 x 24.5 x 30 cm | | | |
| Model | LF 30 | | SF 10 | |
| Funnel | 300 ml 1200 ml 47 mm Yes Yes | | 100 ml | |
| Receiver bottle | | | 1200 ml | |
| Filter diameter | | | 47 mm | |
| Funnel lid | | | Optional | |
| Overflow protection | | | 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)



| Model |
|---------------------|
| Voltage / Freq. |
| Max. vacuum |
| Max. flow rate |
| Vacuum regulator |
| Noise level |
| Hose barb |
| Dimension (LxWxH) |
| Model |
| Funnel |
| Receiver bottle |
| Filter diameter |
| Funnel lid |
| Overflow protection |
| |









| Lafil 400 - LF 30 | | Lafil 400 – SF 10 | |
|---------------------|-----------|-------------------|-----------|
| 110V/60Hz | 220V/50Hz | 110V/60Hz | 220V/50Hz |
| 30 mbar | | | |
| 23 L/min | 20 L/min | 23 L/min | 20 L/min |
| Yes | | | |
| 52 dB | | | |
| ID8 | | | |
| 33.5 x 24.5 x 30 cm | | | |
| LF 30 | | SF 10 | |
| 300 ml | | 100 ml | |
| 1200 ml | | 1200 ml | |
| 47 mm | | 47 mm | |
| Yes | | Optional | |
| 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

WaterVac 101 - MB

| Model |
|-----------------------|
| Power |
| Max. vacuum |
| Max. liquid flow rate |
| Motor |
| Hose barb |
| Material contact wit |
| filtrate |
| Weight |
| Dimension (LxWxH) |
| |
| Number of branch |
| Adaptor |
| Funnel |
| |









| WaterVac 100 | | |
|--|---|--|
| DC12V, 1.0A | | |
| 313 mbar | | |
| 0.5 L/min | | |
| 12W Brushless DC Motor | | |
| ID6 | | |
| SS316, FKM, Silicone, PP, PA66 | | |
| 1.16 Kg | | |
| 17 x 12 x 9.6 cm | | |
| WaterVac 100 - MB | WaterVac 101 - MB | |
| 1 | 1 | |
| Spin-lock design | Spin-lock design | |
| 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

to complete your order



















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





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

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

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

ROCKER

| 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

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 Max, vacuum Max. liquid flow rate Motor Noise level Hose barb Material contact with Weight Dimension (LxWxH)

Number of branch Adaptor

Funnel



| | WaterVac 200 | | |
|------------|---|----------------------------|--|
| | DC24V, 1.8A | | |
| | 313 mbar | | |
| | 4.5 L/min | | |
| | 60W Brushless DC Motor | | |
| | 60 dB | | |
| | ID8 | | |
| n filtrate | Stainless steel, FKM, Silicone, PP, PPS | | |
| | 2.8 Kg | | |
| | 21.4 x 18.3 x 26.4 cm | | |
| | WaterVac 200 - MB | WaterVac 201 - MB | |
| | 2 | 2 | |
| | Spin-lock design | Spin-lock design | |
| | SF stainless steel funnel, | SF stainless steel funnel, | |
| | 100 / 300 / 500 ml (optional) | 100 ml x 2 (standard) | |
| | | | |



How to order?

You can select Combination A, B or C



to complete your order



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

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

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



ROCKER

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 Manif

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



MultiVac 3

MultiVac 6



Specification

Model

| Number of branch | |
|---------------------|----|
| Filter diameter | |
| Funnel capacity | |
| Hose barb | |
| Dimension (LxWxH | I) |
| Part | |
| Body | |
| Control valve | |
| Adaptor | |
| Hose barb / Vent va | a |
| Handle / Knob | |
| | |

| ol | d | | VIDEO |
|-------|----|----------|-----------------------|
| 300 - | MS | | 0 |
| | | <u>I</u> | Adjustable vent valve |
| | | | Quick-Fit hose barb |
| 500 - | MS | | |
| | | | |
| | | | |

| | MultiVac 300 - MS | MultiVac 600 - MS |
|----|-------------------|-------------------|
| | 3 | 6 |
| | Optional | Optional |
| | Optional | Optional |
| | ID8 | ID8 |
| | 48 x 13 x 16 cm | 85 x 13 x 16 cm |
| | Material | Material |
| | SS316 | SS316 |
| | SS316 | SS316 |
| | SS316 | SS316 |
| /e | SS316 | SS316 |
| | 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 | | 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

| Model |
|---------------------|
| Number of branch |
| Filter diameter |
| Funnel capacity |
| Hose barb |
| Dimension (LxWxH) |
| Part |
| Body |
| Control valve |
| Adaptor |
| Membrane support |
| Hose barb / Vent va |
| Handle / Knob |
| Funnel |



| | MultiVac 301 - MB | MultiVac 601 - MB |
|-----|-------------------|-------------------|
| | 3 | 6 |
| | 47 mm | 47 mm |
| | 100 ml | 100 ml |
| | ID8 | ID8 |
| | 48 x 13 x 14.3 cm | 85 x 13 x 14.3 cm |
| | Material | Material |
| | SS316 | SS316 |
| lve | SS316 | SS316 |
| | Aluminum | Aluminum |
| | 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)





Specification

| Petilitation | | | | |
|--------------------------------|-------------------------------|-----------------------|--|--|
| 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)



| 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



Specification

| | P | | | | |
|---|-----------------------|-----------|-----------------------|-----------|--|
| 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)
- Funnel

Number of branch

- Filter diameter
- Material contact
- with filtrate









Specification

Model

Max. vacuum

Max. flow rate

Overflow protect

Vacuum regulator

Filter cartridge

Noise level

Hose barb

| MultiVac 301 - MB - T | | MultiVac 601 - MB - T | |
|---------------------------------------|---|---|---|
| 110V/60Hz | 220V/50Hz | 110V/60Hz | 220V/50Hz |
| 105 mbar | | | |
| 37 L/min | 34 L/min | 37 L/min | 34 L/min |
| Yes | | | |
| Yes | | | |
| 52 dB | | | |
| ID8 | | | |
| MultiVac 301 - MB | 3 | MultiVac 601 - Mi | 3 |
| 3 | | 6 | |
| SF stainless steel funnel, 100 ml x 3 | | SF stainless steel funnel, 100 ml x 6 | |
| 47 mm | | 47 mm | |
| SS316 | | SS316 | |
| | 110V/60Hz 105 mbar 37 L/min 37 L/min Yes Yes 52 dB ID8 MultiVac 301 - ME 3 SF stainless steel f 47 mm | 110V/60Hz 220V/50Hz 105 mbar 34 L/min 37 L/min 34 L/min Yes | 110V/60Hz 220V/50Hz 110V/60Hz 105 mbar 34 L/min 37 L/min 37 L/min 34 L/min 37 L/min Yes |



How to order?

You can select Combination A, B or C









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 | VIDEO | |
| 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





Catalog number Brand Filter diameter Pore size Material of filter Package



Specification Catalog numbe Material of cap Material of gask

Stopper Hose barb Autoclavable

Application for GL45 Suction Cap

Waste Bottle

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



Vapor Absorption (Neutralization) Bottle

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





GL45 Suction Cap / Filtration Adaptor

| | GL45 suction cap | GL45 filtration adaptor |
|-----|------------------|-------------------------|
| er | 197000-60 | 197000-65 |
|) | PP | PP |
| ket | - | PTFE |
| | - | No.8 stopper |
| | ID6 | ID4 ~ ID8 |
| | Yes | Yes |

Moisture Trap Bottle

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



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

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

LIFE **SCIENCES**

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



Standard accessory:

- 1. 199100-30 Handle

Specification

| Model |
|----------------------|
| Operation |
| Hose barb |
| Suction kit material |
| Rack material |
| Dimension (LxWxH) |
| Suction kit |



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)

- 9. 199100-61 Rack

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

| BioDolphin | Plus |
|---------------------------------------|---------------------------------------|
| Press to suck | |
| ID6 | |
| POM, SS304 | POM |
| ABS | - |
| 15 x 15.2 x 19.5 cm | 15 x 7.5 x 5.5 cm |
| 1. Handle | 1. Handle |
| 2. 1-channel tip adaptor (50 mm) | 3. 1-channel tip adaptor (150 mm) |
| 3. 1-channel tip adaptor (150 mm) | 7. 1-channel tip adaptor with ejector |
| 4. 1-channel SS adaptor (40 mm) | 8.8-channel tip adaptor with ejector |
| 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 | |



Portable Suction System



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



 \ast The appearance difference between Lafil 100 / 100 $^{\rm eco}$ is switch color.



197100-48 Anti-UV Cloth Cover (Optional)

ROCKER

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 | 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.



1. Compact size

Lafil 200 Suction System



Lafil 200 Suction System

X2

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





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

Specification

Po

| Scenication | | | |
|-------------------|--|---|--|
| Model | Lafil 200 - Plus / BioDolphin | Lafil 200 ^{eco} - Plus / BioDolphin | |
| ower | DC12V, 1.5A | | |
| /acuum range | 1013 ~ 213 mbar | 880 ~ 370 mbar | |
| Nax. flow rate | 10 L/min | | |
| Aspiration rate | 17 mL/sec | | |
| Vaste bottle | 4L PP vacuum bottle / 3.5L laboratory glass bottle (optional) | | |
| uto shut-off | - | Yes | |
| loise level | 55 dB | | |
| Veight | 2.1 Kg | 2.3 Kg | |
| Dimension (LxWxH) | 37.5 x 25.8 x 21.7 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 | |





| Accomn adaptor | functional ge rack nodates all the rs in the rack and cross-contamination. | |
|-------------------|--|--|
| | RCKER | |







2 suction kits at the same time

Improves experimental efficiency.

Suction System

2 YEAR WARRANTY

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)





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 d | m | | | |
| | Plus | Plus | | BioDolphin | |
| Suction Kit | Handle 1-channel tip adaptor (150 mm) 1-channel tip adaptor with ejector 8-channel tip adaptor with ejector | | | | |

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)

Max. vacuum Max. flow rate Aspiration rate Waste bottle

Noise level

- Net weight
- Dimension (Lx

Suction Kit

ROCKER







| | Lafil 400 - Plus | | Lafil 400 - BioDolphin | |
|-------|--|-----------|---|-----------|
| | 110V/60Hz | 220V/50Hz | 110V/60Hz | 220V/50Hz |
| | 30 mbar | | | |
| | 23 L/min | 20 L/min | 23 L/min | 20 L/min |
| | 19 mL/sec | | | |
| | 1200 ml PES vacuum bottle | | | |
| | 50 dB | | | |
| | 7 Kg | | | |
| /VxH) |) 33.5 x 24.5 x 30 cm | | | |
| | Plus | | BioDolphin | |
| | 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

Yes

PP Heavy-Duty Vacuum Bottle

Autoclavable



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 |
| | | |



,197201-38

197201-39

Specification Catalog numbe Graduated inc Overflow prote Hose barb

Autoclavable

| 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 |

| Specification | 500 ml, glass bottle | 1000 ml, glass bottle | 3500 ml, glass bottle |
|---------------------|-------------------------|--------------------------|--------------------------|
| Catalog number | 197000-60-500 | 197000-60-1000 | 197000-60-3500 |
| Сар | 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 |

ROCKER



PP Vacuum Bottle NEW

| | 1000 ml, PP vacuum bottle | 2000 ml, PP vacuum bottle |
|--------|---------------------------|---------------------------|
| ber | 197100-10 | 196100-0406 |
| rement | 250 ml | - |
| ection | - | - |
| | ID6 | ID6 |
| | Yes | Yes |
| | | |

Quick-Coupling Connector NEW

GL45 Laboratory Glass Bottle

* PES : Polyethersulfone, PP : Polypropylene



Suction Accessories



Gree

Deep Blue

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 | 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 |







| Specification Disposable Nitrile Glove (blue) | | |
|---|----------------------------------|-------|
| Catalog number | 207-1126NFB-XS | |
| | 207-1126NFB-S | |
| | 207-1126NFB-M | |
| | 207-1126NFB-L | /IDEO |
| | 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

WelVac 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 WelVac 200 highly compatible with various kinds of spin column and 96-well microplate.

International certification

CE certification CSA certication (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

WelVac 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)

WelVac 210, Microplate Vacuum Manifold System, AC110V, 60Hz (AC220V, 50Hz), complete set includes: *Rocker 300, Vacuum Pump *WelVac 200, Microplate Vacuum Manifold *Silicone Tube (30 cm) 197000-12

1200 ml PES Vacuum Bottle





| Model | WelVac 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 | WelVac 210 | |
| Voltage / Freq. | 110V/60Hz | 220V/50Hz |
| Max. vacuum | 105 mbar | |
| Max. flow rate | 23 L/min | 20 L/min |
| Microplate manifold | WelVac 200 Microplate vacuum manifold | |
| | 1200 ml PES vacuum bottle (optional) | |
| Vacuum bottle | 1200 mi PES vacuum Dottie (C | (ptional) |



Lab Burner

Features

- Piezo ignition
- ► Max. temperature: 1300°C
- Adjustable flame
- Refillable butane tank
- International certification CE certication
- 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





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 sterlization
- Inoculating loops and needles sterlization

Ordering Information

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

Dragon 320, Electric Sterilizer AC110V, 60Hz (AC220V, 50Hz)

| Model |
|-------------------|
| Temp. range |
| Power |
| Chamber diameter |
| Dimension (LxWxH) |
| Net weight |



| Dragon 300 | Dragon 320 |
|-----------------|------------------|
| R.T. + 20~850°C | R.T. + 20~850°C |
| 180W | 180W |
| 16 mm | 37 mm |
| 17 x 9 x 21 cm | 19 x 9 x 21.5 cm |
| 1128 g | 1098 g |



Colony Counter

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)



The optional blocks

| nm 80 mm | | Aluminum E | Block Dimensi | on (LxWxH): | 80 x 100 x 50 m | im |
|-------------|-----------|------------|---------------|-------------|-----------------|-----------------|
| \$ 50 mm | | | Hole Diameter | Hole Depth | Max. Capacity | Applicable Tube |
| | 179300-05 | 179300-01 | 6.4 mm | 17 mm | 64 well | 0.2 ml |
| | 0000 | 179300-02 | 8.2 mm | 25 mm | 20 well | 0.5 ml |
| 179300-01 | 179300-06 | 179300-03 | 10.2 mm | 33 mm | 20 well | 1.5 ml, 2.0 ml |
| | 300 | 179300-05 | 13 mm | 36 mm | 20 well | |
| 179300-02 | 179300-07 | 179300-06 | 20 mm | 45 mm | 12 well | |
| | | 179300-07 | 25 mm | 45 mm | 6 well | |
| 179300-03 | 179300-10 | 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(2) Counter: 00:00 (HH:MM) | (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 .

Galaxy 330

CE certification

International certification

Two-Year Warranty

Applications

Features

Pressure sensor design, no

Pressure sensor design allows users to

operate with any marking pens. No worry

about sample spoiled or contaminated.

4 panel displays offers convenience of

(1) Multi-counting average: Makes

average count from multiple counting

(2) Exclusive BACK button: Offers the

convenience of deducting data when

(3) Suitable for Petri-dishes in various

showing the present and previous three

contamination

4 panel displays

count values.

automatically.

over counting.

diameters.

User-friendly design

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)

| View | Operator: | Cordon |
|----------|-----------------|-----------|
| New | Cuitomer: | 10005 |
| Database | Strate | Exchence |
| End | Medium: | Broth |
| About | Fector Scel | 10 |
| | Dilution Factor | 10000 |
| | Total Data: | 4 |
| | Raw Avg. | 26.0 |
| | Total Avo. | 250000.0 |
| | Finish Time: | 2014/08 |
| | 14 4 | Þ ÞI |
| ROCKER | | Status: G |

Specification

| MOU | |
|---------|-----------------|
| Displa | у |
| Magn | ification |
| Petri o | lish diameter |
| Storag | ge |
| Opera | ating buttons |
| Illumi | nation |
| Pressu | ure sensitivity |
| Acous | stical counting |
| Outpu | ut |
| Net w | eight |
| | |

Dimension (LxWxH)







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).

| | Galaxy 330 |
|--------|-----------------------------------|
| | 3-digit, LED panel |
| | 2~3 X |
| | 60 mm or 90 ~ 150 mm (adjustable) |
| | 100 records |
| | Average, Zero reset, Count back |
| | LED (adjustable) |
| | Adjustable |
| signal | Adjustable |
| | USB |
| | 5.6 Kg |
| | 35.1 x 30.2 x 37 cm |



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:

COD Reactor / Detector

Multiparameter Colorimeter

Portable pH / Cond. / Res. Meter

EC 200 / 210 / 220 / 230

CR 25

CD 200

WD 100

Accessories

WATER

ANALYSIS

(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. Builtin 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.

| Model | CR25 |
|---------------------------|---|
| Display | OLED |
| Temperature range | Fixed program • 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 ϕ 16 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 |









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



COD Detector

VIDEO

Features

Ideal for major brands of reagents CD 200 detector is equiped 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 regent 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)



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)

Model

Specification

Brand of reagent Standard program Display Light source Working wavelengt Wavelength choosin Detecting time Optical stability Storage Data information Power supply Dimension (LxWxF

ROCKER







| WD 100 |
|--|
| DC12V, 1.0A |
| НАСН |
| COD, NH ₃ -N, TP, TN |
| LCD with backlight |
| LED |
| 420 nm, 610 nm |
| Automatic |
| 3 sec |
| ≤ 0.005 Abs / 30 min |
| 100 records |
| Item, wavelength, concentration, sample number, time |
| DC 9V battery or power adaptor |
| 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 | | | | |
| рН | 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 | | | | |
| рН | 0.01±1digit | 0.01±1digit | - | - |
| ORP (mV) | 1±1digit | 1±1digit | - | - |
| Conductivity | - | - | ±1% full scale | - |
| Resistivity(MΩ) | - | - | - | $\pm 1\%$ 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.

ROCKER

Accessories

Features

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

| pH Electrodes | | | | | | | |
|---------------|-----------|-----------------|-----------|------------------|---------|---------------|-------|
| Cat. No. | Туре | 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 | ĺ |
| 168700-50 | pH 7.00 \pm 0.01, 500 ml | 2 years | |
| 168100-50 | pH 10.01 ± 0.01, 500 ml | 1 year | |
| KCL Buffer | | | ĺ |
| Cat. No. | Description | Shelf year | |
| 168103-50 | 3M KCl, 500 ml | 2 years | |
| | | | |







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 206

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

ULTRASONIC

CLEANER



Soner 203H



Soner 206H



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)











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 |
| 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 |



Soner 210H



Soner 220H

Accessories





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/206/2 |
| 188200-32 | Beaker positioning cover (M) for Soner 210/210H |
| 188200-33 | Beaker positioning cover (L) for Soner 220/220H |

206H



Chemical Resistant of Commonly Used Materials Table

| | Weak Acids | Weak Bases | Temperature (°C) (Prolonged use) | Temperature (°C) (Short-term use) | lzod Impact Strength (kg-cm/cm) | Ultraviolet Ray | Specific Gravity |
|--------|------------|------------|-------------------------------------|--------------------------------------|--|--------------------|---------------------|
| ABS | E | E | 75 | 100 | 21 | Р | 1.06 |
| РР | E | E | 85 | 100 | 20 | F | 0.92 |
| РС | E | F | 130 | 140 | 12 | F | 1.20 |
| РОМ | Р | F | 90 | 110 | 19.1 | Р | 1.42 |
| Nylon6 | G | E | 80 | 120 | б | 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 |

Sterilization Method

| | Autoclavable (121℃, 20min) | Dry (160℃) | Ultraviolet Ray | Gamma Radiatio |
|--------|-------------------------------|----------------------|-----------------|----------------|
| ABS | Р | Р | Р | G |
| РР | F | Р | F | Р |
| РС | G | Р | F | G |
| РОМ | F | Р | Р | Р |
| Nylon6 | G | Р | F | F |
| PSU | E | G | F | G |
| PES | E | E | F | G |
| PVDF | G | Р | G | G |
| PTFE | E | E | G | G |

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

| Pressure Conversion | Table (Ultimate Vacuum) |
|---------------------|-------------------------|
|---------------------|-------------------------|

| psi | atmosphere | mbar | kPa | Kg/cm² | oz/in² | in. Hg | mmHg (Torr) | in. H₂O |
|--------|------------|---------|-------|---------|--------|---------|----------------|---------|
| 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 | m³ / 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 |

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

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