

# INSTRUCTION MANUAL

## Diaphragm Liquid Pump

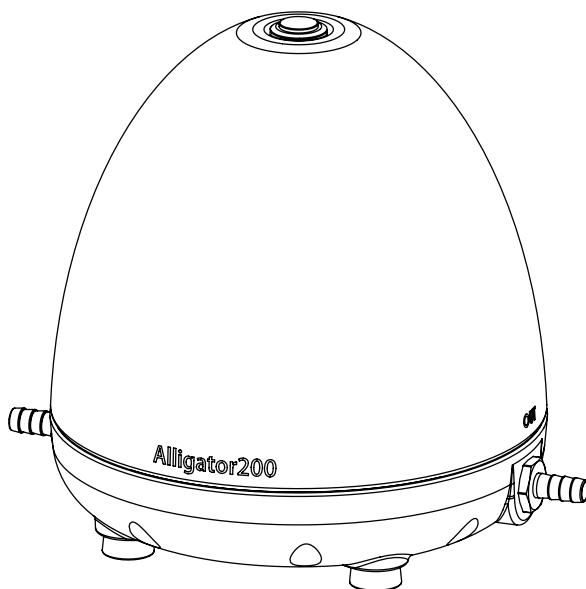
### Model No.

Alligator 200

Tech support



**TAIWAN**  
EXCELLENCE 2022



# ROCKER

Please read this instruction manual before using this product.



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# 1. 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. Never operate this instrument in a circulated, closed system.
6. Please clean and maintain this instrument according to this manual after every use to ensure maximum efficiency.
7. In case of any issues with instrument, please contact the manufacturer or your service agent for assistance. Do NOT disassemble it improperly.
8. Please discard packing materials according to local regulations.
9. Visit the official website and refer to the latest product guide for more information.
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) Indoor use

***\* Before operation, please ensure tube is not bent, plugged, or squeezed to avoid poor drainage or any potential damage.***

## 2. 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.

## 3. Main Part Diagram

### (1) Alligator 200, Diaphragm Liquid Pump



Item	Designation	Position	Designation
1	On /Off Sensor	4	Outlet (OUT)
2	Dust Cap	5	Power Socket
3	Inlet (IN)	6	Power Adaptor

### (2) Parts Material List

Part	Material
Material contacts with filtrates	SS316, FKM, Silicone, PP, PPS

## 4. Installation and Operation

### (1) Installation

- A. Install the Alligator 200 in its working environment.
  - If installing the pump in a laminar flow hood or microbiological safety cabinet, clean the surface by pure water or 75% ethanol.
- B. Remove the dust cap (2) from both inlet (3) and outlet (4) hose barb.
- C. 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.
- D. 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.
  - Ensure the silicone tube diameter matches the pump and filtration apparatus. The pump's hose barb has an 8 mm outer diameter, and a  $\phi$  8 x 14 mm silicone tube (180300-68) is recommended.
- E. Connect the power adaptor (6) to both power source and power socket of pump (5).

### \* Warning:

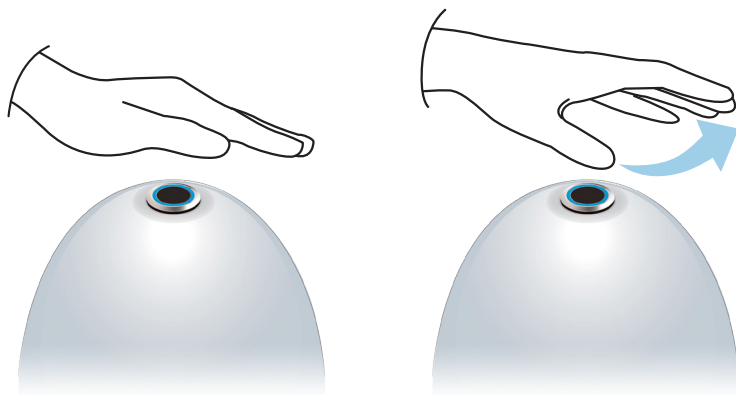
- (1) Do NOT use cable tie or any similar items to secure the pump's outlet and silicone tube together to prevent any bursting and potential damage to the pump.**
- (2) Do NOT bend silicone tube or squeeze it to avoid poor drainage and potential damage.**
- (3) Do NOT pump dirty or impure solution without filtration to avoid clogging or damaging.**



Filtration System Assembly Diagram

## (2) Operation

- A. Install the appropriate membrane in filter holder or funnel of the filtration system.
- B. Activate the pump by waving or hovering a hand on the top of the on/off sensor (1) to start filtration.
- C. After finishing filtration, stop the pump by waving or hovering a hand on the top of the on/off sensor (1) again.



## 5. 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.



## 6. Troubleshooting

Problem	Reason and Solution
Failed to start	<ul style="list-style-type: none"><li>● Loose plug → Reconnect plug to power supply.</li><li>● On/Off sensor 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>● Manifold 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>
Others	<ul style="list-style-type: none"><li>● Contact distributor for assistance.</li></ul>

## Ordering information

181200-01(02)	Alligator 200, Diaphragm Liquid Pump, AC100-240V, 50/60Hz, US Plug (EU plug)
181200-62	60W Diaphragm liquid pump repair kit
186601-01(02)-A	SolarVac 601 - MB - A, Vacuum Filtration System, AC100-240V, US Plug (EU plug)
1861201-01(02)-A	SolarVac 1201 - MB - A, Vacuum Filtration System, AC100-240V, 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)
186601-02	SolarVac 601 - MB, 6 Places Rotary Manifold with ROCKER SF funnel adaptor, 100 mL SF funnel x 6
1861201-02	SolarVac 1201 - MB, 12 Places Rotary Manifold with ROCKER SF funnel adaptor, 100 mL SF funnel x 12
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(-P)	MF 3 (Pro), Magnetic Filter Holder (300 mL)
200500-01(-P)	MF 5 (Pro), Magnetic Filter Holder (500 mL)
180300-68	Silicone tube, Ø 8 x 14 mm, 2 m
167200-47	4000 ml Heavy Duty PP Vacuum Bottle
167200-48	4000 ml Heavy Duty PP Vacuum Bottle with drain
167100-20	PALL, Type A/ E glass fiber discs, 1 µm, 100/PK
167100-52-1	Whatman, ME 25 (MCE) membrane, 47 mm, 0.45 µm, black grid, sterile, 100/PK



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