- 4 kinds of motors are available: 24V/12V DC brush motor and brushless motor
- Flow rate range: 12V330~560ml/min, 24V340~580ml/min
- Working conditions: temperature 0~40℃, humidity <80%
- Pump tube selection: silicone tube, imported Norprene® tube
- Transmission mode: planetary gear transmission, reduction ratio 1:8
- Pump head: the upper cover is made of engineering plastics, the pump body PA and gears are made of synthetic engineering plastics
- Installation method: Straight plate and L plate

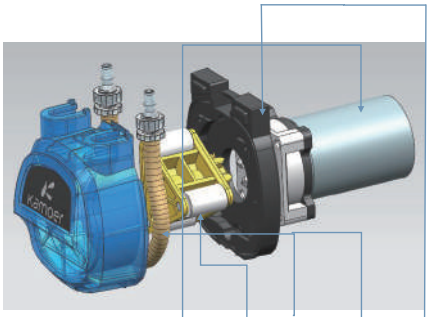
Application Areas

Automatic washing machine

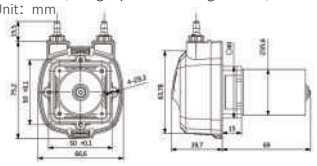
Ammonia nitrogen automatic monitor

Total phosphorus automatic monitor

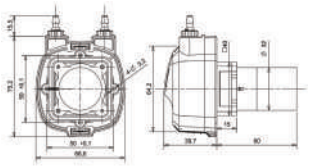
Soil analyzer



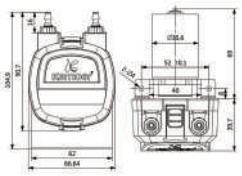
DC Brushed(Straight plate mounting method)
Unit: mm



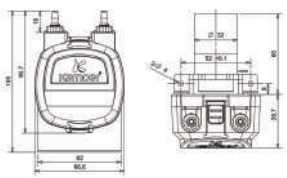
DC Brushless(Straight plate mounting method)



DC Brushed(L plate installation method)



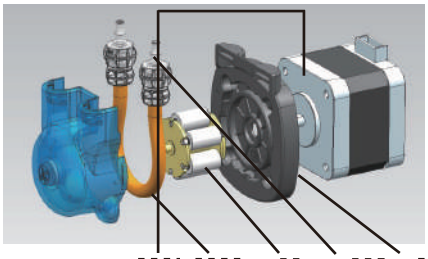
DC Brushless(L plate installation method)



Code			S16	S40	N16	N40
ID*OD(mm)			3.2*6.4	4*7.2	3.2*6.4	4*7.2
Materials			Silicone	Silicone	Norprene	Norprene
Flow rate ml/min	24V Brushed (SV) 0.4A	3 Rollers	360	580	340	530
	12V Brushed (SW) 0.8A	3 Rollers	350	540	330	500
	24V Brushless (24B) 0.3A	3 Rollers	350	560	350	560
	12V Brushless (12B) 0.6A	3 Rollers	350	560	350	560

Note: The above flow parameters are measured with pure water without pressure at 20℃ room temperature and standard atmospheric pressure. Actually, according to different media, different outlet pressures, DC motor speed errors, etc., the flow will have certain errors. The data is for reference.

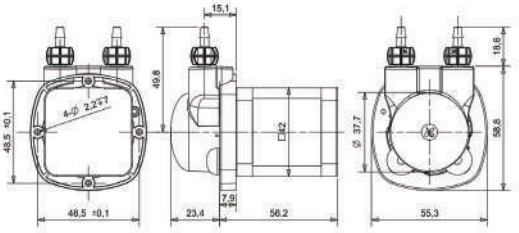
- 1 kinds of stepping motor：42 stepper motor (24V/1.2A)
- Flow rate range：20-110ml/min
- Working conditions:Ambient temperature 0-40℃ , relative humidity <80%
- Pump pipe selection ：silicone tube,imported PharMed BPT tube
- Transmission mode ：the motor drives the pump head directly to output
- Installation mode： the installation mode is fixed through the plate



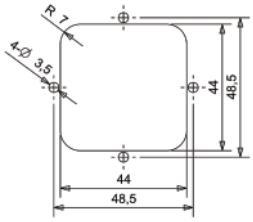
KPAS100-ST B19 6 A A

Motor selection | Pump tube selection | Number of rotors | Connector selection | Installation method

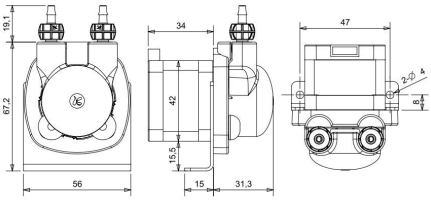
Dimensions (unit: mm)



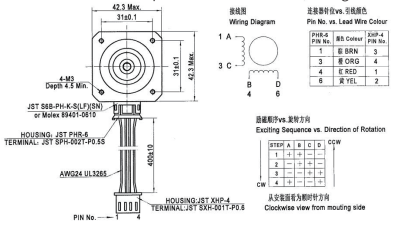
Suggested hole size drawing



Suggested hole size drawing



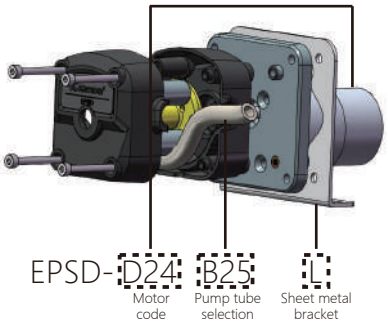
Wire Harness Specification and Wire Color Diagram



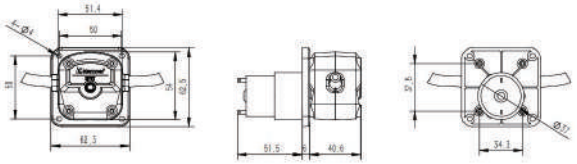
Pump tube code	B14		B19		B16
Inner diameter*outer (mm)	1.6x4.8		2.4x5.6		3.2x6.4
Pump tube material	S/BPT		S/BPT		S/BPT
Number of rotors	3	6	3	6	3
Flow rate ml/min	32	20	70	40	110
Rotating speed rpm	350rpm				
Voltage and current	24V/1.2A				

Note: The above flow parameters are measured with pure water without pressure at 20 degrees Celsius, room temperature and standard atmospheric pressure. Actually, depending on the medium and outlet pressure, there will be a certain error in the flow rate. The data is used as a reference. The current value is the input current and the actual head , Viscosity, and the length of the water inlet and outlet, it is necessary to do uniform acceleration and deceleration when controlling the stepper motor, there is a risk of loss of step when directly reaching the highest speed

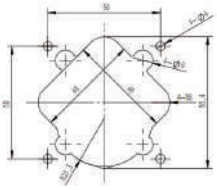
- 1 type of DC motor: 24V DC geared motor
- Flow rate range: 270~330ml/min
- Main material: The rotating part is made of PA plastic, and the housing and motor seat are made of nylon plastic
- Pump tube selection: silicone tube, imported PharMed BPT tube
- Transmission mode: The transmission mode is that the motor drives the pump head to output after transmission through the gearbox
- Main material: The rotating part is made of PA plastic, and the housing and motor seat are made of nylon plastic
- Installation method: The installation method is fixed through the board



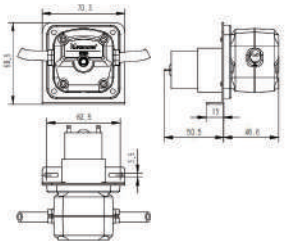
Dimensions (unit: mm)



Suggested hole size drawing



Dimensional drawing of sheet metal



Pump tube code		B25	S28
Inner diameter*outer (mm)		4.8x8	5x8.2
Pump tube material		BPT	S
Flow rate ml/min	Rotating speed rpm	32	110

Note: The above flow parameters are measured with pure water without pressure at 20 degrees Celsius, room temperature and standard atmospheric pressure. Actually, depending on the medium and outlet pressure, there will be a certain error in the flow rate. The data is used as a reference. The current value is the tube-type reference current. Influence of head, viscosity, length of inlet and outlet

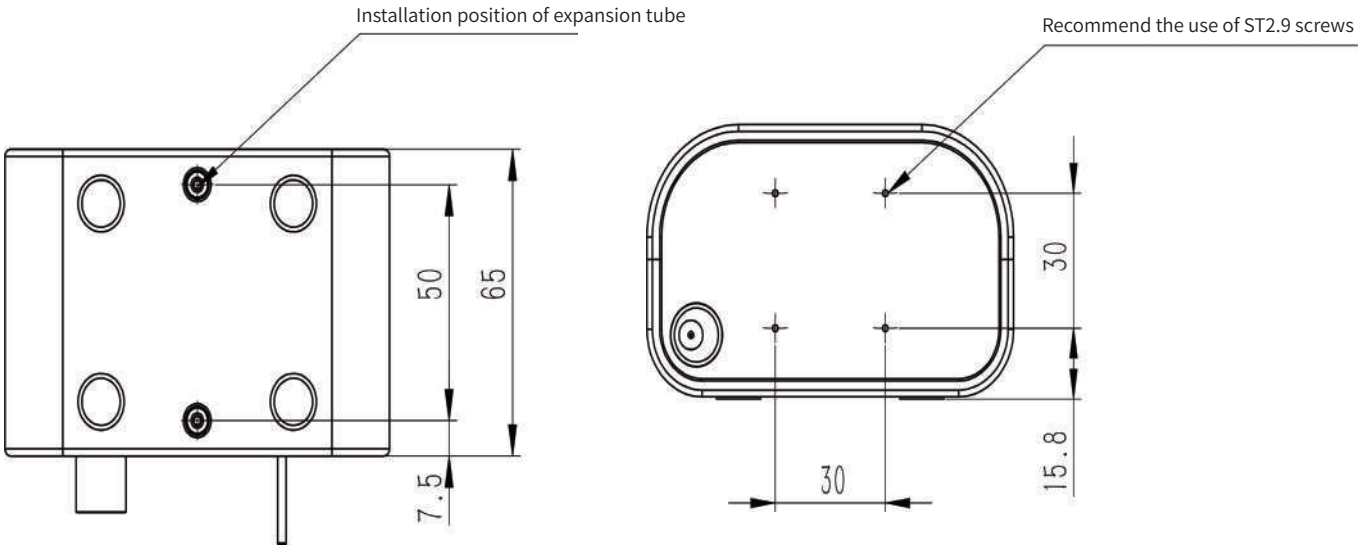
- Low cost adjustment of flow rate
- Convenient and quick replacement of pump tube
- Low noise, small space occupation
- Simple structure, maintenance-free
- With three rollers, moderate pulsation
- Liquid transfer direction can be changed
- Flow rate range: 2.6~65ml/min

Application Areas

Pipeline liquid addition

Laboratory doser

Dimensional drawing
Unit: mm



Code	S02	S04	S06	S08	S10	B06	B08
ID*OD(mm)	0.6×3.0	1.0×3.3	2.0×4.0	2.5×4.5	3.0×5.0	2.0x4.0	2.5x4.5
Materials	Silicone	Silicone	Silicone	Silicone	Silicone	BPT	BPT
Flow rate ml/min	2.6~4	4~14	11~34	17~50	19~65	9.3~32	14.6~41.5

Parameter

Weight: about 185 g
Pump tube length: 135mm (exposed 29.5mm) Code-B
175mm (exposed 49.5mm) Code-S
Working conditions: ambient temperature 0～40°C relative humidity <80%

Lab Pump Serier-KCP-C

- Low cost adjustment of flow rate
- Convenient and quick replacement of pump tube
- Low noise, small space occupation
- Simple structure, maintenance-free
- With three rollers, moderate pulsation
- Flow rate range: 2.6~65ml/min

Application Areas

Equipment

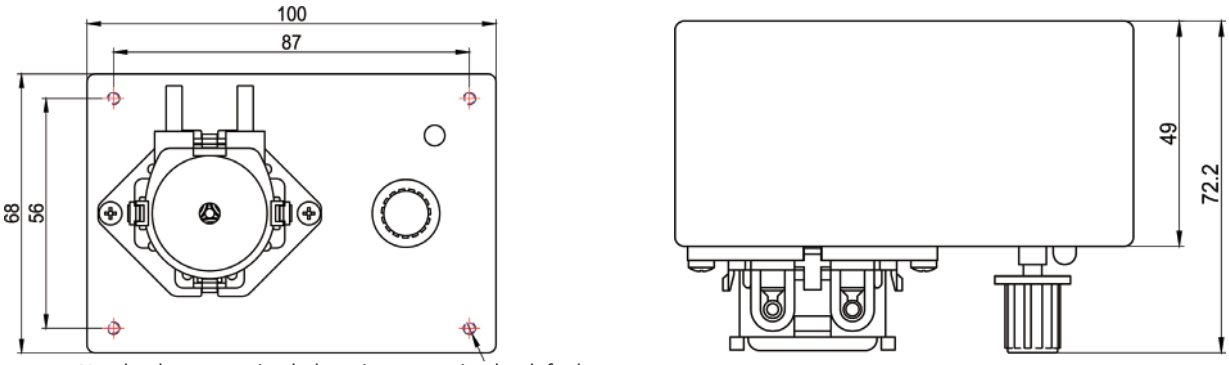
Research institutions

Aquarium fish tank

laboratory

Dimensional drawing

Unit: mm



Need to be customized, there is no opening by default

Code	S02	S04	S06	S08	S10	B04	B06	B08
ID*OD(mm)	0.6×3.0	1.0×3.0	2.0×4.0	2.5×4.5	3.0×5.0	1.0x3.0	2.0x4.0	2.5x4.5
Materials	Silicone	Silicone	Silicone	Silicone	Silicone	BPT	BPT	BPT
Flow rate ml/min	2.6~4	4~14	11~34	17~50	19~65	3~13	9.3~32	14.6~41.5

Parameter

Pump tube length: 135mm (exposed 29.5mm) Code-B

175mm (exposed 49.5mm) Code-S

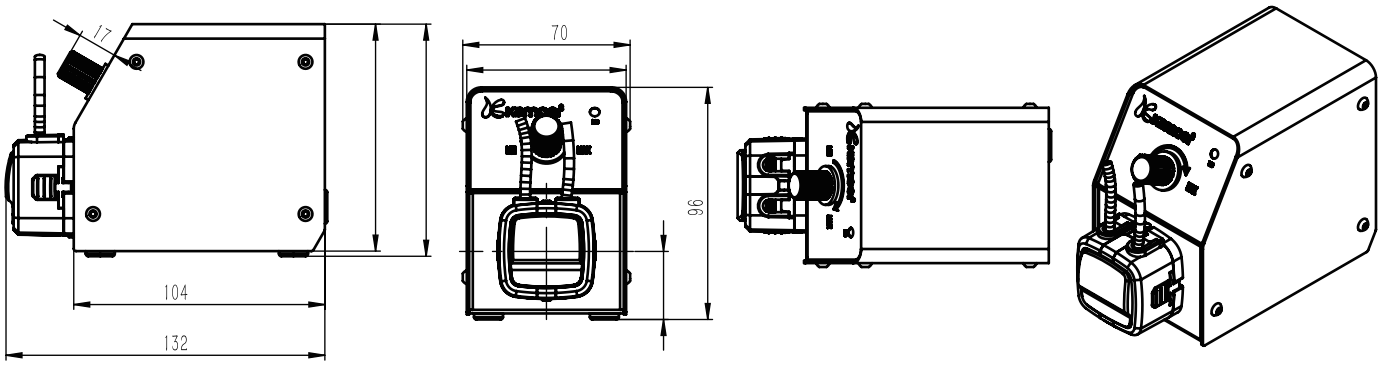
Working conditions: temperature 0～40°C, humidity <80%

Weight: 270g (excluding power supply), 330g (including power supply)

- Low cost to adjust the flow rate, multiple pumps in one
- Convenient and quick replacement of pump tube
- Low noise, small space occupation
- Simple structure, maintenance-free
- With three rollers, moderate pulsation
- Flow rate range: 2.6~41.5ml/min

Dimensional drawing

Unit: mm



Part No	Power supply	Silicone tube	BPT tube	Flow rate ml/min
CK.10.36.0645	DC24V	1X3.3	1X3.3	4-10
CK.10.36.0646	DC24V	2.0X4.0	2.0X4.0	9.3-32
CK.10.36.0647	DC24V	2.5X4.5	2.5X4.5	14.6-41.5

Parameter

BPT pump tube length 135 (exposed 29.5mm)

Working environment: ambient temperature 0-40 °C relative humidity <80%

Bare metal weight: 500g packaging weight 700g (including power supply)

- Low cost to adjust the flow rate, multiple pumps in one
- Convenient and quick replacement of pump tube
- Low noise, small space occupation
- Simple structure, maintenance-free
- With three rollers, moderate pulsation
- Gear transmission, higher precision
- Flow rate range: 4~49ml/min

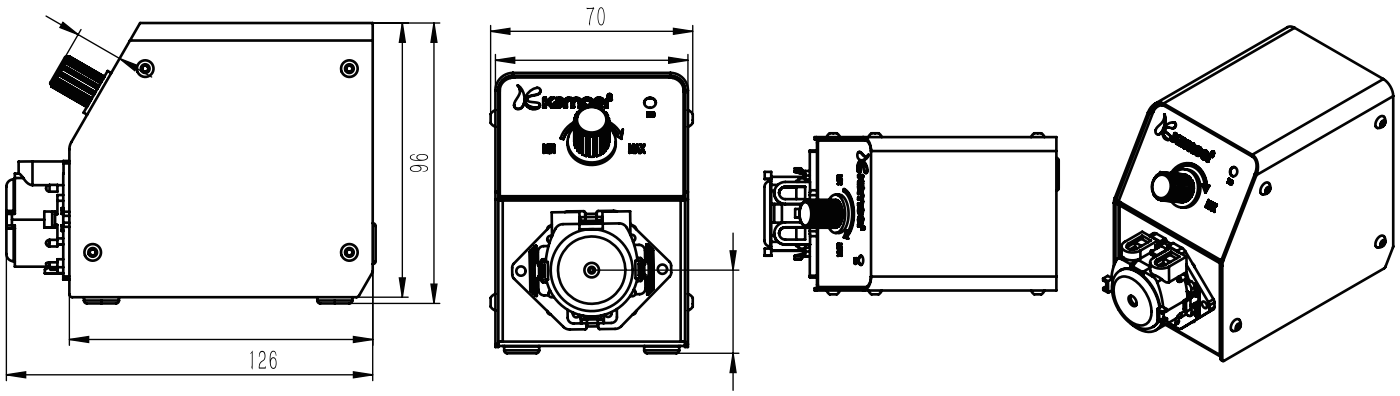
Application Areas

Pipeline liquid addition

Laboratory doser

Dimensional drawing

Unit: mm



Part No	Power supply	Silicone tube	BPT tube	Flow rate ml/min
CK.10.36.0648	DC24V	1X3.3	1X3.3	4-10
CK.10.36.0649	DC24V	2.0X4.0	2.0X4.0	14-49

Parameter

BPT pump tube length 135 (exposed 29.5mm)

Working environment: temperature 0-40°C, humidity <80%

Bare metal weight: 580g packaging weight 650g (including power supply)

F01A-STP KSP-F01A

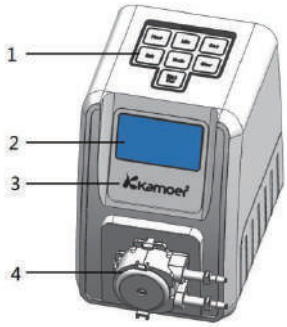
- Small appearance, powerful
- LCD screen display, key operation, friendly man-machine interface
- Support speed control, can be adjusted to the required speed through the speed control knob
- Real-time clock, support timing start and stop
- Run interval time can be set, support circulation operation, support time period operation
- Calibration function
- Support multi-machine serial use through extension cable
- Flow rate range: DC motor 27~40ml/min, stepper motor 1~10ml/min

Application Areas

Precision wire saw emery addition

Laboratory doser

Appearance introduction



Key Description

Manual key: manual operation button;

Calibration key: calibration button;

set key: set button;

OK key : OK button;

Automatic key: automatic operation button;

1. Button 2. LCD screen 3. LCD protection screen 4. Pump head assembly 5. Speed control knob 6. DC IN 7. DC OUT

Code		F01A-DC	F01A-STP
Pump head		KPP DC	KAS Stepper motor
Adapter	Input	AC 100-240V 50-60Hz 1.0A max	
	Output	DC 12V 1A	DC 24V 1A
Power input power		12W	
Add times		96 Times/Day-1 Time/4 Days	
Capacity range		1 ml-9999 ml	
Quantitative accuracy		<±2%	
Operating temperature		0-70℃	
Storage environment	Humidity	10%-90% (Non-condensing)	
	Temperature	-20℃-85℃	
Length * Width * Height		200*170*110mm	
Weight		660g	

- Small size and powerful function
- Simple structure, convenient maintenance, quick replacement of pump tube
- Support flow calibration
- Include-in real-time clock, automatically run according to the set parameters, the parameters will not be lost when power off
- Support iOS and Android devices to control the device through WIFI, support App to upgrade the device firmware
- Potted plants drip irrigation
- DC motor 27~40ml/min,Stepper motor 1~10ml/min

Appearance introduction

1. Water inlet 2. Water outlet 3. Indicator light 4. DC 12V power input 5. RESET button

Indicator light	Status	Description
Status Indicator (Blue)	The light is always on	Already connected to the cloud through a router
	Light is off	Disconnected from router
	Flashes quickly	In network distribution mode, the APP can configure the dosing pump to connect to the router
	Flashing slowly	Disconnected from the cloud
Power indicator (Red)	The light is always on	The power has been turned on
	Light is off	No power supply or power failure

Note: Drip pro uses red and blue two-color indicator lights. When red and blue light up at the same time, the indicator lights are purple.

- Upgrade version, large pump head design,
- Motor life is up to about 1000 hours
- Low noise, small space occupation
- Standard configuration of French Saint-Gobain Norprene® pump
- tube (in line with FDA certification, very suitable for food and dairy applications, heat resistance, ozone resistance, acid and alkali resistance, anti-aging, anti-oxidation, working temperature -60℃-135℃)
- Flow rate range: 30~260ml/min

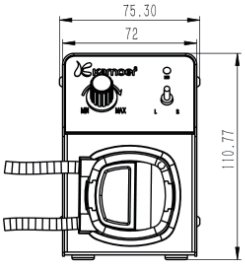
Application Areas

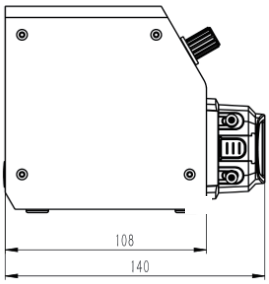
Precision wire saw emery addition

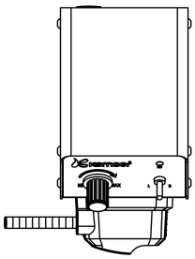
Laboratory doser

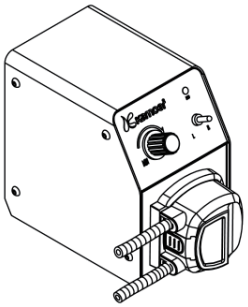
Dimensional drawing

Unit: mm









Product number	KCPPro2 - N19	KCPPro2 - N16	KCPPro2 - N40
Pump tube material	Saint-Gobain voitn BPT tube		
Pump tube model	2.4x5.6mm	3.2*6.4mm	4.0*7.2mm
Flow	30-150 ml/min	40-210ml/min	50-260ml/min
Positive pressure	0.15 Mpa		
Negative pressure	-0.09 Mpa		
Voltage	24V		
Current	0.3- 0.35(A)		
Net size	L139 x W79 x H110		
Weight	About 765g (with power supply)		

- Use stepper motor to ensure long-term stable operation
- OLED display, with rotary encoder to realize local control
- Remote control via App, support iOS and Android systems
- Memory function, keep the state before power failure after power failure recovery
- Setting parameters are not lost when power off
- Imported PharMed BPT pump tube
- With alarm push function
- Support remote firmware upgrade

Appearance introduction

1. Display 2. Adjusting knob 3. Adjusting screw 4. Water inlet 5. Water outlet 6. DC24V power interface

Length * Width * Height	136mmx87mmx124mm
Weight	1177g(Without power adapter)
Power Adapter	In put: AC100-240V Output: DC24V 1.9A
Parameter	Pump head: KCS
Interface	Rotary encoder /WiFi
Working environment	0 - 70℃, Humidity 10% - 90% (Non-condensing)
Storage environment	20℃-- 85℃,Humidity 10% - 90% (Non-condensing)
Flow range	14~145ml/min

- Convenient and quick replacement of pump tube
- Timed and quantitative work according to customer needs
- Low noise and high precision
- Simple structure, maintenance-free
- The number of rollers is adjustable, which can balance the flow rate and pulsation
- Flow rate range: 13.2~352ml/min

Parameter

LLS Plus pump weight: 2.5 kg
Power: 110v~220v Power: 20W max
Working conditions: ambient temperature 0～40°C relative humidity <80%

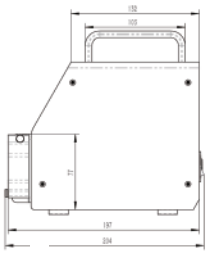
Application Areas

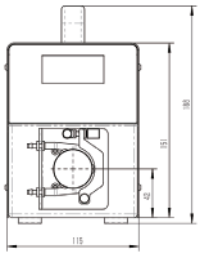
Food packaging machine

Reagent dispensing machine

Laboratory

Dimensional drawing
Unit：mm





Norprene®		PharMed® BPT		Silicone tube		Pump tube size (mm)	Flow
6 Rollers	3 Rollers	6 Rollers	3 Rollers	6 Rollers	3 Rollers		
/	/	/	/	CK 40200601	/	0.8×4	13.2ml/min
/	/	/	/	/	CK 40200301		17.6ml/min
CK 40200609	/	CK 40200606	/	CK 40200602	/	1.6×4.8	49.5ml/min
/	CK 40200309	/	CK 40200306	/	CK 40200302		71.5ml/min
/	/	CK 40200608	/	CK 40200604	/	2.4×5.6	99ml/min
/	/	/	CK 40200308	/	CK 40200304		132ml/min
CK 40200610	/	CK 40200607	/	CK 40200603	/	3.2×6.4	165ml/min
/	CK 40200310	/	CK 4020307	/	CK 40200303		231ml/min
/	/	/	/	CK 40200605	/	4.0×7.2	220ml/min
/	/	/	/	/	CK 40200305		352ml/min

Note: The product code starts with CK in the selection table. For example: "CK40200301", it means that this LLS Plus pump is equipped with 3 rollers, 0.8×4 domestic silicone pump tube, and the factory qualified flow rate is ≥17.6ml/min.

- Small volume, large flow
- Suitable for the transfer of viscous and non-viscous liquids
- Simple replacement of pump tubing
- Stainless steel rollers, long life
- Stepper motor, precise control
- The pump tube has a thicker wall and can withstand greater pressure
- Induction device can be connected externally to realize automation
- Can realize remote control of mobile phone App
- Built-in 2 working modes, easier to use
- Advanced calibration method

Application Areas

Food packaging machine

Reagent dispensing machine

Laboratory

BPT	#19	#16	#25	#17	#18
CK15/3 Rollers	190ml/min	310ml/min	650ml/min	/	/
CK15/6 Rollers	140ml/min	220ml/min	390ml/min	/	/
Silicone tube	#19	#16	#25	#17	#18
CK15/3 Rollers	170ml/min	300ml/min	670ml/min	1050ml/min	1520ml/min
CK15/6 Rollers	120ml/min	200ml/min	440ml/min	630ml/min	780ml/min
Silicone tube	#15	#24			
CK25/3 Rollers	530ml/min	950ml/min			

Technical Parameters

Instrument size: 299mm×152mm×244mm (including handle and pump);Motor life: ⩾6000h*;Working voltage: AC 100～240V;Maximum power: 75W;
Maximum speed: 350RPM;Speed control resolution: 0.1RPM;Language setting: English;Mode setting: continuous mode, volume mode
External control: temperature sensor (optional), liquid level sensor (optional), bracket (optional), foot switch (standard)

Accessories selection

UIP WIFI series intelligent peristaltic pump provides the following accessories:
Temperature sensor (optional) Liquid level sensor (optional) Bracket (optional) Foot switch (standard)

Appearance introduction

Interface Description

Each interface definition:
1. Fan: machine fan, used to remove heat when the machine is working;
2. Liquid level sensor interface: used to connect the expansion element of the liquid level sensor, so that the instrument has the function of liquid level detection;
3. Temperature sensor interface: used to plug in temperature sensor extension components, so that the instrument has the function of temperature detection;
4. CAN communication interface: connected to the RJ45 connector network cable, the machine can be remotely controlled via CAN;
5. RS485 communication interface: connect to the RJ45 connector network cable, the machine can be remotely controlled through RS485;
6. Wi-Fi antenna: 2.4G Wi-Fi antenna, which can be controlled by mobile phone App;
7. Integrated switch: switch and power cord interface;
8, 9. Expansion interface: used to connect with expansion equipment, such as foot switch, PC, PLC and other equipment, the two ports can be plugged freelyuse. But to ensure availability, please use the standard wiring harness provided by our company.
Note: The damage to the instrument caused by the use of a standard wire harness not provided by our company is not covered by the warranty.

Temperature Sensor

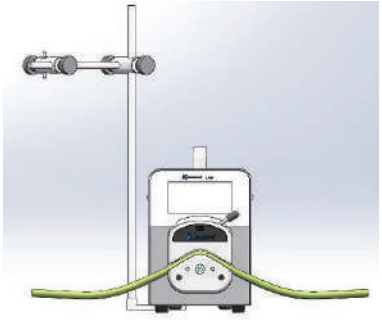
Temperature sensors can be used to monitor ambient temperature, liquid temperature, or the temperature of other objects.We have two temperature sensors, one is a normal temperature model, codenamed CT-2, and its sensing temperature range is -55°C to +85C. The other is a high temperature model, codenamed GT-2, which has an induction temperature range of -55. °C ~ +125 ° C; under the usual temperature (-10 ° C ~ +85 ° C) conditions, the temperature accuracy can reach ± 0.5 ° C. The temperature sensor line length defaults to 2 meters, which is CT-2 or GT-2; however, custom temperature sensor lines can be selected as 1, 3, 4, 5 meters.

Foot switch

The foot switch is used to replace the start/stop button. Under the appropriate interface, the foot switch can be used to control the start and stop of the pump, which greatly improves the user experience.The foot switch is a standard accessory with a line length of 1.5 meters.

Liquid level sensor

1. A liquid storage bottle for supplying a raw liquid, the instrument provides an alarm when the amount of liquid in the liquid storage bottle is exhausted; 2. a liquid collecting bottle for collecting externally transporting liquid, when the liquid collecting bottle is almost full, the instrument Provides an alarm and automatically stops the liquid supply.
The default container capacity is 2L, the container size is 125m*230mm; the sensor line is 2 meters long, the pipeline length is 2 meters, and the default tube size is 5mm*10mm.
The liquid collection bottle can provide a vacuum container and a non-vacuum container.
If you are using your own container, we can also customize the sensor without a container.



Bracket

The default pole height is 450mm and the crossbar length is 180mm.
The crossbar can be loaded with all the accessories that the user needs. The brackets are divided into two types. The code on the left is UIPZJ-the code on the right is UIPZJ-Y.

- Speed range: 0.1RPM-500RPM, forward and reverse
- Speed adjustment resolution: 0.1RPM
- Control mode: encoder, switch, external analog signal control, external R485 communication control, foot switch control
- External analog signal mode: 4-20mA, 0-5V
- Display mode: LED 4-digit digital tube, speed display, duration display
- Power-off parameter memory: support
- Working mode: automatic cycle, semi-automatic cycle, manual
- Support functions: start and stop, positive and negative, speed regulation, parameter memory, etc.
- Multi-machine interconnection: the maximum can be expanded to 15
- Flow range: ⩽670ml/min; power: <50W
- Power supply: external power adapter

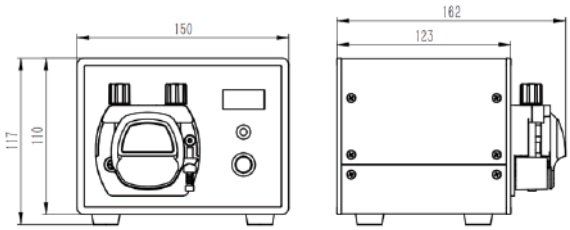
Application Areas

Reagent dispensing machine

Laboratory

Dimensional drawing

Unit: mm



Code	Pump tube size	Number of roller	Flow rate ml/min
S13	0.8x4.0	3	26
		4	25
		6	22
B14 S14	1.6*4.8	3	70
		4	68
		6	60
B19 S19	2.4*5.6	3	175
		4	165
		6	130
B16 S16	3.2*6.4	3	300
		4	285
		6	230
B40 S40	4.0*7.2	3	480
		4	420
		6	300
B25 S25	4.8*8.0	3	670
		4	580
		6	375

"Note": The maximum flow test environment is standard atmospheric pressure, transmission medium water, and new pump tubing; actual flow depends on the transmission medium, air pressure and the degree of newness of the pump tubing.

Working conditions

Environment temperature: -20°C～60°C
Rated voltage: 24V
Maximum current: 2A

- No grease
- No maintenance
- Compact design
- Low energy consumption

Application Areas

Medical treatment

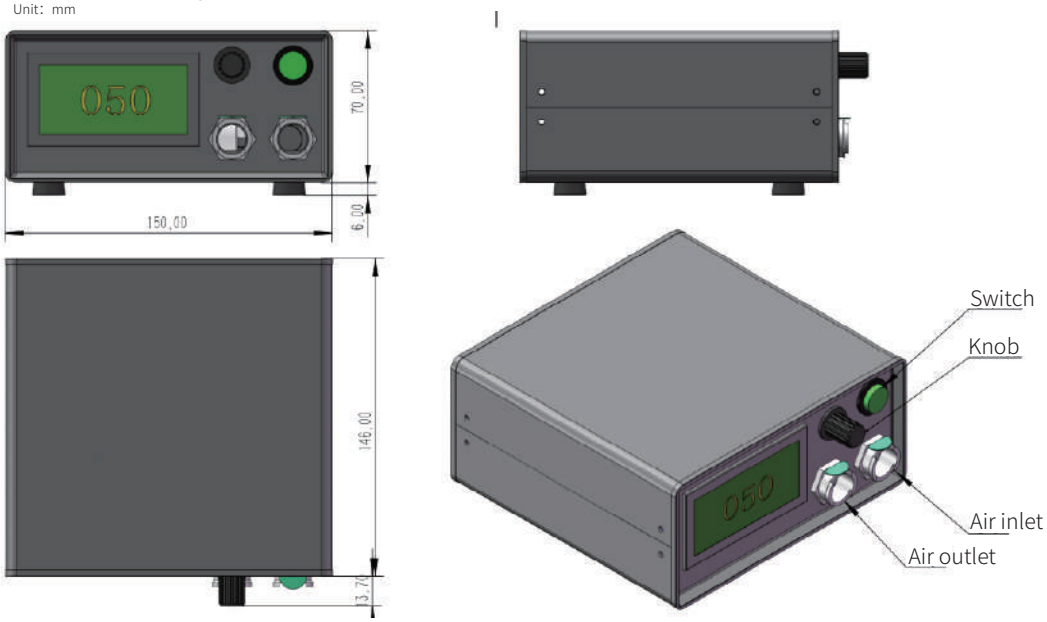
Cosmetology

Gas analysis

Physiotherapy

Dimensional drawing

Unit: mm



BOM	Motor (V)	Power (W)	Gas Flow l/min	Liquid Flow ml/min	Positive pressure Mpa	Negative pressure Mpa	Noise m/db	Model	Power supply
ck.33.03.0001	12	10	4-10	/	≥0.1	≥0.065	≤74	Lab VP15-D12	12V/1A
ck.33.03.0002	12	12	/	≥1200	≥0.05	≥0.04	≤65	Lab LP02-D12	12V/1A

- Small volume, large flow
- Suitable for transmission of viscous and non-viscous liquids
- Simple replacement of pump tubing
- Stainless steel rotor, long life
- Step motor, precise control
- The pump tube has a thicker wall and can withstand greater pressure
- Can be connected externally to realize automation
- Can be controlled via mobile app
- Built-in two working modes
- Advanced calibration method

Application Areas

Food packaging machine

Reagent dispensing machine

Laboratory

Pump head	Code	Pump tube size(mm)	Maximum flow (ml/min)
KK15 3 Rollers	19#	2.4x5.6	300
	16#	3.2x6.4	500
	25#	4.8x8	1000
	17#	6.4x9.6	1700
	18#	7.9x11.1	2400
KK15 6 Rollers	19#	2.4x5.6	160
	16#	3.2x6.4	400
	25#	4.8x8	800
	17#	6.4x9.6	1090
	18#	7.9x11.1	1200
KK25	15#	4.8x9.8	2000
	24#	6.4x11.4	3000
	35#	7.9x12.7	5000
	36#	9.6x14.6	6000

Technical Parameters

Instrument size: 304×164×244mm (including handle and pump head)

Working voltage: AC 100～240V

Maximum power: 150W; Maximum speed: 600RPM; Speed control resolution: 0.1RPM

Whole machine weight: 7.6 kg (including a single pump head); language setting: Chinese/English; mode setting: continuous mode, volume mode

External control: foot switch (standard)

Temperature sensor (optional)

Liquid level sensor (optional)

Motor life: ⩾6000h*

Temperature Sensor

Temperature sensors can be used to monitor ambient temperature, liquid temperature, or the temperature of other objects.We have two temperature sensors, one is a normal temperature model, codenamed CT-2, and its sensing temperature range is -55°C to +85C. The other is a high temperature model, codenamed GT-2, which has an induction temperature range of -55. °C ~ +125 ° C; under the usual temperature (-10 ° C ~ +85 ° C) conditions, the temperature accuracy can reach ± 0.5 ° C. The temperature sensor line length defaults to 2 meters, which is CT-2 or GT-2; however, custom temperature sensor lines can be selected as 1, 3, 4, 5 meters.

Foot switch

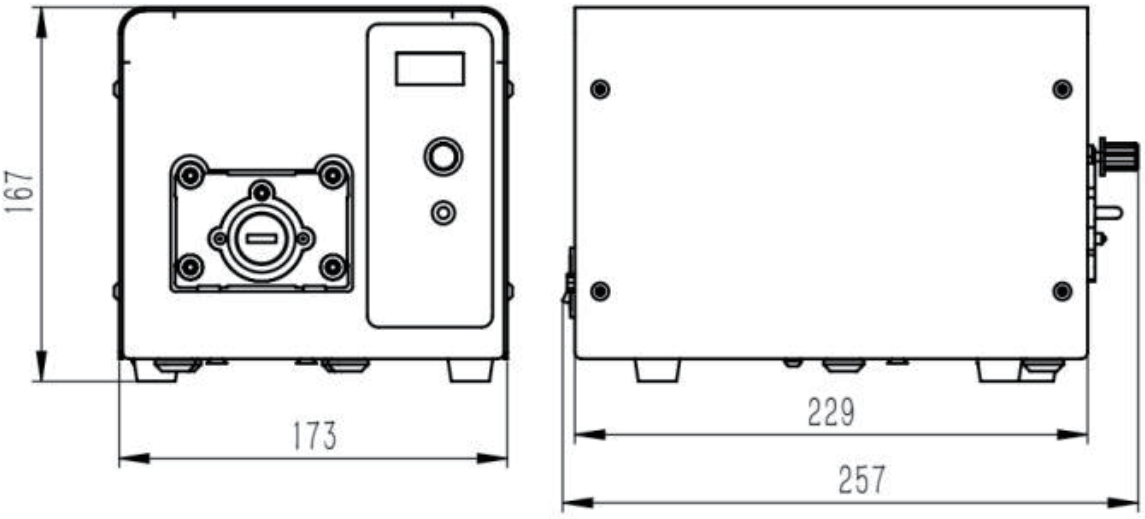
The foot switch is used to replace the start/stop button. Under the appropriate interface, the foot switch can be used to control the start and stop of the pump, which greatly improves the user experience.The foot switch is a standard accessory with a line length of 1.5 meters.

Liquid level sensor

1. A liquid storage bottle for supplying a raw liquid, the instrument provides an alarm when the amount of liquid in the liquid storage bottle is exhausted; 2. a liquid collecting bottle for collecting externally transporting liquid, when the liquid collecting bottle is almost full, the instrument Provides an alarm and automatically stops the liquid supply.
The default container capacity is 2L, the container size is 125m*230mm; the sensor line is 2 meters long, the pipeline length is 2 meters, and the default tube size is 5mm*10mm. The liquid collection bottle can provide a vacuum container and a non-vacuum container. If you are using your own container, we can also customize the sensor without a container.

- Speed range: 0.1RPM-600RPM, forward and reverse
- Speed adjustment resolution: 0.1RPM
- Control mode: encoder, switch, external analog signal control, external R485 communication control, foot switch control
- External analog signal mode: 4-20mA, 0-5V
- Display mode: LED 4-digit digital tube, speed display, duration display
- Power-off parameter memory: support
- Working mode: automatic cycle, semi-automatic cycle, manual
- Support functions: start and stop, positive and negative, speed regulation, parameter memory, etc.
- Flow range: ⩽6000ml/min CIPump600
- Power: <150W CIPump600

Dimensional drawing
Unit: mm



Working conditions

Environment temperature: -20°C～60°C

Rated voltage: 220VAC

Working voltage: AC 100～240V

Maximum power: 150W

Maximum current: 2A @220VAC

Product model	Pump head type and quantity	Recommended maximum speed
BIPump600-KK25	KK25 X1	600RPM
BIPump600-KK25D	KK25 X2	600RPM
BIPump600-KK153	KK15 3 Rollers X1	600RPM
BIPump600-kk153D	KK15 3 Rollers X2	600RPM
BIPump600-KK156	KK15 6 Rollers X1	600RPM
BIPump600-KK156D	KK15 6 Rollers X2	600RPM

Code	Pump tube size	Applicable pump head	Flow ml/min
19#	2.4x5.6	KK15 3 Rollers	320
16#	3.2x6.4		550
25#	4.8x8		1100
17#	6.4x9.6		1900
18#	7.9x11.1		2400
19#	2.4x5.6	KK15 6 Rollers	
16#	3.2x6.4		
25#	4.8x8		
17#	6.4x9.6		
18#	7.9x11.1		
15#	4.8x9.8	KK25	2000
24#	6.4x11.4		3000
35#	7.9x12.9		B/5000 C/3500
36#	9.6x14.6		6000

- 7-inch color touch screen control, easy to operate
  Support a variety of pump heads, a variety of tube types,
- adapt to different flow requirements
- App upgrade via Wi-Fi firmware
- Setting parameters are not lost when power off
- With continuous mode, quantitative mode, proportioning mode
- Contains CAN and RS485 external communication interfaces
- Contains cumulative usage record function

Appearance introduction

1：Touch screen 2：KCS pump head 3：Screen program programming interface 4：Buttons
5：Indicator light 6：CAN/RS485 communication interface 7：Fan 8.：Integrated power switch

Dimensions (length x width x height)	373x199x90mm
Weight	6kg
Power adapter input	AC100~240V
Pump parameters	Adding accuracy: 2% Flow range: 0.1-300 ml Speed range: 0.1-450 rpm
Software function	continuous mode/quantitative mode/proportioning mode
For external	RS485/CAN/Wi-Fi
Working environment	Temperature 0-70℃ Humidity: 10%-90% (non-condensing)
Storage environment	Temperature -20℃-85℃ Humidity: 10%-90% (non-condensing)

- Small size and powerful
- Using DC brushless motor, long life
- Good sealing and low noise
- Can run dry, good durability and maintenance-free
- The diaphragm material is EPDM, which has good resistance to chemicals such as alcohol, acid, alkali, oxidant, ketone and grease, and has strong chemical stability
- PWM speed control is optional, wide range flow control
- 12V and 24V voltage optional

Application Areas

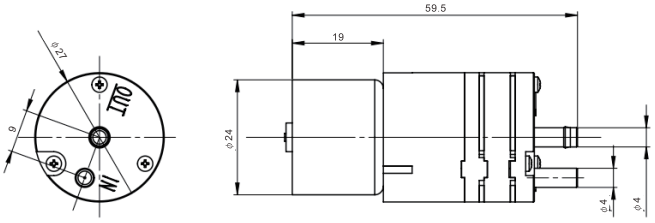
Fully automatic enzyme immune workstation

VOCs online detector

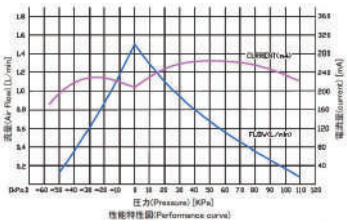
Automatic luminescence immunoassay analyzer

Dimensional drawing

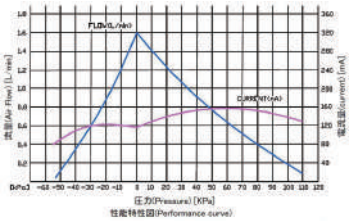
Unit：mm



A) KVP 04-1.1-12
KVP 04-1.1-12(N)
Performance characteristic curve：



B) KVP 04-1.1-24
Performance characteristic curve：



type	Parameter	
Motor	DC brushless	
Model	KVP04-1.1-12(N)	KVP04-1.1-24
PWM Speed regulation	Can't adjust speed	Adjustable speed
Rated voltage	12V	24V
Load current	320mA	170mA
Flow	≥1.1L/min	
Maximum pressure	90kpa	
Vacuum	-40kpa	
Diaphragm material	EPDM：Good sealing and strong chemical stability	
Noise	＜50Db	
Product weight	40g	
Life	⩾3000h	

Diaphragm Pump-KLP04

- Exquisite workmanship, strong and durable structure
- Small size and powerful
- Dry running, durable, chemically stable
- Long-life DC brushless

Application Areas

Potassium Permanganate Index Tester

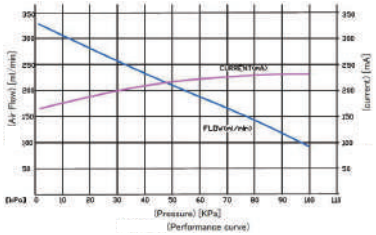
Electrode polishing machine

Fluorescence in situ hybridization dyeing machine

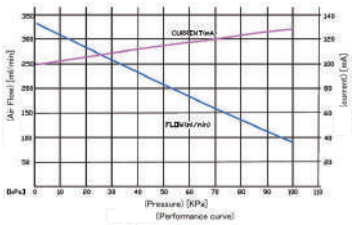
Automatic liquid-based cell staining machine

Flow curve

A) KLP 04-320-12 Performance characteristics chart:



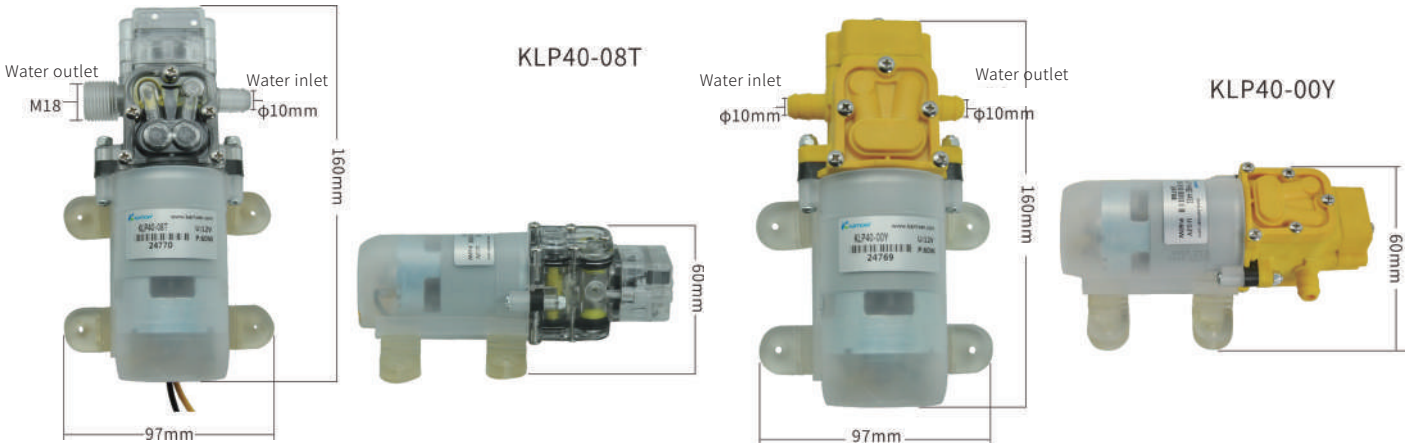
B) KLP 04-320-24 Performance characteristics chart:



type	Parameter	
Motor	DC brushless(PWM Speed regulation)	
Model	KLP04-320-12	KLP04-320-24
Rated voltage	12V	24V
Load current	250mA	150mA
Flow	320±80ml/min	
Lift range	⩾2m	
Maximum pressure	90kpa	
Diaphragm material	Good airtightness; good resistance to chemicals such as alcohols, acids, oxidants, ketones and esters, etc., with strong chemical stability and poor oil resistance; NBR: strong oil resistance is required	
Noise	＜50Db	
Product weight	40g	
Life	⩾3000h	

- Product model: KLP40-08T/KLP40-00Y
- Product color: transparent/yellow
- Product specifications: 160*97*60mm
- Drive mode: electric
- Add customization: yes
- Product material: engineering plastic
- Product weight: 0.6KG
- Speed index: 4200/2800
- Voltage index: 12V

Appearance size chart



Model	Colour	Voltage	Power	Protection type	Working pressure	Water flow	Current	Suction	Lift
KLP40-08T	Transparent	12V	60W	Pressure adjustment switch	5bar(75psi)4~6KG	4l/min	3.5A	1.5M	50M
				Backflow	5bar(75psi)4~6KG	4l/min	3.5A	1.5M	50M
KLP40-00Y	Yellow	12V	60W	Pressure adjustment switch	5bar(75psi)4~6KG	4l/min	3.5A	1.5M	50M
				Backflow	5bar(75psi)4~6KG	4l/min	3.5A	1.5M	50M

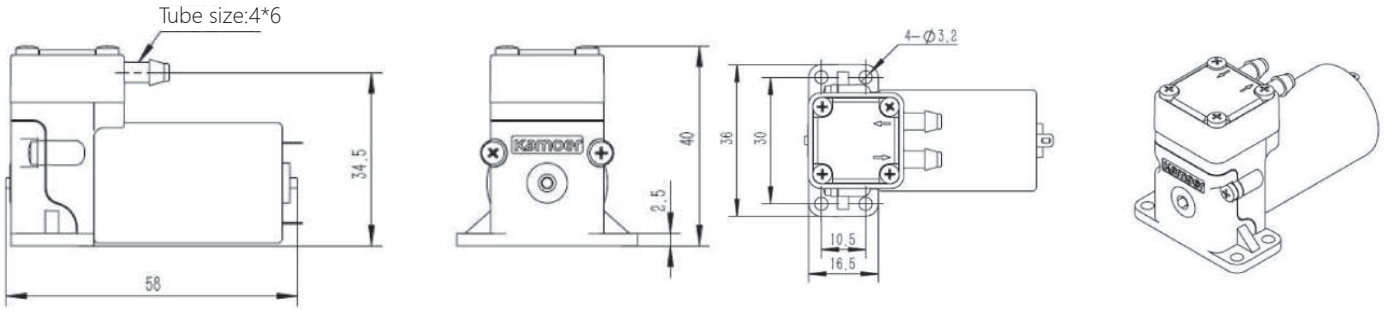
KLP40-08T Wiring diagram

KLP40-00Y Wiring diagram

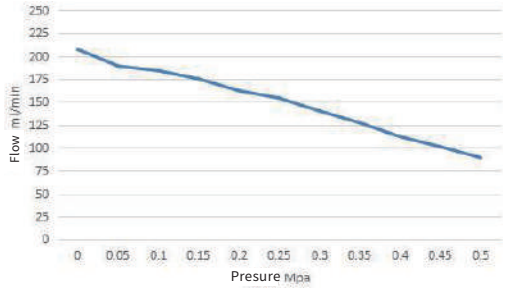
- Small size, high pressure
- Chemical stability
- Low noise, small space occupation
- Dry running, durable and maintenance-free
- Motor optional

Dimensional drawing

Unit: mm



Flow curve



Flow	Liquid pressure (max)	Negative pressure (Air)	Noise	Power	Life	Diaphragm material
≥160ml/min	0.3Mpa	0.02Mpa	≤58Db	≤6W	Brushed 500H/brushless 5000H	V
≥180ml/min	0.3Mpa	0.02Mpa	≤58Db	≤6W	Brushed 500H/brushless 5000H	E

"Note": The flow rate is tested under standard atmospheric pressure,temperature 25℃, and direct discharge without pressure at the inlet and outlet. The noise is tested at a distance of 500mm from the product in a silent room.

Other technical parameters

Fluid medium: water, corrosive medium. Not viscous liquid, not high temperature liquid.

Working environment: temperature range: 0°C～40°C;

Relative humidity: <80%

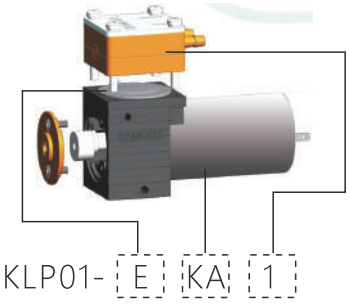
- Small size but powerful
- Positive liquid pressure up to 3bar
- Chemical stability
- Dry running, durable and maintenance-free
- Multiple choices of brush and brushless motors

Application Areas

Stool analysis and processing system

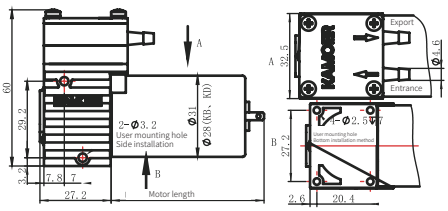
Vaginal secretion analyzer

Solder Mask Printing Machine

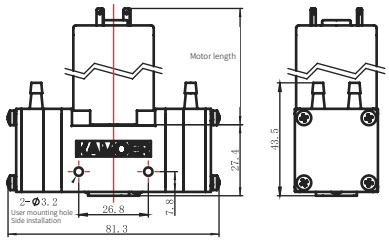


Dimensional drawing

Unit: mm

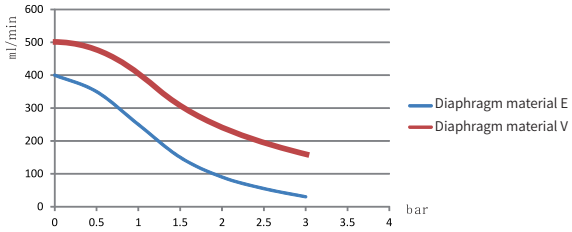


Single pump head pump



Double head pump

Flow curve



Model	Voltage	Motor	Pump head	Load current	Weight
KA	24	Brushed	1	0.3	0.2
KB	24	Brushless	1	0.26	0.245
KC	12	Brushed	1	0.36	0.2
KD	12	Brushless	1	0.38	0.275
KG	24	Brushed	2	0.38	0.322
KH	12	Brushed	2	0.69	0.322

Pump head	Diaphragm material	Flow (ml/min)	Positive (bar)	Negative (bar)
1	EPDM	≥400	0.6	0.5
	Fluorine diaphragm	≥500		
2	EPDM	≥700		
	Fluorine diaphragm	≥700		

Diaphragm Pump-KLP02

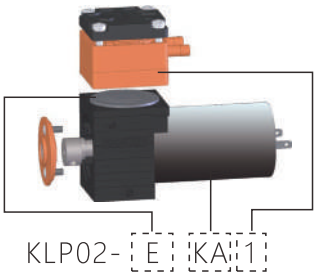
- Small size but powerful
- Positive liquid pressure up to 3bar
- Chemical stability
- Dry running, durable and maintenance-free
- Multiple choices of brush and brushless motors

Application Areas

Automobile exhaust gas tester

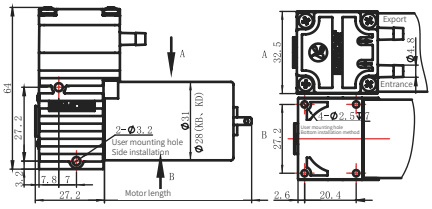
Dust removal spray

Inkjet printer

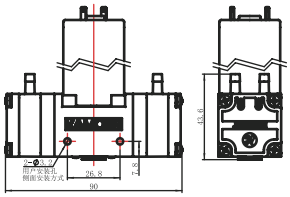


Dimensional drawing

Unit: mm

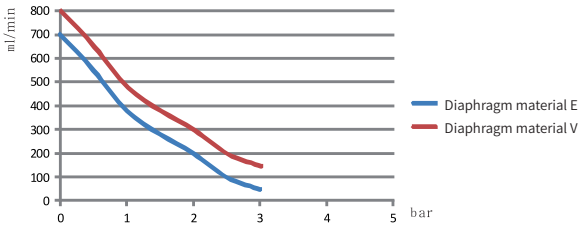


Single head pump



Double head pump

Flow curve

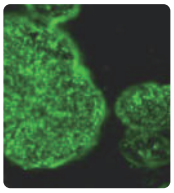


Model	Voltage	Motor	Pump head	Load current	Weight
KA	24	Brushed	1	0.3	0.212
KB	24	Brushless	1	0.26	0.250
KC	12	Brushed	1	0.36	0.212
KD	12	Brushless	1	0.49	0.250
KG	24	Brushed	2	0.38	0.336
KH	12	Brushed	2	0.69	0.336

Pump head	Diaphragm material	Flow (ml/min)	Positive (bar)	Negative (bar)
1	EPDM	≥700	0.6	0.4
	Fluorine diaphragm	≥800		
2	EPDM	≥1400		
	Fluorine diaphragm	≥1500		

- Using external rotor brushless motor, long life (5000 hours)
- Large flow, high negative pressure
- Dry running, durable, maintenance-free
- Good stability
- Flexible installation of nozzle direction (consult customer service)

Application Areas

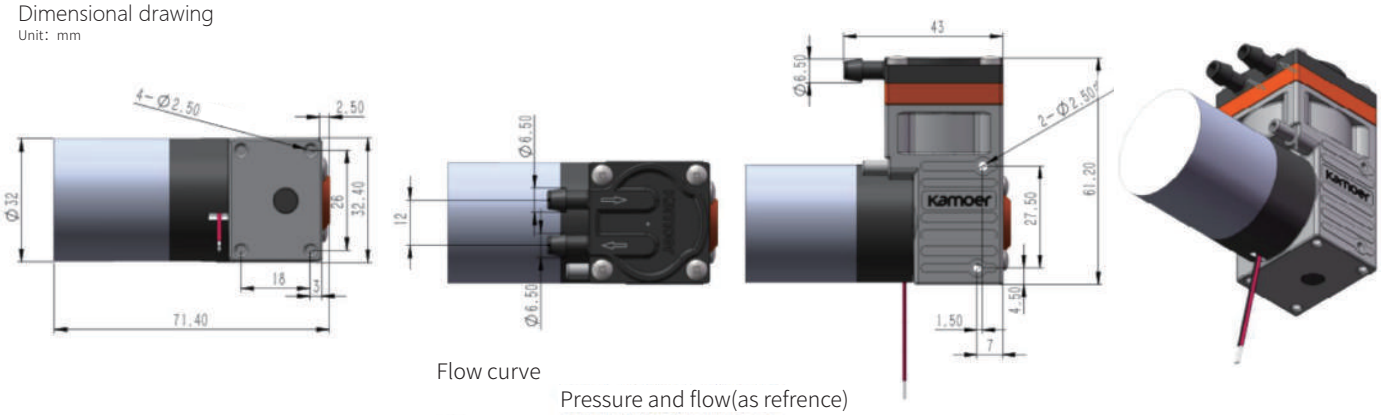


Immunofluorescence staining

Portable oxygen generator

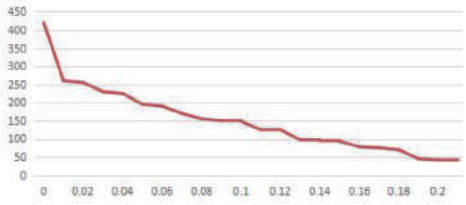
Dimensional drawing

Unit: mm



Flow curve

Pressure and flow(as refrence)



BOM	Voltage (V)	Electric current (A)	Power (W)	Air flow l/H	Positive Mpa	Negative Mpa	Noise m/db	Life H	Model	Net weight g
CK.20.81.0005	Outer roller12	1	12	420	≥0.2	0.05	≤78	5000	KZP-PE	160
CK.20.81.0006	Outer roller24	0.5	12	420	≥0.2	0.05	≤78	5000	KZP-PF	160

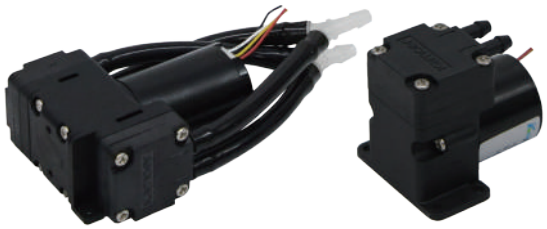
Other technical parameters

Diaphragm note--At present, our company adopts high fluorine diaphragm, and the diaphragm is made of PTFE material, which can withstand conventional corrosive gases.

Selection of accessories---A variety of connecting pipes, which can be used for different fluid transmission and docking with customer products.

Working environment-ambient temperature 0-40 degrees Celsius relative humidity <80%, it is recommended not to work for a long time under positive pressure> 0.2Mpa, otherwise it will greatly shorten the product life.

Note:product temperature ⩽85° is a normal phenomenon, suitable for tube type: 4X6, please install a filter device at the air inlet to prevent foreign matter from entering the cavity.



- High-quality engineering plastics, stable and reliable
- EPDM diaphragm & valve disc, high performance, long life
- Simple design, beautiful and generous
- High-performance brushless motor, Super power, enduring

Application Areas

On-line flue gas detector

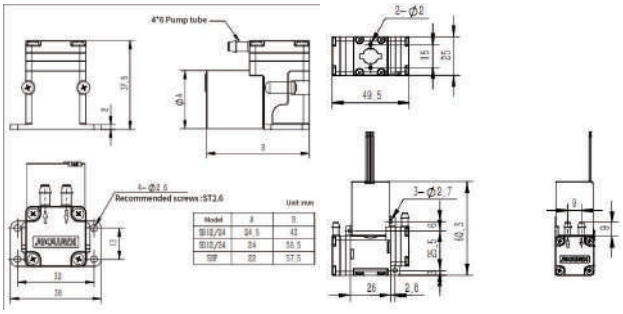
VOCs online detector

Dimensional drawing

Unit: mm

Single head type (SB series/SD series/SBP series)

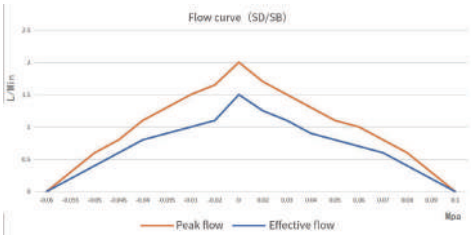
Double head type (DB series)

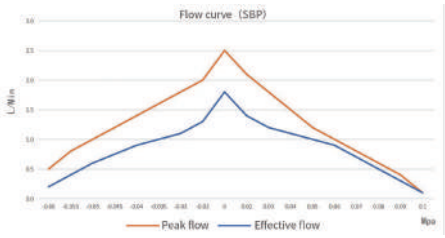


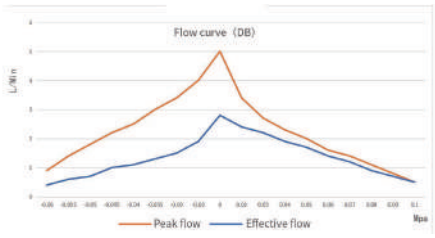
Motor wiring

Red line	Yellow line	White line	Black line
Vcc	FG	PWM	GND
Positive electrode	Speed feedback	Speed regulation	Negative electrode

Full-speed operation: the red and white wires are connected to the positive pole of the power supply, and the black wire is connected to the negative pole.







Model	Peak flow L/H	Effective flow L/H	Negative pressure Mpa	Positive pressure Mpa	Noise dB	Power W
KLVP3-SB12	2	1.5	0.05	0.08	62	2.5
KLVP3-SB24	2	1.5	0.05	0.08	62	2.5
KLVP3-SD12	2	1.5	0.05	0.08	65	2.5
KLVP3-SD24	2	1.5	0.05	0.08	65	2.5
KLVP3-SBP	2.5	1.8	0.05	0.08	65	4
KLVP3-DB12	4	2.5	0.06	0.08	65	5
KLVP3-DB24	4	2.5	0.06	0.08	65	5

Other technical parameters

Fluid medium: air, general gas
Working environment: temperature: 0°C～40°C; humidity: <70%
Product weight: 80g~90g
Maximum power consumption: 5W; product life: 5000H current
Tolerance: ±10%; protection level: IP42

- Free Maintenance
- Compact design
- Low energy consumption
- Gas flow ⩾6L/min
- Negative pressure at inlet end⩽-0.05MPa
- Positive pressure at the outlet end⩾0.1MPa

Application Areas

On-line flue gas detector

VOCs online detector

Air monitoring station

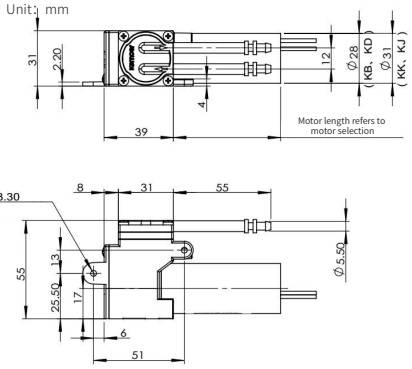
Oil mist purification equipment

KVP300-KK

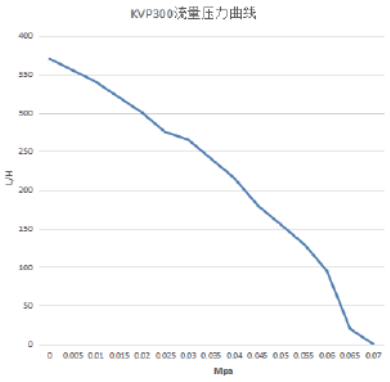
KJ: 24V DC Brushed motor
KK: 12V DC Brushed motor
KB: 24V DC Brushless motor
KD: 12V DC Brushless motor

Dimensional drawing

Unit: mm



Flow curve



Model	Voltage V	No-load current V	Rated current A	Motor length mm	Weight g	Power W	Flow L/H	Positive pressure Mpa	Negative pressure Mpa	Noise dB
KVP300-KK	12	0.42	< 1.2	58	240	8W	≥360	≥0.1	≤-0.05	< 70
KVP300-KD	12	0.55	< 1.5	67	280					
KVP300-KJ	24	0.2	< 0.5	58	238					
KVP300-KB	24	0.32	< 0.6	67	277					

"Note" This type of diaphragm air pump can not work continuously for a long time under the condition of positive pressure> 0.02MPa, otherwise the product life will be greatly shortened. For other special working conditions, please contact our company before purchasing.

Vacuum Pump-HLVP6

- Master -level professional design, beautiful and generous
- Large cavity High flow rate, low noise
- EPDM diaphragm & valve plate special process treatment, greatly prolonged life
- Brushless motor Long life, stable performance
- Rubber machine feet, effective vibration reduction

Application Areas

On-line flue gas detector

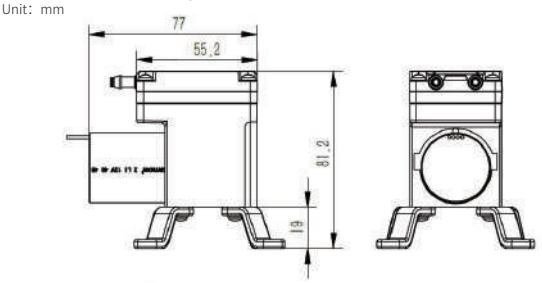
VOCs online detector

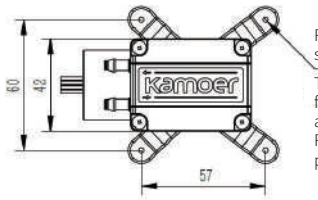
Air monitoring station

Oil mist purification equipment

Dimensional drawing

Unit：mm

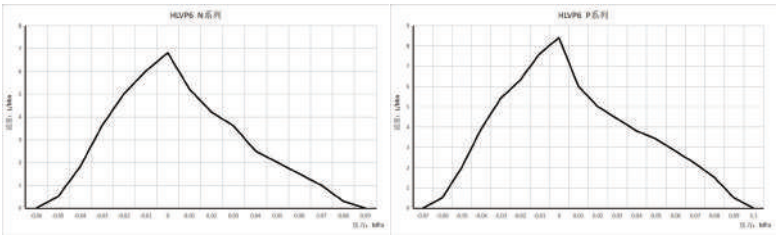




Recommended mounting screw M3/ST2.9

The rubber machine feet can rotate freely, and the installation dimensions are for reference only.
Recommended installation pipe: 4*6PU pipe.

Flow curve



Two-wire connection (the pump runs at full speed): the positive pole is connected to the red wire and the blue wire; the negative pole is connected to the black wire.

Motor wiring

Red line	Yellow line	Blue line	Black line
Vcc	FG	PWM	GND
Positive electrode	Speed feedback	Speed regulation	Negative electrode

Model	Flow L/H	Negative MPa	Positive MPa	Noise Db	Power W	Life H
HLVP6-NB12	300	0.05	0.08	60	5	5000
HLVP6-NB24	300	0.05	0.08	60	5	5000
HLVP6-PB12	400	0.06	0.10	62	8	5000
HLVP6-PB24	400	0.06	0.10	62	8	5000

Note: The flow rate is tested under standard atmospheric pressure, room temperature 25℃, and direct discharge without pressure at the inlet and outlet. Noise is tested at a distance of 500mm from the product. Quiet room test. There are currently no burshless models for sale. For other information, please contact customer service.

Note: The flow curve test environment (under standard atmospheric pressure, room temperature 25℃), due to differences in practicality, is for reference only.

- Small but powerful
- Series negative pressure<-0.082MPa
- Parallel negative pressure<-0.06MPa
- Dry running, durable and maintenance-free
- Brush or brushless motors
- Flow rate>480L/H
- Positive gas pressure>0.1MPa
- Chemical stability

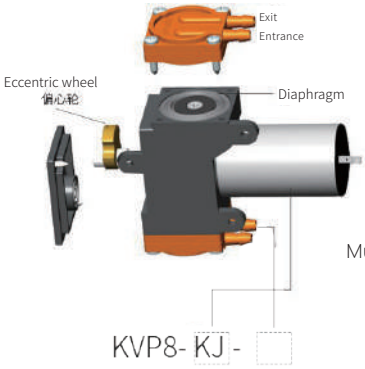
Application Areas

Negative pressure wound therapy instrument

VOCs online detector

Air monitoring station

Portable oxygen generator



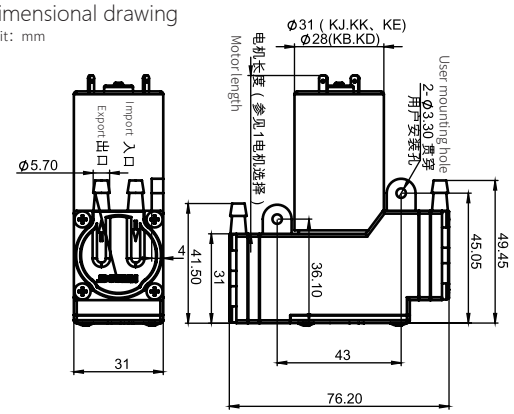
Brushless (Parallel)

Multi-wire speed regulation (In series)

Brushed (In series)

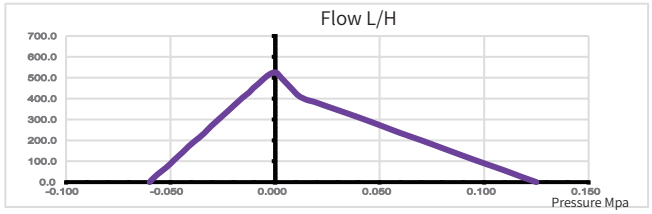
Dimensional drawing

Unit：mm

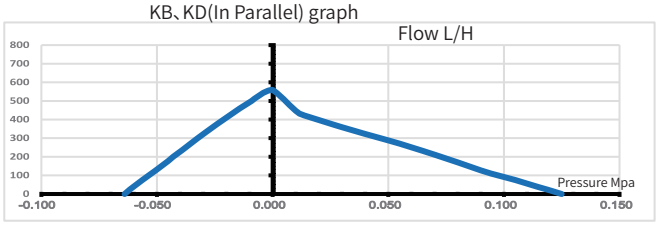


Flow curve

KJ、KK、KE(In Parallel) graph



KB、KD(In Parallel) graph



Model	Flow(L/H)	Positive (Mpa)	Negative (Mpa)
KJ、KK、KE、KB、KD、(In Parallel)	>480	>0.1	<-0.06
KJ、KK、KE、(In series)	>320	>0.12	<-0.082
KB、KD (In series)	>400		

Note:

1. No-load current is the current when no gas is delivered.
2. The rated current is the current value of the input and output terminals that are approximately the gas delivered under atmospheric pressure. In actual use, as the gas input and output pressure increase, the actual current value will increase accordingly.

Working conditions: enviroment temperature 0～40°C

Relative humidity <80%

Vacuum Pump-HLVP8

- Small but powerful
- Series negative pressure≥-0.09Mpa
- Positive pressure＞0.1Mpa
- Dry running, durable and maintenance-free
- Flow rate ≥ 360L/H
- Parallel negative pressure≥-0.07Mpa
- Chemical stability

Application Areas

Negative pressure wound therapy instrument

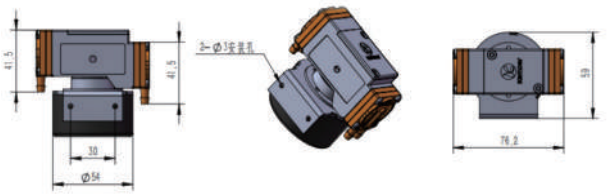
VOCs online detector

Air monitoring station

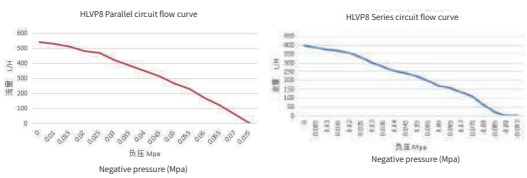
Portable oxygen generator

Dimensional drawing

Unit：mm



Flow curve



Model	Flow (L/H)	Positive pressure (Mpa)	Negative pressure (Mpa)	Noise (Db)
HLVP8-WB12-S(In serier)	≥360	Lnvalid use	≥0.09	≤72
HLVP8-WB12-(In parallel)	≥480	≥0.1	≥0.07	≤72
HLVP8-WB24-S(In serier)	≥360	Lnvalid use	≥0.09	≤72
HLVP8-WB24(In parallel)	≥480	≥0.1	≥0.07	≤72

Motor wiring

Red line	Yellow line	White line	Black line
Vcc	FG	PWM	GND
Positive electrode	Speed feedback	Speed regulation	Negative electrode

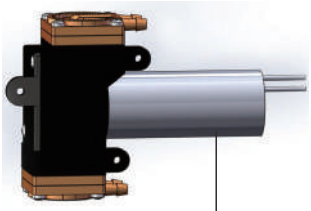
- Small size and powerful
- Series negative pressure＜-0.09Mpa
- Parallel negative pressure＜-0.07Mpa
- Positive gas pressure＞0.1Mpa
- Flow rate＞660L/H
- Dry running, durable and maintenance-free
- Brush or brushless motors
- Chemical stability

Application Areas

Negative pressure wound therapy instrument

Gene sequencing instrument

Portable oxygen generator



KVP8 plus−KJ- S

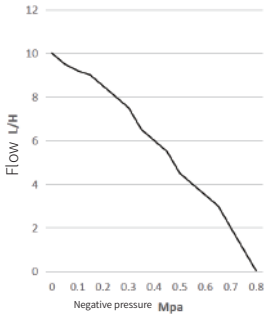
KJ: 24V DC Brush motor

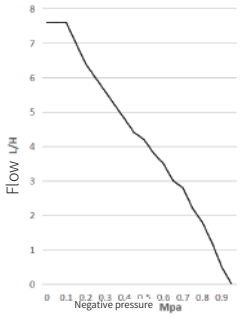
KK: 12V DC Brush motor

KB: 24V DC Brushless motor

KD: 12V DC Brushless motor

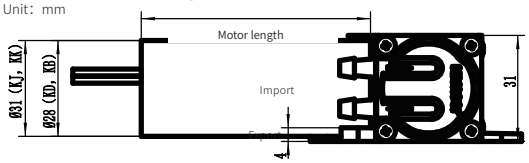
Flow curve

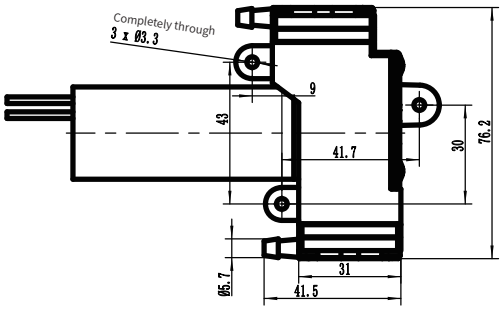




Dimensional drawing

Unit：mm





Parallel circuit	Model	Voltage (V)	Electric current (A)	Flow (L/H)	Positive (Mpa)	Negative (Mpa)	Noise (dB)	Power (W)
KVP8 plus	KK	12	0.75	≥600	≥0.15	≥0.07	≤74	9
	KJ	24	0.375	≥600				
	KD	12	0.75	≥660				
	KB	24	0.375	≥660				

Series circuit	Model	Voltage (V)	Electric current (A)	Flow (L/H)	Positive (Mpa)	Negative (Mpa)	Noise (dB)	Power (W)
KVP8 plus −S	KK	12	0.75	≥380	≥0.12	≥0.09	≤72	9
	KJ	24	0.375	≥380				
	KD	12	0.75	≥400				
	KB	24	0.375	≥400				

Note: 1. The flow parameters are measured without pressure at 20°C room temperature and standard atmospheric pressure. Actually, depending on the medium, outlet pressure, DC motor speed error, etc., the flow will have a certain error, and the data is for reference.

2. When the DC motor is running, temperature rise and heat generation are normal. 3. The vacuum diaphragm pump is mainly used as a vacuum pump. If it is used as a positive pressure source, it will affect the product life and performance. Please consult our company for specific use. In addition, it can be customized according to customer needs.

Other technical parameters

Working conditions: temperature 0～40°C; humidity <80%

This diaphragm air pump can not work continuously for a long time under the condition of positive pressure> 0.02MPa, otherwise it will greatly shorten the life of the product. Other special working conditions, please contact our company before purchasing

- Large negative pressure (In series≤0.092Mpa)
- Use DC brush motor
- Large flow (In parallel ≥13L/Min)
- Good stability
- Dry running, durable, maintenance-free
- 12v or 24v voltages are optional.

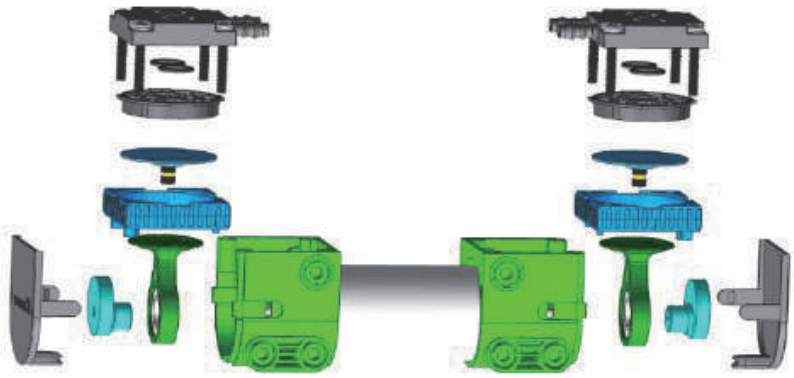
Application Areas

Automobile exhaust gas tester

VOCs online detector

On-line flue gas detector

Traditional Chinese Medicine Sulfur Dioxide Analyzer



KVP15-KL-□-□

KVP15-KL-□-□

KVP15-KL-□-□

KVP15-KL-□-□

1.Motor selection

At present we provide 4 types of motors:
KL: 24V DC brushless motor
KM: 12V DC brushless motor
KJ: 24V DC brush motor (single head)
KK: 12V DC brush motor (single head)

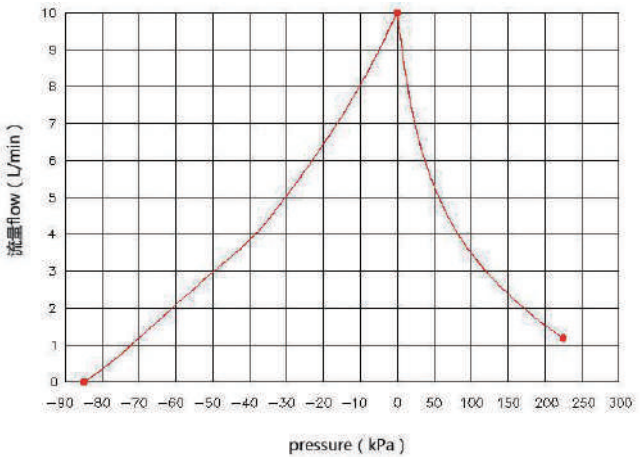
2. Single and double head selection

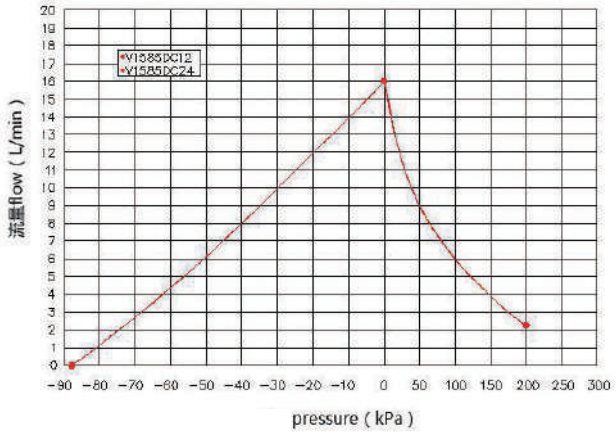
1. Single head
2. Double head

3.Diaphragm selection

1. EPDM
2. PTFE

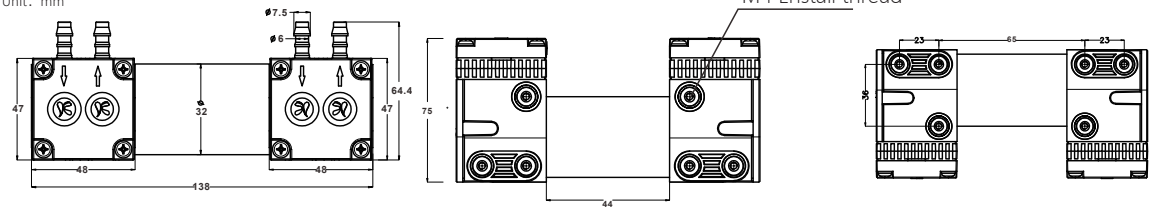
Flow curve



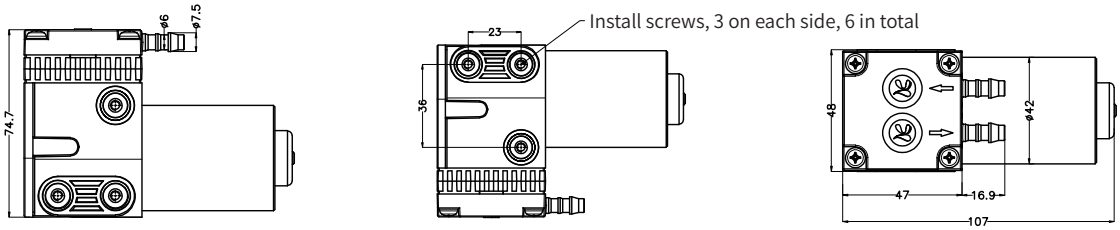


Dimensions of two pump heads

Unit: mm

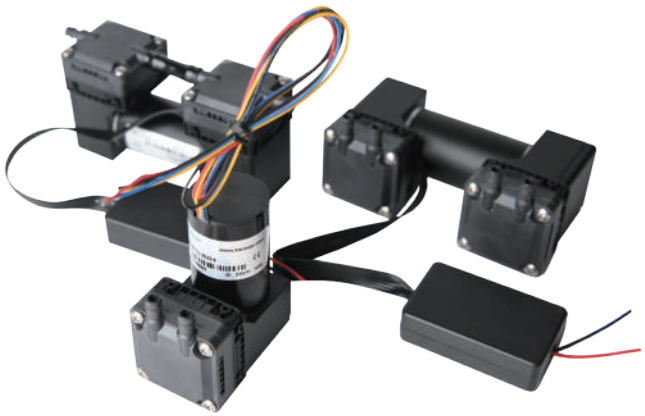


Single head size chart



Model	Flow (L/min)	Positive (Mpa)	Negative (Mpa)	Power (W)	Noise (dB)
KJ、KK、KL、KM Single head	10L/min	⩾0.10	⩽-0.065	7	⩽74
KL、KM Double head In parallel	16L/min	⩾0.15	⩽-0.075	12.5	⩽78
KL、KM Double head In series	10L/min	⩾0.15	⩽-0.092	12.5	⩽78

Note: The above flow parameters are measured with pure water without pressure at 20°C room temperature and standard atmospheric pressure. Actually, according to different media, different outlet pressures, DC motor speed errors, etc., the flow will have certain errors. The data is for reference. In addition, it can be customized according to customer needs.



- Fluid medium: Air, general gas
- Working environment: Temperature: 0°C～50°C; Humidity: <80%
- Product weight: Type A 240g Type B/Type C 360g
- Rated power: 8W/10W
- Pump head material: PPS
- Product life: 8000H
- Diaphragm material: EPDM
- Protection level: IP42
- Motor type: Brushless motor

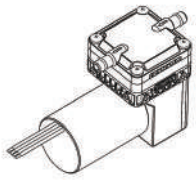
Application Areas

Automobile exhaust gas tester

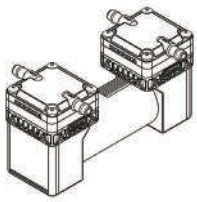
VOCs online detector

Medical washing microtiter plates

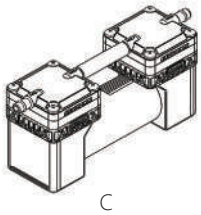
Automatic Chinese Medicine Sulfur Dioxide Analyzer



A



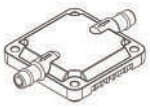
B



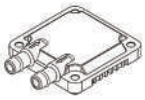
C

HLVP15-A-I-XX

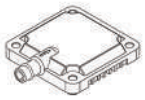
- XX: Voltage: 12V 24V
- I: Valve plate: I type U type T type
- A: Type: A single head B parallel C series



I



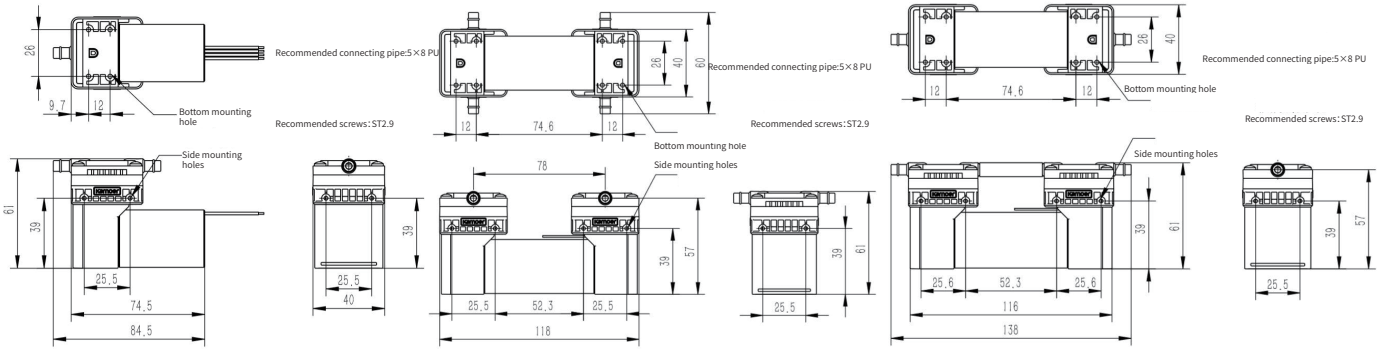
U



T

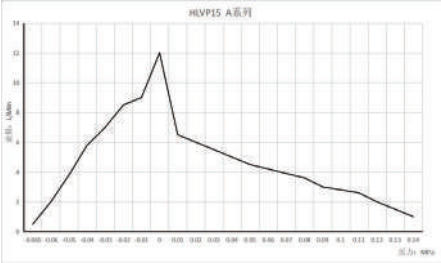
Dimensional drawing

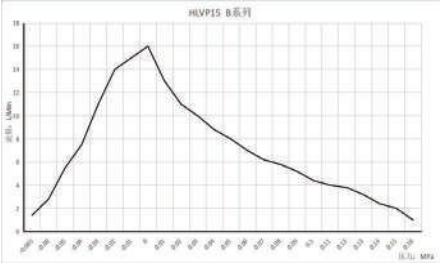
Unit: mm



A B C

Flow curve





Model	Flow (L/min)	Negative (Mpa)	Positive (Mpa)	Noise (dB)	Power (W)
HLVP15-AIXX	12	68	0.12	65	8w
HLVP15-AUXX	12	68	0.12	65	8w
HLVP15-ATXX	12	68	0.12	65	8w
HLVP15-BIXX	16	68	0.16	70	10W
HLVP15-BUXX	16	68	0.16	70	10W
HLVP15-CIXX	12	90	Lnvalid use	72	10W
HLVP15-CUXX	12	90	Lnvalid use	72	10W

The above green shades are regular products

Disclaimer: Plesae read the following parameter descriptions carefully before buying

1. Flow rate: under standard atmospheric pressure, the product is running without load, and the gas flow rate is tested;
2. Noise: the product runs without load; the distance of the decibel meter is 50CM; the silent room (environmental noise 40Db) test;
3. Life: refer to working environment. Harsh working conditions will reduce product life;
4. Pressure: The maximum pressure parameter that the pump can output under standard atmospheric pressure and normal power-on operation;
5. Positive pressure: It is not recommended to use positive pressure. When working under positive pressure, the output pressure should not exceed 0.1Mpa;
6. Power consumption: In order to ensure the normal operation of the product, the output should be larger than or equal to this value, and it is lower than this value during actual operation;
7. For other unreported questions, please contact customer service;
8. The final interpretation right of this product belongs to Kamoer Fluid Technology (Shanghai) Co., Ltd.

Motor wiring

Red line	Yellow line	Blue line	Black line
Vcc	FG	PWM	GND
Positive electrode	Speed feedback	Speed regulation	Negative electrode

In addition to the above conventional models, HLVP15 can also achieve customized services:

A. The valve plate can be replaced with a T-type valve plate: to realize a single flow channel, for customers who only need air intake/intake, saving customer space.

B. The air outlet direction can be freely customized on the four quadrant axes.

C. Please consult customer service for other customization

Vacuum Pump-KLVP1

- High-quality engineering plastics, stable and reliable
- EPDM diaphragm & valve disc
- High performance, long life
- Simple design, beautiful and generous
- High performance brushless motor
- Straight power, durable
- Fluid medium: air, general gas
- Temperature range: 0°C～40°C
- Relative humidity: <60% (no condensation water)

Application Areas

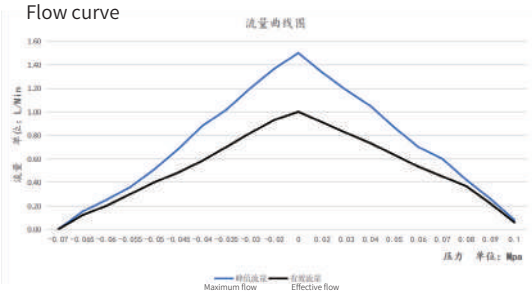
Fully automatic enzyme immune workstation

Automatic luminescence immunoassay analyzer

KLVP1-S-B-12

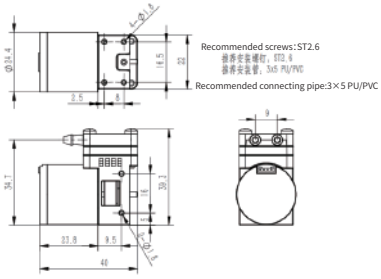
- Voltage: 12V 24V
- Motor: B brushless D brush
- Number of pump heads: S single head D double head

Flow curve



Dimensional drawing

Unit: mm



Motor wiring

Red line	Yellow line	White line	Black line
Vcc	FG	PWM	GND
Positive electrode	Speed feedback	Speed regulation	Negative electrode

Model	Maximum flow L/H	Effective flow L/H	Negative MPa	Positive MPa	Noise Db	Power W	Life H
KLVP1-SB12	1.5	1	0.05	0.08	60	2	6000
KLVP1-SB24	1.5	1	0.05	0.08	60	2	6000
KLVP1-SD12	1.5	1	0.05	0.08	60	2	600
KLVP1-SD24	1.5	1	0.05	0.08	60	2	600

Peak flow: the test value under the glass rotameter. Effective flow rate: The measured flow rate under the TSI electronic flowmeter is tested under standard atmospheric pressure, room temperature 25°C, and direct discharge without pressure at the inlet and outlet.
The noise is at a distance of 500mm from the product. The test life data of the silent room is the test result under the general environment. Bad working conditions will reduce the product life.
The flow curve test environment under standard atmospheric pressure, room temperature 25°C,there will be errors due to differences in practicality, is for reference only.
For other information that has not been notified, please contact customer service.

- Maximum pressure time: 11.5 seconds
- Rated voltage: DC6V
- Temperature: 5°C～50°C; humidity 30%RH～85%RH.
- Maximum current consumption: 430Ma
- Maximum test noise: 55DB
- Maximum pressure: 400mmHg

Application Areas

Sphygmomanometer

Reliability test

1. Low temperature test -25°C for 96 hours, then take it out, and place it at room temperature for another 2 hours before measuring the characteristics.

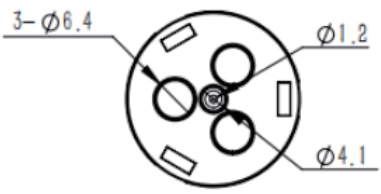
2. High temperature test +70°C for 96 hours, then take it out, and then place it at room temperature for another 2 hours, then perform characteristic measurement.

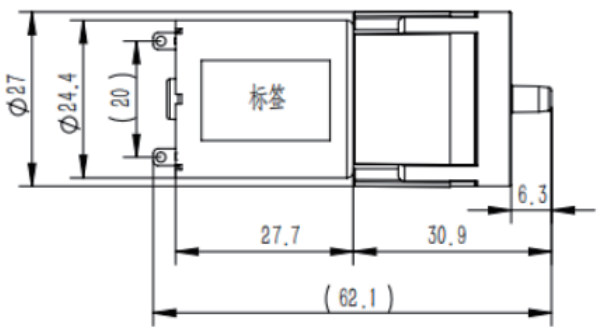
3. High-temperature and high-humidity test +70°C95%RH for 96 hours, then take it out, and then place it at room temperature for another 2 hours, then perform characteristic measurement.

4. Temperature and humidity cycle test +70°C85%RHx×3H→-20°C×3H Treat these as one cycle and repeat 10 cycles.

5. Endurance test Tested as follows, after 30,000 cycles, the following technical parameters can be met: Maximum pressure time: 15S Maximum current consumption: 520Ma; Air leakage: 10mmHg/min Maximum noise: 60Db

6. Landing test In the standard packaging state, the height is 50cm from the concrete floor, and there is no abnormality after free fall on each of the six sides.





- Maximum pressure time: 10 seconds
- Rated voltage: DC3V
- Temperature: 5°C～45°C; Humidity: 30%RH～85%RH
- Maximum current consumption: 450Ma
- Maximum test noise: 55DB
- Maximum pressure: 350mmHg

Application Areas

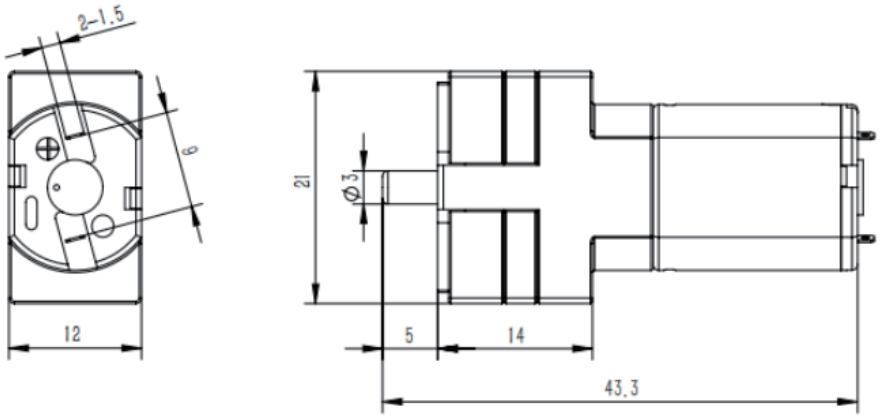
Sphygmomanometer

Reliability test

1. Low temperature test -25°C for 96 hours, then take it out, and place it at room temperature for another 2 hours before measuring the characteristics.
2. High temperature test +70°C placed for 96 hours and then taken out, placed at room temperature for another 2 hours and then measured characteristics.
3. High-temperature and high-humidity test +70°C95%RH for 96 hours and then take it out, and then place it at room temperature for another 2 hours and then perform characteristic measurement.
4. Temperature and humidity cycle test +70°C85%RHx×3H→-20°C×3H Treat these as one cycle and repeat 10 cycles.
5. Endurance test Test as follows, after 30,000 cycles, the following technical parameters can be met: maximum pressurization time: 15S, maximum current consumption: 520Ma; air leakage: 10mmHg/min, maximum noise: 60DB
6. Landing test In the standard packaging state, the height is 50cm from the concrete floor, and there is no abnormality after a free fall on each of the six sides.

Dimensional drawing

Unit: mm



- Small size and powerful
- Negative pressure≥-0.098Mpa
- Positive gas pressure＞0.1Mpa
- Dry running, durable and maintenance-free
- Flow rate ≥ 270L/H
- Chemical stability
- Flexible installation of nozzle direction (consult customer service)

Application Areas

Negative pressure wound therapy instrument

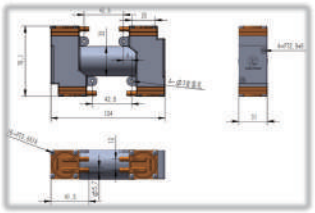
VOCs online detector

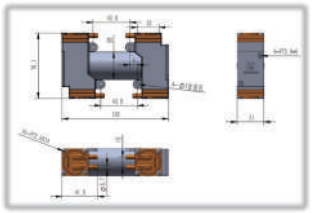
Air testing station

Portable oxygen generator

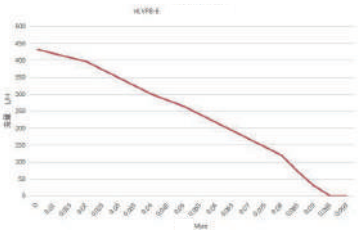
Dimensional drawing

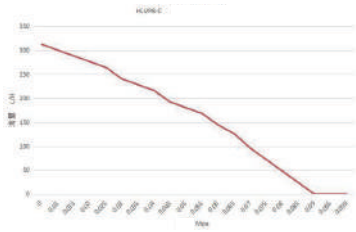
Unit：mm





Flow curve





Model	Flow(L/H)	Negative MPa	Positive MPa	Noise DB
HLVP8-B24-2-S	≥360	≥0.098	Invalid use	≤75
HLVP8-B12-2-S	≥360	≥0.098	Invalid use	≤75
HLVP8-C24-2-S	≥270	≥0.098	Invalid use	≤75
HLVP8-C12-2-S	≥270	≥0.098	Invalid use	≤75

Note:

1. The no-load current is the current when no gas is delivered.

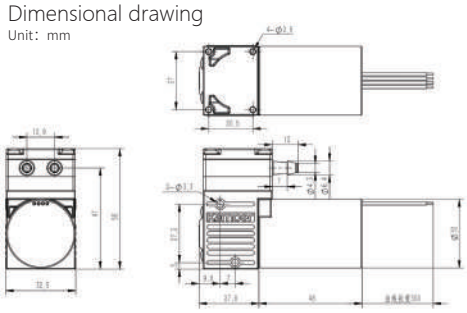
2. The rated current is the current value of the input and output terminals that are approximately the gas delivered under atmospheric pressure. In actual use, as the gas input and output pressure increase, the actual current value will increase accordingly.

Diaphragm Pump-JET500

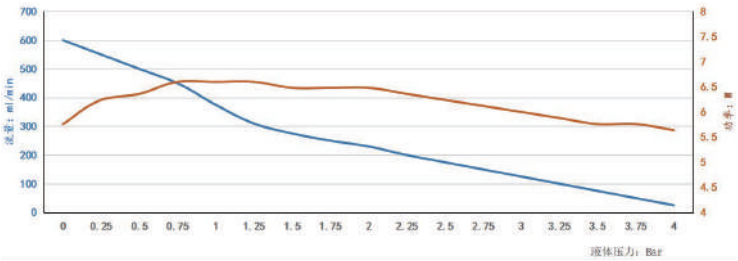
- Fluid medium: general liquid (compatibility test is required for special liquid)
- Liquid pressure: the maximum pressure can reach 3.5Bar
- Core material: PPS pump head & EPDM diaphragm
- Core drive: high-quality DC motor
- Installation method: two installation methods, supporting vibration damping machine feet
- Control method: PWM and analog voltage speed regulation
- Input voltage: 12V/24V input
- Working environment: temperature range: 5℃~50℃; relative humidity: <90%
- Product weight: 200g

Dimensional drawing

Unit：mm



Flow curve



Red line	Yellow line	Blue line	Black line
Vcc	FG	PWM	GND
positive electrode	Speed feedback	Speed regulation	negative electrode

1. Two-wire connection (the pump runs at full speed): the positive pole is connected to the red and blue wires, and the negative pole is connected to the inner wire
2. FG feedback: one pulse speed per revolution (revolution/min) = FG signal * 60
3.PWM speed regulation: 10K-30K full speed: high level 100%

Model	Flow(ml/min)	Suction Lift(M)	Lift(M)	Maximum Pressure (Bar)	Maximum Power (W)	Life(H)
JET500-D12	500	2	30	3.5	8	2000
JET500-D24	500	2	30	3.5	8	2000
JET500-B12	500	2	30	3.5	8	8000
JET500-B24	500	2	30	3.5	8	8000

Note: There are currently two motors available: brushed motor/brush less motor
The flow rate is tested under standard atmospheric pressure, room temperature 25℃, and direct discharge without pressure at the inlet and outlet.
The life data is the test result under the general environment. The harsh working conditions will reduce the life of the product
Flow curve (brush less motor, standard atmospheric pressure, room temperature 25℃), due to practical differences, for reference only
For other uninformed information, please contact customer service

Silicone tube

PharMed® BPT tube

Noeprene® tube

Viton tube

Tefon tube

PVC tube

Tygon tube

PU tube

Tygon Ink tube

Pump tube code	Pump tube material	Pump tube performance parameters
S	Silicone tube	Good adsorption, low temperature resistance, low deposition, chemical corrosion resistance can be decreased with the rise of temperature. Suitable for transporting weak corrosive liquid (30%).
		Applicable Temperature: -60℃~200℃。 Lifetime: 200H
B	PharMed® BPT tube	Has very good general chemical resistance, and excellent acid, alkali and oxidation properties.Product is not transparent and resistance to ultraviolet radiation, thus helps protect sensitive liquid.
		Applicable Temperature: -51℃~132℃。 Lifetime: 2000H
N	Noeprene® tube	Resistant to almost all of the food disinfectant, UV resistance is good, can repeat subjected to pressure the effect of heat exchanger, a wide range of chemical resistance.Comply with FDA, 3 - A and NSF certiÞcation.
		Applicable Temperature: -60℃~135℃。 Lifetime: 1000H
P	PVC tube	Surface gloss and elastic.PVC pipe is transparent, PU black, resistance to ultraviolet radiation, thus helps protect sensitive liquid.
		Applicable Temperature: 5℃~60℃
V	Viton tube	Good resistance to oil, fuel, lubricants, and most of the mineral acid. Good tolerance environmental exposure, such as the sun.Excellent high temperature resistant ability.
		Applicable Temperature: -20℃~250℃。 Lifetime: 500H
/	Tefon tube	Non-sticky, high insulation, high flame retardancy, 60HZ, 60MHZ high and low temperature dielectric constant is 2.1, non-toxic and corrosion resistant, concentrated, dilute inorganic acid, alkali, ester have no effect, low absorption rate <0.01% The light refractive index is low, and the arc resistance is >165 seconds without leakage.
		Working temperature: -200°C-200°C

Note: The above working life is the life at 300 RPM rotation speed of pure water at normal temperature.

Silicone tube

ID (mm)	OD (mm)	Wall thickness (mm)	Cross section (mm)
3.0	5.0	1.0	
4.0	6.0		
1.0	3.0		
2.5	4.5		
2.0	4.0		
8.0	10.0		
2.0	4.0		
0.8	3.0	1.1	
1.0	3.3	1.15	
0.6	3.0	1.2	
1.5	4.0	1.25	
1.0	3.5		
2.0	5.0		
0.4	3.0	1.3	
3.0	6.0	1.5	
5.0	8.0		
4	7.2	1.6	
8	12	2	
7.9	12.7	2.4	
9.6	14.6	2.5	

Tube number	ID (mm)	OD (mm)		Cross section (mm)
13#	0.8	4.0	1.6	
14#	1.6	4.8		
19#	2.4	5.6		
16#	3.2	6.4		
25#	4.8	8.0		
17#	6.4	9.6		
18#	7.9	11.1		

ID (mm)	OD (mm)	Wall thickness (mm)	Cross section (mm)
5.0	8.2	1.6	

Tube number	ID (mm)	OD (mm)	Wall thickness (mm)	Cross section (mm)
/	5.0	10.0	2.5	
24#	6.4	11.4		
/	10.0	15.0		
15#	4.8	9.8		
/	7.5	13.0	2.8	

Tygon Ink tube

Colour	ID (mm)	OD (mm)	Wall thickness (mm)	Cross section (mm)
Transparent	3.2	6.4	1.6	
Yellow	2	4	1	

Noeprene® tube

Color	Tube number	ID (mm)	OD (mm)	Wall thickness (mm)	Cross section (mm)
Beige	17#	6.4	9.6	1.6	
	16#	3.2	6.4		
	25#	4.8	8.0		
	14#	1.6	4.8		
	19#	2.4	5.6		
	/	4	7.2		
Black	16#	3.2	6.4		
	25#	4.8	8.0		
	14#	1.6	4.8		
	/	6.4	9.6		

PVC tube

Color	Material	ID (mm)	OD (mm)	Wall thickness (mm)	Cross section (mm)
Transparent	PVC	3.0	5.0	1	
	PVC	2.0	4.0		
	PVC	4.0	6.0		
Red Green Blue Yellow	PVC	3.0	5.0		

PU tube

ID (mm)	OD (mm)	Wall thickness (mm)	Cross section (mm)
4	6	1	
3	5		

Viton tube

ID (mm)	OD (mm)	Wall thickness (mm)	Cross section (mm)
2.79	4.49	0.85	
2.54	4.24	0.85	
1.65	3.4	0.875	
1.6	4.8	1.6	
3.1	6.3	1.6	
0.8	4	1.6	

Tefon tube

ID (mm)	OD (mm)	Wall thickness (mm)	Cross section (mm)
2.0	4.0	1.0	
3.0	5.0		
4.0	6.0		
4.0	5.0	0.5	

Pharmed® BPT tube

Tube number	ID (mm)	OD (mm)	Wall thickness (mm)	Cross section (mm)
/	1.5	3.5	1.0	
/	2	4		
/	2.5	4.5		
/	3	5		
/	4	6		
/	1	3.2	1.1	
/	0.8	4	1.6	
14#	1.6	4.8		
/	2.38	5.56		
16#	3.2	6.4		
/	4	7.2		
25#	4.8	8		
17#	6.4	9.6		
/	1.6	3.2	0.8	
/	4.8	9.8	2.5	

MasteFlex® tube

内径（单位：mm）	外径（单位：mm）	壁厚（单位：mm）	软管截面（比例1:1）
2.79	4.49	0.85	
2.54	4.24	0.85	
1.65	3.4	0.875	
1.6	4.8	1.6	
3.1	6.3	1.6	
0.8	4	1.6	

Straight-through pump pipe joint	ID (mm)
	(inch) / (mm)
	1/16 / 1.6
	3/32 / 2.4
	1/8 / 3
	5/23 / 3.9
	3/16 / 4.7
	1/4 / 6.3
	3/8 / 9.5
Y model pump tube connector	1/16 / 1.5
	3/32 / 2.3
	1/8 / 3
	5/32 / 3.9
	3/16 / 4.7
	1/4 / 6.3
	3/8 / 9.5

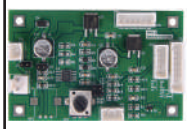
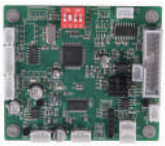
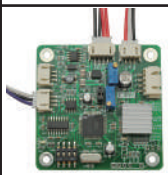
Reduced diameter pump pipe joint	ID (mm) 1		ID (mm) 2	
	(inch)	(mm)	(inch)	(mm)
	1/8	3	3/32	2.3
	1/8	3	1/16	1.5
	1/8	3	3/16	4.7
	1/8	3	1/4	6.3
	3/32	2.3	5/32	3.9

T connector	ID (mm)
	(inch) / (mm)
	3/32 / 2.3
	1/8 / 3.6
	3/16 / 5
	1/4 / 6.3
	5/16 / 7.9
L connector	1/4 / 6.3
	1/8 / 3
	1/16 / 1.5
	3/16 / 4.7
	3/32 / 2.3
	5/32 / 3.9

Cross connector	ID (mm)	
	(inch)	(mm)
	1/16	1.5
	1/8	3
	1/8 Six joints	3
Threaded connector	1/8	6*4
	1/8	8*5~6
	1/8	10*6.5
	1/4	6*4
	1/4	8*5~5
	1/4	10*6.5
Check valve	1/4	7
	1/8	3.8
	3/16	5
	3/32	2.6
	5/32	4
	1/8 Ruhr connector	3.7
	1/16 Ruhr connector	2
	1/8 Ruhr Joint	3.4
	3/32 Ruhr connector	3.2
	3/16 Joint connector	5
	3/16 Filter connector	22.6
	3/32 Ruhr Joint	2.6
	5/32 Six-joint	4
	3/32 to 5/32 (Reducer check valve)	ID 1(2.6) ID 2(5.8)

Prevent drifting joints

Model	K01	K02
Products real shot		
Temperature range	5~60℃	150℃
Pressure resistance	1.0Mpa	1.5Mpa
Suitable material for pump tube	Hard tube	Hose
Interface pump tube caliber(mm)	φ6	
Installation form	Direct insertion	
Scope of application	Exhaust/neutral liquid	
The main material	Brass	

Model	Exterior	Motor use	Size	Speed adjustment	RS232 Communication Interface	RS485 Communication Interface	Use Model
2405.2 Driver board		Brushless DC motor, external PWM speed control board Brushless DC motor, built-in PWM speed control board	8.5	√	×	×	KVP04/KLP04
2300.3 Driver board		Stepper motor control driver board	7.8*6.8	√	√	√	KAS/KCS/KDS
4460.4 Driver board		Control drive board	6.1*6.1	√	√	√	KAS/KCS/KDS
KMD-542 Driver board		Stepper motor driver	9.6*7.1*3.6	×	×	×	KAS/KCS/KDS

Exterior	Model	Material	Sealing material	Inner hole size	Voltage	KV Value	Qnn Value
	KVE33PL12F11Q161	PVDF	FKM	1.6mm	12/DC	0.045	49
	KVE32PL24FF1Q163				24/DC	0.025	27
	KVE32PL12FF1Q163				12/DC		
	KVE21PS24N2N651	PP	NBR	6.5mm	24/DC		

	Bucket	High temperature plastic water storage bucket
	Vacuum pump silencer	Extend the life of the air pump, small size, no consumables
	Anti-floating joint	316L stainless steel material, two passages are 6mm and 2.5mm respectively

Power adapter	SpeciÞcation
	Voltage：3V, 6V, 12V, 24V Input: AC100-240V 50/60HZ Output： DC12V Output current：1A Deviation: ±5% (on-load) Proarity：inside（+）outside（-） Plug stype：5.5*2.1mm
Multi-function power	SpeciÞcation
  	12V Large power supply Input: 100-240V 50-60HZ 0.8A Output:: 12V , 2A L.T.E.POWER SUPPLY Proarity:inside(+) outside(-) Plug style:5.5*2.1mm

The compatibility of the pump

Tygon hose table chart chemical resistance performance assessments are based on laboratory test results. They reßect a variety of hose formula the relative ability of resistance to speciÞc chemicals. Note: the estimates in the table cannot be reßected in the media contact with the hose may occur in the extraction and medium levels of physical performance or composition changes. Saint-Gobain performance plastics companies in extraction may occur due to transmission medium pipe components resulting in a medium polluted or its performance/composition change on this sensitive issue without any representations or warranties. For prolonged exposure may be some corrosion of the pipes are destructive, provided that it can be often ßush in a timely manner, satisfactory results can be obtained. All estimates are at room temperature (23 ° c/73 ° f) measured. Chemical resistance due to temperature rise and decline. Important notice: users are responsible for ensuring that all of its intended use and safety, including compatibility of the transmission medium. Laboratory, Þeld and clinical tests must be operated according to the actual requirements, to pipe in any speciÞc application in safety and effectiveness. If used for medical, pipe in line with actual business, users are responsible for ensuring that the regulatory requirements.

Compatibility E=Excellent G=Good F=Not bad X=Incompatible /=No info	PharMed® BPT	Viton	Norprene®	Norprene® Food	Silicon
Acetaldehyde	X	X	X	X	E
Acetate LMW	E	/	E	E	/
Acetic acid <5%	E	/	E	E	/
Acetic acid >5%	E	G	E	E	/
Acetic anhydride	E	X	E	E	F
Acetone	X	X	X	X	X
Acetonitrile	G	X	G	G	/
Acetyl bromide	F	/	F	F	/
Acetyl chloride	F	E	F	F	/
Air	E	E	E	E	/
Aliphatic hydrocarbons	X	/	X	X	/
Aluminum chloride	E	E	E	E	G
Aluminum sulfate	E	E	E	E	E
Alums	E	E	E	E	E
Ammonia, gas/liquid	E	X	E	E	/
Ammonium acetate	E	X	E	E	/
Ammonium carbonate	E	E	E	E	F
Ammonium chloride	E	E	E	E	F
Ammonium hydroxide	E	G	E	E	E
Ammonium nitrate	E	E	E	E	F
Ammonium phosphate	E	E	E	E	/
Ammonium sulfate	E	E	E	E	E
Amyl acetate	G	X	G	G	X
Amyl alcohol	X	E	X	X	X
Amyl chloride	F	E	F	F	X
Aniline	F	G	F	F	G
Aniline hydrochloride	F	G	F	F	X
Aqua regia (80% HCl, 20% H)	X	G	X	X	/
Aromatic hydrocarbons	X	E	X	X	X
Arsenic salts	E	X	E	E	/

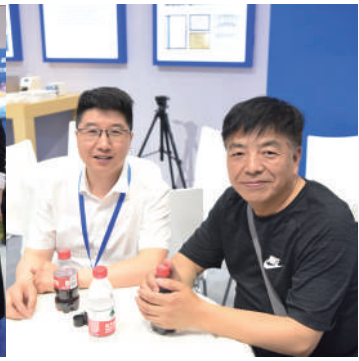
Compatibility E=Excellent G=Good F=Not bad X=Incompatible /=No info	PharMed® BPT	Viton	Norprene®	Norprene® Food	Silicon
Barium salts	E	E	E	E	/
Benzaldehyde	X	X	X	X	X
Benzenesulfonic acid	X	E	X	X	/
Bleaching liquors	E	E	E	E	G
Boric acid	E	E	E	E	E
Bromine	X	E	X	X	X
Butane	E	E	E	E	X
Butanol (butyl alcohol)	X	E	X	X	G
Butyl acetate	G	X	G	G	/
Butyric acid	G	G	G	G	X
Calcium oxide	E	E	E	E	E
Calcium salts	E	E	E	E	/
Carbon bisulfide	X	/	X	X	/
Carbon dioxide	E	E	E	E	G
Carbon tetrachloride	X	E	X	X	X
Chlorine, dry	F	E	F	F	/
Chlorine, wet	X	G	X	X	/
Chloroacetic acid	G	X	G	G	X
Chlorobenzene	X	E	X	X	X
Chlorobromomethane	G	E	G	G	X
Chloroform	F	E	F	F	X
Chlorosulfonic acid	X	X	X	X	X
Chromic acid, 30%	E	E	E	E	/
Chromium salts	E	/	E	E	/
Copper salts	E	E	E	E	/
Cresol	X	E	X	X	X
Cyclohexane	X	E	X	X	X
Cyclohexanone	X	X	X	X	X
Diacetone alcohol	E	X	E	E	X
Dimethyl formamide	G	X	G	G	F
Dimethyl Sulfoxide (DMSO)	E	/	E	E	/
Essential oils	X	/	X	X	/
Ethanol (ethyl alcohol)	F	E	F	F	/
Ether	F	X	F	F	X
Ethyl acetate	G	X	G	G	G
Ethyl bromide	X	E	X	X	/
Ethyl chloride	F	E	F	F	X
Ethylamine	X	X	X	X	/
Ethylene chlorohydrin	E	E	E	E	F
Ethylene dichloride	F	E	F	F	X
Uric acid	E	/	E	E	/

Compatibility E=Excellent G=Good F=Not bad X=Incompatible /=No info	PharMed® BPT	Viton	Norprene®	Norprene® Food	Silicon
Ethylene glycol	E	E	E	E	E
Ethylene oxide	E	X	E	E	X
Fatty acids	F	E	F	F	F
Ferric chloride	E	E	E	E	G
Ferric sulfate	E	E	E	E	G
Ferrous chloride	E	E	E	E	/
Ferrous sulfate	E	E	E	E	/
Fluoboric acid	X	/	X	X	/
Fluoroborate salts	E	/	E	E	/
Fluosilicic acid	F	E	F	F	/
Formaldehyde	X	X	X	X	G
Formic acid, 25%	E	X	E	E	G
Zinc oxide	E	E	E	E	/
Gasoline, high-aromatic	X	E	X	X	/
Gasoline, nonaromatic	X	E	X	X	/
Glucose	E	E	E	E	E
Glue, P.V.A.	E	E	E	E	E
Glycerin	E	E	E	E	E
Hydriodic acid	X	E	X	X	/
Hydrobromic acid, 30%	X	E	X	X	/
Hydrochloric acid (conc)	/	E	/	/	/
Hydrochloric acid (dil)	E	E	E	E	/
Hydrochloric acid (med)	G	E	G	G	/
Hydrocyanic acid	E	E	E	E	F
Hydrocyanic acid, gas, 10%	E	E	E	E	/
Hydrofluoric acid, 50%	X	X	X	X	/
Hydrofluoric acid, 75%	/	X	/	/	/
Hydrogen peroxide (dil)	E	E	E	E	/
Hydrogen peroxide, 90%	G	E	G	G	/
Hypochlorous acid	E	E	E	E	/
Iodine solutions	E	E	E	E	/
Iodoform	/	F	/	/	/
Kerosene	X	E	X	X	X
Ketones	X	/	X	X	/
Lacquer solvents	G	X	G	G	/
Lactic acid, 3–10%	E	E	E	E	/
Lead acetate	E	X	E	E	E
Linseed oil	F	E	F	F	/
Lithium hydroxide	G	F	G	G	/
Magnesium chloride	E	E	E	E	E
Water, fresh	E	E	E	E	G

Compatibility E=Excellent G=Good F=Not bad X=Incompatible /=No info	PharMed® BPT	Viton	Norprene®	Norprene® Food	Silicon
Magnesium sulfate	E	E	E	E	E
Malic acid	E	E	E	E	G
Manganese salts	E	E	E	E	/
Mercury salts	E	E	E	E	/
Methane	E	E	E	E	X
Methanol (methyl alcohol)	E	G	E	E	E
Methyl chloride	F	G	F	F	X
Methyl ethyl ketone (MEK)	X	X	X	X	/
Mixed acid (40% H2SO4, 15% HNO3)	G	/	G	G	/
Molybdenum disulfide	/	E	/	/	/
Monoethanolamine	F	X	F	F	G
Naphtha	X	E	X	X	X
Natural gas	E	E	E	E	E
Nickel salts	E	E	E	E	/
Nitric acid (conc)	X	E	X	X	/
Nitric acid (dil)	E	G	E	E	/
Nitric acid (med)	E	E	E	E	/
Nitrobenzene	X	G	X	X	X
Nitrogen oxides	E	X	E	E	/
Nitrous acid	E	/	E	E	/
Oils, animal	F	E	F	F	/
Oils, mineral	X	E	X	X	/
Oils, vegetable	F	E	F	F	/
Oleic acid	F	G	F	F	X
Oxalic acid, cold	G	E	G	G	/
Oxygen, gas	E	G	E	E	/
Palmitic acid, 100% in ether	F	E	F	F	/
Perchloric acid	E	E	E	E	X
Perchloroethylene	F	E	F	F	X
Phenol (carbolic acid)	E	E	E	E	X
Phosphoric acid, 50%	E	E	E	E	/
Phthalic acid	E	G	E	E	G
Plating solutions	E	E	E	E	/
Polyglycol	G	E	G	G	/
Potassium carbonate	E	E	E	E	/
Potassium chlorate	G	E	G	G	G
Potassium hydroxide (conc)	E	X	E	E	/
Potassium hydroxide (med)	E	X	E	E	/
Potassium iodide	E	E	E	E	/
Propanol (propyl alcohol)	F	E	F	F	/
Water, salt	E	E	E	E	G

Compatibility E=Excellent G=Good F=Not bad X=Incompatible /=No info	PharMed® BPT	Viton	Norprene®	Norprene® Food	Silicon
Pyridine	F	X	F	F	X
Xylene	E	E	E	E	/
Silicone oils	F	E	F	F	/
Silver nitrate	E	E	E	E	E
Soap solutions	G	E	G	G	E
Sodium bicarbonate	E	E	E	E	E
Sodium bisulfate	E	E	E	E	E
Sodium bisulfite	E	E	E	E	E
Sodium borate	E	E	E	E	E
Sodium carbonate	E	E	E	E	E
Sodium chlorate	E	E	E	E	F
Sodium chloride	E	E	E	E	E
Sodium ferrocyanide	E	E	E	E	/
Sodium hydrosulfite	G	/	G	G	F
Sodium hydroxide (conc)	/	E	/	/	/
Sodium hydroxide (dil)	E	E	E	E	/
Sodium hydroxide, 25%	E	E	E	E	/
Sodium hypochlorite, <5%	E	E	E	E	/
Sodium hypochlorite, >5%	E	E	E	E	/
Sodium nitrate	E	E	E	E	X
Sodium silicate	E	E	E	E	E
Sodium sulfide	E	E	E	E	E
Sodium sulfite	E	E	E	E	E
Steam, up to 40 psi	F	G	F	F	/
Stearic acid	F	E	F	F	G
Styrene	X	E	X	X	X
Sulfuric acid (conc)	X	E	X	X	/
Sulfuric acid (dil)	E	E	E	E	/
Sulfuric acid (med)	E	E	E	E	/
Sulfurous acid	E	G	E	E	X
Tannic acid	G	E	G	G	G
Tanning liquors	E	/	E	E	G
Tartaric acid	E	E	E	E	E
Tin salts	E	/	E	E	G
Toluene (toluol)	X	E	X	X	X
Trichloroacetic acid	G	F	G	G	X
Trichloroethylene	X	E	X	X	X
Trisodium phosphate	E	E	E	E	E
Turpentine	X	E	X	X	X
Urea	E	/	E	E	G
Xylene	X	E	X	X	X

Our products can be customized



Nearly ten thousand companies have chosen us

TEL:(+86) 021-67742578　37701819

E-mail:sales@kamoer.com

高新技术企业

证书

企业名称：卡川尔流体科技（上海）有限公司　　证书编号：GR201831001852

发证时间：2018 年 11 月 27 日　　有 效 期：三年

批准机关：

上海市科学技术委员会　上海市财政局　国家税务总局上海市税务局

证 书

卡川尔流体科技(上海)有限公司

ISO 9001:2015

CERTIFICATE

Kamoer Fluid Tech (Shanghai) Co., Ltd.

ISO 9001:2015

Kamoer, your best choice of liquid and air pump

Kamoer Fluid Tech（Shanghai）Co.，Ltd.
4th building,No.79 Xiangjing Road | 201611
Songjiang District , Shanghai | China
www.kamoer.com