

INSTRUCTION MANUAL

Chemical Resistant Vacuum Pump

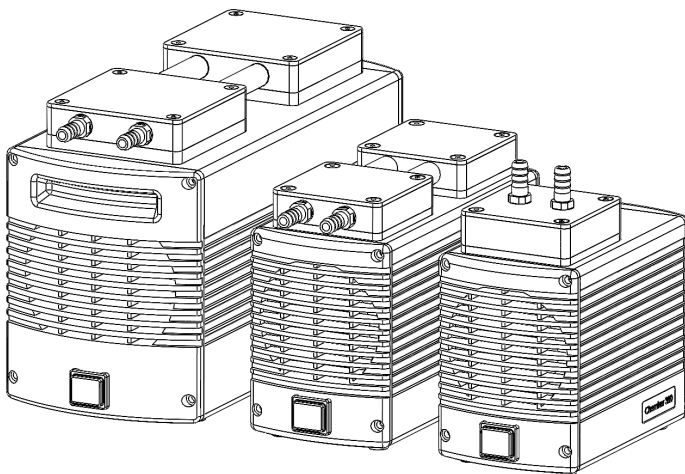
Model No.

Chemker 300

Chemker 400 / 410 / 411

Chemker 600 / 610 / 611

Tech support



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 flammable gas or toxic material.
4. Please connect the pump with high-pressure hose or tubes.
5. The instrument, except for Chemker 600 / 610 / 611, is not designed to start against applied vacuum. To prevent damage, verify that the inlet of pump is at atmospheric pressure before each start.
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 replacement 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



Caution: Hot surface

**** Before operation, please check whether the compatibility of materials of pump head, valve plates and diaphragm with used medium.***

- Pump head: PTFE

- Valve plates: FFKM

- Diaphragm: PTFE coated

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.

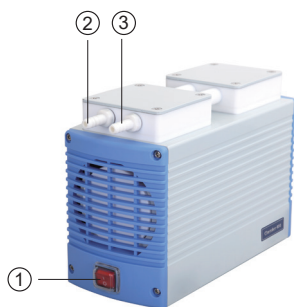
3. Main Part Diagram

Chemker 300

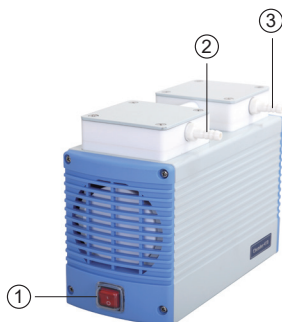


Position	Designation
1	Power Switch
2	Air Inlet
3	Air Outlet

Chemker 400



Chemker 410



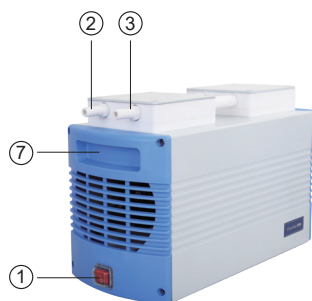
Chemker 411



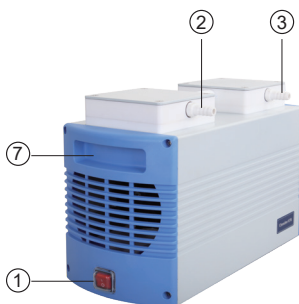
Position	Designation	Position	Designation
1	Power Switch	5	Moisture Trap
2	Air Inlet	6	Vacuum Gauge
3	Air Outlet	7	Handle
4	Vacuum Regulator		

* The reference point of vacuum gauges is atmospheric pressure.

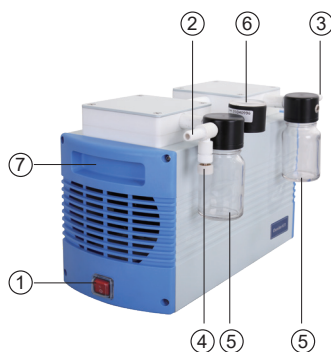
Chemker 600



Chemker 610



Chemker 611



4. Operation

(1). Chemker 300 / 400 / 410 / 600 / 610 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.

B. To setup vacuum, an optional glass moisture trap / vacuum regulator is needed.

- Optional glass moisture trap / vacuum regulator please refer to Ordering Information.

(2). Chemker 411 / 611 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.

B. To setup vacuum by adjusting the vacuum regulator (4).

C. Check liquid level of moisture trap (5) 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 Assembly Diagram

5. 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.

6. Troubleshooting

Problem	Reason and Solution
Failed to start	<ul style="list-style-type: none">● Loose plug → Reconnect plug to power supply.● Wrong voltage → Reconnect to power specified on name plate.● Vacuum exists → Release vacuum and restart the pump.● Switch is broken → Contact distributor for assistance.
Poor vacuum	<ul style="list-style-type: none">● Improperly vacuum setting → Adjust the vacuum regulator.● Faulty vacuum gauge → Replace a new gauge.● Air leakage → Replace or tighten the tubing and accessories that possible leaks.

7. Ordering Information

169300-11(22)	Chemker 300 Vacuum pump, AC110V,60Hz (AC 220V,50Hz)
169400-11(22)	Chemker 400 Vacuum pump, AC110V,60Hz (AC 220V,50Hz)
169410-11(22)	Chemker 410 Vacuum pump, AC110V,60Hz (AC 220V,50Hz)
169411-11(22)	Chemker 411 Vacuum pump, AC110V,60Hz (AC 220V,50Hz)
169600-11(22)	Chemker 600 Vacuum pump, AC110V,60Hz (AC 220V,50Hz)
169610-11(22)	Chemker 610 Vacuum pump, AC110V,60Hz (AC 220V,50Hz)
169611-11(22)	Chemker 611 Vacuum pump, AC110V,60Hz (AC 220V,50Hz)
169411-06	Glass moisture trap / vacuum regulator for Chemker 300 / 400 / 410 / 411
169611-06	Glass moisture trap / vacuum regulator for Chemker 610 / 611
169300-62	Chemker 300 repair kit
169400-62	Chemker 400 repair kit
169410-62	Chemker 410 / 411 repair kit
169600-62	Chemker 600 repair kit
169610-62	Chemker 610 / 611 repair kit
169300-21	Hose barb, 1/4 NPS, 5/16 in. for Chemker 300 / 400 / 411
169300-20	Hose barb, 1/4 NPS, 3/8 in. for Chemker 600 / 610 / 611
167200-38	Silicone Tube, Ø 6 x 12 mm, 1 m
180300-68	Silicone Tube, Ø 8 x 14 mm, 2 m

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