

Chemical Resistant Diaphragm Pumps (A Series)

- > Chemvak series are chemical resistant diaphragm vacuum pumps which can be used in the chemical, pharmaceutical, petrochemical and other industries, such as suction filtration, vacuum distillation, rotational evaporation, vacuum concentration, centrifugal concentration, solid phase extraction and so on.
- > A Pumps can be widely used to hard acidic, basic and solvent vapors by utilizing corrosion proof PTFE on all the wetted surfaces. The vacuum chamber and the drive chamber are separated and sealed, Ensure a longer working life of mechanical components
- > Chemvak A series pumps are driven by Diaphragm, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.
- > Driven direct by motor with no additional belt-driven transmission; the quality vibration-proof assembly makes Chemvak A series run at the lowest noise level among all other equivalent pumps.
- > Cost-effective, reliable, unique structural design, noise less than 50dB.
- > A variety of models are available to meet the various needs of the laboratory, with a minimum vacuum of up to 2 mbar.
- > Every motor of Chemvak A 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.

Features

- > No pollution when working.
- > Can be used for suction of high temperature steam or Condensat
- > Overheat protection and power insurance
- > Chemical resistant design
- > Suitable for corrosive gases and steam media
- > Environmentally friendly design
- > Strong tightness



Specifications

Model	A300	A400	A410	A510	A600	A610
Max. vacuum (mbar)	100	120	13	8	100	2-4
Max. Flow Rate (L/min)	20	30	25	40	50	40
Number of Stages	Single	Single	Double	Double	Single	Double
Outlet (mm)	10	10	10	10	10	10
Size WxDxH (mm)	230x143x165	230x155x173	230x155x173	290x190x210	290x190x210	290x190x210
Order No.	170300-22	170400-22	170410-22	170510-22	170600-22	170610-22



Chemical Resistant Diaphragm Pumps (C Series)

C series 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 Chemvak C series to be quiet, safe, maintenance-free and cost effective vacuum pumps.

Application Areas

- > Chemical and petrochemical Industry
- > Pharma Industry
- > Filtration processes
- > Vacuum distillation
- > Rotary evaporation
- > Vacuum and centrifugal concentration
- > Solid phase extraction
- > Conventional drying and gel drying
- > Advanced substitute for water-jet pumps



Specifications

Model	C300	C400	C410	C510	C600	C610
Power	115V / 60Hz 220V / 50Hz	115V / 60Hz 220V / 50Hz	115V / 60Hz 220V / 50Hz	115V / 60Hz 220V / 50Hz	115V / 60Hz 220V / 50Hz	115V / 60Hz 220V / 50Hz
Max. vacuum (mbar)	100	120	13	8	90	2-4
Max. Flow Rate (L/min)	22	34	25	41	60	37
Number of Stages	Single	Single	Double	Double	Single	Double
Outlet (mm)	10	10	10	10	10	10
Size WxDxH (mm)	233*110*210	294*156*195	294*156*195	380*156*226	380*162*226	380*171*226
Order No.	169300	169400	169410	169510	169600	169610



High-power Chemical Resistant Diaphragm Pumps Frequency conversion Chemical Resistant Diaphragm Pumps

C series 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 Chemvak C series to be quiet, safe, maintenance-free and cost effective vacuum pumps.

- > New generation of intelligent vacuum technology, modular design, integrating variable frequency pumps and control units, compact design, light weight. It can adjust the speed of the diaphragm pump by frequency conversion motor and controller, control the vacuum pressure more accurately.
- > PID Self-tuning for vacuum control, the controller automatically changes the PID value according to the artificial intelligence logic algorithm, accurately adjusting the motor speed and stabilizing the precise vacuum degree.
- > This series of chemical resistant vacuum pumps are suitable for the treatment of corrosive gases in the chemical, pharmaceutical, petrochemical and other industries, such as extraction, vacuum distillation, rotational evaporation, vacuum concentration, centrifugal concentration, solid phase extraction and other uses.
- > All parts in contact with gas and condensate are made of high-quality PTFE, the gas chamber and drive chamber are separated and sealed to ensure a long life of the mechanical parts
- > Overheat protection, automatic shutdown when the temperature is too high, and automatic start when it back to the normal temperature, to ensure the security and stability of the system.

Features

- > Vacuum stability, easy to control, high control precision
- > Excellent chemical and vapour resistance
- > In the high vacuum degree, the performance is still very good.
- > Long life, simple and convenient for maintenance.
- > Simple and convenient to work in a stable and lasting way
- > Small structural size, energy conservation and environmental protection
- > High level of protection for motor, suitable for various environments

Application

- > Vacuum distillation for large volume
- > Large capacity reaction kettle
- > Large capacity vacuum filtration
- > Vacuum enrichment
- > Vacuum drying
- > Various applications in the semiconductor industry



Specifications



Model	C900E	C920Z	C960T	C980V
Max. vacuum (mbar)	< 30	< 8	< 2	< 1
Max. Flow Rate (L/min)	95	75	60	40
Number of Stages	Single	Double	Triple	Triple
IP Code	IP55	IP55	IP55	IP55
Outlet (mm)	10	10	10	10
Size WxDxH (mm)	440*270*240	440*270*240	440*270*240	440*270*240
Order No.	169900-22	169920-22	169960-22	169980-22

Specifications

Model	C900EF	C920ZF	C960TF	C980VF
Power	50Hz ,230/400, V Δ /Y		60Hz ,265/460, V Δ /Y	
Max. vacuum (mbar)	< 30	< 8	< 2	<1
Max. Flow Rate (L/min)	95	75	75	40
Motor Speed (rpm)	1380(50Hz)/1680(60Hz)			
Number of Stages	Double	Double	Triple	Triple
IP Code	IP55	IP55	IP55	IP55
Outlet (mm)	10	10	10	10
Size WxDxH (mm)	440*270*240	440*270*240	440*270*240	440*270*240
Order No.	169900B-22	169920B-22	169960B-22	169980B-22

Solvent Recovery Systems

- > Sealed system to enable a good distillation environment
- > Precise control of the evaporation process
- > Compact and environmental friendly design
- > Low noise
- > Buffer bottle prevents particles from damaging the pump
- > Direct electric connection
- > Ultimate vacuum range: 2 – 30 mbar
- > Flow rate range: 10 – 95 L/min



CSH System

CSH System

The inlet of the CSH System is connected to a segregation bottle, whereas the outlet is connected to a condenser, which is used to condensate and recover the solvent.

Model	CSH 410	CSH 510	CSH 610
Build in Pump Type	C410	C510	C610
Power (W)	95	245	245
Ultimate Vacuum (mbar)	13	8	2
Max. Flow Rate (l/min)	25	34	34
Outlet Size (outer diameter in mm)	10	10	10
Weight (kg)	12.5	15.8	16.6
Order No.	900512	900513	900514



CSC System

CSC System

The inlet of the CSH System is connected to a segregation bottle, whereas the outlet is connected to a condenser, which is used to condensate and recover the solvent. In addition, the system contains a vacuum controller to set, display, and control the vacuum.

Fully automated vacuum generation system comprising Chemical resistant diaphragm vacuum pump, base plate, high performance condenser, segregation bottle, Vacuum control device, valves and control unit.

Model	CSC 410	CSC 510	CSC 610
Build in Pump Type	C410	C510	C610
Power (W)	95	245	245
Ultimate Vacuum (mbar)	13	8	2
Max. Flow Rate (l/min)	25	34	34
Outlet Size (outer diameter in mm)	10	10	10
Weight (kg)	16	19.3	20.1
Order No.	900522	900523	900524

Oil-Free Piston Vacuum Pumps

Chemvak V series vacuum pump is a piston-powered, oil-free pump. With innovative electronic, mechanical technology and human design concept make, compact and light weight, clean and maintenance free, safe and comfortable.

Application Areas

- > Biology laboratories
- > Food industry
- > Microbiological detection
- > Vacuum extraction
- > Liquid filtration
- > Vacuum drying
- > Suspended solids measurement



Specifications

Model	V300	V400	V410	V430	V600	V610	V800	V810
Max. vacuum (mbar)	100	100	30	150 / 5.5bar	100	30	100	30
Max. flow rate (L/min)	17	34	19	28	60	40	80	50
Port thread (mm)	9	9	9	9	9	9	9	9
Dimension WxDxH(mm)	272x142x165	310x152x165	310x152x165	247x235x200	340x155x195	340x155x195	340x185x195	340x185x195
Order No.	167300-22	167400-22	167410-22	167430-22	167600-22	167610-22	167800-22	167810-22

Multi-Position Filtration Systems

The manifold is made of SS316

All parts of manifold are made of SS316 Which are excellent chemical resistance and can be fast sterilized by flame and steam.

The patented spin-lock design

The manifold uses a patented spin-lock connection which facilitates fast and stable installation without clamp.

Individual control valve

Each branch permits individual control.

Application Areas

- > Biological laboratories
- > Chemical industry
- > Microbiological detection
- > All kinds of liquid filtration

Compatible to different sizes of funnels

manifolds are available to fit 100, 300, 500ml funnel at option.

Light and handy aluminum design

The manifold is made of anodized aluminum which is autoclavable, light and cost-effective.

Magnetic filter holder is included

Magnetic filter holder allows one-handed operation, prevents possible twisting and tearing of the membrane.



BioVac 630B



BioVac 321A

Specifications

Model	BioVac330B	BioVac630B	BioVac321A	BioVac321B
Max. Flow Rate	34 l/min	58 l/min	34 l/min	34 l/min
Ultimate Vacuum(mbar)	150 mbar	150 mbar	150 mbar	150 mbar
Waste Bottle (Capacity in ml/ Material)	3000 ml, PC	3000 ml, PC	3000 ml, PC	3000 ml, PC
Number of Branches	3	6	3	3
Manifold Material	Stainless Steel	Stainless Steel	Aluminum	Aluminum
Filter Diameter(mm)	47 / 50 mm	47 / 50 mm	47/50 mm	47/50 mm
Filter Cup (Capacity in ml/ Material)	100 ml Stainless Steel	100 ml Stainless Steel	300 ml Magnetic	100 ml Stainless Steel
Effective Filtration Area(cm2)	9.6 cm ²	9.6 cm ²	9.6 cm ²	9.6 cm ²
Outlet Diameter(mm)	8 mm	8 mm	8 mm	8 mm

Filtration Collocations

Features

- > Wide range of pumps and filtration flasks
- > High quality components
- > Quick filtration results
- > Easily exchangeable elements

Application Areas

- > Suspended solids measurement
- > HPLC
- > Gas chromatography
- > AA micro-analysis
- > Mobile phase decontamination
- > Food and beverages industry
- > Pharma industry



Specifications

Model	V300A	V300B	V300SS	C300A
Flow Rate of the Pump(l/min)	17 l/min	17 l/min	17 l/min	22 l/min
Ultimate Vacuum(mbar)	150 mbar	150 mbar	150 mbar	210 mbar
Filtration Glass Set	VF6	VF1	VF2	VF3
Suction Bottle Capacity(ml)	1000 ml	1000 ml	1000 ml	1000 ml
Filter Diameter(mm)	47/50 mm	47/50 mm	47/50 mm	47/50 mm
Filter Flask Capacity(ml)	300 ml	300 ml	100 ml	300 ml
Filter Flask Material	(Glass Filter Cup)	(Magnetic Filter Cup)	(Stainless Steel Filter Cup)	(Glass Filter Cup)
Effective Filtration Area(cm ²)	9.6 cm ²	9.6 cm ²	9.6 cm ²	9.6 cm ²
Outlet Connector(mm)	8 mm	8 mm	8 mm	8 mm
Order No.	167301	167302	167303	169301

Rotary Vane Vacuum Pumps

Oil-sealed Rotary Vane vacuum pumps are widely used traditional vacuum pumps in research and production, can be used independently, as well as working as backing pumps for molecular pumps or diffusion pumps. Wiggins' direct driven rotary vane pumps are available as one and two-stage versions, cover the range from desktop lab pumps to production line pumps, with low noise and stable working temperature for common voltages and frequencies, long lifespan, and outstanding reliability for chemical applications. Various application areas may include vacuum distillation, vacuum filtration, vacuum inspection, vacuum freeze drying, vacuum coating, vacuum leak detection, vacuum packaging, vacuum adsorption, etc.

Features

- > Compact structure
- > Very good sealing
- > No returning throughput
- > Oil-spout prevention
- > Low noise
- > Oil-observation window
- > Handle for easy transportation
- > High flow rate
- > Low and stable ultimate vacuum
- > High evaporation resistance
- > Comparatively high chemical resistance
- > High longevity
- > Low maintenance rate
- > Low oil mist
- > Gas ballast valve
- > Overcurrent protection
- > Fulfills IP54 standards

R-24DSN



Specifications

Model series	R-4SN	R-8SN	R-16SN	R-8D	R-17D	R-24D	R-36D
Number of Stages	Single	Single	Single	Double	Double	Double	Double
Flow Rate (L/min)	50	120	240	180	283	360	540
Ultimate Vacuum (mbar)	2.5×10^{-2}	2.5×10^{-2}	2.5×10^{-2}	4×10^{-4}	4×10^{-4}	4×10^{-4}	4×10^{-4}
Oil Capacity (L)	0.25	0.28	0.65	1.1	1.4	1.9	2.1
IP Code	IP40	IP40	IP40	IP44	IP44	IP44	IP44
Weight (kg)	7	13.5	22	29	31	37	39
Inlet and Outlet Specifications	5/8" SAE Male 7/16" SAE Male	5/8" SAE Male 7/16" SAE Male	3/8" SAE Male; 1/4" SAE Male; 5/16" SAE Male	DN25KF	DN25KF	DN25KF	DN25KF
Order No.	900101-22	900102-22	900104-22	900111-22	900112-22	900025-22	900035-22