# **INSTRUCTION MANUAL**

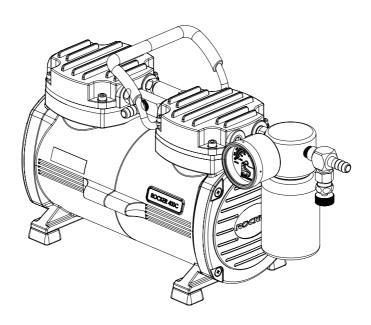
## PTFE Coated Chemical Resistant Vacuum Pump

#### Model No.

Rocker 300C Rocker 400C / 410C Rocker 900C / 910C









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 flammable gas or toxic material.
- 4. The pump is not designed to start against applied vacuum. To prevent damage, verify that the inlet of pump is at atmospheric pressure before each start. If necessary, the inlet can be vented to atmosphere by partially unscrewing the vacuum regulator knob.
- 5. Please connect the pump with high-pressure hose or tubes.
- 6. This pump has a thermal protection device that automatically shuts off when it becomes overheated.
- 7. The temperature of the surface of pump is very high after use or during work, please don't touch it to avoid being burnt.
- 8. The instrument must not be used to create vacuum and pressure simultaneously.
- 9. Do not use any lubricant, which may damage the pump.
- 10. If the supply cord is damaged, please contact the manufacturer or your service agent for replace ment to avoid hazard.
- 11. Please discard packing material according to local related regulations.
- 12. Operating condition
  - (a) Ambient temperature: 5~ 40°C
  - (b) Relative humidity: 80% RH Max.
  - (c) Power supply: 100-120V~, 50/60Hz or 200-240V~, 50/60Hz
  - (d) Altitude: up to 2000 m
  - (e) Pollution degree: II
  - (f) Indoor use

- \* Before operation, please check whether the compatibility of materials of pump head, valve plates and diaphragm with used medium.
- \* Warning: The PTFE-coated diaphragm and pump head can offer good resistance to a wide range of chemicals except strong acid and alkali.

### **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**

#### Rocker 300C



Position	Designation	Position	Designation
1	Power Switch	5	Vacuum Gauge
2	Air Outlet	6	Vacuum Regulator
3	Air Inlet	7	Moisture Trap
4	Handle		





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#### **Operation**

#### Operation

- A. Press power switch (1) to activate the pump after making sure all tubing are well connected.
  - A cold trap or trap bottle is recommended to connect before pump while amount of moisture exists.
  - Hoop holder is available for fixing filtration apparatus and saving space.
- B. To setup vacuum by adjusting the vacuum regulator (6).
- C. Check liquid level of moisture trap (7) daily and drain the liquid when it is up to the neck of bottle.
- \* Warning: When pump is used for aqueous solution filtration, please ensure the liquid level of flask not exceed safety level. Failure to comply could result in serious damage to the pump and void the warranty. If it occurs, please contact the distributor immediately for service.







Filtration System with Hoop Holder

#### Maintenance

- 1. Please remove the liquid in the moisture trap after every use. If the liquid in moisture trap is more than 70%, please stop the experiment immediately to empty the liquid.
- 2. After finishing the experiment, please remove the liquid in the moisture trap and keep pumping the air for at least 2 minutes to withdraw the residual steam.
- 3. The vacuum pump is not autoclavable. Please clean the surface by pure water or 75% ethanol.
- 4. 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> <li>Loose plug → Reconnect plug to power supply.</li> <li>Wrong voltage → Reconnect to power specified on name plate.</li> <li>Vacuum exists → Release vacuum and restart the pump.</li> <li>Switch is broken → Contact distributor for assistance.</li> </ul>		
Poor vacuum	<ul> <li>Improperly vacuum setting → Adjust the vacuum regulator.</li> <li>Faulty vacuum gauge → Replace a new gauge.</li> <li>Air leakage → Replace or tighten the tubing and accessories that possible leaks.</li> </ul>		

## **Ordering Information**

189300-11(22)	Rocker 300C, PTFE Coated Chemical Resistant Vacuum Pump,
	AC110V,60Hz (AC 220V,50Hz)
189400-11(22)	Rocker 400C, PTFE Coated Chemical Resistant Vacuum Pump,
	AC110V,60Hz (AC 220V,50Hz)
189410-11(22)	Rocker 410C, PTFE Coated Chemical Resistant Vacuum Pump,
	AC110V,60Hz (AC 220V,50Hz)
189900-11(22)	Rocker 900C, PTFE Coated Chemical Resistant Vacuum Pump,
	AC110V, 60Hz (AC220V, 50Hz)
189910-11(22)	Rocker 910C, PTFE Coated Chemical Resistant Vacuum Pump,
	AC110V, 60Hz (AC220V, 50Hz)
189300-06	Glass moisture trap / vacuum regulator for Rocker 300C / 400C / 410C
189900-06	Glass moisture trap / vacuum regulator for Rocker 900C / 910C
167300-37	Hoop Holder for Rocker 300 / 400 / 410 / 300C / 400C / 410C, applicable apparatus dia.
	Max.118 mm
189300-37	Hoop Holder for Rocker 300 / 400 / 410 / 300C / 400C / 410C, applicable apparatus dia.
	Max.103 mm
189300-62	Rocker 300C repair kit
189400-62	Rocker 400C / 410C repair kit
189900-62	Rocker 900C / 910C repair kit
167200-38	Silicone Tube, Ø 6 x 12 mm, 1 m
180300-68	Silicone Tube, Ø 8 x 14 mm, 2 m
167200-12	VF 12, Glass filtration apparatus
167200-15	VF 15, Glass filtration apparatus
167200-16	VF 16, Glass filtration apparatus

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