Infitek Infitek Infitek Infitek Infitek

Infitek

VACUUM PUMPS

Diaphragm Vacuum Pump
Water Circulating Vacuum Pump
Oil-free vacuum pump

Infitek

Infitek Inc.

Address: 522W Riverside Ave Ste N, Spokane, WA 99201, USA
Email: Info@infitek.com

Infitek Co., Ltd.

TEL: +86-531-88982330
FAX: +86-531-88983691
Website: infitek.com
Email: info@infitek.com
Service: service@infitek.com
Address: Room 201A, Building 9 (Block B), No. 2679,
Hechuan Road, Minhang District, Shanghai,P.C.201100



VERSION.26

Diaphragm Vacuum Pump

VACP-D20





Applications

It is mainly used in rotary evaporation, vacuum drying, vacuum concentration, vacuum distillation, and solid-phase extraction.

Working Principle

The diaphragm vacuum pump is designed based on the principle of a positive displacement pump. Driven by an electric motor, the connecting rod performs a reciprocating up-and-down motion, actuating the diaphragm to expand and contract. This movement changes the volume within the diaphragm chamber, resulting in pressure fluctuations of the medium to achieve suction and discharge.

Features

Eliminates oil mist pollution issues; superior to rubber diaphragms in terms of airtightness, corrosion resistance, and structural strength;

It has strong resistance to chemical corrosion; it is pollution-free, maintenance-free, low-noise, low-vibration, and has overheat protection.

Core Technology: PTFE and special material composite diaphragms with excellent corrosion resistance; enhanced fatigue resistance, effectively extending the service life of the diaphragm;



Specification

Model	VACP-D20
Max. Pumping Speed	20 L/min
Pump Head Type	Double-stage
Ultimate Vacuum	8mbar
Max. Operating Pressure	1 bar
Rated Speed	1450rpm
Suitable Media	Strong acids and strong alkaline gases
Interface Specification	10 mm
Media and Ambient Temperature	5 ℃~40 ℃
Ambient Relative Humidity	＜80%
Pump Head Material	PTFE
Composite Diaphragm Material	PTFE (Customizable non-standard options)
Valve Plate Material	FFPM (Customizable non-standard options)
Operating Mode	Continuous operation
Noise	＜60 dB
Electricity	110V / 220V, 50Hz
Rated Power	130 W
External Dimensions (L*W*H)	315*165*210 mm
Net Weight	11.5kg

Diaphragm pump

VACP-D21 VACP-D31 VACP-D51 VACP-D52 VACP-D102

The special electricity motor is provided by the expert motor manufacturer ODM. Reasonable rotation design, equipped with an overheating power-off protector, will automatically power off when the pump body temperature reaches 130°C, and protect the motor from damage during long-term operation.

The pressure adjustable design can meet the vacuum degree and gas flow rate within a certain range.

The bearing adopts imported classic bearings, with stable operation, low noise and high working efficiency.

Optional Accessory: Retention Bottle

VACP-D52, VACP-D102, VACP-D31, VACP-D51:



Adopt frictionless film movement, no heat generation, no friction loss. The diaphragm is made of imported rubber, which is corrosion resistant and has a long service life.

The parts of the anti-corrosion pump in contact with gas are treated with Teflon surface treatment, which is resistant to chemical corrosion.

Automatic cooling and exhaust system, which ensures continuous operation for 24 hours.

Small size, light weight, easy to move, saving laboratory space, convenient for repair and maintenance.

No need for any working medium (no oil), no pollution. The air exchange chamber is equipped with filter materials to ensure the air purity.

Adopt new technology and new materials in the production process. Easy to move and work smoothly, thus ensuring an ideal vacuum degree and a high air flow rate.



Specifications

Model	VACP-D21	VACP-D31	VACP-D51	VACP-D52	VACP-D102
Pumping Speed (L/Min)	15	20	30	30	60
Ultimate Vacuum	250mbar	200mbar	200mbar	50mbar	200mbar
Voltage	220Vac,50Hz	220Vac,50Hz	220Vac,50Hz	220Vac,50Hz	220Vac,50Hz
Power	75W	160W	160W	160W	160W
Positive Pressure	≥30Psi	/	≥30Psi	/	≥30Psi
Air Inlet (mm)	φ6	φ6	φ6	φ6	φ6
Air Outlet (mm)	φ6	Silencer Cotton	φ6	Muffler	φ6
Operating Ambient Temperature(°C)	7-40	7-40	7-40	7-40	7-40
Pump Head	/	1	1	2	2
Pump body Temperature(°C)	<55	<55	<55	<55	<55
Dimension(L×W×H) (mm)	245x120x160	270x130x210	230x180x265	350x130x220	310x200x210
Weight(Kg)	4	7	7.5	10	10
Diaphragm	/	Imported Rubber	Imported Rubber	Imported Rubber	Imported Rubber
Valve Plate	/	Imported Rubber	Imported Rubber	Imported Rubber	Imported Rubber
Pump Head Material	Nylon	/	/	/	/
Noise(BD)	<60	<60	<60	<60	<60
Note	Positive-negative pressure dual purpose	/	Positive-negative pressure dual purpose	/	Positive-negative pressure dual purpose

Chemical Resistant Diaphragm Pumps

VACP-D410



Applications

VACP-Dseries are chemical resistant, diaphragm vacuum pumps which can be widely used to hard acidic, basic and solvent vapors by utilizing corrosion proof PTFE on all the wetted surfaces. Through innovative mechanical technology and human considerations, we have made VACP-D series to be quiet, safe, maintenance-free and cost effective vacuum pumps.







Pumping Speed

mbar	1000	880	750	600	480	280
L/min	25	22	20	12	7.5	5

High chemical resistant

All wetted parts of VACP-D series pump are made of PTFE material which can resist most of corrosive gases.

No air pollution, maintenance free

VACP-D 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 direct by motor with no additional belt-driven transmission; the quality vibration-proof assembly makes VACP-D series run at the lowest noise level among all other equivalent pumps.

Thermal protection device

Every motor of VACP-D 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.



Specifications

Model	VACP-D410	
Power	115V/ 60Hz	220V/ 50Hz
Max. power (W)	90	95
Max. current (A)	1.4	0.5
Max. vacuum (mbar)	13	13
Max. Flow Rate（L/min）	25	25
Motor Speed (rpm)	1700	1450
Work Mode	Double	Double
Outlet (mm)	8	8
External Dimension (W*D*H)(mm)	294*156*195	294*156*195
Noise Level (dB)	50	50
Order No.	169410	169410
Package Dimension (W*D*H)(mm)	350*250*290	350*250*290
N.W./G.W.(kg)	8.5/9.2	8.5/9.2

Diaphragm Vacuum Pump

VACP-LH51 VACP-LH52 VACP-LH102

Applications

Vacuum filtration

Drying ovens

Eco-friendly and cost-effective alternative to water jet pumps

Molecular distillation

Vacuum concentration

Gel drying



VACP-LH51

Description

These diaphragm vacuum pumps are designed for continuous, oil-free operation, featuring low noise levels and high operating efficiency. They are suitable for a wide range of laboratory applications, such as vacuum filtration and rotary evaporation. The series also includes dual-function models (providing both vacuum and pressure) to help optimize laboratory procurement costs.

- Oil-Free Diaphragm Vacuum Pump
- Pumping Speed: 30 L/min, 60 L/min
- Ultimate Vacuum: 50 mbar, 150 mbar
- Diaphragm Material: HNBR
- Stable pressure, adjustable via a valve

Advantages

Stable pressure, adjustable via a valve.

Compact, space-saving design with convenient portability.

Plug-and-play simplicity.

Continuously running for 24 hours.

Easy to maintain.



Specification

Model	VACP-LH51	VACP-LH52	VACP-LH102
Pumping Speed (L/min)	30	30	60
Ultimate Vacuum (MPa)	>0.085 (150 mbar)	>0.095 (50 mbar)	>0.085 (150 mbar)
Pressure (psi)	/	/	40
Number of Pump Heads	1	2	2
Motor Power (W)	180	180	180
Diaphragm Material	HNBR	HNBR	HNBR
Sound Emission (dB)	<50	<50	<50
Function	Vacuum	Vacuum	Vacuum & Pressure
Dimensions (L*W*H) (mm)	250*135*210	315*135*210	315*135*210
Weight (kg)	7.5	10	10

Diaphragm Vacuum Pump

VACP-LH51P VACP-LH52P VACP-LH102P





VACP-LH51P

Description

Chemically resistant diaphragm vacuum pumps are designed for aggressive media. These portable, oil-free vacuum pumps are ideal for use with all brands of rotary evaporators, concentrators, vacuum ovens, and filtration devices. They can be used to transfer and evacuate almost all laboratory gases and vapors.

Advantages

The pump chamber is made of chemically resistant materials to withstand extreme chemicals.

PTFE-bonded diaphragm.

Easy to use and maintain.

- Chemically Resistant Diaphragm Vacuum Pump
- Pumping Speed: 30 L/min, 60 L/min
- Ultimate Vacuum: 50 mbar, 150 mbar
- Number of Pump Heads: 1, 2
- Diaphragm Material: PTFE-bonded



Specification

Model	VACP-LH51P	VACP-LH52P	VACP-LH102P
Pumping Speed (L/min)	30	30	60
Ultimate Vacuum (MPa)	>0.085 (150 mbar)	>0.095 (50 mbar)	>0.085 (150 mbar)
Pressure (psi)	/	/	40
Number of Pump Heads	1	2	2
Motor Power (W)	180	180	180
Diaphragm Material	PTFE-bonded	PTFE-bonded	PTFE-bonded
Sound Emission (dB)	<50	<50	<50
Dimensions (L*W*H) (mm)	250*135*210	315*135*210	315*135*210
Weight (kg)	7.5	10	10

Rotary-Vane Vacuum Pump

VACP-T8D VACP-T24D





VACP-T8D



VACP-T24D

Applications

It's widely used in semiconductor, spatial simulation, pharmaceutical R&D, chemical engineering, metallurgy, vacuum furnaces, vacuum coating, lamp and lamp tube manufacturing, and engineering analysis.

Description

This series of pumps is a type of mechanical vacuum pump widely used in the vacuum field. The gas is inhaled, compressed and exhausted through the operation of rotating blades and eccentric rotors. It features a simple structure, high reliability, and a wide pumping speed range. It has good gas ballast function, strong adaptability, low vibration and low noise. Such design makes it economical and practical.



VACP-T24D

Features

The internal pump adopts corrosion-resistant materials and techniques.

Fewer parts make maintenance more easier.

With magnetic shaft sleeve, more stable and reliable.

Built-in active anti-oil return valve design to prevent oil return upon shutdown.

Adjustable gas ballast valve for convenient water vapor discharge in different processes.

A more constant and stable forced oil supply structure ensures stable operation with low noise under high pressure.





Specifications

Model	VACP-T8D	VACP-T24D
50Hz Nominal Pumping Speed (m3/h) (L/s)	8/2	24/6
50Hz Pumping Speed (m3/h) (L/s)	8/2	23/6
Partial Ultimate Pressure Without Gas Ballast (Pa)	5x10-2	5x10-2
Total Ultimate Pressure Without Gas Ballast (Pa)	1	1
Total Ultimate Pressure With Gas Ballast (Pa)	6	6
Vapour Allowed Pressure (Pa)	20	20
Vapour Pumping Ability (g/h)	230	300
Oil Capacity (Min./Max.) (L)	1/1.4	1.45/1.9
Sound Emission (Gas Ballast Close/Open) (dBA)	58/60	60/62
Ambient Temperature (C)	5~45	5~45
Connector	KF25	KF25
Electricity	Single-phase/Three-phase	Single-phase/Three-phase
Power Rating (kW)	0.37	0.75
External Dimension (mm)	520*175*285	564*175*285
Net Weight (Without Oil) (kg)	33	38

Bench Water Circulating Vacuum Pump

VACP-WC3Y





PTFE spray jets



PTFE spray nozzle



Fluoroelastomer tube

Spray Paint Teflon (PTFE) plus FV Rubber on the ejector and suction nozzle. Hose is made of fluorine rubber.

Better corrosion resistance and more reliability and longer service life.

Features

Water Circulating Vacuum Pump takes circulating water as working fluid to create negative pressure by fluid jet. It can provide negative pressure condition for the processes of evaporation, distillation, crystallization, drying, sublimation, pressure-reducing filtration and so on, particularly be suitable for labs and small scale test of industries such as universities and colleges, scientific research institutes, chemical industry, pharmacy, biochemistry, foodstuff, pesticide, agricultural engineering, biological engineering.

Specifications

Model	VACP-WC3Y
Power	180W
Power supply	220V
Flow	60L/MIN
Lift	8M
Material	Anti-corrosive
Tap	2
Tapping capacity	10L/MIN
Volume	15L
Size	400*280*420
Weight	15KG

Water Circulating Vacuum Pump

VACP-WC95A



Description

It can provide negative pressure conditions for evaporation, distillation, crystallization, drying, sublimation, vacuum filtration and other processes, especially suitable for laboratories and small-scale tests in universities, research institutes, chemical industries and other industries.

Features

Obvious water saving effect

The water added in the water tank can be recycled, which overcomes the phenomenon of wasting a lot of water when the vacuum is obtained by directly flushing tap water.

It can be used for a long time after adding water once, especially suitable for laboratories with insufficient water source or water pressure.

Multi-function

In addition to providing vacuum conditions, this machine can also perform external circulation operations at the same time to provide circulating cooling water for the reaction device.

The machine is connected to the tap water source, and the temperature and water quality of the vacuum circulating water can be kept unchanged under the condition of continuous operation for a long time by supplementing the water injection source in an appropriate amount.

Energy efficient & Easy to use

The pump head of this machine is directly intruded into the water, easy to move, easy to operate and observe, and can be opened for water filling and maintenance.

The machine is equipped with five suction nozzles, which can work independently or simultaneously.

Corrosion-resistant, pollution-free, convenient and durable, not affected by corrosive substances such as acid and alkali, and does not produce any oil, impurities, etc. that pollute the laboratory.

Specification

Model	VACP-WC95A
Water Tank Capacity	50L
Flow	80L/min
Number of Tap	5
Single Tap Air Suction Amount	10L/min
Lift	12m
Material	Stainless steel
Electricity	220V
Power	370W
Dimensions(W*D*H)	450*340*870mm
Package Dimension (W*D*H)	740*610*1170mm
N.W./ G.W.(kg)	35/40kg

