

# INSTRUCTION MANUAL

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## Diaphragm Liquid Pump

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### Model No.

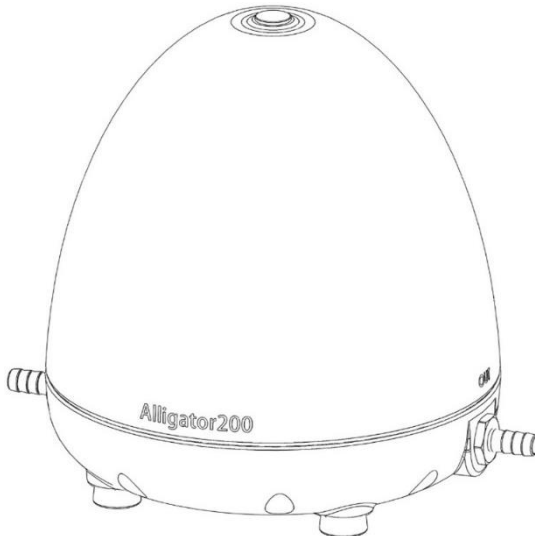
Alligator 200



Instruction Video



**TAIWAN**  
EXCELLENCE 2022



# **ROCKER**

Please read this instruction manual before using this product.



# Important Notice

This instrument is designed for laboratory usage only. Please read this manual carefully before installing and operating. The instrument shall not be modified in any way. Any modification will void the warranty and may result in potential hazard. We are not responsible for any injury or damage caused by any non-intended purposes and modifying the instrument without authorization.

1. Check the voltage specified on the name plate and ensure it matches the line voltage in your location.
2. Install the instrument in a clean, dust-less and ventilated area under 40°C.
3. Never use the pump with any corrosive, chemical, flammable or toxic material.
4. Do not pump any solution without filtration, please use this instrument with filtration apparatus, manifold and membrane to prevent clogging.
5. Ensure silicone tube is not bent, plugged, or squeezed to avoid poor drainage.
6. Never operate this instrument in a circulated, closed system.
7. Please clean and maintain this instrument according to this manual after every use to ensure maximum efficiency.
8. For more product details, please refer to the latest catalog and website.
9. Please discard packing material according to local related regulations.
10. Operating condition
  - (a) Ambient temperature: 5~ 40°C
  - (b) Relative humidity: 80% RH Max.
  - (c) Power supply: 100~240V, 50/60Hz
  - (d) Altitude: up to 2000 m
  - (e) Pollution degree: II
  - (f) IP64
  - (g) Overvoltage category: I
  - (h) Indoor use

# Unpacking

Please check if the package is complete without any damage before unpacking. When unpacking, please make sure you have all accessories that indicated on the list. If there is any problem, please keep the serial number along with packing case and contact your local distributor immediately for assistance.

## Main Part Diagram



Position	Designation	Position	Designation
1	Power Switch	4	Outlet (OUT)
2	Dust Cap	5	Power Socket
3	Inlet (IN)	6	Power Adaptor

# Installation and Operation

## • Installation

- A. Remove the dust cap (2) from both inlet (3) and outlet (4) hose barb.
- B. Connect the filtration apparatus or manifold to inlet (3) of Alligator 200 with silicone tube.
  - The tube length between filtration apparatus and pump should be as short as possible.
- C. Connect a long tube to outlet (4) of Alligator 200 and put the other side of tube into sink or a container to drain and collect the waste liquid.
  - Make sure the diameter of silicone tube is in accordance with pump and filtration apparatus. The hose barb diameter of pump is ID8 (8 mm), and  $\phi 8 \times 14$  mm silicone tube (180300-68) is recommended.
- D. Connect the power adaptor (6) to both power source and power socket of pump (5).

## • Operation

- A. After sample preparation, install the appropriate membrane in filter holder or funnel of previous installed filtration system.
- B. Switch on the pump by pressing the power switch (1) to start the filtration.
- C. After finishing filtration, switch off the pump by pressing the power switch (1) again.

### \* Warning:

- (1) Do not bend silicone tube or squeeze it with heavy objects to avoid poor drainage.
- (2) Do not pump dirty or impure solution without filtration to avoid clogging or damaging.



Filtration System Assembly Diagram

# Maintenance

1. The liquid pump is not autoclavable. Please clean the surface by pure water or 75% ethanol.
2. Please pump the pure water to clean the tubing after every use to prevent any dirty is left over. Keep pumping the air for at least 2 minutes to eliminate the liquid.
3. Valve plate(s), O-ring(s), silicone tube(s) and diaphragm are consumables, it is recommended to replace it on a yearly basis or as needed to ensure good operation.

# Troubleshooting

Problem	Reason and Solution
Failed to start	<ul style="list-style-type: none"><li>• Loose plug → Reconnect plug to power supply.</li><li>• Switch is broken → Contact distributor for assistance.</li></ul>
Poor vacuum	<ul style="list-style-type: none"><li>• Outlet is blocked → Clean or stretch the outlet tube.</li><li>• Internal wiring loose → Contact distributor for assistance.</li></ul>
Low filtration speed	<ul style="list-style-type: none"><li>• Connection between filtration apparatus is not sealed → Reconnect to ensure they're tightly sealed.</li><li>• Control valve(s) is not open → Open it properly.</li><li>• Unsuitable membrane → Change an appropriate membrane.</li><li>• Membrane is blocked → Replace a new membrane.</li><li>• Silicone tube is bent too much → Replace silicone tube</li><li>• Internal wiring loose → Contact distributor for assistance.</li></ul>

# Ordering Information

181200-01(02)	Alligator 200, Diaphragm Liquid Pump with AC 100~240V, US Plug (EU plug)
180301-01(02)-A	MultiVac 301 - MB - A, Vacuum Filtration System with AC 100~240V, US Plug (EU plug)
180601-01(02)-A	MultiVac 601 - MB - A, Vacuum Filtration System with AC 100~240V, US Plug (EU plug)
180311-01(02)-A	MultiVac 310 - MS - A, Vacuum Filtration System with AC 100~240V, US Plug (EU plug)
180611-01(02)-A	MultiVac 610 - MS - A, Vacuum Filtration System with AC 100~240V, US Plug (EU plug)
181200-62	60W Diaphragm Liquid Pump Repair Kit
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
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
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, Magnetic Filter Holder (300 ml)
200300-01-P	MF 3 Pro, Magnetic Filter Holder (300 ml)
200500-01	MF 5, Magnetic Filter Holder (500 ml)
200500-01-P	MF 5 Pro, Magnetic Filter Holder (500 ml)
167120-31	300 ml Glass Filter Holder for VF 6/ VF 12
180300-68	Silicone Tube, Ø 8 x 14 mm, 2 m
167200-47(48)	4000 ml Heavy Duty PP Vacuum Bottle (with drain)
167100-20	PALL, Type A/ E Glass Fiber Discs, 1 um, 100/PK
167100-52	PALL, GN-6 Metrice Membrane Disc Filter, grid, 0.45 um, 200/PK

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