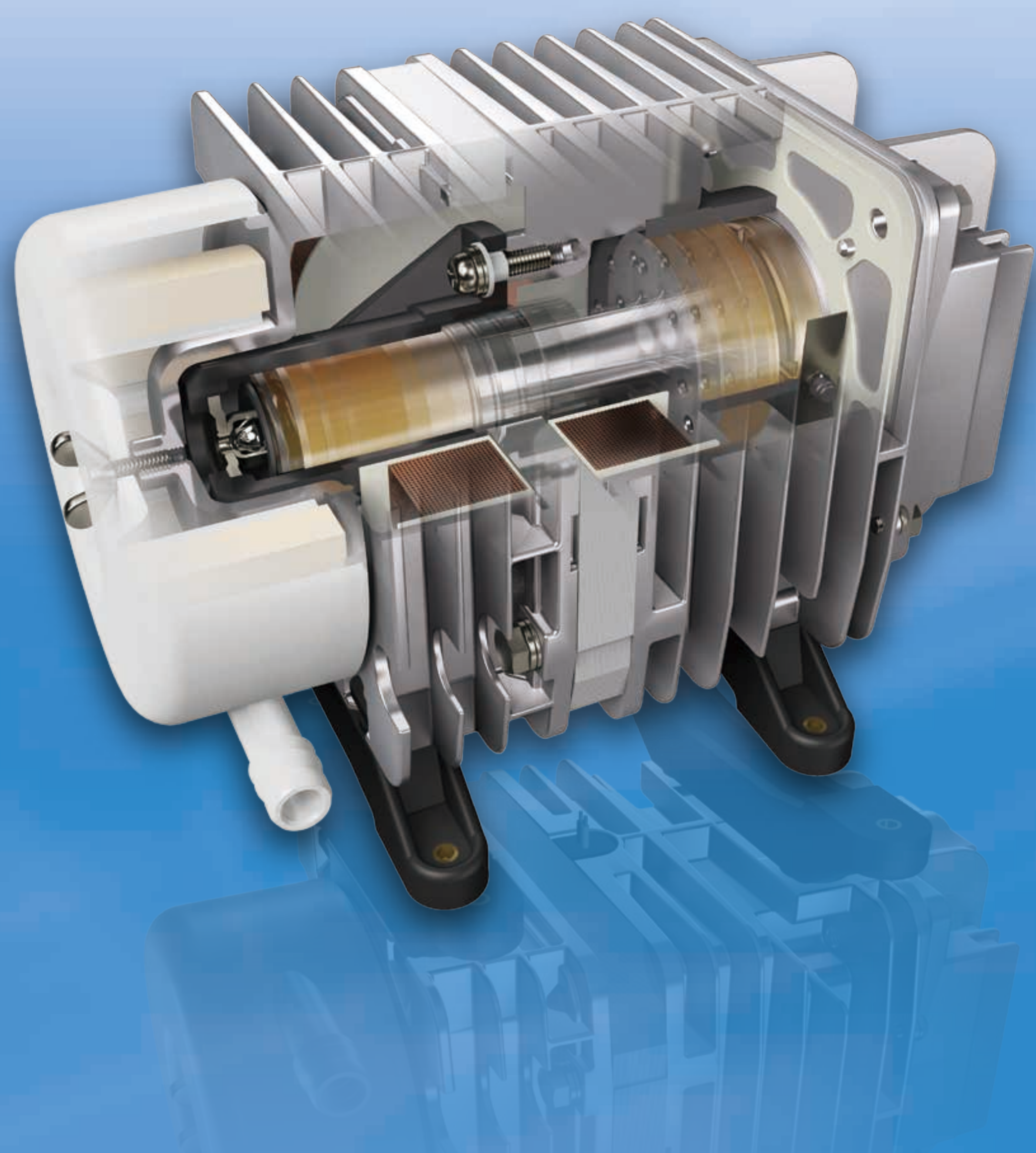
L01cns-b

AIR COMPRESSORS, VACUUM PUMPS & LIQUID PUMPS GENERAL CATALOG

空气压缩泵，
真空泵 & 液体泵
综合样本



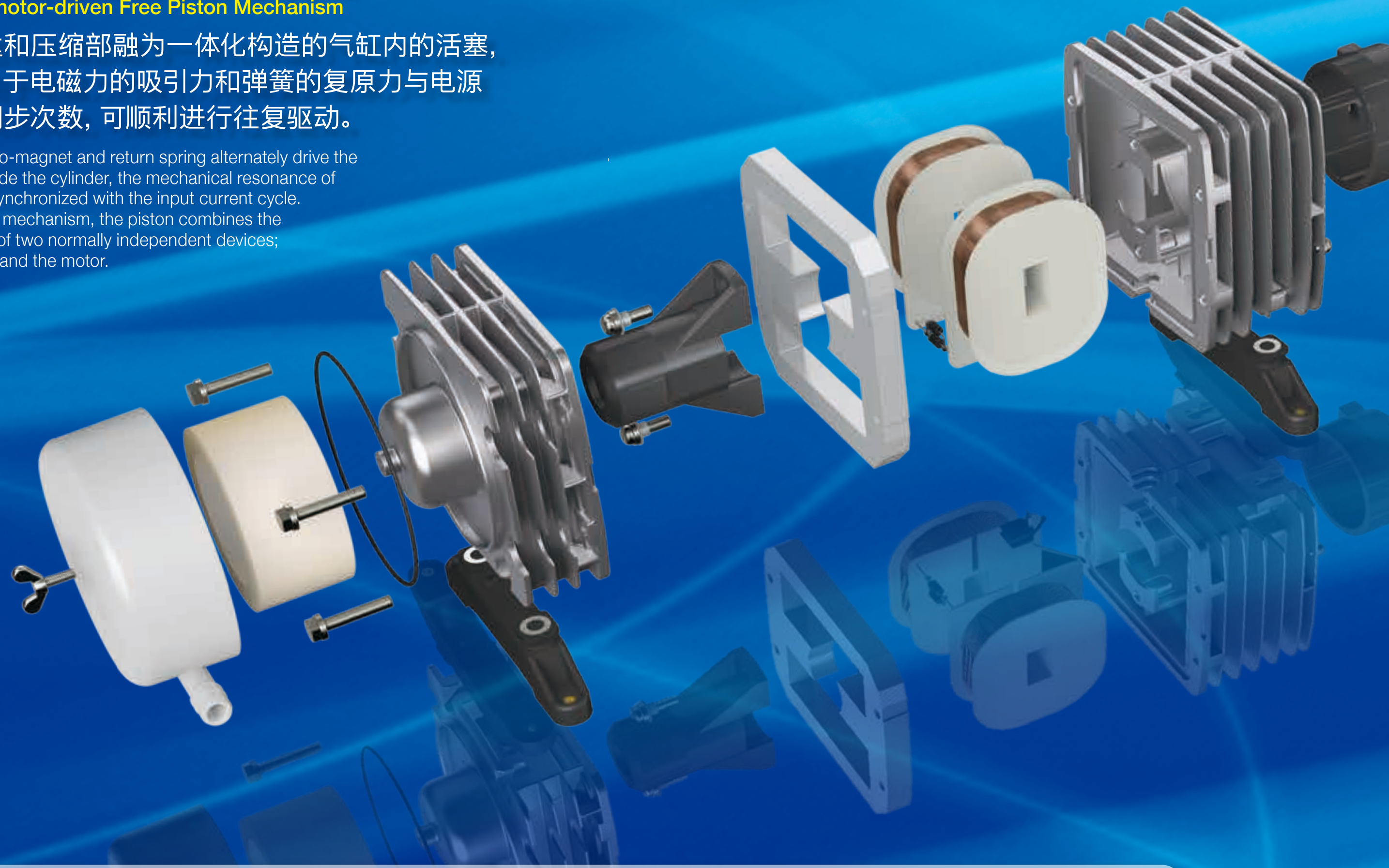
线性驱动活塞驱动方式活跃于压缩泵、真空泵中、形成丰富多样的系列群。以先端产业中心，最适合组装各种装置、机器类的「压缩空气源」、「真空源」。作为各种领域产品「压缩、吸引空气」「搬送液体」的驱动源而被活用。

Our air compressors and vacuum pumps are unique products featuring a Linear-motor-driven Free Piston System. Nitto Kohki has made available a complete series of air compressors and vacuum pumps that incorporate this revolutionary mechanism. These are quite appropriate as air sources or vacuum units for various pneumatically operated equipment and apparatus in advanced industries.

线性驱动自由活塞泵构造
Linear-motor-driven Free Piston Mechanism

将马达和压缩部融为一体化构造的气缸内的活塞，利用由于电磁力的吸引力和弹簧的复原力与电源频率同步次数，可顺利进行往复驱动。

The Electro-magnet and return spring alternately drive the piston inside the cylinder, the mechanical resonance of which is synchronized with the input current cycle. In a single mechanism, the piston combines the functions of two normally independent devices; the pump and the motor.



工作原理 / Operating Principle

装入线圈间的硅二级管 *1 和变换器对电流进行半波整流。*2 实现无额外损耗， 高效率的往复运动。

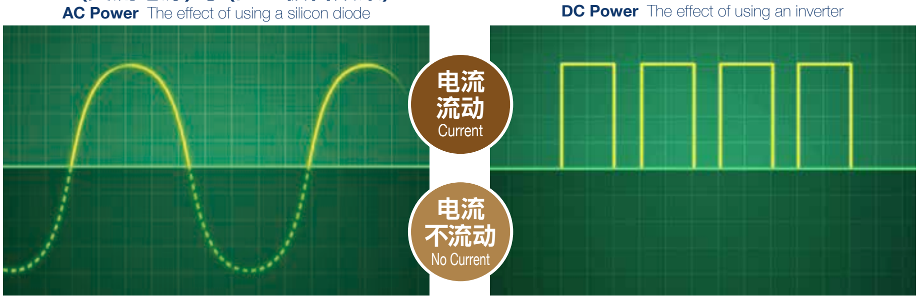
A silicon diode*1 in between the coils or inverter*2 converts the full-wave input current into half-rectified current. In turn this activates and deactivates the electro-magnet, producing a smooth mechanically resonating action.

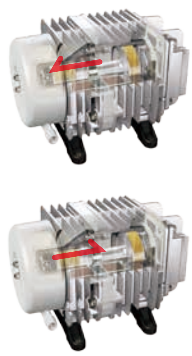
A

在电磁力的作用下，活塞被吸引而弹簧受压，此时，空气从进气阀吸入气缸内。
The energized electro-magnet attracts the piston, compresses the return spring, and draws air into the cylinder through the opened inlet valve.

AC(交流电源)时 (硅二极管效果)
AC Power The effect of using a silicon diode

DC(直流电源)时 (变压效果)
DC Power The effect of using an inverter



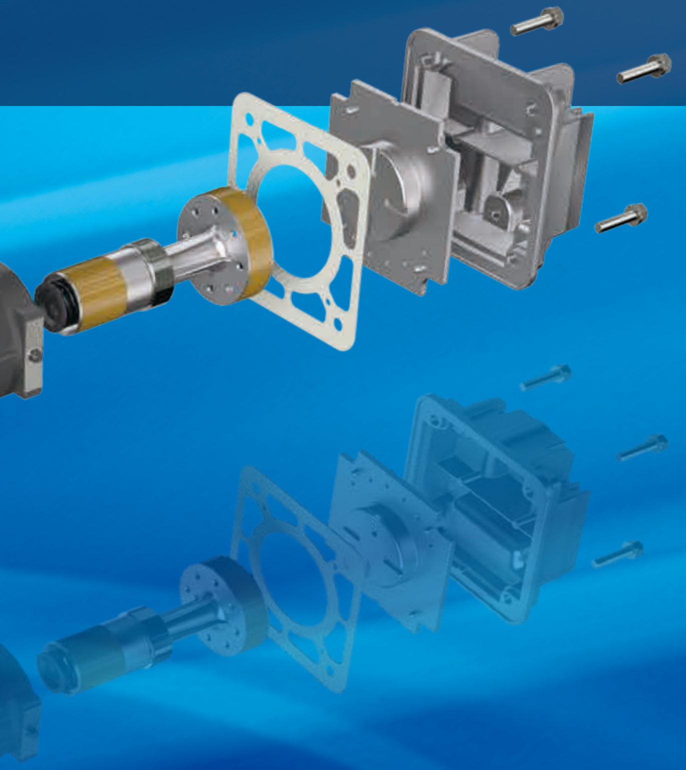


B

电磁力消失，活塞被复位弹簧的恢复力压回。此时，将压缩空气从排气阀排出气缸。
When the electro-magnet is de-energized, the return spring pushes the piston back, forcing the compressed air out of the cylinder through the now opened outlet valve.

活塞通过A和B的反复动作进行往复运动，发挥压缩泵与真空泵的功能。
Repeating the movements of A and B delivers the function of compressor or vacuum pump.

*1) AC驱动模型搭载 *1) Incorporated in AC models
*2) DC驱动模型搭载 *2) Incorporated in DC models



小型一体化构造 / Compact Integrated Design

与可动铁芯为一体的活塞可直接往复运动的独特机械装置。马达和压缩部融为一体化构造，比其他的驱动方式更小型和轻量化。

This unique system enables the mechanical resonance of a single part. An incredibly compact, lightweight design is achieved by combining what are entirely independent functions in conventional pumps – the motor and the compressor – into a superior single, unified structure.

自我冷却系统 / Self-cooling Design

采用自我冷却系统将吸入的空气吹过线圈，因此，可以采用封闭式结构，运转时噪音很小。

Cool intake air passes over the coils to reduce and control the rise in the pump's internal temperature. As a result of this feature, it is possible to almost completely seal the unit, thus improving the suppression of internal operating noise.

过压防止功能 / Overpressure Control Mechanism

当压力超过额定压力时，活塞行程自动减少，以防止产生过压。此时，消耗功率和电流也会自动减少，无需担心一时的过载造成故障或烧毁。

Should the output pressure exceed the rated value, the piston will automatically adjust to a shorter stroke. Simultaneously, power consumption will automatically reduce to prevent the motor from failing or being burnt out.

目 录 / Contents

页 / Page

绿色筹备 / Green Procurement

为了进行环境保护事业活动，本公司通过了国际标准的ISO14001认证，推行全公司范围内的环境改善活动。作为环境改善活动的一个环节，依据RoHS指令为首的各种法规，将本公司产品作为环境对应制品（绿色筹备对应产品），废止、削减指定的环境管理物质。

Nitto Kohki has made every effort in developing “Environmental Improvement Plans” through the implementation of ISO14001, to execute environmentally conscious business activities on a company-wide basis. As a part of our ongoing commitment to the environment, we are also committed to reduce and/or exclude restricted substances from our products as designated by RoHS directives, laws and regulations of chemical substances.

性能区别索引 / Series Selection

AC 线性 压缩泵 / AC Linear Free Piston Compressor

型 号 / Model	额定压力 / Rated Pressure kPa	额定压力 / Rated Pressure psig	最高压力 / Max. Pressure kPa	最高压力 / Max. Pressure psig	吐出空气量 / Rated Airflow L/min	吐出空气量 / Rated Airflow cfm	页 / Page
AC0102	20	2.84	40	5.69	5	0.177	13
AC0201A	10	1.42	20	2.84	20	0.71	14
AC0301A	10	1.42	30	4.27	28	0.99	15
AC0401A	10	1.42	35	4.98	35	1.24	16
AC0602	15	2.13	35	4.98	40	1.41	17
AC0901	10	1.42	40	5.69	80	2.83	18
AC0902	20	2.84	45	6.40	55	1.94	19
AC0105	50	7.11	80	11.4	2.5	0.088	20
AC0110	100	14.2	120	17.1	0.8	0.028	21
AC0207	70	9.96	100	14.2	3.5	0.124	22
AC0210	100	14.2	120	17.1	3.5	0.124	85
AC0410A	100	14.2	130	18.5	5	0.177	23
AC0610/AC0610A	100	14.2	150	21.3	8	0.283	24/86
AC0910	100	14.2	150	21.3	16	0.57	25
AC0920	200	28.4	350	49.7	8	0.283	26

额定压力 & 最高压力 / Rated Pressure & Max. Pressure: 0 50 100 150 200 250 300 350 (kPa)

吐出空气量 / Rated Airflow: 0 20 40 60 80 100 120 (L/min)

AC 线性 真空泵 / AC Linear Free Piston Vacuum Pump

型 号 / Model	达到真空度 / Attainable Vacuum kPa	达到真空度 / Attainable Vacuum in.Hg	吐出空气量 / Rated Airflow L/min	吐出空气量 / Rated Airflow cfm	页 / Page
VP0125	-33.3	-9.84	7	0.247	29
VP0140	-53.3	-15.7	3	0.106	30
VP0435A	-46.7	-13.8	25	0.88	31
VP0450	-66.7	-19.7	18	0.64	32
VP0625	-33.3	-9.84	40	1.41	33
VP0660	-80	-23.6	25	0.88	34
VP0940	-53.3	-15.7	60	2.12	35
VP0940T	-53.3	-15.7	120	4.24	36

达到真空度 / Attainable Vacuum: (kPa) -100 -80 -60 -40 -20 0

吐出空气量 / Rated Airflow: 0 20 40 60 80 100 120 (L/min)

DC 线性 压缩泵 / DC Linear Free Piston Compressor

型 号 / Model	额定压力 / Rated Pressure kPa	额定压力 / Rated Pressure psig	最高压力 / Max. Pressure kPa	最高压力 / Max. Pressure psig	吐出空气量 / Rated Airflow L/min	吐出空气量 / Rated Airflow cfm	页 / Page
DAH102-X1	20	2.84	50	7.11	5	0.177	39
DAH102-Y1	20	2.84	50	7.11	5	0.177	39
DAH105-X1	50	7.11	80	11.4	2.5	0.088	40
DAH105-Y1	50	7.11	80	11.4	2.5	0.088	40
DAH110-X1	100	14.2	120	17.1	1.0	0.035	41
DAH110-Y1	100	14.2	120	17.1	1.0	0.035	41

额定压力 & 最高压力 / Rated Pressure & Max. Pressure: 0 50 100 150 200 250 300 (kPa)

吐出空气量 / Rated Airflow: 0 20 40 60 80 100 120 (L/min)

DC 线性 真空泵 / DC Linear Free Piston Vacuum Pump

型 号 / Model	达到真空度 / Attainable Vacuum kPa	达到真空度 / Attainable Vacuum in.Hg	吐出空气量 / Rated Airflow L/min	吐出空气量 / Rated Airflow cfm	页 / Page
DVH130-X1	-40	-11.8	7	0.247	42
DVH130-Y1	-40	-11.8	7	0.247	42
DVH145-X1	-60	-17.7	3	0.106	43
DVH145-Y1	-60	-17.7	3	0.106	43

达到真空度 / Attainable Vacuum: (kPa) -100 -80 -60 -40 -20 0

吐出空气量 / Free Air Displacement: 0 20 40 60 80 100 120 (L/min)

AC 线性 隔膜泵（压缩泵专用）/ AC Linear Diaphragm Pump (Blower Type)

型 号 / Model	额定压力 / Rated Pressure		最高压力 / Max. Pressure		额定压力 & 最高压力 / Rated Pressure & Max. Pressure	吐出空气量 / Rated Airflow		吐出空气量 / Rated Airflow	页 / Page
	kPa	psig	kPa	psig		L/min	cfm		
VC0100	4	0.57	16	2.28		6	0.212		46
VC0101	10	1.42	20	2.84		10	0.35		48
VC0101S	5	0.71	26	3.70		15	0.53		49
VC0201B	10	1.42	18	2.56		20	0.71		51
VC0301B	10	1.42	20	2.84		25	0.88		53
					0 50 100 150 200 250 300(kPa)			0 20 40 60 80 100 120(L/min)	

AC 线性 隔膜泵（压缩泵 / 真空泵 兼用）/ AC Linear Diaphragm Pump (Dual Type)

型 号 / Model	达到真空度 / Attainable Vacuum	达到真空度 / Attainable Vacuum		定格压力 / Rated Pressure		最高压力 / Max. Pressure		额定压力 & 最高压力 / Rated Pressure & Max. Pressure	吐出空气量 / Rated Airflow		吐出空气量 / Rated Airflow	页 / Page
		kPa	in.Hg	kPa	psig	kPa	psig		L/min	cfm		
VC0100		-14.7	-4.33	4	0.57	16	2.28		6	0.212		45
VC0101 120 V		-18.7	-5.51	10	1.42	18	2.56		10	0.35		47
VC0101 230 V		-10	-2.95	10	1.42	15	2.13		10	0.35		47
VC0201B		-18.7	-5.51	10	1.42	18	2.56		20	0.71		50
VC0301B		-21.3	-6.30	10	1.42	20	2.84		25	0.88		52
	(kPa)-80 -60 -40 -20 0							0 50 100 150(kPa)			0 20 40 60(L/min)	

DC液体泵 / DC Liquid Pump

型 号/ Model	使用压力范围 / Working Pressure Range		使用压力范围 / Working Pressure Range	流量 / Flow Rate	流量 / Flow Rate	自吸力 / Self-priming Pressure		自吸力 / Self-priming Pressure	页 / Page
	kPa	psig		mL/min		kPa	psig		
DPE-100	0 to 100	0 to 14.2		100		20	2.84		73
DPE-400	0 to 100	0 to 14.2		400		40	5.69		73
DPE-400BL	0 to 100	0 to 14.2		400		40	5.69		73
DPE-800	0 to 100	0 to 14.2		800		40	5.69		73
DPE-100BLC	0 to 100	0 to 14.2		100		10	1.42		75
DPE-200BLC	0 to 100	0 to 14.2		200		20	2.84		75
		(kPa)	0 20 40 60 80 100	(mL/min)	0 200 400 600 800		(kPa)	0 20 40 60	

测试条件 : 25℃ 水 /Test conditions: Water at 25 degrees.

液体泵(BIMOR泵) / Liquid Pump (BIMOR PUMP)

型 号/ Model	吐出压力 / Discharge Pressure		吐出压力 / Discharge Pressure	流量 / Flow Rate	流量 / Flow Rate	自吸力 / Self-priming Pressure		自吸力 / Self-priming Pressure	页 / Page
	kPa	psig		mL/min		kPa	psig		
BPS-215i	15	2.13		30		3	0.43		70
BPS-235G	15	2.13		30		1.5	0.21		
BPH-214i	18	2.56		350		8	1.14		
BPH-214D	18	2.56		350		8	1.14		
BPH-214E	18	2.56		350		8	1.14		
BPH-214G	17	2.41		350		7	1.00		
BPH-414i	35	4.98		500		12	1.70		
BPH-414D	35	4.98		500		12	1.70		
BPH-414E	35	4.98		500		12	1.70		
BPH-414G	32	4.54		450		10	1.42		
BPH-474G	35	4.98		400		10	1.42		
BPH-474P	35	4.98		400		10	1.42		
BPHS-414i	35	4.98		700		12	1.70		
BPHS-414E	35	4.98		700		12	1.70		
BPHS-414G	35	4.98		700		12	1.70		
BPHS-474G	35	4.98		500		10	1.42		
BPHS-474P	35	4.98		500		10	1.42		
BPF-465P	35	4.98		400		10	1.42		
		(kPa)	0 20 40 60 80 100	(mL/min)	0 200 400 600 800		(kPa)	0 20 40 60	

测试条件 :25℃ 水，60Hz /Test conditions: 25℃ water at AC frequency 60 Hz.

DC 压缩泵 / 真空泵 (兼用) / DC Compressor and Vacuum Pump (Dual Type)

型 号 / Model	达到真空度 / Attainable Vacuum kPa	in.Hg	最高压力 / Max. Pressure kPa	psig	吐出空气量 / Free Air Displacement L/min	cfm	页 / Page
DP0125	-33.3	-9.84	30	4.27	2.5	0.088	61
DP0140	-53.3	-15.7	50	7.11	4	0.141	62
DP0102	-26.7	-7.87	45	6.40	5	0.177	63
DP0102S	-26.7	-7.87	45	6.40	7	0.247	63
DP0102H-X1	-50.7	-15.0	80	11.4	4	0.141	64
DP0110-X1	-66.7	-19.7	150	21.3	7.5	0.265	66
DP0110-Y1	-66.7	-19.7	150	21.3	7.5	0.265	66
DP0110-X3	-66.7	-19.7	150	21.3	7.5	0.265	67
DP0110T-X1	-60	-17.7	150	21.3	5.5	0.194	68
DP0110T-Y1	-60	-17.7	150	21.3	5.5	0.194	68
DP0210TA-Y1	-60	-17.7	150	21.3	10	0.35	69
DP0105-X1	-66.7	-19.7	250	35.6	2.8	0.099	55
DP0105-Y1	-66.7	-19.7	250	35.6	2.8	0.099	55

(kPa)-80 -60 -40 -20 0 | 0 50 100 150 200 250(kPa) | 0 20 40 60(L/min)

DC 压缩泵 (压缩泵专用) / DC Compressor only

型 号 / Model	达到真空度 / Attainable Vacuum kPa	in.Hg	最高压力 / Max. Pressure kPa	psig	吐出空气量 / Free Air Displacement L/min	cfm	页 / Page
DP0102H-X2			80	11.4	4	0.141	65
DPA0105-X1			220	31.3	2.8	0.099	65
DPA0105-Y1			220	31.3	2.8	0.099	66
DP0410-X2			180	25.6	18	0.64	58
DP0410-Y2			180	25.6	18	0.64	58
DP0410T-Y2			150	21.3	34	1.2	60

(kPa)-80 -60 -40 -20 0 | 0 50 100 150 200 250(kPa) | 0 20 40 60(L/min)

DC 真空泵 (真空泵专用) / DC Vacuum Pump only

型 号 / Model	达到真空度 / Attainable Vacuum kPa	in.Hg	最高压力 / Max. Pressure kPa	psig	吐出空气量 / Free Air Displacement L/min	cfm	页 / Page
DP0410-X1	-77.3	-22.8			18	0.64	57
DP0410-Y1	-77.3	-22.8			18	0.64	57
DP0410T-Y1	-77.3	-22.8			34	1.2	59

(kPa)-80 -60 -40 -20 0 | 0 50 100 150 200 250(kPa) | 0 20 40 60(L/min)

单位换算表/Conversion Tables

压力 / Pressure

kPa	kgf/cm^2 (bar)	psig
300	3.0	42.7
250	2.5	35.6
220	2.2	31.3
200	2.0	28.4
180	1.8	25.6
150	1.5	21.3
130	1.3	18.5
120	1.2	17.1
100	1.0	14.2
80	0.8	11.4
70	0.7	9.96
50	0.5	7.11
45	0.45	6.40
30	0.3	4.27
26	0.26	3.70
20	0.2	2.84
18	0.18	2.56
16	0.16	2.28
15	0.15	2.13
10	0.1	1.42
7	0.07	1.00
5	0.05	0.71
4	0.04	0.57
1	0.01	0.142
0	0	0

流量 / Flow Rate

L/min	cfm	L/min	cfm
0.80	0.028	25.0	0.883
1.00	0.035	28.0	0.989
2.00	0.070	28.32	1.00
2.50	0.088	30.0	1.06
2.80	0.099	34.0	1.20
2.83	0.100	35.0	1.24
3.00	0.106	35.4	1.25
3.50	0.124	40.0	1.41
4.00	0.141	45.0	1.59
5.00	0.177	50.0	1.77
5.50	0.194	55.0	1.94
6.00	0.212	56.6	2.00
7.00	0.247	60.0	2.12
7.50	0.265	70.0	2.47
8.00	0.283	75.0	2.65
10.0	0.353	80.0	2.83
12.0	0.424	85.0	3.00
14.2	0.500	90.0	3.18
15.0	0.530	100	3.53
16.0	0.565	120	4.24
18.0	0.636	150	5.30
20.0	0.708	200	7.06

真空度 / Vacuum

kPa	mmHg	mbar	in.Hg
0	0	0	0
−13.3	−100	−133	−3.94
−26.7	−200	−267	−7.87
−33.3	−250	−333	−9.84
−40.0	−300	−400	−11.8
−44.0	−330	−440	−13.0
−45.3	−340	−453	−13.4
−46.7	−350	−467	−13.8
−53.3	−400	−533	−15.7
−60.0	−450	−600	−17.7
−66.7	−500	−667	−19.7
−73.3	−550	−733	−21.7
−80.0	−600	−800	−23.6
−93.3	−700	−933	−27.6
−100.0	−750	−1000	−29.5
−101.3	−760	−1013	−29.9

压力 / Pressure

from \ to	kPa	kgf/cm^2	bar	psig
kPa	1	0.01	0.01	0.142
kgf/cm^2	100	1	1	14.2
bar	100	1	1	14.2
psig	7	0.07	0.07	1

真空度 / Vacuum

from \ to	kPa	mmHg	mbar	in.Hg
kPa	−1	−7.50	−10	−0.295
mmHg	−0.133	−1	−1.335	−0.0394
mbar	−0.1	−0.75	−1	−0.0295
in. Hg	−3.39	−25.4	−33.92	−1

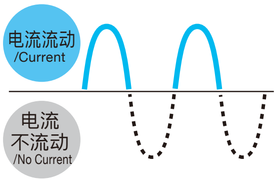
线性产品的工作原理和结构 /The Mechanism and Structure of Nitto Kohki Pumps

线性驱动/自由活塞系统/Linear Motor Driven Free Piston System

通过电磁铁的吸力和弹簧的反作用力来推动活塞，从而产生压力。交流系统利用交流波形和硅二极管，DC系统利用直流波形和逆变器。
The attractive force of the electromagnet and the reaction force of the spring drive the piston to generate pressure.
There are AC models that use AC waveform and a silicon diode, and DC models that use DC waveform and an inverter.

[交流电源、硅二极管的效果] /AC Power (The effect of using a silicon diode)

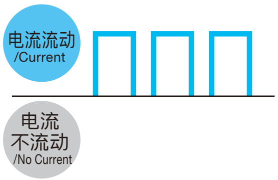
AC方式/AC power



利用硅二极管的特性，
开(电源流动)和关(电流不流动)
反复进行半波整流。
By utilizing the characteristics of the silicon diode, it creates a half-rectified current that repeats ON (current flows) and OFF (no current).

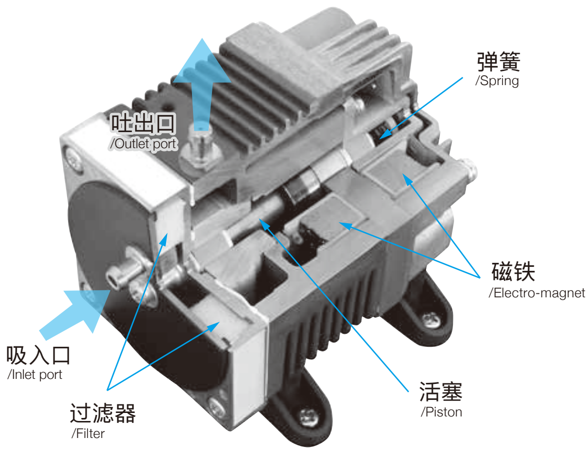
[直流电源、逆变器的效果] /DC Power (The effect of using an inverter)

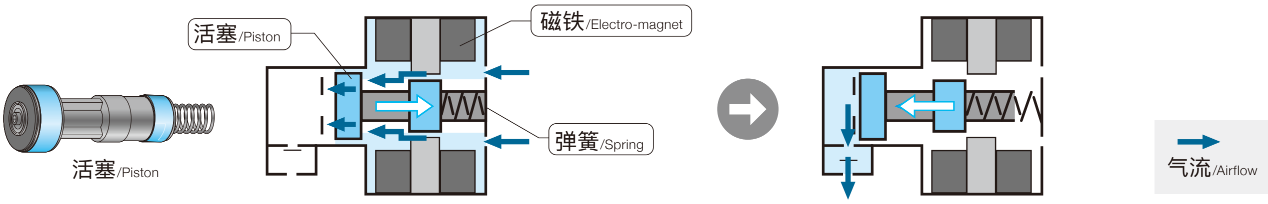
DC方式/DC power



根据逆变器的能力，
产生ON(电源流动)
和OFF(电流不流动)。
The inverter creates a half-rectified current that repeats ON (current flows) and OFF (no current).

＜结构图像/Structural image＞





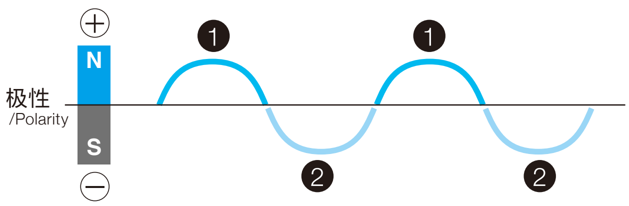
当电流流动时，产生磁力，吸引(拉伸)活塞，弹簧被压缩。
When electric current flows, a magnetic force is generated to pull the piston and the spring is compressed.

如果没有电流流动，则磁力消失，
活塞被压缩的弹簧的复原力推回。
When the electric current stops, the magnetic force is lost and the piston is pushed back by the restoring force of the compressed spring.

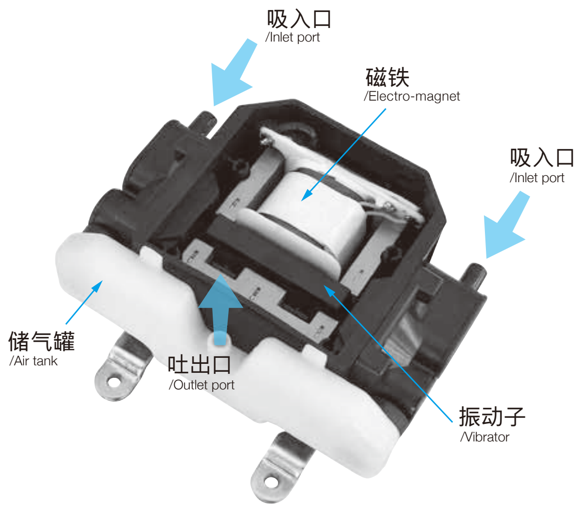
电磁驱动/隔膜方式/Electromagnetic Driven Diaphragm System

通过电磁铁和磁铁的吸引、排斥力使振子往复运动，通过移动隔膜产生压力。
The attractive / repulsive force of the electromagnet reciprocates a vibrator that moves the diaphragm to generate pressure.

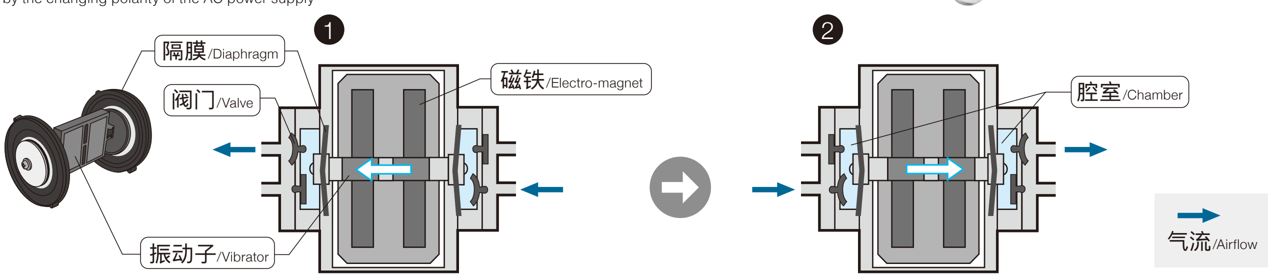
[交流电源、隔膜的效果] /AC Power (The effect of using a diaphragm)



＜结构图像/Structural image＞



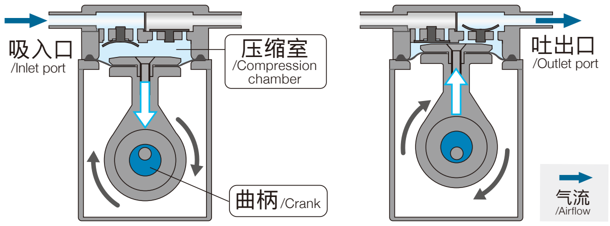
因交流电源引起的极性变化而反复排斥，被压缩、吸引。
The air is drawn and discharged alternately by the changing polarity of the AC power supply



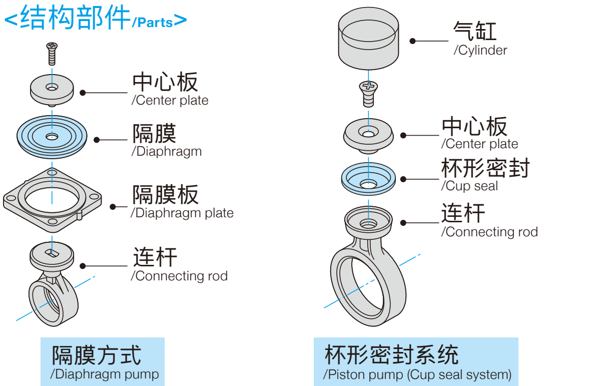
DC泵/隔膜系统/DC Motor Driven Diaphragm System

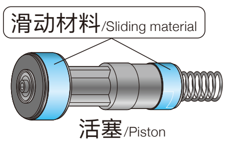
通过曲柄将DC电机的旋转运动转换为往复运动,
让安装在连结杆上的隔膜动作产生压力。

The rotational motion of the DC motor is converted into a reciprocating motion by the crank, and moves the diaphragm attached to the connecting rod to generate pressure.



<结构部件/Parts>





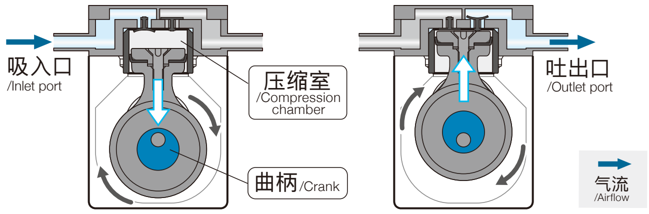
杯形密封利用了我们在线性压缩机和真空泵中使用的活塞滑动材料的专有技术。

The know-how of the piston sliding material used for Nitto Kohki linear compressor and vacuum pump is utilized for the cup seal.

DC泵/杯形密封系统/DC Motor Driven Piston Pump (Cup seal system)

通过曲柄将DC电机的旋转运动转换为往复运动,
让安装在连结杆上的杯形密封动作产生压力。

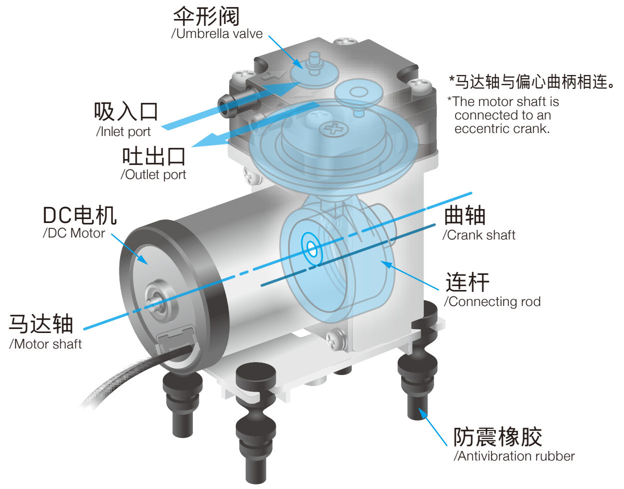
The rotational motion of the DC motor is converted into a reciprocating motion by the crank, and moves the cup seal attached to the connecting rod to generate pressure.



密封件的外周(杯形密封件)灵活地跟随活塞的动态运动到气缸内部。

The outer circumference of the seal part (cup seal) flexibly follows the inner wall of the cylinder against the dynamic movement of the piston.

<结构图像/Structural image> (通用/Common to diaphragm and cup seal)

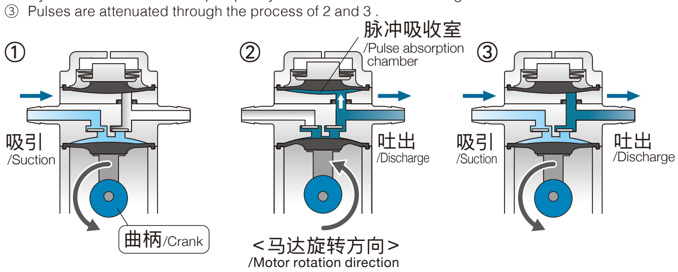


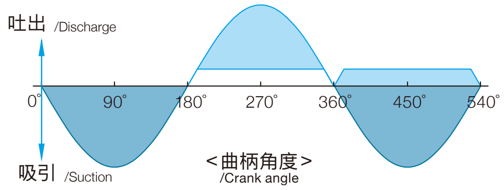
液体泵/隔膜方式/Liquid pump / Diaphragm System

<脉冲吸收结构/Pulse absorption mechanism>

① 吸入。
② 吐出。部分液体被推到脉冲吸收室,因此不会直接流向吐出口。
进入泵的循环吸入与吐出同步。
③ 通过②和③的过程,可以减轻脉冲。

① Suction
② Discharge. Partial fluid delivery to pulse absorption chamber, not directly forced to outlet port.
Cyclical suction drawn into pump is synchronized with the discharge.
③ Pulses are attenuated through the process of 2 and 3 .





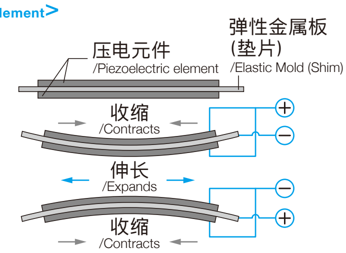
液体泵/压电泵/Liquid pump / Piezoelectric pump

<压电元件/Piezoelectric element>

•双晶片振动子
/Bimorph vibrator

在两个压电元件的内部有粘贴弹性金属板(垫片)的结构。

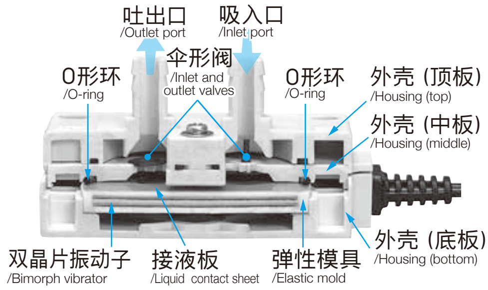
BIMOR PUMP's driving force, the bimorph, comprises the elastic mold (Shim) between two parallel piezoelectric wafers.



双晶片是圆形的,在施加电压时变形为碗状。

*The shape of Bimorph is circular. It deforms when applied with electricity.

<结构图像/Cross section>



型号表示及其含义 /Information found in the model name

以下所示的功耗,额定压力和到达真空度的指示仅用作大尺寸机型选择的指导。

The following indications of power consumption, rated pressure and attained vacuum should be used only as a general guideline for model selection.

AC 01 02

- 02: 额定压力: 20 kPa {0.2 kgf/cm²} /Rated Pressure: 20 kPa {0.2 kgf/cm²}
- 01: 消耗功率: 10 W/Rated Consumption: 10 W
- AC: 压缩泵/Air compressor

VP 01 25

- 25: 达到真空度: -33.3 kPa {-250 mmHg} /Attainable Vacuum: -33.3 kPa {-250 mmHg}
- 01: 消耗功率: 10 W/Rated Consumption: 10 W
- VP: 真空泵/Vacuum pump

技术术语解释 / Explanation of Technical Terms

在选择适合您的应用的型号之前，请务必阅读以下“技术术语解释”。
Be sure to read the following “Explanation of Technical Terms” before selecting a model appropriate for your application.

压缩泵和真空泵的用途、适用流体 /Application Examples and Applicable Fluids for Compressors and Vacuum Pumps

用途: 设备置入用 **适用流体:** 空气 **/Application:** for incorporation into equipment **Applicable fluid:** Air

关于压缩泵和真空泵 /For Compressors & Vacuum Pumps

耐用时间
Rated performance
: 除维护过滤器外，设备可以无需修理的平均累计时间。这表示额定风量降至规格值的80％所需的预计时间。实际使用寿命可能取决于实际运行和环境条件，如输出压力设置，维护计划，通风，环境温度，工作周期等。
The average total accumulated time over which the unit can be used without repair, except the maintenance of the filter. This indicates the expected time required for the rated air flow to fall to 80% of the specification value. The actual life might vary depending on the actual operating and environmental conditions such as output pressure setting, maintenance schedule, ventilation, ambient temperature, duty cycle, etc.

平均无故障时间
MTTF
: 无维修的累计可使用工作时间（除过滤器的保养、点检）。这是在额定运转吐出的空气量的规格值到80％以下的目标时间。实际的耐用时间会随着使用条件和使用环境（使用压力、维护计划、通风、额定时间等）的不同而异。
MTTF (Mean Time to Failure) is the average time that the product will function before it fails.However, this time is reference only and does not guarantee.Since MTTF depends on your actual operating environment and conditions, conduct performance evaluation test with an actual product prior to use.

额定时间
Duty cycle
: 可在线圈绝缘等级的温度范围内使用的时间。
The period of operation under the condition that the coil temperature will not exceed the coil insulation class limit.

额定电源
Rated voltage
: 两种主要类型: AC 115 V/60 Hz和AC 230 V/50 Hz。（DC马达除外）
大部分机型为50 Hz、60 Hz同时工作，也有一部分专用机型。（50 Hz和60 Hz的运转能力不同）
The two major types are 115 V AC/60 Hz and 230 V AC/50 Hz (excluding DC motors). While most models can be operated at both 50 Hz and 60 Hz with different performance characteristics, there are some models that are frequency specific.

额定频率
Rated frequency
: 采用AC驱动泵时，额定频率随型号而不同。有50/60 Hz兼用机型和50 Hz以及60 Hz专用机型。
In the case of AC drive pumps, the rated frequency will vary according to the model. While some are designed for only 50 Hz or for 60 Hz, some are designed for both 50 Hz and 60 Hz.

线圈绝缘等级
Coil insulations
: 本公司的产品根据日本电气用品安全法，相当于E类，一部分除外。但是，这些组装用的产品被看作为“组件”，被分为完成品以及构造，仅供参考。
The suggested class, most bare units attaining “E” class, is based on Japanese electric regulations. They are merely suggestions since bare units are considered “components” and are not classified as complete products or systems.

绝缘等级（参考） Coil Insulation Class (for reference only)	（湿度极限，℃） (Temperature limit, degrees C)
A	100
E	115
B	125
F	150

控制方法
Control method
: 由于负荷功率的变动，控制电子部品时请注意。
Be careful when controlling compressors and vacuum pumps with electronic components because the power factor depends upon the load.

外形以及安装尺寸图
Outside & mounting dimensions
: 确认组装时的设置空间及安装空间。
Useful for assessing the required space for installation. Include sufficient space surrounding the pump when designing it into your application.

使用环境温度
Operating ambient temperature
: 0 ～ 40℃
0 to 40°C

使用环境温度
Operating ambient humidity
: 30 ～ 85%（不可凝结）
30 to 85% non-condensing

保存环境温度
Storage environment temperature
: -10 ～ 60℃
-10 to 60°C

保存环境湿度
Storage environment humidity
: 10 ～ 90%（不可凝结）
10 to 90% non-condensing

改进建议 /Improvement Suggestion

虽然本公司的压缩泵和真空泵采用独特的线圈冷却功能，可控制内部温度上升。
但在超过额定压力运转时，可能会导致温度上升，如果温度过高，可能需要减少运转额定时间，或考虑使用辅助冷却风扇。
Our compressors and vacuum pumps employ a unique internal coil cooling feature to reduce or control the rise in internal temperature. If they are operated at higher than rated pressures, elevated temperatures may result. Should these temperatures become excessive, operating duty cycles may need to be reduced, or the use of an auxiliary cooling fan should be considered.

关于压缩泵 /For Compressors

额定压力 Rated pressure	:可发挥最大能力(性能，寿命)的压力值。与50 Hz/60 Hz的额定频率无关，空气量基本一致的设计。 This is the pressure point where you will get optimum capabilities for performance and service life and where the pump is designed to have almost the same airflow regardless of a rated frequency of 50 Hz or 60 Hz.
吐出空气量 Rated airflow	:额定压力时的吐出流量。(工作后3分钟以内) The discharge airflow volume at the rated pressure. (within three (3) minutes after starting).
额定运转 Rated operation	:额定压力、额定电压、额定频率的运转状态。 Operating conditions regarding the rated pressure, rated voltage, and rated frequency.
最高压力 Maximum pressure	:吐出空气量为0时，设计泵的工作到达最高压力。(不是保证值，只是参考值) The highest obtainable pressure at which the pump is designed to operate while producing zero discharge airflow (not guaranteed; for reference only).
消耗功率 Power consumption	:以额定压力运转时的输入功率。 The wattage during operation at the rated pressure.
电流 Electric current	:以额定压力运转时的电流。(参考) The electric current value when operated at rated pressure (for reference only).
空气量特性图 Airflow characteristics	:空气量相对于压力的特性。(参考) Discharge pressure-airflow curve (for reference only).
消耗功率特性图 Power consumption characteristics:	:消耗功率相对于压力的特性。(参考) Discharge pressure-power consumption curve (for reference only).

关于真空泵 /For Vacuum Pumps

达到真空度 Attainable vacuum	:关闭泵吸入口后运转时的最高真空度。(部分专用机型除外) The highest vacuum the pump can attain with the pump inlet closed (except some of the exclusive models). * 本商品目录采用计示压力 *The degree of vacuum shown in this catalog is gauge pressure.
吐出空气量 Free air displacement	:真空度0时的吐出流量。(运转后3分钟内) The airflow volume at zero vacuum (within 3 minutes after starting).
消耗功率 Power consumption	:达到真空度的范围内的最大输入功率。 The maximum wattage on the power consumption curve when measured against vacuum levels up to the pumps attainable vacuum.
电流 Electric current	:达到真空度的范围内的最大电流。(参考) The maximum electric current on the current characteristics curve when measured against vacuum levels up to the pumps attainable vacuum. (for reference only).
流量特性图 Airflow characteristics	:空气量相对于真空度的特性。(参考) Vacuum-airflow curve (for reference only).
消耗功率特性图 Power consumption characteristics:	:消耗功率相对于真空度的特性。(参考) Vacuum-power consumption curve (for reference only).
排气特性图 Exhaust characteristics	:将10升的容器抽成真空时的真空度的时间特性。(参考) The time required to attain the respective vacuum in a 10 liter container (for reference only).

关于 DC 泵 /For DC Pumps

吐出空气量 Free air displacement	:真空度0时的吐出流量。(运转后3分钟内) The airflow volume at zero vacuum (within 3 minutes after starting).
使用环境温度 Operating ambient temperature	:0 ～ 40℃ (5 ～ 50℃，仅限DP0105) 0 to 40°C (5 to 50°C for DP0105 only)
使用环境湿度 Operating ambient humidity	:30 ～ 85 % (不可凝结) 30 to 85 % non-condensing

与气压同压力的状态下起动。(DPE系列也同样) Start-up the pump at the same level as the atmospheric pressure (Similarly in the case of DPE series pumps)

关于液体泵 /For Liquid Pumps

自吸力 Self-priming pressure	:泵将25℃的水抽起的能力。1 kPa相当于将25℃的水抽起10 cm。 The power the pump requires to draw up 25°C water. 1 kPa is equal to the power needed to draw up 25°C water 10 cm.

本产品录可为用户指南，以针对其用途确定合适的产品型号。在某些情况下，用户可能需要更详细的信息，本公司技术人员将会以规格表的形式提供各机型/型号的信息，以进一步协助用户进行适当的选择。

This catalogue will give the guidelines needed to determine the appropriate model for your application(s). However, in certain cases you may need further detailed information, which will be provided in the form of a specifications sheet for each model/version by our technical staff who will further assist you in your selection.

规格及设计如有变更，恕不另行通知。对于OEM用户，在订购前必须以书面形式确认所需规格。

Specifications and designs are subject to change at any time without notice.
It is recommended that OEM customers confirm the required specifications in writing before placing orders.

凭借在众多用途中的设计，工程，制造以及对产品不断完善等方面积累的经验，
向用户提供“智能化功能”包。
以下我们将介绍主要的设计特征，了解每个设计元素对开发优异的压缩泵或真空泵所发挥的作用。

Experience gained in designing, engineering, manufacturing and continually perfecting our products in thousands of applications has resulted in a “functionally intelligent” package. Please review these key design features and see how every design element contributes overall to the creation of a superior compressor or vacuum pump.

线性驱动活塞 / The Key Design Features of the Linear-motor-driven Free Piston System

小型・轻量 / Compact and Lightweight

马达和压缩部一体化
/ with the motor and compressor combined into the single structure

只有活塞是可动部品，高效性的空间设计，比其他泵相比，实现小型，轻量化。因此，OEM设计时，也增加了机器壳内可收纳部品的选择项。

With the piston as the only moving part, efficient space utilization enables our pump to be considerably smaller and lighter than other pumps. This allows the OEM design engineer increased packaging options for other internal components.

低振動 / Low Vibration

活塞重量轻 / Using an ultra-lightweight piston

因为活塞是唯一可动部品，因此减少了往复时本体的反冲振动作用。另外采用防振橡胶脚垫，可吸收二次振动。

Reducing the moving parts to only the piston minimizes reactive force vibrations to the pump body. In addition, the secondary vibrations are isolated or absorbed through the anti-vibration rubber feet.

低噪音 / Low Noise Level

无动力传递装置
/ No transmission assemblies, means less noise

完全除去了复杂的动力传递结构，无旋转音及轴承音，实现了低噪音。另外，采用独特的自我冷却系统，实现了封闭式结构，从而避免了运转时噪音外泄。

With no need for complicated transmission mechanisms riding on ball bearings, or actuating linkages creating friction and noise, Nitto Kohki’ s pumps are inherently quieter. Additionally, the almost completely sealed configuration further suppresses secondary internal operating noises.

环保清洁 / Clean Operation – Clean Air

无油式构造 / Due to oil-less construction

不使用油分，润滑剂和其他不卫生的润滑油。此时，消耗功率和电流也会减少，无需担心一时的过载造成故障或烧毁。

All wearing surfaces use no oil, grease or other contaminating lubricants. The combination of a precision fluoropolymer sleeved piston assisted by an “air-bearing effect” made possible through a unique air path design, assures that the outlet air is completely free of oil.

低消耗功率 / Low Power Consumption

简单构造 / Truly energy efficient through integrated design

Low

由于活塞是唯一的可动部品，比其他驱动方式相比，大幅度减少能耗，实现了优异的电气效率驱动。

Since the low mass piston is the only moving part, frictional losses are minimized, allowing lower starting and running current, and thus greater efficiency. Related benefits are realized through a lower rise in temperature, facilitating a longer operating life for the pump and the other components within your system.

防止过压 / Overload Protection Structure

自我压力控制功能 / protects against burnout

kPa

当压力过高时，活塞行程自动减少，以防止产生过压。此时，消耗功率和电流也会减少，无需担心一时的过载造成故障或烧毁。

As the pressure within the compressor increases, the piston stroke decreases. Along with this, electric current decreases. Thus a temporary overload will not cause a failure or the pump to burnout.

降低脉动 / Minimal Pulsating Effect

理想的活塞冲程 / due to the ideal piston stroke

无论有无负载，活塞都与电源频率同步运转，由于每分钟3000次/50 Hz或每分钟3600次/60 Hz的高速运转冲程，可极度减少脉冲，实现运转更顺畅，更线性。

The piston’ s mechanical resonance speed is synchronized with the input power frequency regardless of the load, i.e., 3000 strokes at 50 Hz, and 3600 strokes at 60 Hz per minute. This high speed produces shorter pulses which translate into a smoother, more uniform and “linear” motion.

起动快捷 / Instant Response

适应频繁的ON/OFF / enabling easy start-ups in frequent on-off short cycle applications

由于起动电流小，起动速度快，即使对于频繁的ON/OFF反复操作，也可即时应对。另外，可在加压状态下进行ON/OFF操作。

A very low starting current enables our pumps to produce immediate performance in quick short cycle applications, even in the presence of residual back pressure.

易维修 / Easy Maintenance

只需更换空气过滤器和活塞
/ Only air filter and piston to change

无需给油的无油构造，可动部品（只有活塞）和简单的机械装置，无需担心由于过负荷而引起故障或者烧损，可长期发挥稳定的性能。

The oil-less construction requires no lubrication. A simple mechanism containing the piston as the only moving part causes no failure or burning due to an overload and provides stable performance over a long period of time.

长寿命 / Longer Lifetime

增加OEM价值 / increased OEM value

以下融合列举的所有主要特征，作为高价值泵，融合所有重要的一面，提供性能优异的泵。因此OEM设计工程师可以完全放心地将其组装到最先端的设备或装置中。

All key design features listed here combine to provide superior performance in all the important aspects of superior pump design. This enables the OEM engineer to have complete confidence in incorporating the unit into the most demanding systems, in the most advanced equipment.

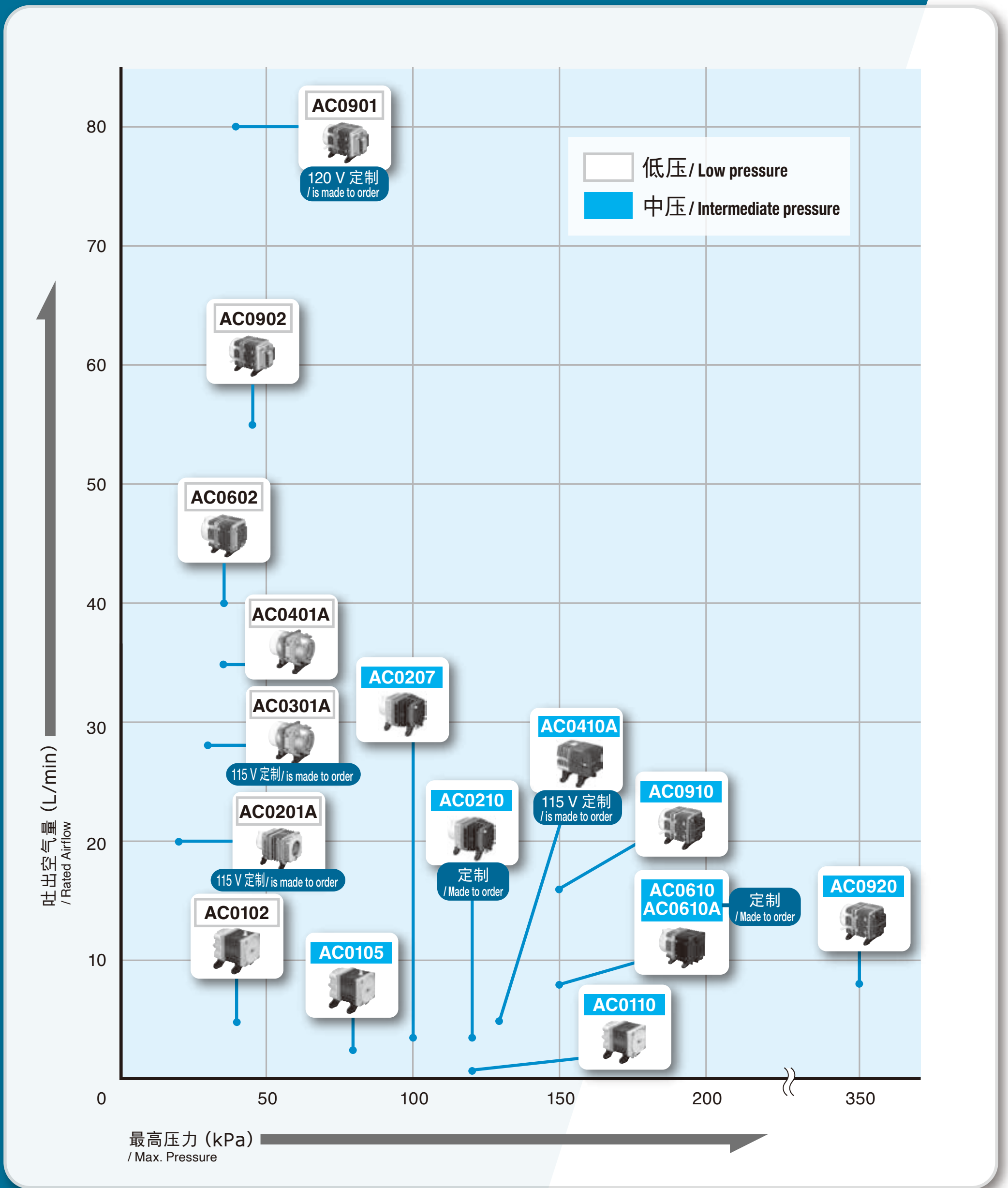
AC LINEAR
Free Piston Compressor

空气压缩泵 / AIR COMPRESSOR

AC线性自由活塞 压缩泵
/ AC LINEAR Free Piston Compressor

AC系列 低压
AC series Low pressure

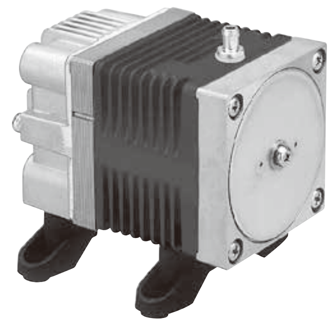
AC系列 中压
AC series Intermediate pressure



压缩泵 / Compressor

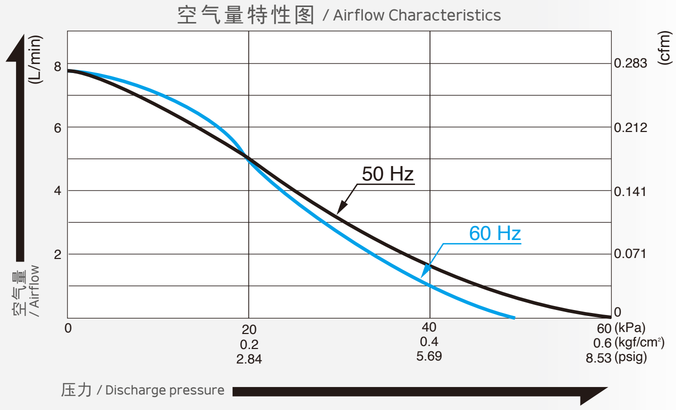
型号 AC0102

115 V/230 V | 115 V/230 V | 115 V/230 V

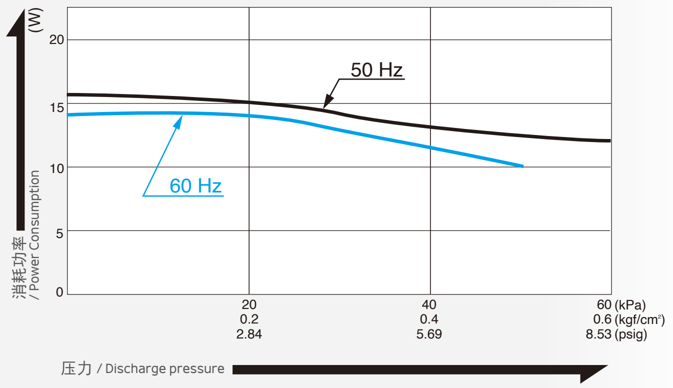


空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



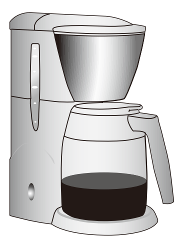
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

额定压力 / Rated Pressure	20 kPa (0.2 kgf/cm²) 0.2 bar 2.84 psig	
吐出空气量 / Rated Airflow	5 L/min 0.177 cfm	
最高压力 / Maximum Pressure	40 kPa (0.4 kgf/cm²) 0.4 bar 5.69 psig	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz	
消耗功率 / Power Consumption	15 W / 14 W	
耐用时间 (MTTF) / Rated Performance	10,000 小时 / hours	
吐出口尺寸 / Outlet	ϕ6 mm (外径) 软管接头 / 6 mm O.D. hose barb	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	
安装尺寸 / Mounting Dimensions	48 (L) x 62 (W) mm 1 - 57/64" (L) x 2 - 7/16" (W)	
本体重量 / Weight	0.7 kg 1.54 Lbs	
导线长度 / Leadwire Length	200 mm 7 - 7/8"	

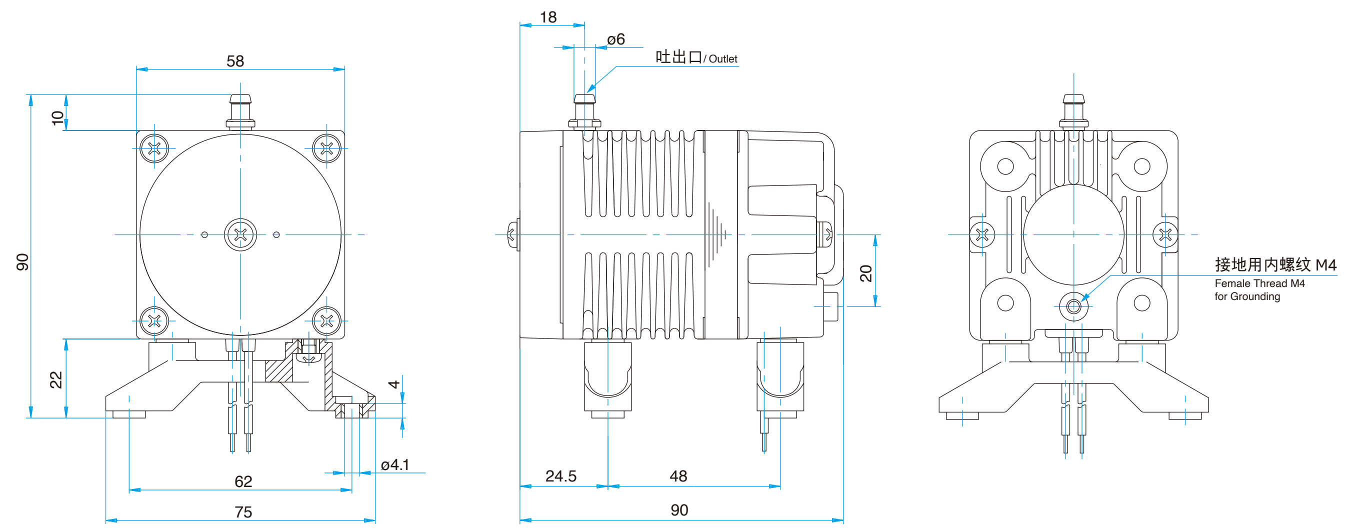
用途例 / Application Examples

滴水机 / Dripping Machine

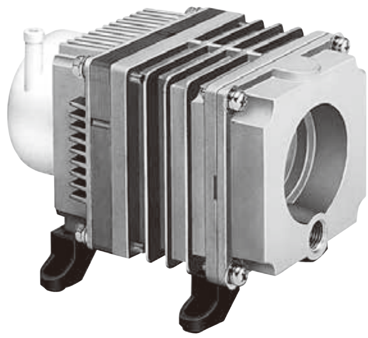


血压计 / Blood Pressure Tester

外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor



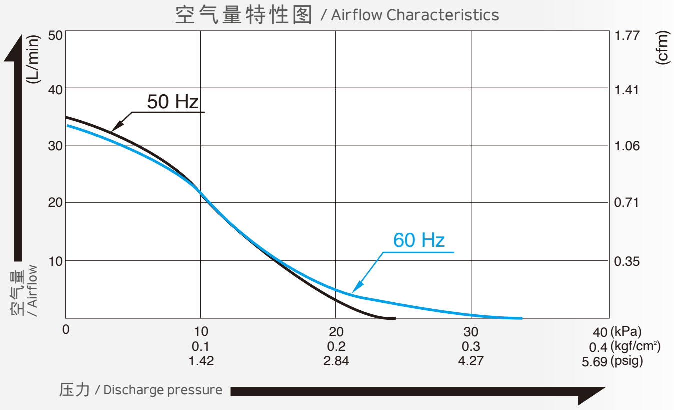
型号 AC0201A

115 V 定制/115 V is made to order

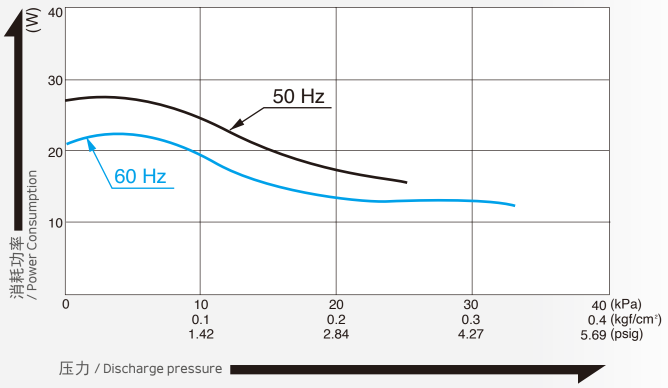
115 V | 115 V/230 V | 115 V/230 V

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



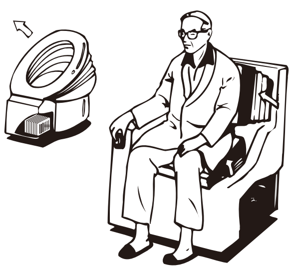
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

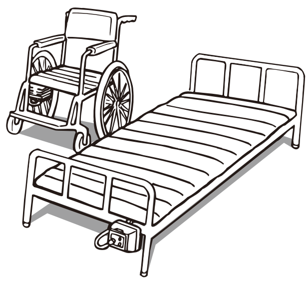
额定压力 / Rated Pressure	10 kPa (0.1 kgf/cm²) 0.1 bar 1.42 psig	
吐出空气量 / Rated Airflow	20 L/min 0.71 cfm	
最高压力 / Maximum Pressure	20 kPa (0.2 kgf/cm²) 0.2 bar 2.84 psig	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz	
消耗功率 / Power Consumption	23 W / 19 W	
耐用时间 / Rated Performance	6,000 小时 / hours	
吐出口尺寸 / Outlet	ISO Rc 1/4（内螺纹 / internal thread）	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	73 (L) x 88 (W) mm 2 - 7/8" (L) x 3 - 15/32" (W)	
本体重量 / Weight	1.5 kg 3.3 Lbs	
导线长度 / Leadwire Length	200 mm 7 - 7/8"	

用途例 / Application Examples

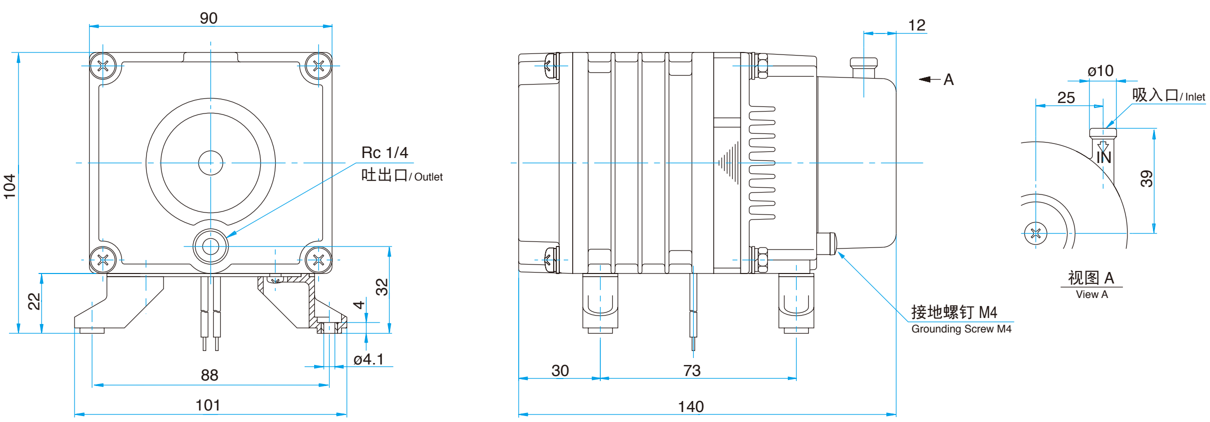
空气式起立辅助器 / Seat LifterTester



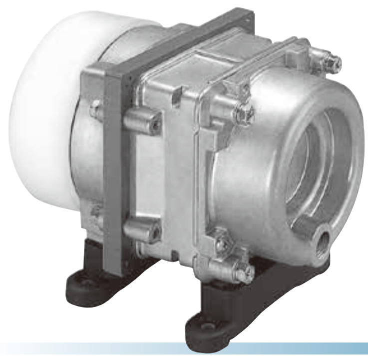
防褥疮垫 / Bed Sore Prevention Mattress



外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor



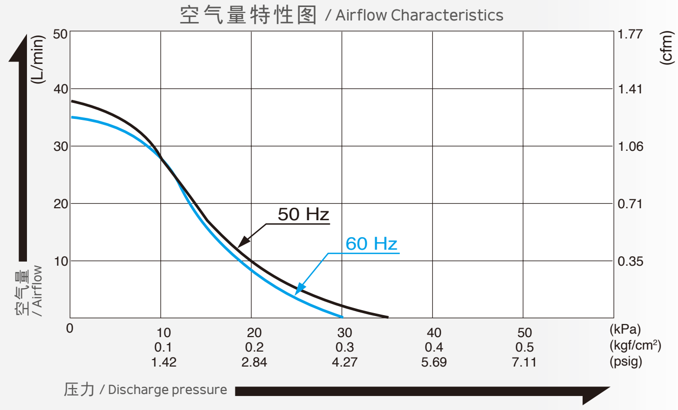
型号 AC0301A

115 V 定制/115 V is made to order

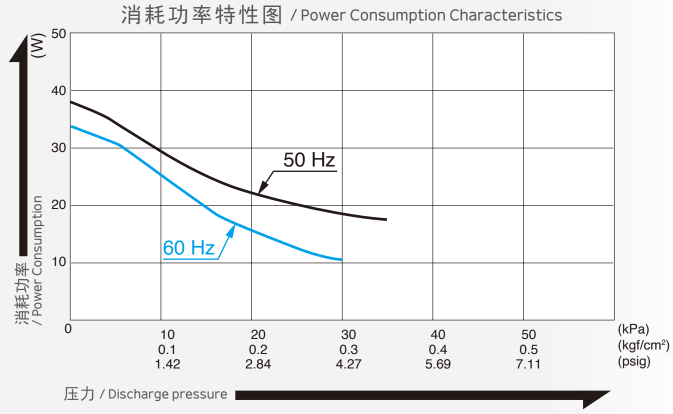
115 V | 115 V/230 V | 115 V/230 V

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

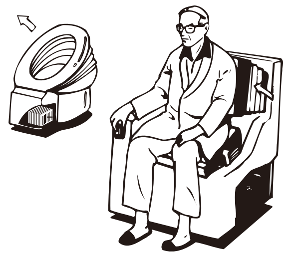
规 格 / Specifications

额定压力 / Rated Pressure	10 kPa (0.1 kgf/cm²) 0.1 bar 1.42 psig	
吐出空气量 / Rated Airflow	28 L/min 0.99 cfm	
最高压力 / Maximum Pressure	30 kPa (0.3 kgf/cm²) 0.3 bar 4.27 psig	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz
消耗功率 / Power Consumption	25 W	29 W
耐用时间 / Rated Performance	10,000 小时 / hours	
吐出口尺寸 / Outlet	ISO Rc 1/4（内螺纹 / internal thread）	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	68 (L) x 84 (W) mm 2 - 43/64" (L) x 3 - 5/16" (W)	
本体重量 / Weight	1.9 kg 4.2 Lbs	
导线长度 / Leadwire Length	200 mm 7 - 7/8"	

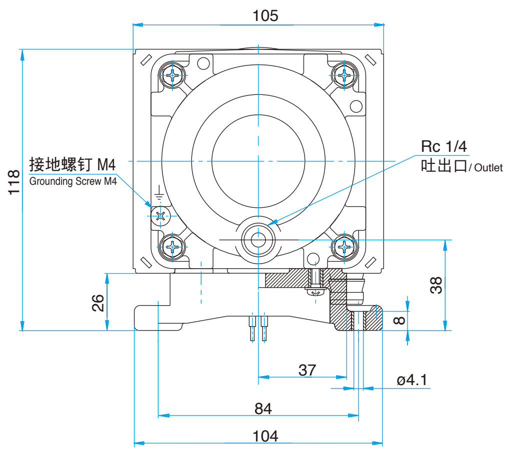
用途例 / Application Examples

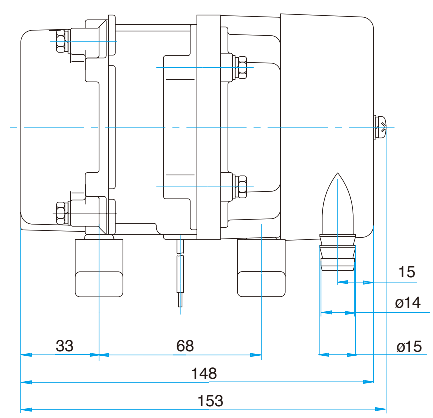
液体搅拌 / Liquid Mixer

空气式起立辅助器 / Seat LifterTester



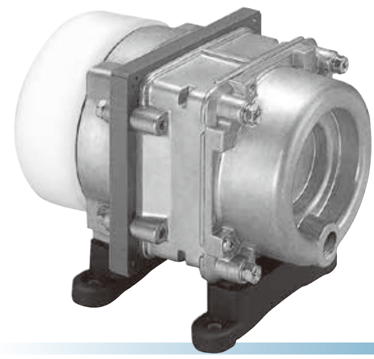
外形尺寸图 / External Dimensions (单位 / Unit : mm)





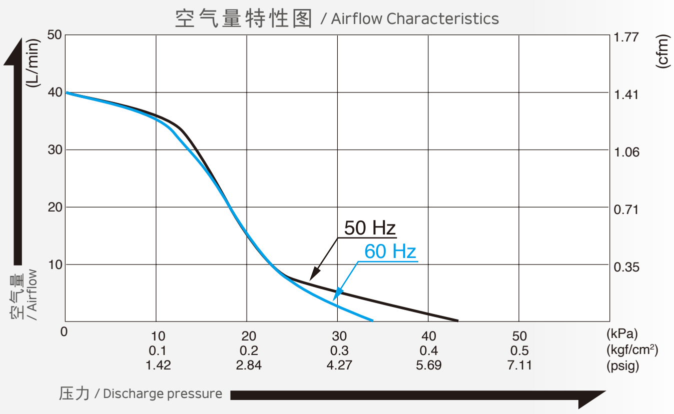
压缩泵 / Compressor

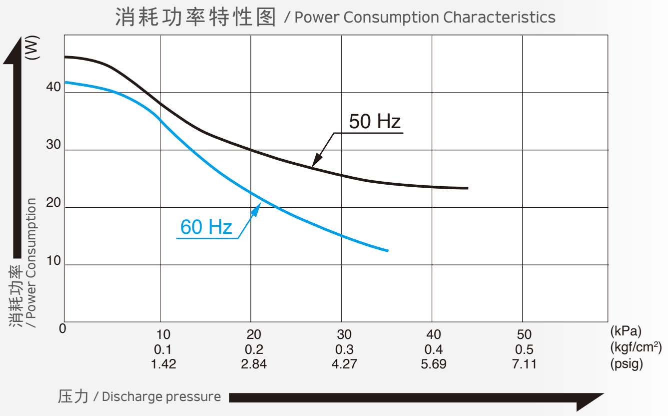
型号 AC0401A



120 V | 120 V/230 V | 120 V/230 V

空气量和消耗功率 / Airflow & Power Consumption





* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

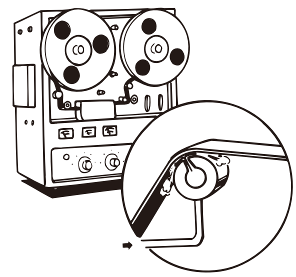
规 格 / Specifications

额定压力 / Rated Pressure	10 kPa (0.1 kgf/cm²) 0.1 bar 1.42 psig	
吐出空气量 / Rated Airflow	35 L/min 1.24 cfm	
最高压力 / Maximum Pressure	30 kPa (0.3 kgf/cm²) 0.3 bar 4.27 psig	35 kPa (0.35 kgf/cm²) 0.35 bar 4.98 psig
额定电压 / Rated Voltage	120 V AC	230 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz
消耗功率 / Power Consumption	35 W	38 W
耐用时间 / Rated Performance	10,000 小时 / hours	
吐出口尺寸 / Outlet	ISO Rc 1/4 (内螺纹 / internal thread)	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品： 相当于 A 类 / Class A for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	68 (L) x 84 (W) mm 2 - 43/64" (L) x 3 - 5/16" (W)	
本体重量 / Weight	1.9 kg 4.2 Lbs	
导线长度 / Leadwire Length	200 mm 7 - 7/8"	

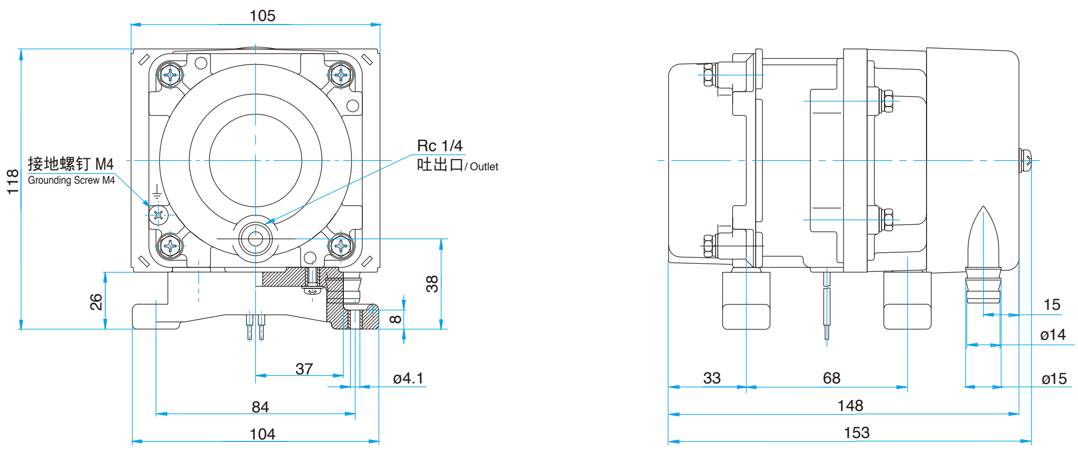
用途例 / Application Examples

液体搅拌 / Liquid Mixer

空气轴承 / Air Bearing



外形尺寸图 / External Dimensions (单位 / Unit : mm)



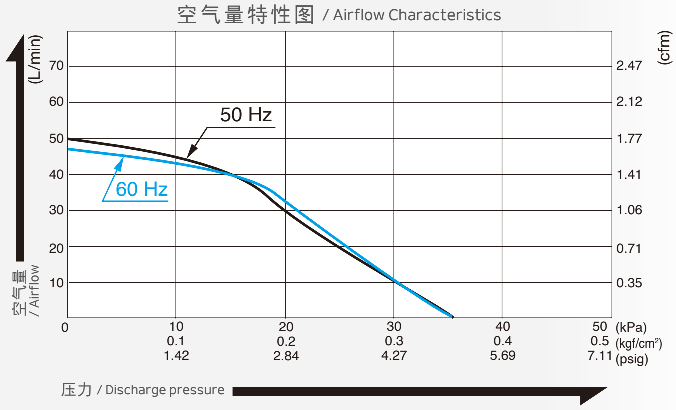
压缩泵 / Compressor

型号 AC0602

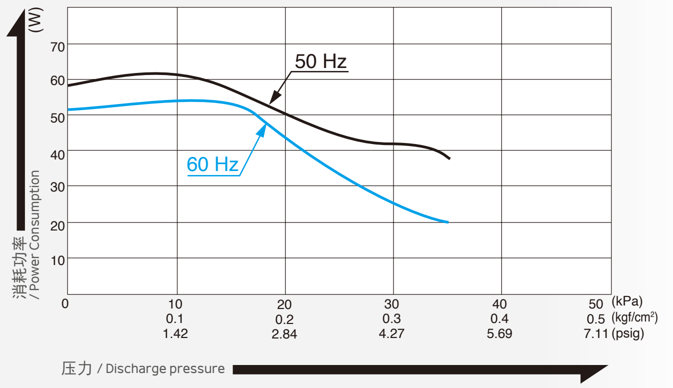
115 V | 115 V/230 V | 115 V/230 V

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



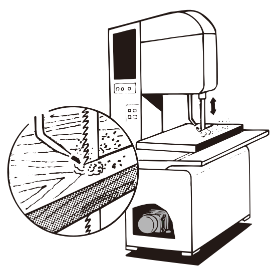
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

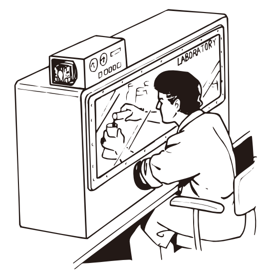
额定压力 / Rated Pressure	15 kPa (0.15 kgf/cm²) 0.15 bar 2.13 psig	
吐出空气量 / Rated Airflow	40 L/min 1.41 cfm	
最高压力 / Maximum Pressure	35 kPa (0.35 kgf/cm²) 0.35 bar 4.98 psig	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz	50 Hz
消耗功率 / Power Consumption	58 W / 52 W	58 W
耐用时间 / Rated Performance	10,000 小时 / hours	
吐出口尺寸 / Outlet	ISO Rc 1/4 (内螺纹 / internal thread)	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 A 类 / Class A for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	68 (L) x 84 (W) mm 2 - 43/64" (L) x 3 - 5/16" (W)	
本体重量 / Weight	3 kg 6.6 Lbs	
导线长度 / Leadwire Length	235 mm 9 - 1/4"	235 mm 9 - 1/4"

用途例 / Application Examples

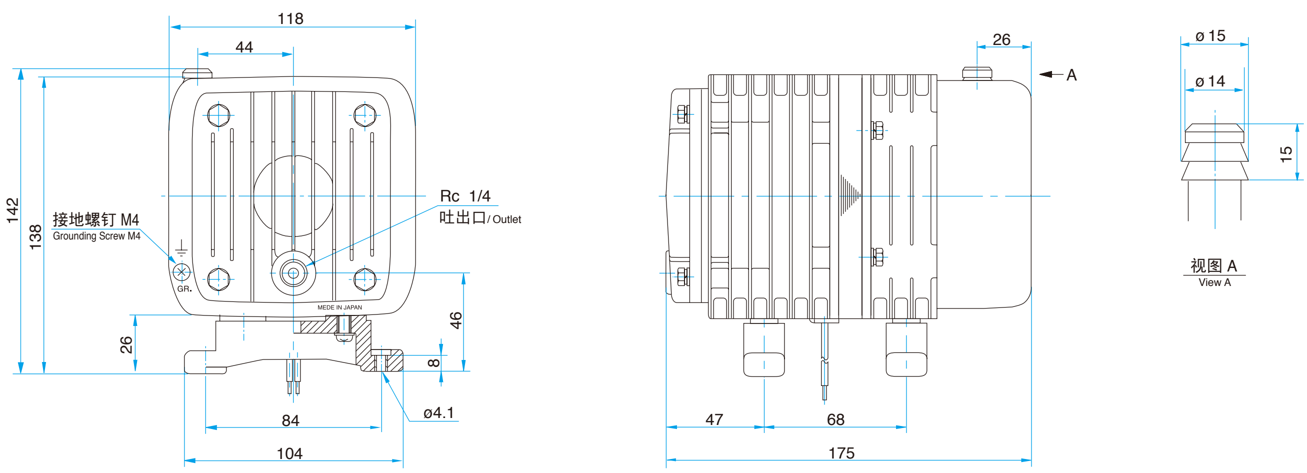
带锯阻塞防止 / Air Blaster for Bandsaw



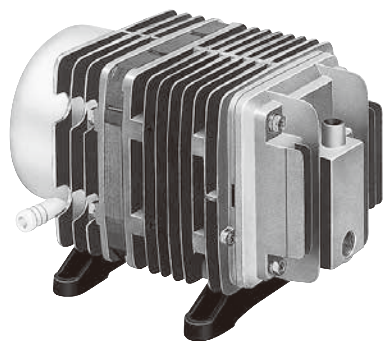
洁净空气工作室 / Clean Room Ventilation



外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor



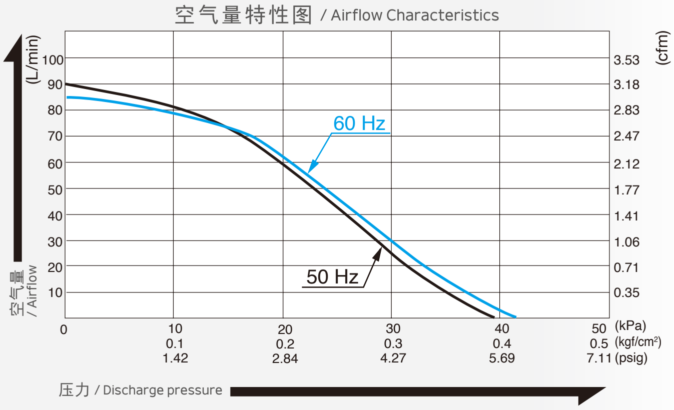
型号 AC0901

120 V 定制/120 V is made to order

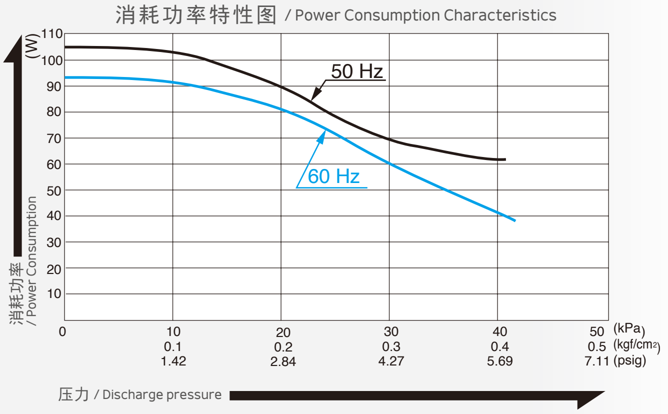
120 V | 120 V/230 V | 120V/230 V

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



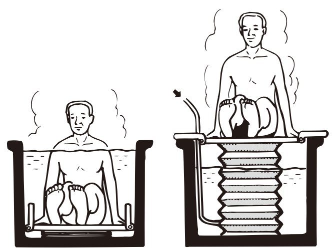
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

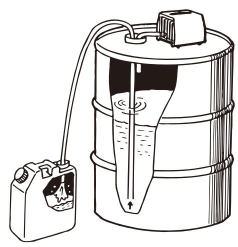
额定压力 / Rated Pressure	10 kPa (0.1 kgf/cm²) 0.1 bar 1.42 psig	
吐出空气量 / Rated Airflow	80 L/min 2.83 cfm	
最高压力 / Maximum Pressure	40 kPa (0.4 kgf/cm²) 0.4 bar 5.69 psig	
额定电压 / Rated Voltage	120 V AC	230 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz
消耗功率 / Power Consumption	88 W	99 W
耐用时间 / Rated Performance	10,000 小时 / hours	
吐出口尺寸 / Outlet	ISO Rc 3/8 (内螺纹 / internal thread)	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	102 (L) x 130 (W) mm 4 - 1/64" (L) x 5 - 1/8" (W)	
本体重量 / Weight	4.9 kg 10.8 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	

用途例 / Application Examples

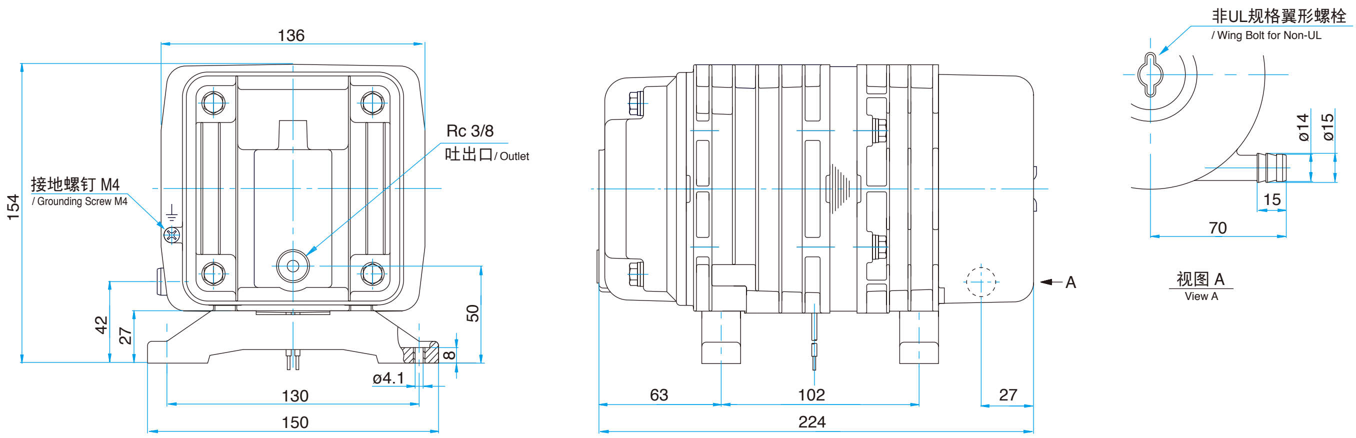
浴缸用空气提升器 / Air Lifter for Bathtub



液体压送 / Liquid Dispenser

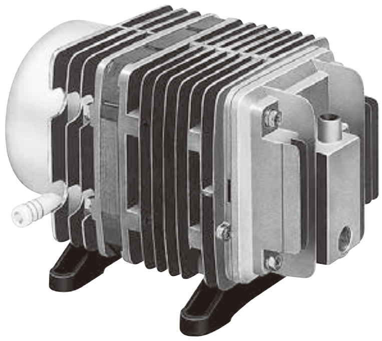


外形尺寸图 / External Dimensions (单位 / Unit : mm)

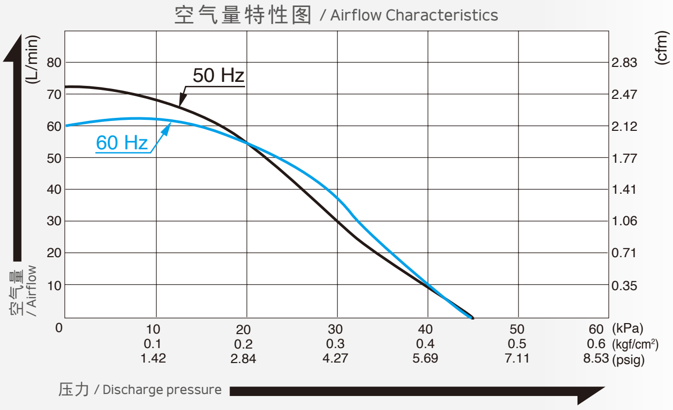


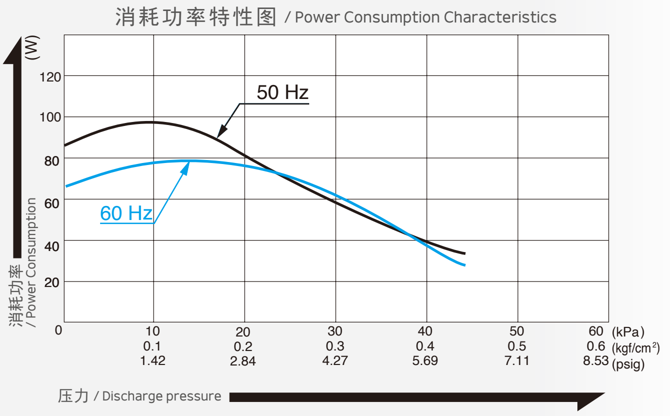
压缩泵 / Compressor

型号 AC0902



空气量和消耗功率 / Airflow & Power Consumption





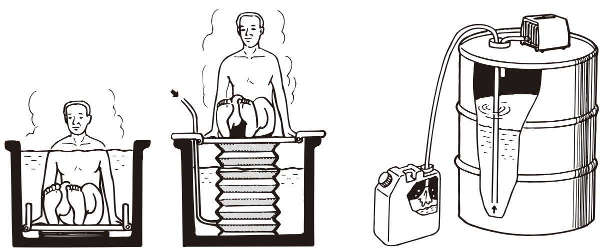
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

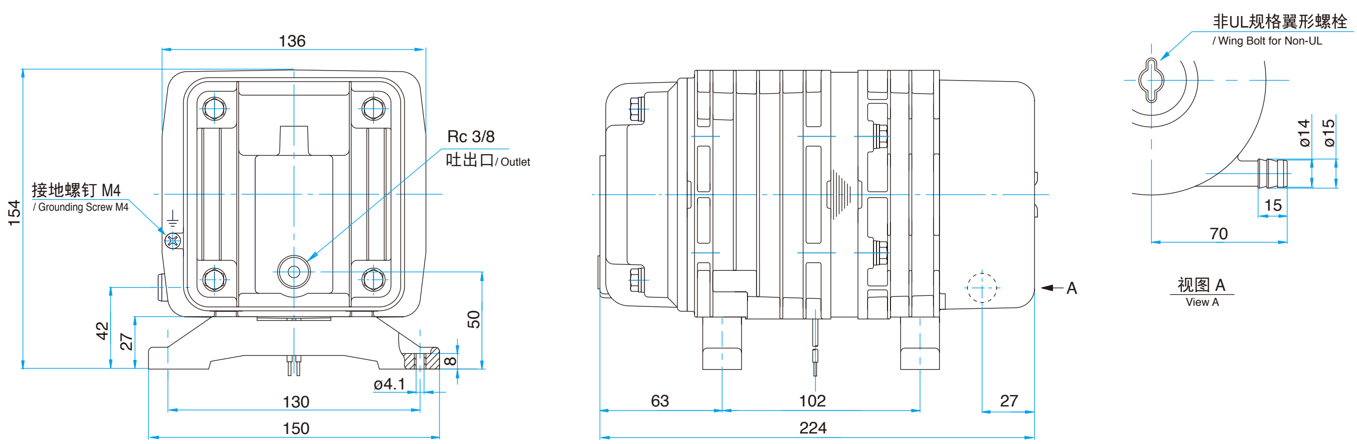
额定压力 / Rated Pressure	20 kPa (0.2 kgf/cm²) 0.2 bar 2.84 psig	
吐出空气量 / Rated Airflow	55 L/min 1.94 cfm	
最高压力 / Maximum Pressure	45 kPa (0.45 kgf/cm²) 0.45 bar 6.40 psig	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz
消耗功率 / Power Consumption	75 W	85 W
耐用时间 / Rated Performance	10,000 小时 / hours	
吐出口尺寸 / Outlet	ISO Rc 3/8（内螺纹 / internal thread）	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	102 (L) x 130 (W) mm 4 - 1/64" (L) x 5 - 1/8" (W)	
本体重量 / Weight	4.9 kg 10.8 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	320 mm 12 - 19/32"

用途例 / Application Examples

浴缸用空气提升器 / Air Lifter for Bathtub　液体压送 / Liquid Dispenser

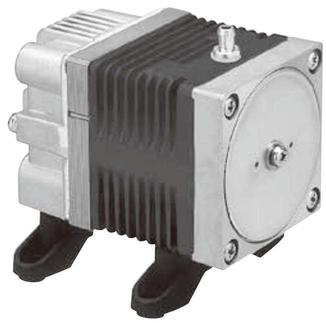


外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor

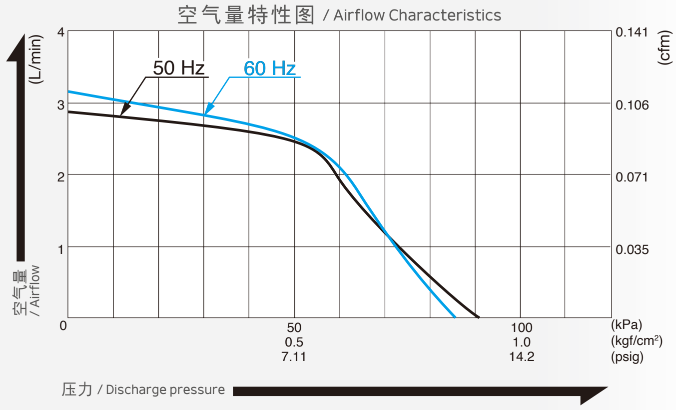
型号 AC0105



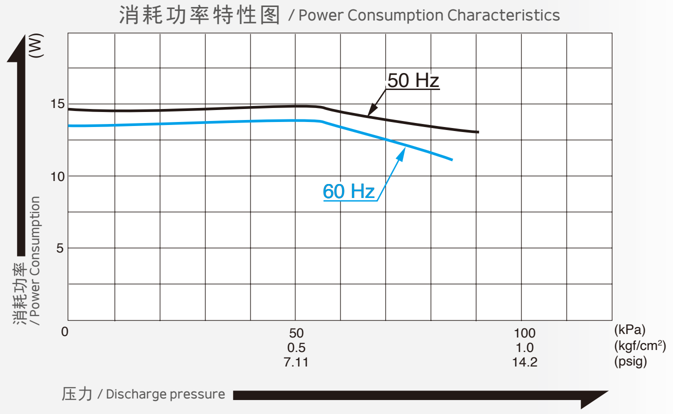
115 V | 115 V/230 V | 115 V/230 V

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



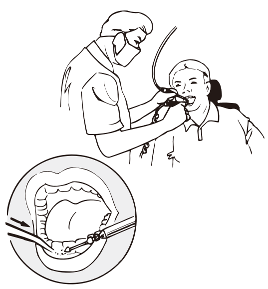
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

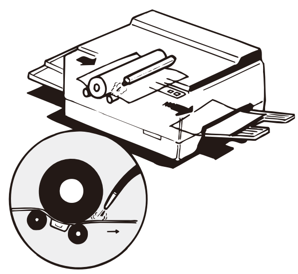
额定压力 / Rated Pressure	50 kPa (0.5 kgf/cm²) 0.5 bar 7.11 psig	
吐出空气量 / Rated Airflow	2.5 L/min 0.088 cfm	
最高压力 / Maximum Pressure	80 kPa (0.8 kgf/cm²) 0.8 bar 11.4 psig	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz	
消耗功率 / Power Consumption	15 W / 14 W	
耐用时间 (MTTF) / Rated Performance	5,000 小时 / hours	
吐出口尺寸 / Outlet	ϕ6 mm（外径）软管接头 / 6 mm O.D. hose barb	
额定时间 / Duty Cycle	60 分钟 / minutes	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	48 (L) x 62 (W) mm 1 - 57/64" (L) x 2 - 7/16" (W)	
本体重量 / Weight	0.7 kg 1.54 Lbs	
导线长度 / Leadwire Length	200 mm 7 - 7/8"	

用途例 / Application Examples

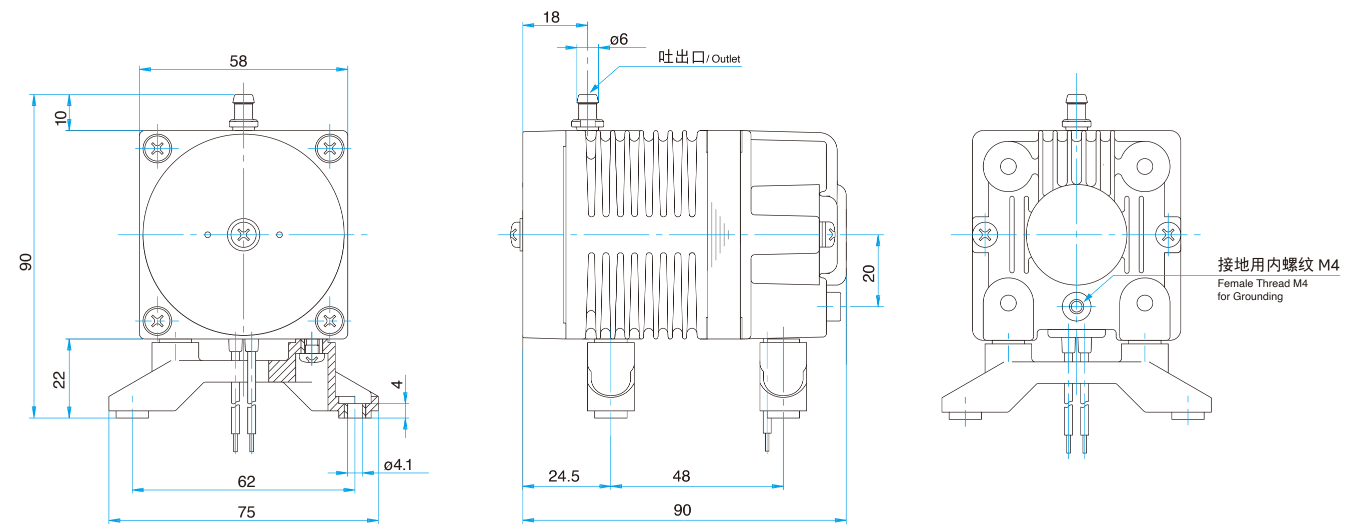
生理盐水喷射 / Saline Water Splasher



复印机 (复印纸的分离) / Copy Paper Separator

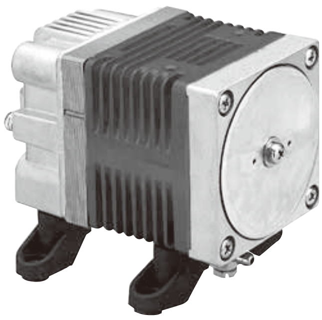


外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor

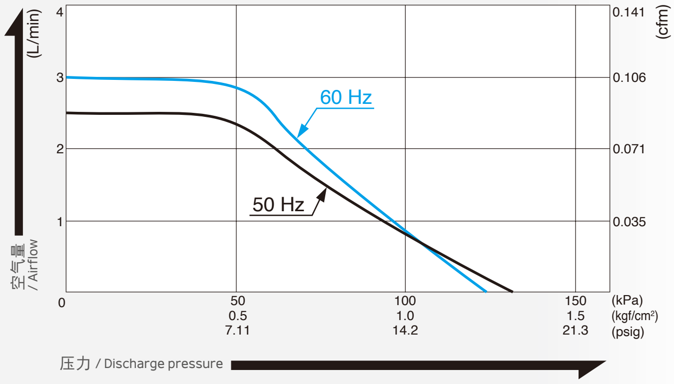
型号 AC0110



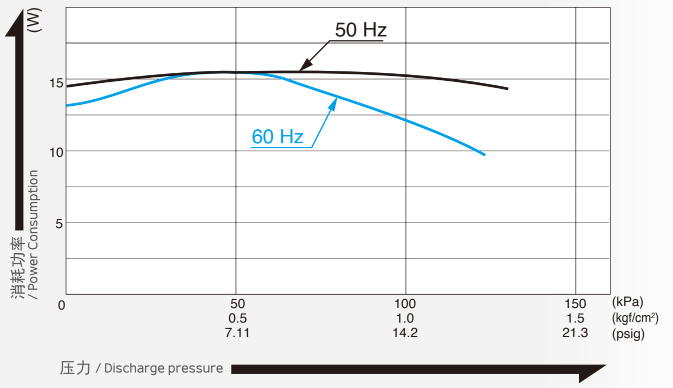
UL 115 V | CE 115 V/230 V | UKCA 115 V/230 V | 面向中国 RoHS 机种 230 V

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



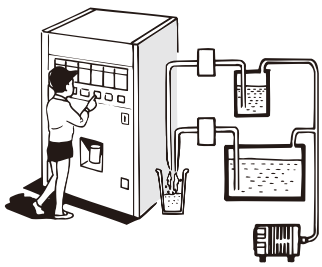
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

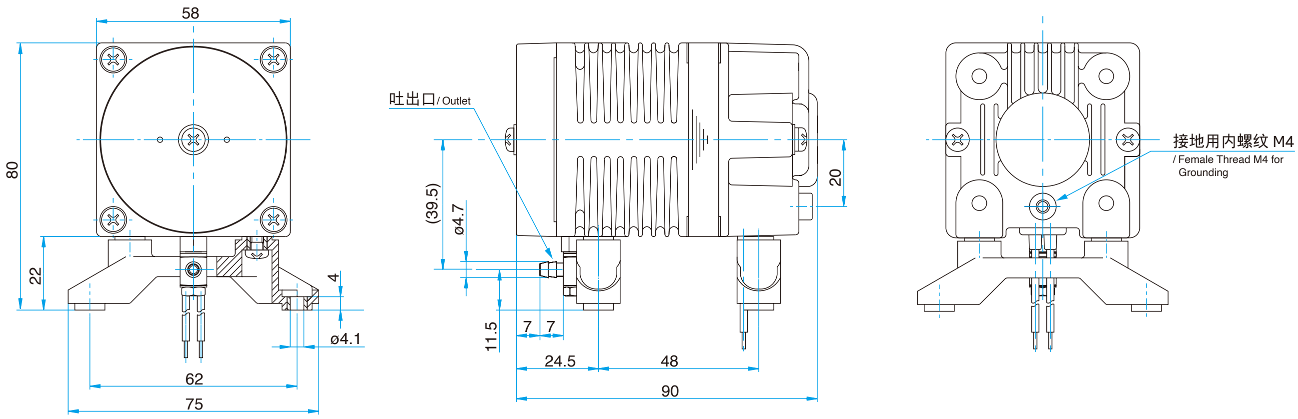
额定压力 / Rated Pressure	100 kPa (1.0 kgf/cm²) 1.0 bar 14.2 psig	
吐出空气量 / Rated Airflow	1.0 L/min 0.035 cfm	0.8 L/min 0.028 cfm
最高压力 / Maximum Pressure	130 kPa (1.3 kgf/cm²) 1.3 bar 18.5 psig	120 kPa (1.2 kgf/cm²) 1.2 bar 17.1 psig
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz	
消耗功率 / Power Consumption	15 W / 12 W	
耐用时间 (MTTF) / Rated Performance (MTTF)	4,000 小时 / hours	
吐出口尺寸 / Outlet	ϕ6 mm (外径) 软管接头 / 6 mm O.D. hose barb	
额定时间 / Duty Cycle	30 分钟	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	48.5 (L) x 62 (W) mm 1 - 29/32" (L) x 2 - 7/16" (W)	48 (L) x 62 (W) mm 1 - 57/64" (L) x 2 - 7/16" (W)
本体重量 / Weight	0.7 kg 1.54 Lbs	
导线长度 / Leadwire Length	200 mm 7 - 7/8"	

用途例 / Application Examples

自动售货机 / Automatic Dispenser

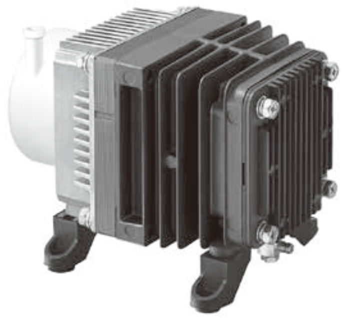


外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor

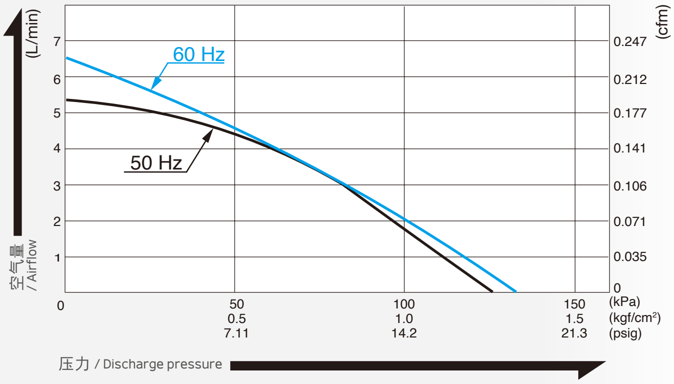
型号 AC0207



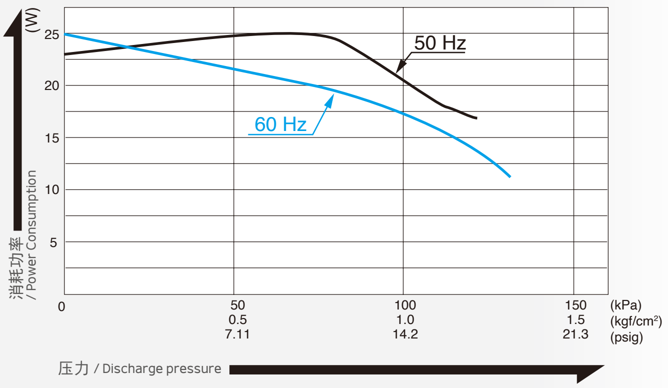
115 V | 115 V/230 V | 115 V/230 V

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



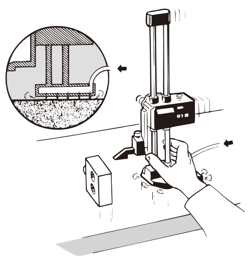
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

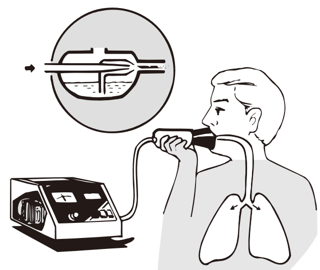
额定压力 / Rated Pressure	70 kPa (0.7 kgf/cm²) 0.7 bar 9.96 psig	
吐出空气量 / Rated Airflow	3.5 L/min 0.124 cfm	
最高压力 / Maximum Pressure	100 kPa (1.0 kgf/cm²) 1.0 bar 14.2 psig	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz	
消耗功率 / Power Consumption	25 W / 20 W	
耐用时间 / Rated Performance	3,000 小时 / hours	
吐出口尺寸 / Outlet	ϕ4.7 mm (外径) 软管接头 / 4.7 mm O.D. hose barb	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	75 (L) x 88 (W) mm 2 - 61/64" (L) x 3 - 15/32" (W)	
本体重量 / Weight	1.7 kg 3.7 Lbs	
导线长度 / Leadwire Length	200 mm 7 - 7/8"	

用途例 / Application Examples

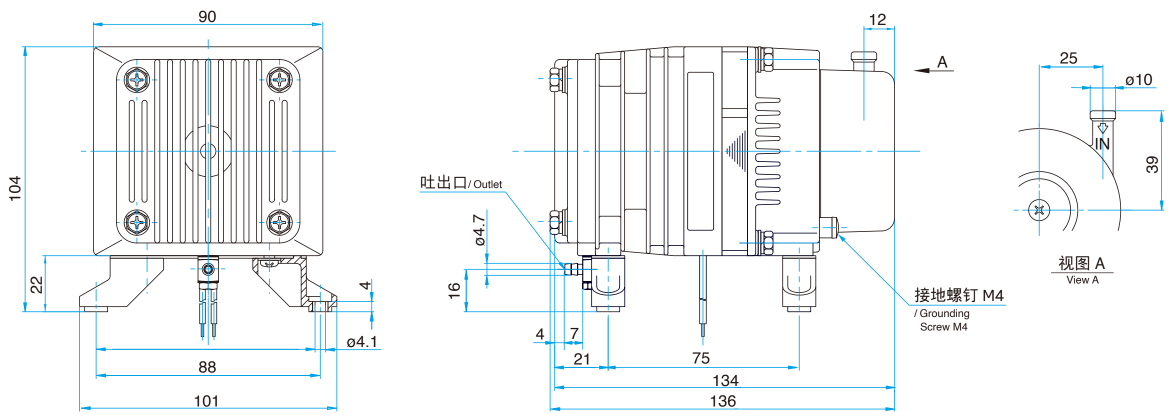
气浮式精密测量仪 / Air Bearing for Precision Machines



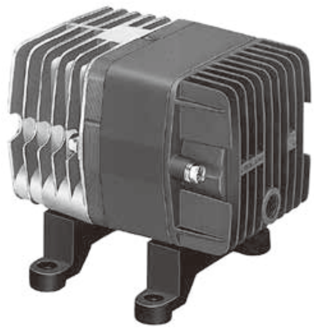
雾化器 / Nebulizer



外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor



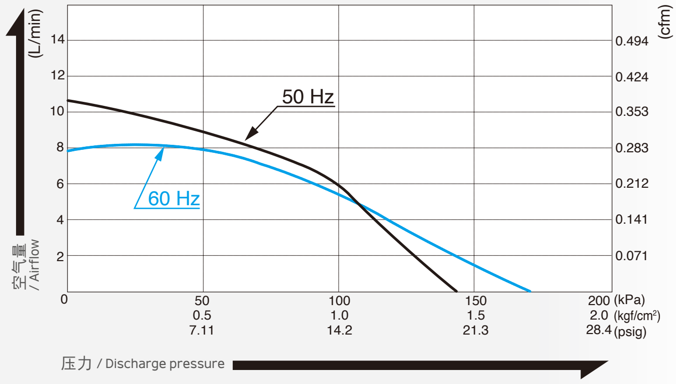
型号 AC0410A

115 V 定制 / 115 V is made to order

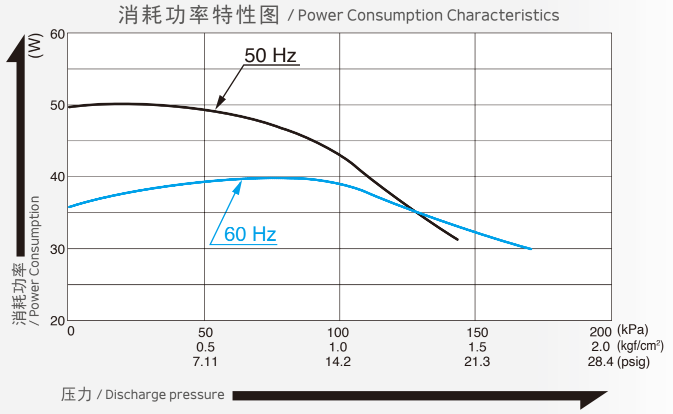
CE 230 V　UKCA 230 V

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



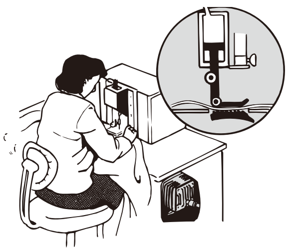
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

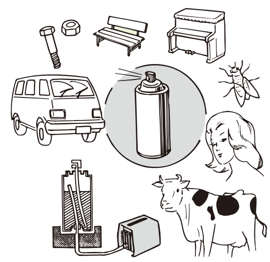
额定压力 / Rated Pressure	100 kPa (1.0 kgf/cm²) 1.0 bar 14.2 psig	
吐出空气量 / Rated Airflow	5 L/min 0.177 cfm	
最高压力 / Maximum Pressure	130 kPa (1.3 kgf/cm²) 1.3 bar 18.5 psig	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz / 60 Hz
消耗功率 / Power Consumption	39 W	43 W / 39 W
耐用时间 / Rated Performance	3,000 小时 / hours	
吐出口尺寸 / Outlet	ISO Rc 1/4 (内螺纹 / internal thread)	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	相当于 B 类 / Class B equivalent	
安装尺寸 / Mounting Dimensions	68 (L) x 98 (W) mm 2 - 43/64" (L) x 3 - 55/64" (W)	
本体重量 / Weight	2.1 kg 4.6 Lbs	
导线长度 / Leadwire Length	220 mm 8 - 21/32"	170 mm 6 - 11/16"

用途例 / Application Examples

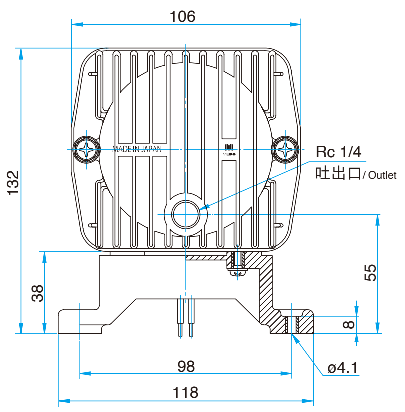
工业缝纫机 / Industrial Sewing Machine

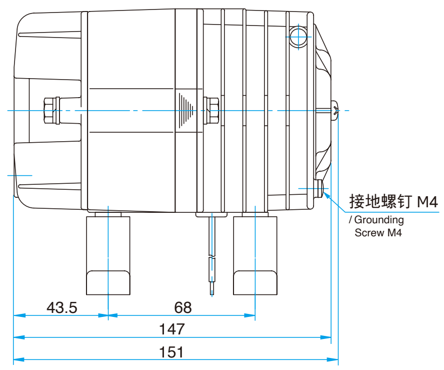


各种喷雾器 / Various Aerosol Sprays



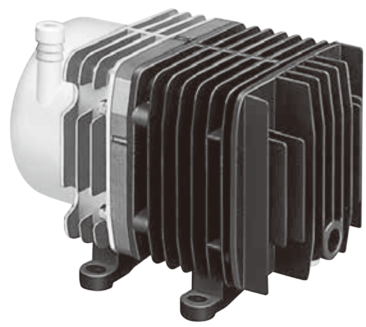
外形尺寸图 / External Dimensions (单位 / Unit : mm)





压缩泵 / Compressor

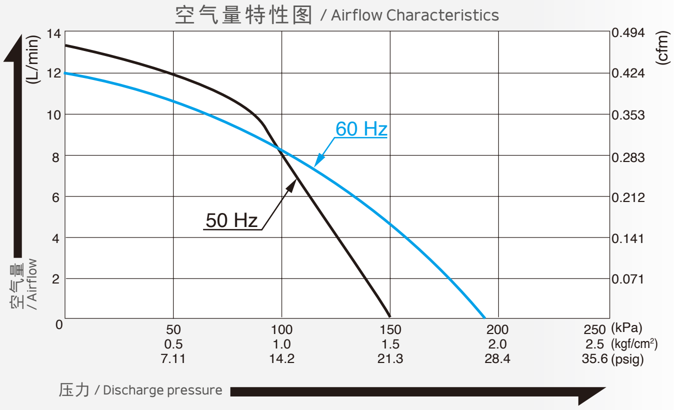
型号 AC0610



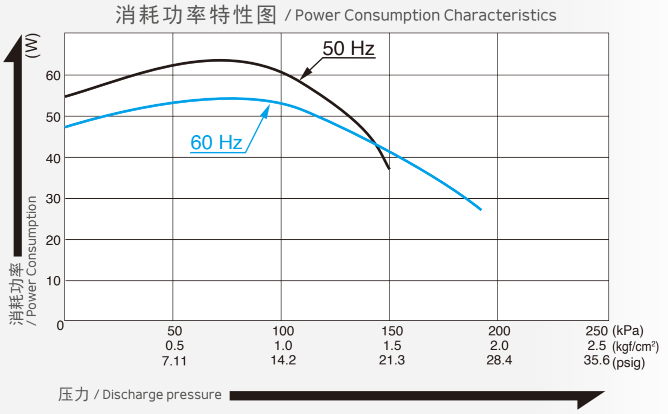
115 V | 115 V/230 V | 115 V/230 V

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



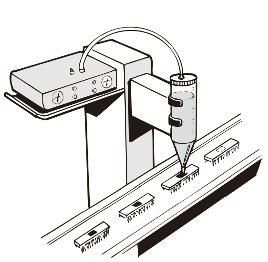
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

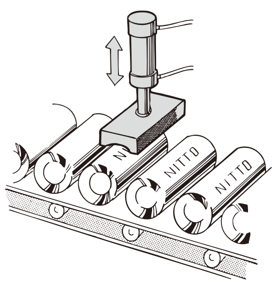
额定压力 / Rated Pressure	100 kPa (1.0 kgf/cm²) 1.0 bar 14.2 psig	
吐出空气量 / Rated Airflow	8 L/min 0.283 cfm	
最高压力 / Maximum Pressure	150 kPa (1.5 kgf/cm²) 1.5 bar 21.3 psig	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz	
消耗功率 / Power Consumption	60 W / 52 W	
耐用时间 / Rated Performance	3,000 小时 / hours	
吐出口尺寸 / Outlet	ISO Rc 1/4（内螺纹 / internal thread）	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	68 (L) x 84 (W) mm 2 - 43/64" (L) x 3 - 5/16" (W)	
本体重量 / Weight	3.2 kg 7.1 Lbs	
导线长度 / Leadwire Length	200 mm 7 - 7/8"	

用途例 / Application Examples

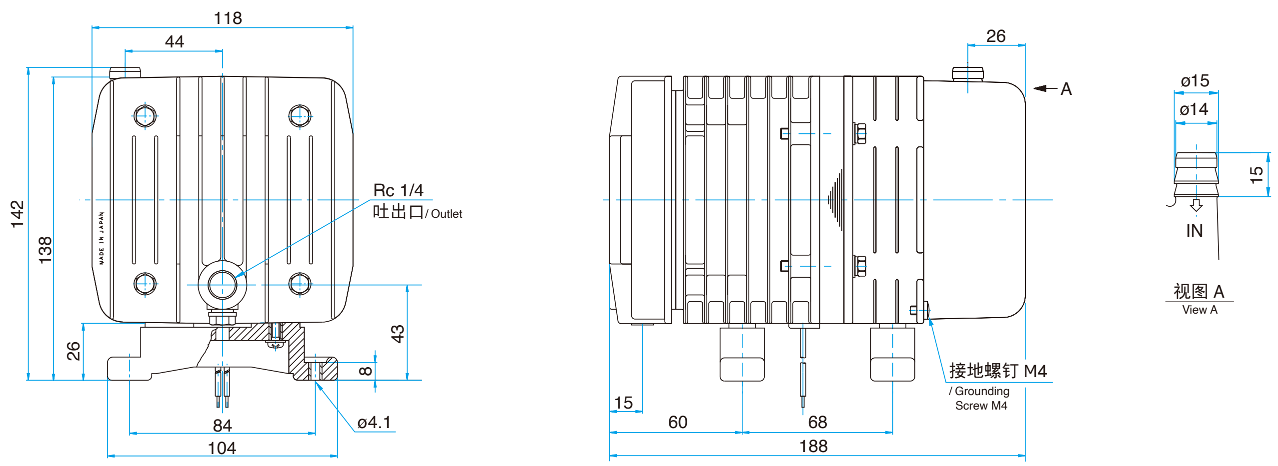
自动点胶机 / Dispenser



自动压印机 / Automatic Stamper

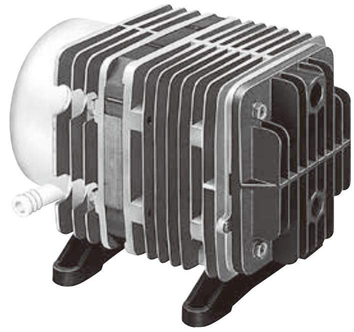


外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor

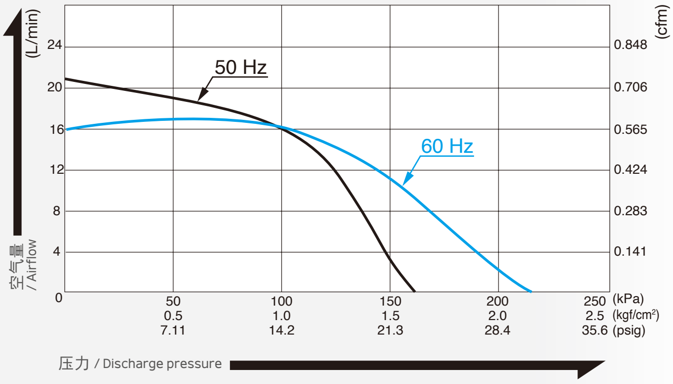
型号 AC0910



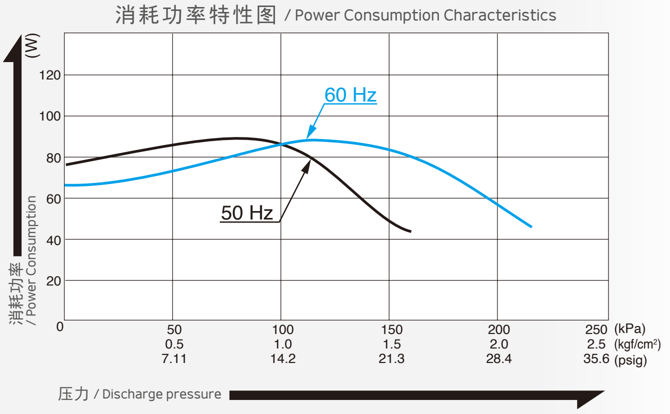
UL	CE	UKCA	面向中国 RoHS 机种
115 V/230 V	115 V/230 V	115 V/230 V	230 V

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



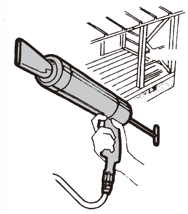
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

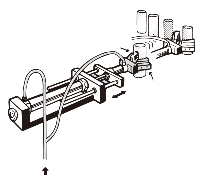
额定压力 / Rated Pressure	100 kPa (1.0 kgf/cm²) 1.0 bar 14.2 psig	
吐出空气量 / Rated Airflow	16 L/min 0.57 cfm	
最高压力 / Maximum Pressure	150 kPa (1.5 kgf/cm²) 1.5 bar 21.3 psig	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz / 60 Hz
消耗功率 / Power Consumption	85 W	90 W / 85 W
耐用时间 / Rated Performance	3,000 小时 / hours	
吐出口尺寸 / Outlet	ISO Rc 1/4 (内螺纹 / internal thread)	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	
安装尺寸 / Mounting Dimensions	102 (L) x 130 (W) mm 4 - 1/64" (L) x 5 - 1/8" (W)	
本体重量 / Weight	4.9 kg 10.8 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	320 mm 12 - 19/32"

用途例 / Application Examples

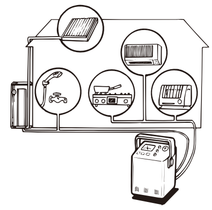
密封胶枪 / Sealant gun



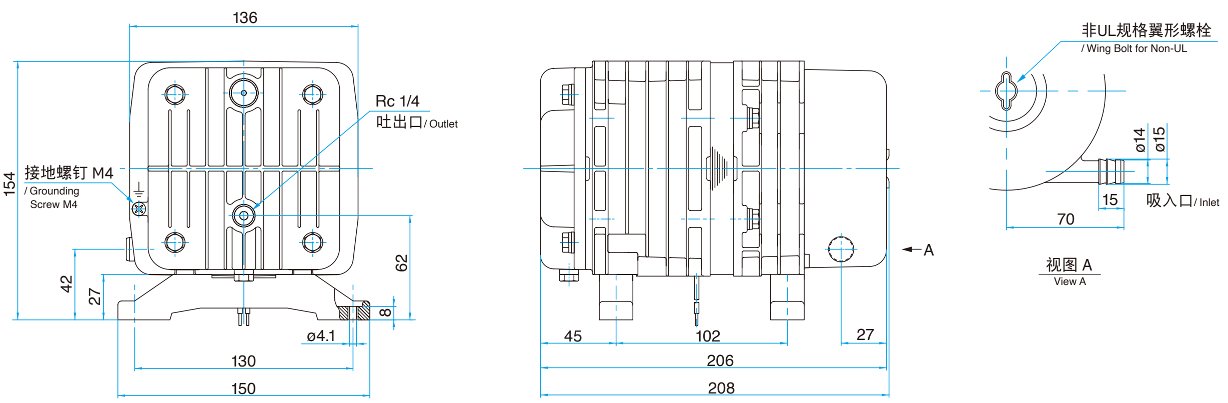
气缸 / 气动卡盘 / Air Cylinder/Chuck Driver



检漏机 / Leakage Tester

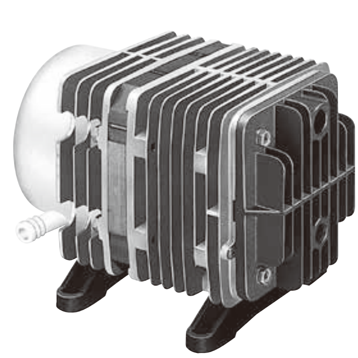


外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor

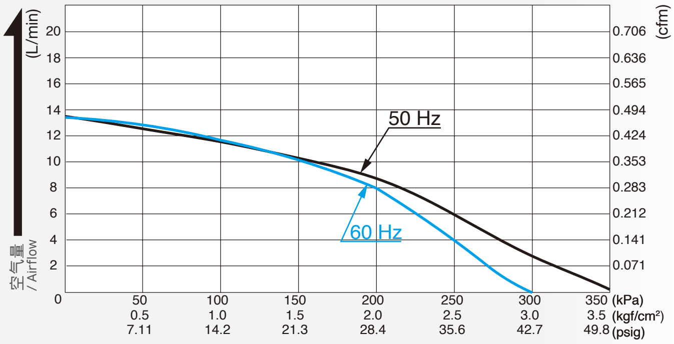
型号 AC0920



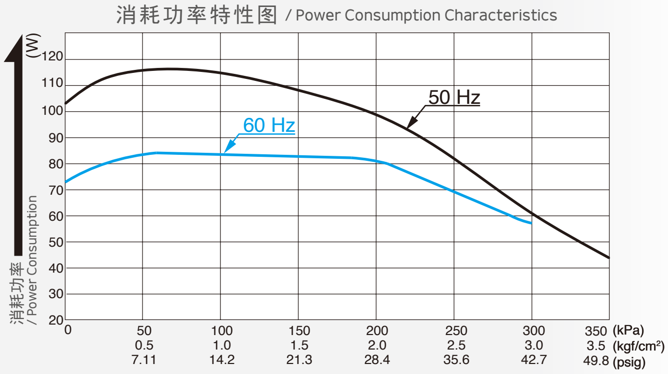
115 V (60 Hz) | 115 V (60 Hz) 230 V (50 Hz) | 115 V (60 Hz) 230 V (50 Hz)

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



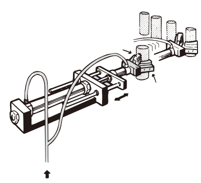
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

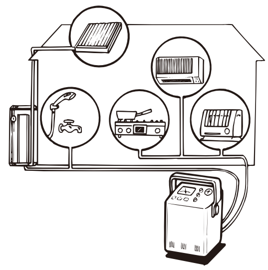
额定压力 / Rated Pressure	200 kPa (2.0 kgf/cm²) 2.0 bar 28.4 psig	
吐出空气量 / Rated Airflow	8 L/min 0.283 cfm	
最高压力 / Maximum Pressure	280 kPa (2.8 kgf/cm²) 2.8 bar 39.8 psig	350 kPa (3.5 kgf/cm²) 3.4 bar 49.7 psig
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz
消耗功率 / Power Consumption	81 W	100 W
耐用时间 / Rated Performance	3,000 小时 / hours	
吐出口尺寸 / Outlet	ISO Rc 1/4（内螺纹 / internal thread）	
额定时间 / Duty Cycle	30 分钟	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	102 (L) x 130 (W) mm 4 - 1/64" (L) x 5 - 1/8" (W)	
本体重量 / Weight	4.9 kg 10.8 Lbs	5 kg 11 Lbs
导线长度 / Leadwire Length	300 mm 11 - 13/16"	320 mm 12 - 19/32"

用途例 / Application Examples

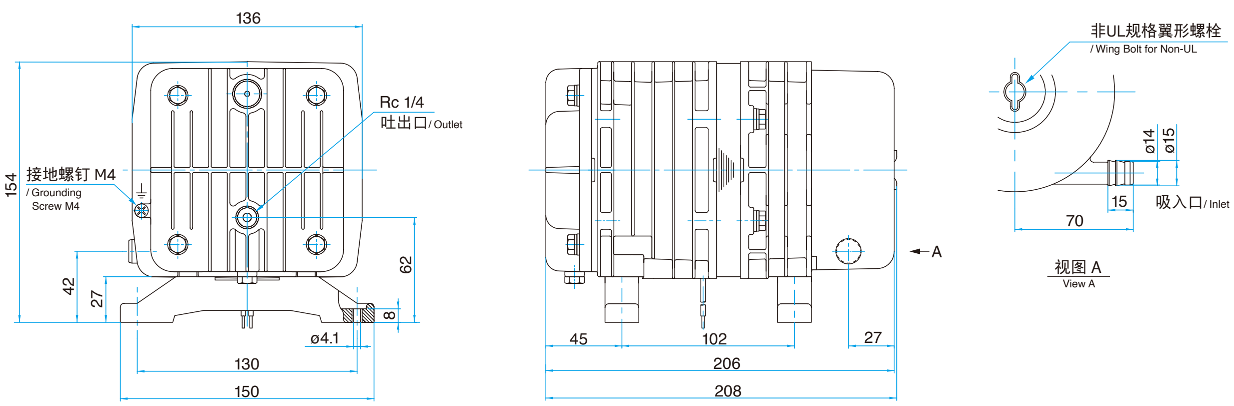
气缸 / 气动卡盘 / Air Cylinder/Chuck Driver



检漏机 / Leakage Tester



外形尺寸图 / External Dimensions (单位 / Unit : mm)

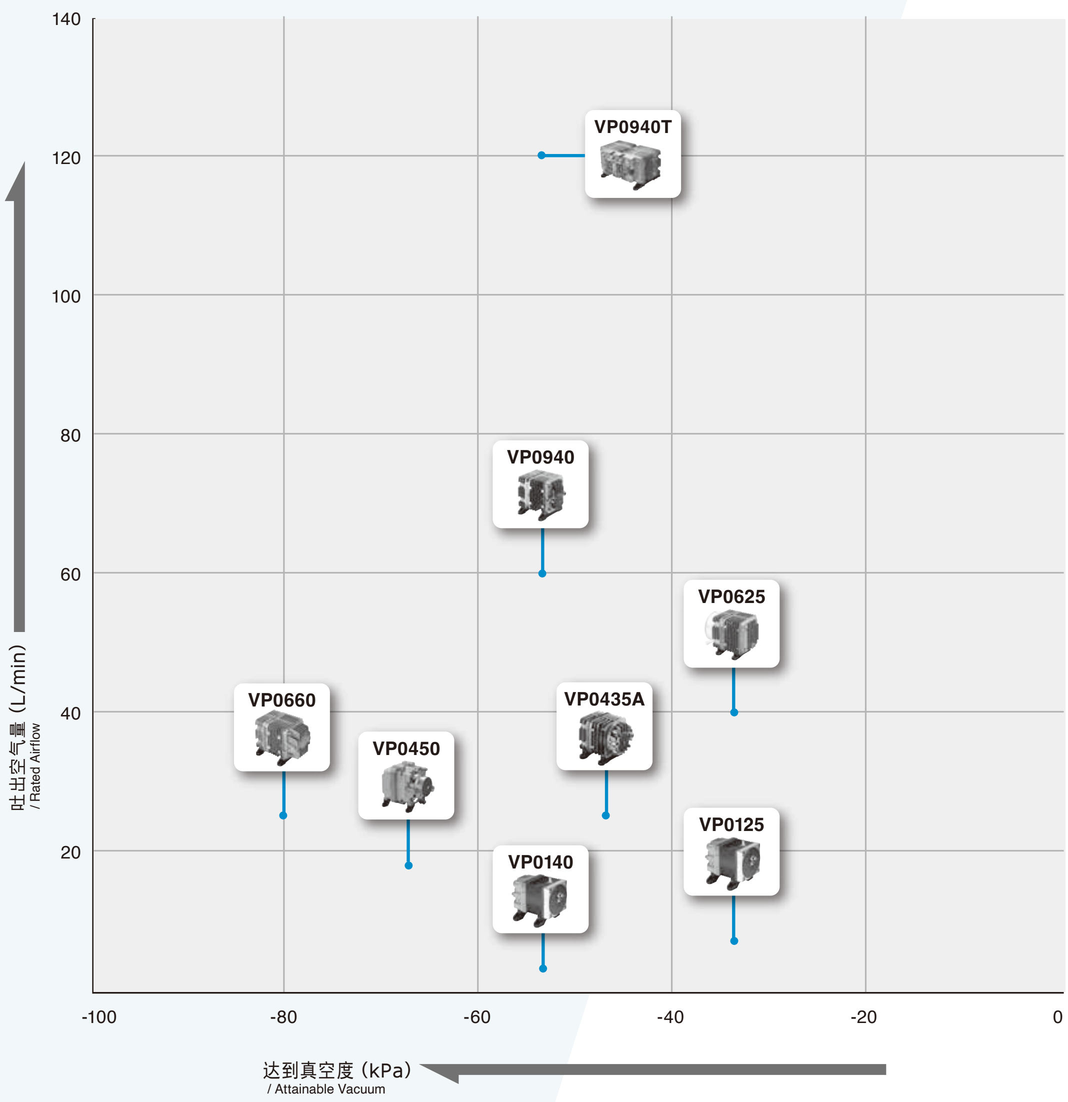


AC LINEAR
Free Piston Vacuum Pump

真空泵 / VACUUM PUMP

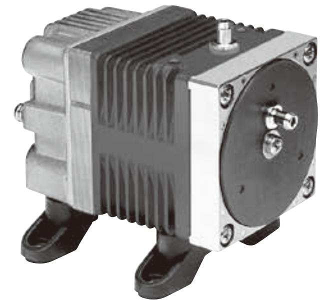
AC线性自由活塞真空泵
/ AC LINEAR Free Piston Vacuum Pump

VP系列
VP series



真空泵 / Vacuum Pump

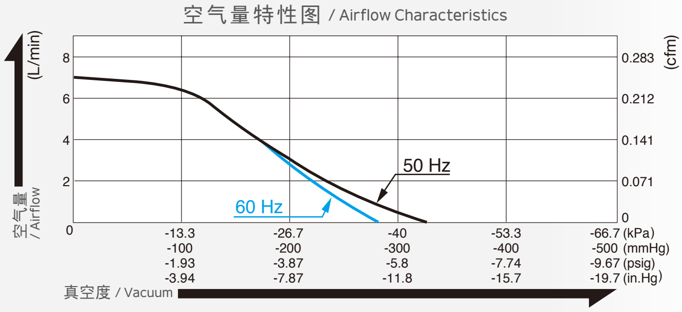
型号 VP0125



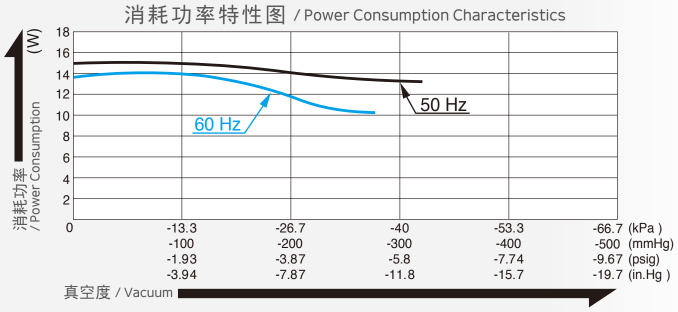
115 V/230 V | 115 V/230 V | 115 V/230 V | 面向中国 RoHS 机种 230 V

空气量和消耗功率 / Airflow & Power Consumption

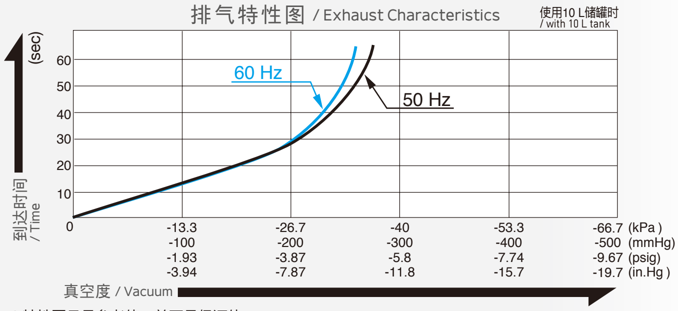
空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



排气特性图 / Exhaust Characteristics　使用10 L储罐时 / with 10 L tank



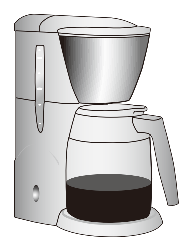
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

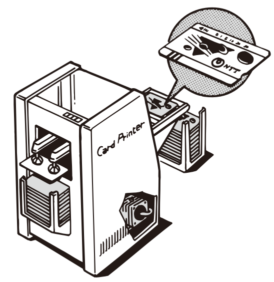
达到真空度 / Attainable Vacuum	-33.3 kPa (-250 mmHg) -333 mbar -9.84 in. Hg	
吐出空气量 / Free Air Displacement	7 L/min 0.247 cfm	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz / 60 Hz
消耗功率 / Power Consumption	14 W	15 W / 14 W
耐用时间 (MTTF) / Rated Performance (MTTF)	10,000 小时 / hours	
吸入口尺寸 / Inlet	ϕ6 mm (外径) 软管接头 / 6 mm O.D. hose barb	
吐出口尺寸 / Outlet	ϕ6 mm (外径) 软管接头 / 6 mm O.D. hose barb	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	
安装尺寸 / Mounting Dimensions	48 (L) x 62 (W) mm 1 - 57/64" (L) x 2 - 7/16" (W)	
本体重量 / Weight	0.7 kg 1.54 Lbs	
导线长度 / Leadwire Length	200 mm 7 - 7/8"	

用途例 / Application Examples

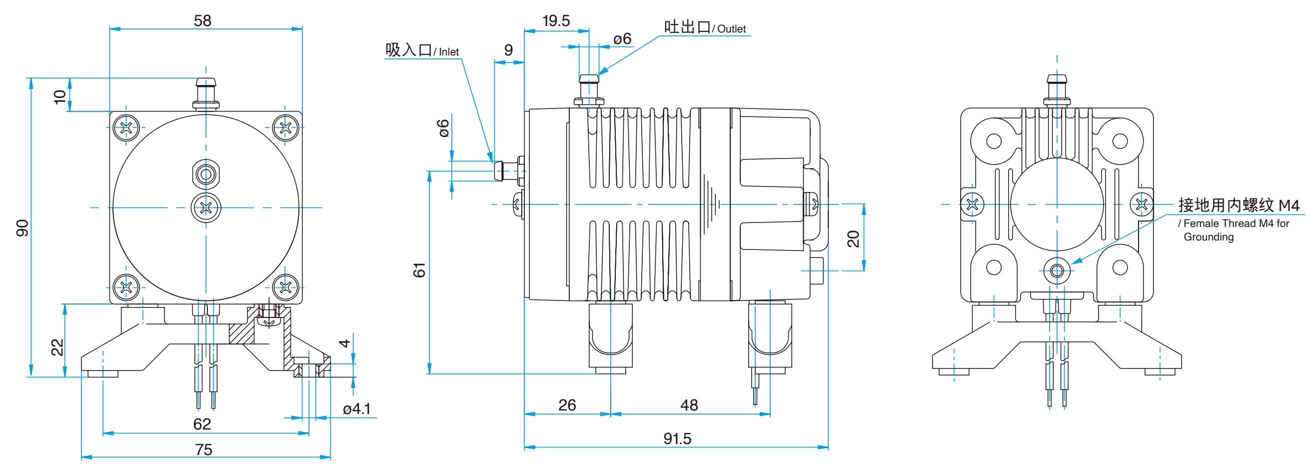
滴落式装置 / Dripping Machine



小型印刷机 / Paper Card Dispenser

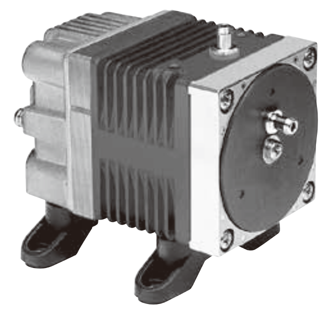


外形尺寸图 / External Dimensions (单位 / Unit : mm)



真空泵 / Vacuum Pump

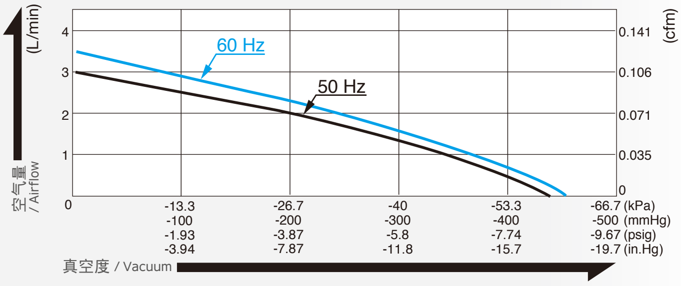
型号 VP0140



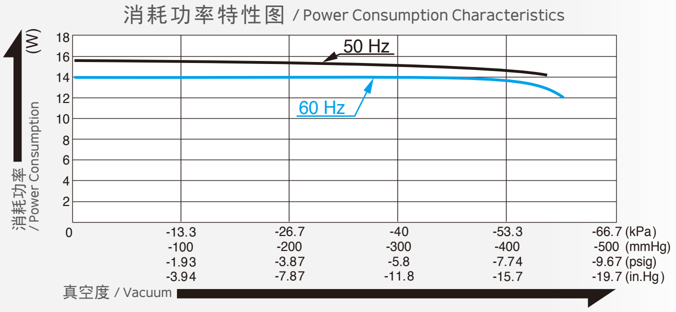
UL	CE	UK CA	面向中国 RoHS 机种
115 V	115 V/230 V	115 V/230 V	230 V

空气量和消耗功率 / Airflow & Power Consumption

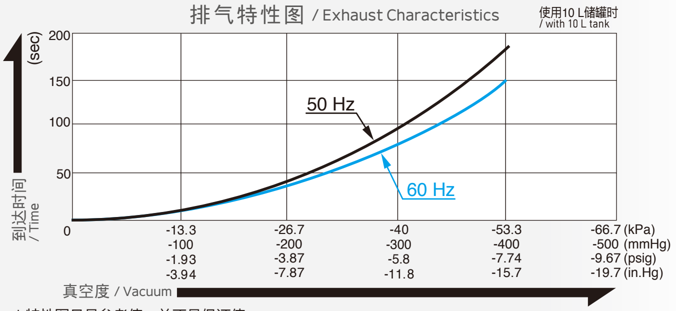
空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



排气特性图 / Exhaust Characteristics 使用10 L储罐时 / with 10 L tank



* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

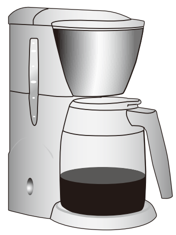
规 格 / Specifications

达到真空度 * / Attainable Vacuum	-53.3 kPa (-400 mmHg) -533 mbar -15.7 in. Hg	
吐出空气量 / Free Air Displacement	3 L/min 0.106 cfm	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz	
消耗功率 / Power Consumption	15 W / 14 W	
耐用时间 (MTTF) / Rated Performance (MTTF)	5,000 小时 / hours	
吸入口尺寸 / Inlet	ϕ6 mm (外径) 软管接头 / 6 mm O.D. hose barb	
吐出口尺寸 / Outlet	ϕ6 mm (外径) 软管接头 / 6 mm O.D. hose barb	
额定时间 / Duty Cycle	60 分钟	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	48 (L) x 62 (W) mm 1 - 57/64" (L) x 2 - 7/16" (W)	
本体重量 / Weight	0.7 kg 1.54 Lbs	
导线长度 / Leadwire Length	200 mm 7 - 7/8"	

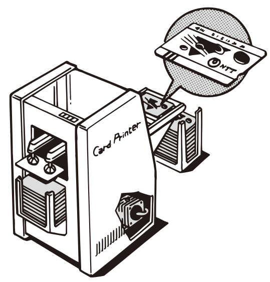
* 高于 -53.5 kPa 运转时需要在进气管路上加装一个放气阀或泄压阀。
/ Operations at higher than -53.5 kPa need an additional leak valve or relief valve on the inlet piping.

用途例 / Application Examples

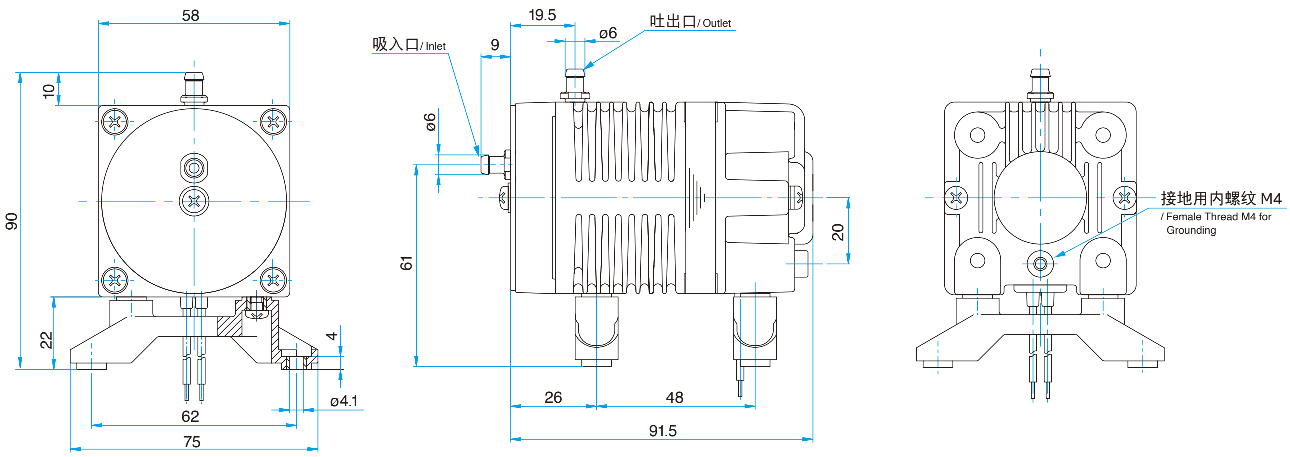
滴落式装置 / Dripping Machine



小型印刷机 / Paper Card Dispenser

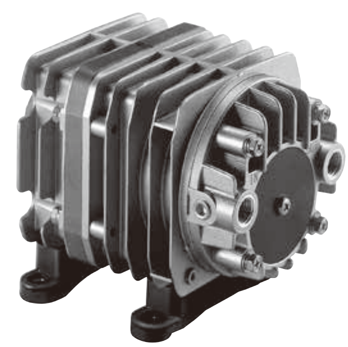


外形尺寸图 / External Dimensions (单位 / Unit : mm)



真空泵 / Vacuum Pump

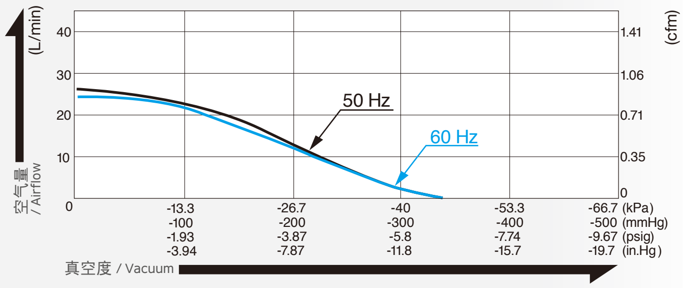
型号 VP0435A



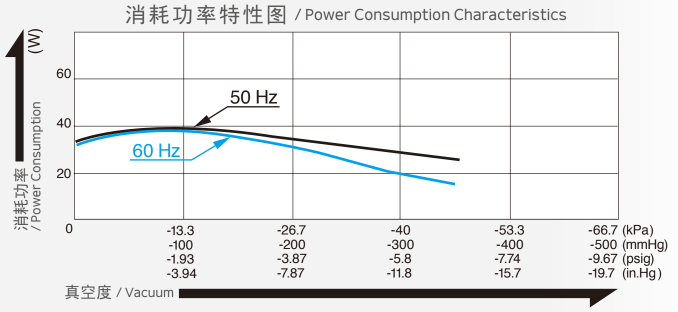
115 V | 115 V/230 V | 115 V/230 V

空气量和消耗功率 / Airflow & Power Consumption

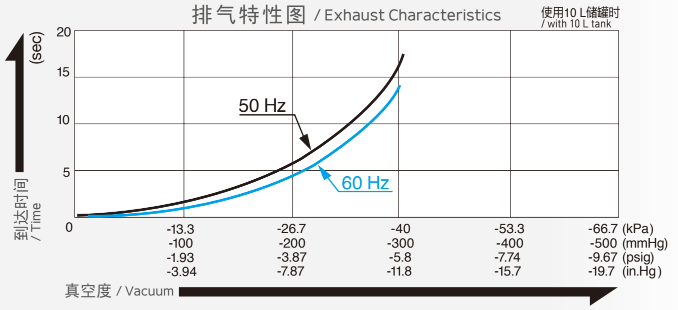
空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



排气特性图 / Exhaust Characteristics 使用10 L储罐时 / with 10 L tank



* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

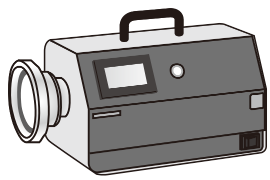
规 格 / Specifications

达到真空度 / Attainable Vacuum	-46.7 kPa (-350 mmHg) -467 mbar -13.8 in. Hg	
吐出空气量 / Free Air Displacement	25 L/min 0.88 cfm	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz	
消耗功率 / Power Consumption	39 W	
耐用时间 / Rated Performance	3,000 小时 / hours	
吸入口尺寸 / Inlet	ISO Rc 1/4（内螺纹 / internal thread）	
吐出口尺寸 / Outlet	ISO Rc 1/4（内螺纹 / internal thread）	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 B 类 / Class B equivalent
安装尺寸 / Mounting Dimensions	68 (L) x 84 (W) mm 2 - 43/64" (L) x 3 - 5/16" (W)	
本体重量 / Weight	2.3 kg 5.1 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	550 mm 21 - 21/32"

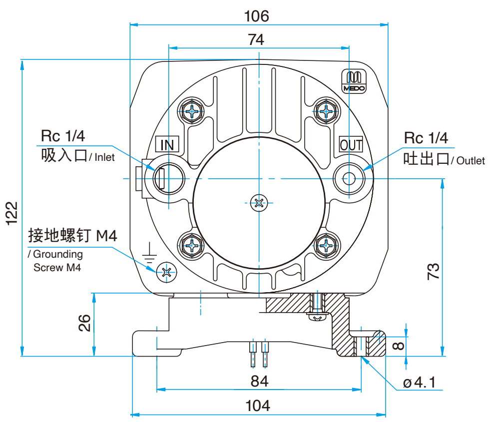
用途例 / Application Examples

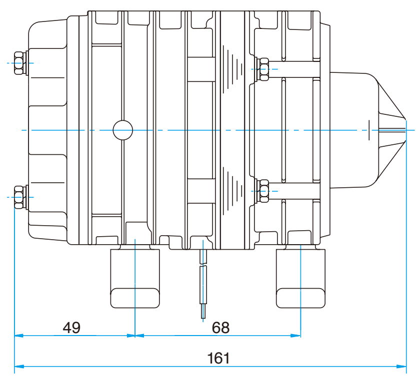
小螺丝、螺钉的吸附 / Machine Screw Feeder

空气采样器 / Air Sampler



外形尺寸图 / External Dimensions (单位 / Unit : mm)

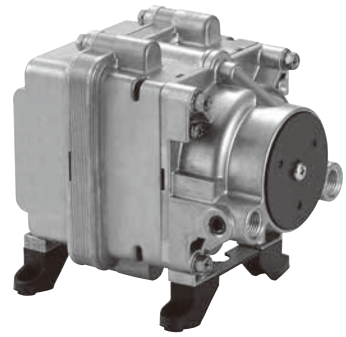




真空泵 / Vacuum Pump

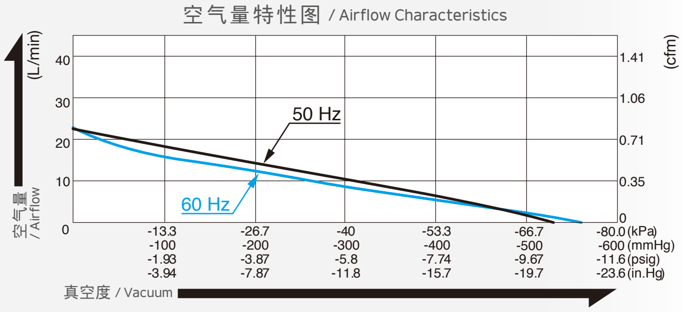
型号 VP0450

120 V | 120 V/230 V | 120 V/230 V | 面向中国 RoHS 机种 230 V

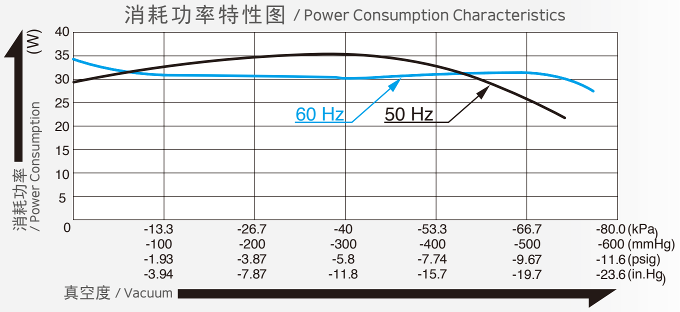


空气量和消耗功率 / Airflow & Power Consumption

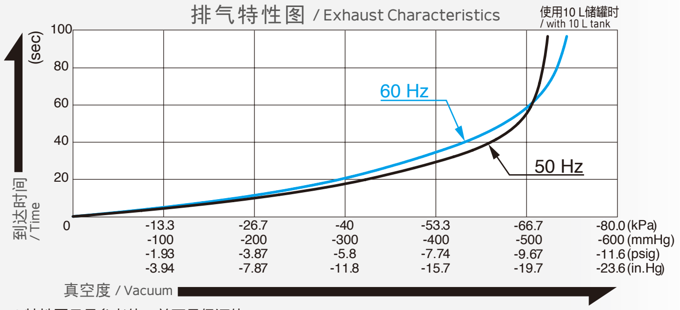
空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



排气特性图 / Exhaust Characteristics



* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

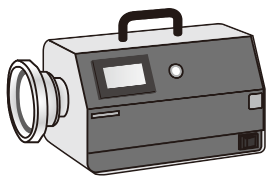
规 格 / Specifications

达到真空度 / Attainable Vacuum	-66.7 kPa (-500 mmHg) -667 mbar -19.7 in. Hg	
吐出空气量 / Free Air Displacement	18 L/min 0.64 cfm	
额定电压 / Rated Voltage	120 V AC	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz	
消耗功率 / Power Consumption	35 W / 34 W	
耐用时间 / Rated Performance	10,000 小时 / hours	
吸入口尺寸 / Inlet	ISO Rc 1/4（内螺纹 / internal thread）	
吐出口尺寸 / Outlet	ISO Rc 1/4（内螺纹 / internal thread）	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 A 类 / Class A for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	85 (L) x 88 (W) mm 3 - 11/32" (L) x 3 - 15/32" (W)	
本体重量 / Weight	2.2 kg 4.9 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	

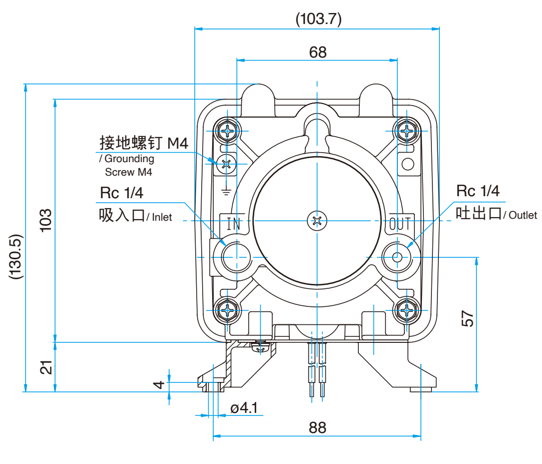
用途例 / Application Examples

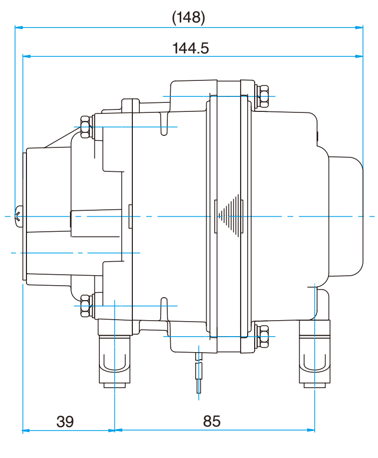
小螺丝、螺钉的吸附 / Machine Screw Feeder

空气采样器 / Air Sampler



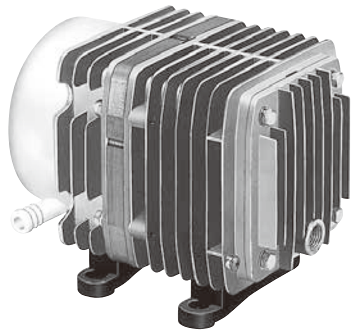
外形尺寸图 / External Dimensions (单位 / Unit : mm)





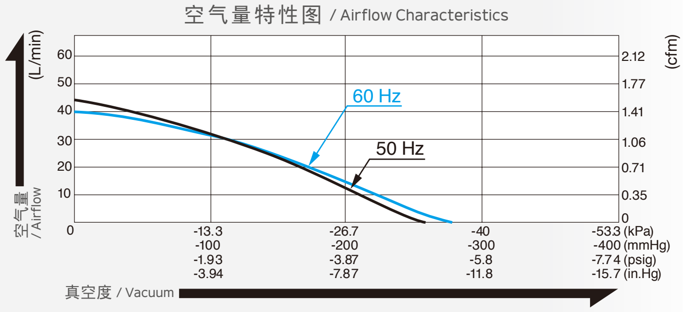
真空泵 / Vacuum Pump

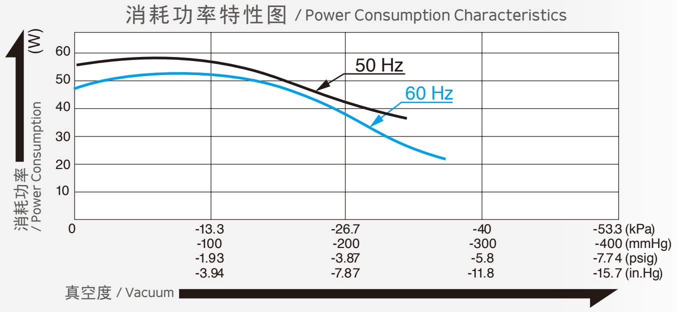
型号 VP0625

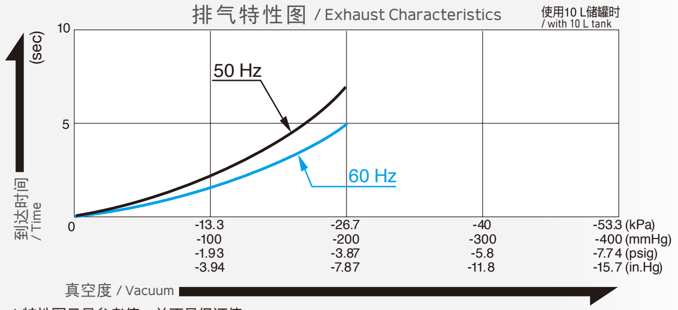


115 V/230 V | 115 V/230 V | 115 V/230 V

空气量和消耗功率 / Airflow & Power Consumption







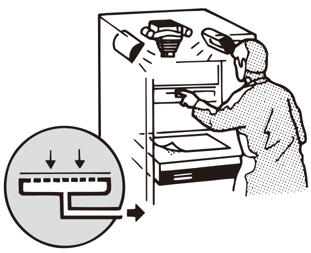
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

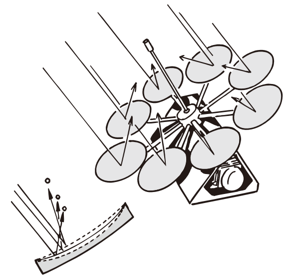
达到真空度 / Attainable Vacuum	-33.3 kPa (-250 mmHg) -333 mbar -9.84 in. Hg	
吐出空气量 / Free Air Displacement	40 L/min 1.41 cfm	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz / 60 Hz
消耗功率 / Power Consumption	60 W	60 W / 56 W
耐用时间 / Rated Performance	10,000 小时 / hours	
吸入口尺寸 / Inlet	ϕ15 mm (外径) 软管接头 / 15 mm O.D. hose barb	
吐出口尺寸 / Outlet	ISO Rc 1/4 (内螺纹 / internal thread)	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	
安装尺寸 / Mounting Dimensions	68 (L) x 84 (W) mm 2 - 43/64" (L) x 3 - 5/16" (W)	
本体重量 / Weight	3 kg 6.6 Lbs	
导线长度 / Leadwire Length	235 mm 9 - 1/4"	320 mm 12 - 19/32"

用途例 / Application Examples

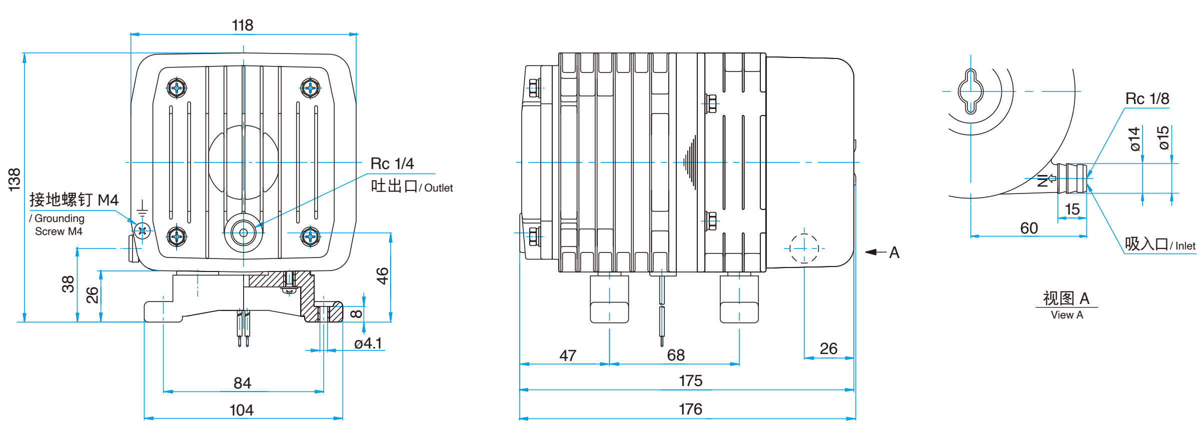
胶片洗印设备 / Microfiche Camera



聚光装置 / Solar Collection Screen



外形尺寸图 / External Dimensions (单位 / Unit : mm)



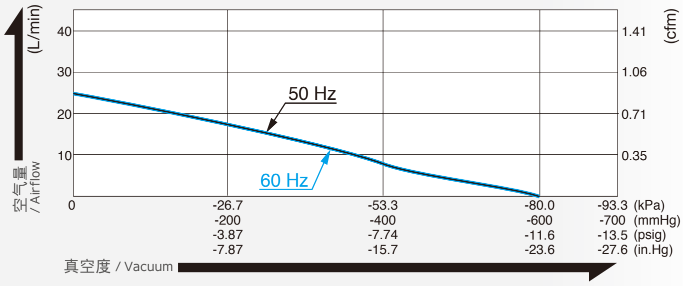
真空泵 / Vacuum Pump

型号 VP0660

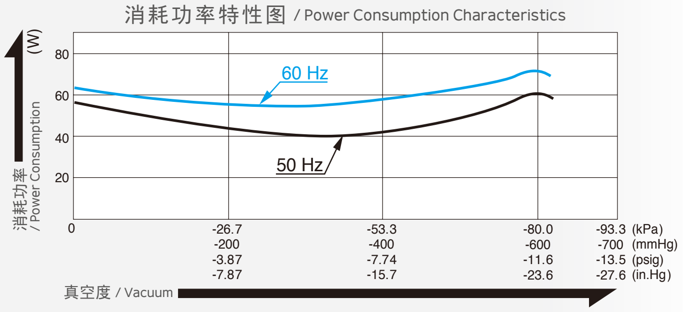
115 V (60 Hz) | 115 V (60 Hz) 230 V (50 Hz) | 115 V (60 Hz) 230 V (50 Hz) | 面向中国 RoHS 机种 230 V (50 Hz)

空气量和消耗功率 / Airflow & Power Consumption

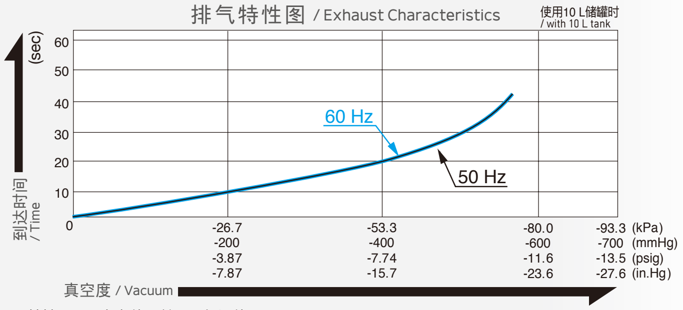
空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



排气特性图 / Exhaust Characteristics



* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

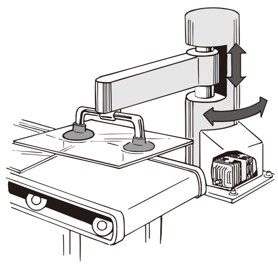
规 格 / Specifications

达到真空度 * / Attainable Vacuum	-80 kPa (-600 mmHg) -800 mbar -23.6 in. Hg	
吐出空气量 / Free Air Displacement	25 L/min 0.88 cfm	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz
消耗功率 / Power Consumption	70 W	60 W
耐用时间 / Rated Performance	6,000 小时 / hours	
吸入口尺寸 / Inlet	ISO Rc 1/4 (内螺纹 / internal thread)	
吐出口尺寸 / Outlet	ISO Rc 1/4 （内螺纹 / internal thread ）	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	102 (L) x 130 (W) mm 4 - 1/64" (L) x 5 - 1/8" (W)	
本体重量 / Weight	5 kg 11 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	600 mm 23 - 5/8"

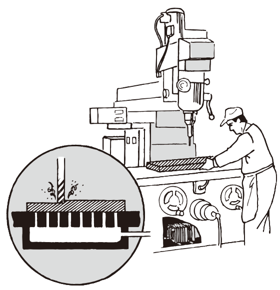
* 高于 -80 kPa 运转时需要在进气管路上加装一个放气阀或泄压阀。/Operations at higher than -80 kPa need an additional leak valve or relief valve on the inlet piping.

用途例 / Application Examples

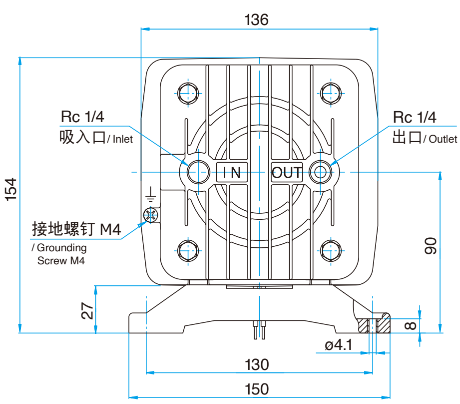
真空吸附材料搬运 / Vacuum Material Handling Equipment

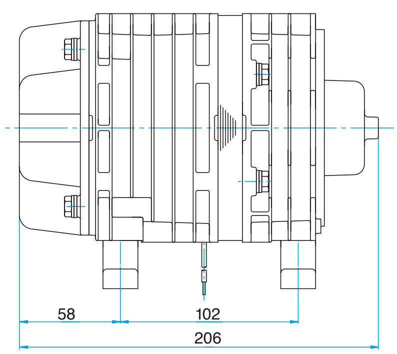


真空吸盘 / Vacuum Chucking

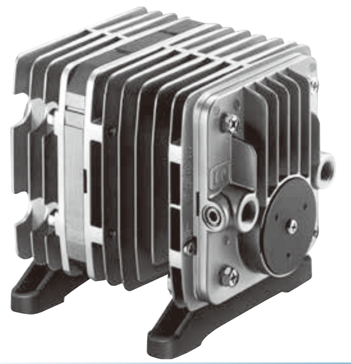


外形尺寸图 / External Dimensions (单位 / Unit : mm)





真空泵 / Vacuum Pump

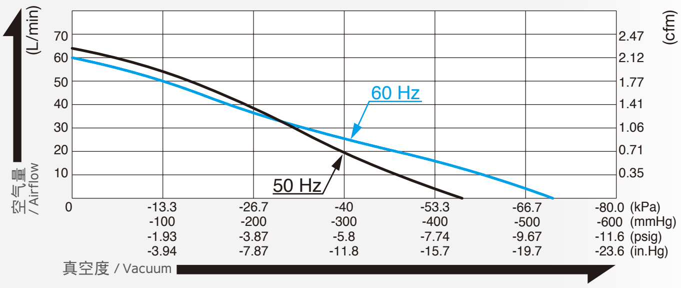


型号 VP0940

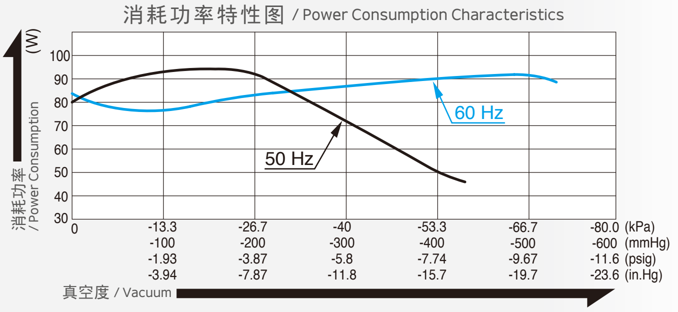
UL	CE	UKCA	面向中国 RoHS 机种
115 V	115 V/230 V	115 V/230 V	230 V

空气量和消耗功率 / Airflow & Power Consumption

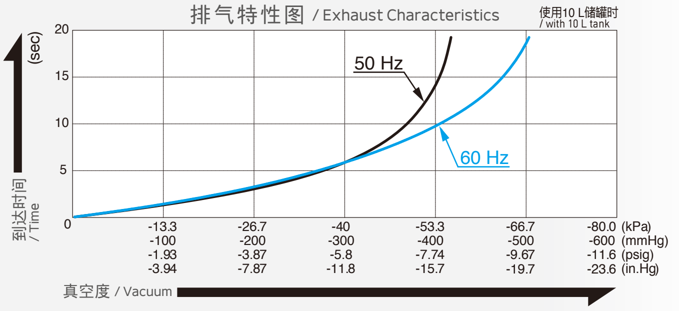
空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



排气特性图 / Exhaust Characteristics



* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

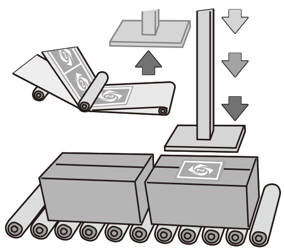
规 格 / Specifications

达到真空度 * / Attainable Vacuum	-53.3 kPa (-400 mmHg) -533 mbar -15.7 in. Hg	
吐出空气量 / Free Air Displacement	60 L/min 2.12 cfm	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz	
消耗功率 / Power Consumption	95 W	
耐用时间 / Rated Performance	10,000 小时 / hours	
吸入口尺寸 / Inlet	ISO Rc 1/4 (内螺纹 / internal thread)	
吐出口尺寸 / Outlet	ISO Rc 1/4 (内螺纹 / internal thread)	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 B 类 / Class B equivalent
安装尺寸 / Mounting Dimensions	102 (L) x 130 (W) mm 4 - 1/64" (L) x 5 - 1/8" (W)	
本体重量 / Weight	4.55 kg 10.0 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	320 mm 12 - 19/32"

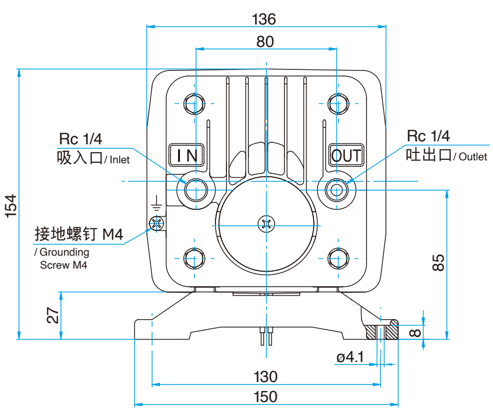
* 高于 -53.5 kPa 运转时需要在进气管路上加装一个放气阀或泄压阀。/Operations at higher than -53.3 kPa need an additional leak valve or relief valve on the inlet piping.

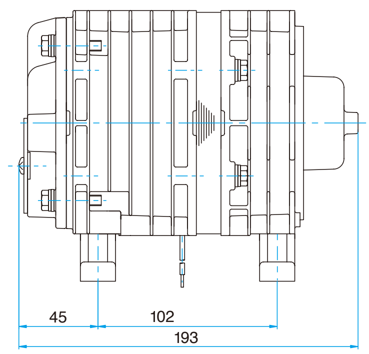
用途例 / Application Examples

贴标机 / Label Sticking Machine



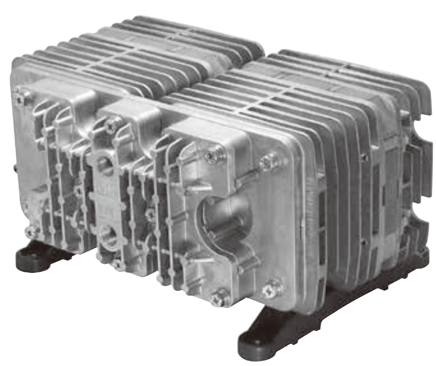
外形尺寸图 / External Dimensions (单位 / Unit : mm)





真空泵 / Vacuum Pump

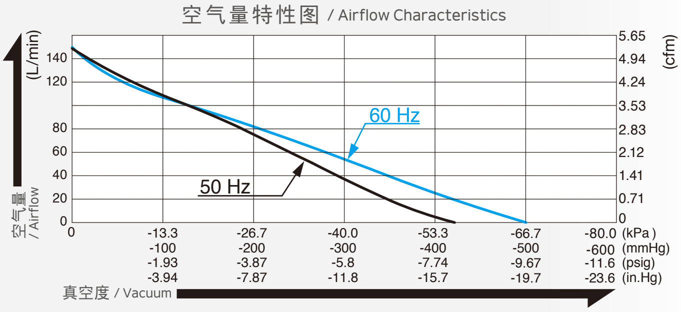
型号 VP0940T



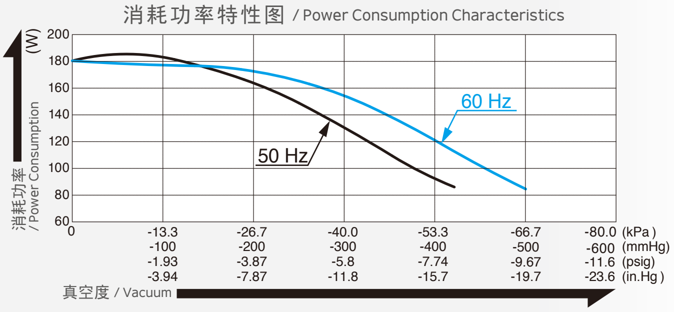
CE 230 V UKCA 230 V

空气量和消耗功率 / Airflow & Power Consumption

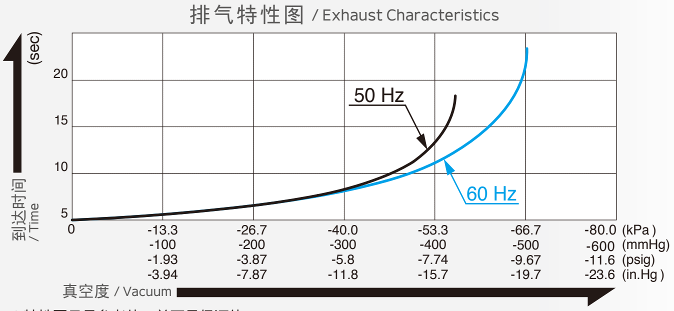
空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



排气特性图 / Exhaust Characteristics

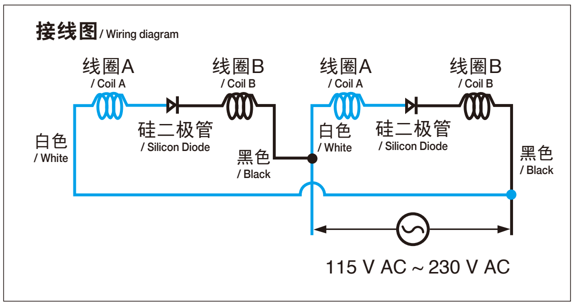


* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

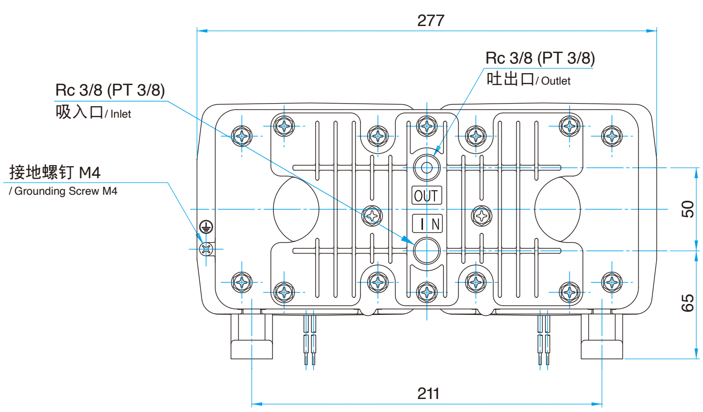
达到真空度 *1 / Attainable Vacuum	-53.3 kPa (-400 mmHg) -533 mbar -15.7 in. Hg
吐出空气量 / Free Air Displacement	120 L/min 4.24 cfm
额定电压 / Rated Voltage	230 V AC*2
额定频率 / Rated Frequency	50 Hz / 60 Hz
消耗功率 / Power Consumption	185 W
耐用时间 / Rated Performance	10,000 小时 / hours
吸入口尺寸 / Inlet	ISO Rc 3/8（内螺纹 / internal thread）
吐出口尺寸 / Outlet	ISO Rc 3/8（内螺纹 / internal thread）
额定时间 / Duty Cycle	连续 / Continuous
线圈绝缘等级 / Coil Insulation Class	相当于 B 类 / Class B equivalent
安装尺寸 / Mounting Dimensions	172 (L) x 211 (W) mm 6 - 49/64" (L) x 8 - 5/16" (W)
本体重量 / Weight	10 kg 22 Lbs
导线长度 / Leadwire Length	320 mm 12 - 19/32"

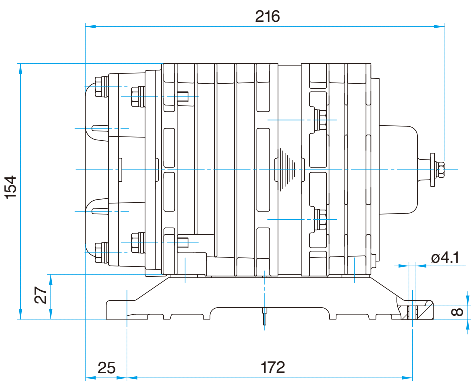
*1: 高于 -53.5 kPa 运转时需要在进气管路上加装一个放气阀或泄压阀。/Operations at higher than -53.3 kPa need an additional leak valve or relief valve on the inlet piping.
*2: 有关 115 V 规格的产品，请与我们联系。/Please contact us for 115 V AC model.



* 消音器，空气过滤器和管道不包含在产品中。
* 管道和接线需要由用户完成。
*The silencer, air filter, and pipe are not included with the product.
*Piping and wiring need to be done by the user.

外形尺寸图 / External Dimensions (单位 / Unit : mm)



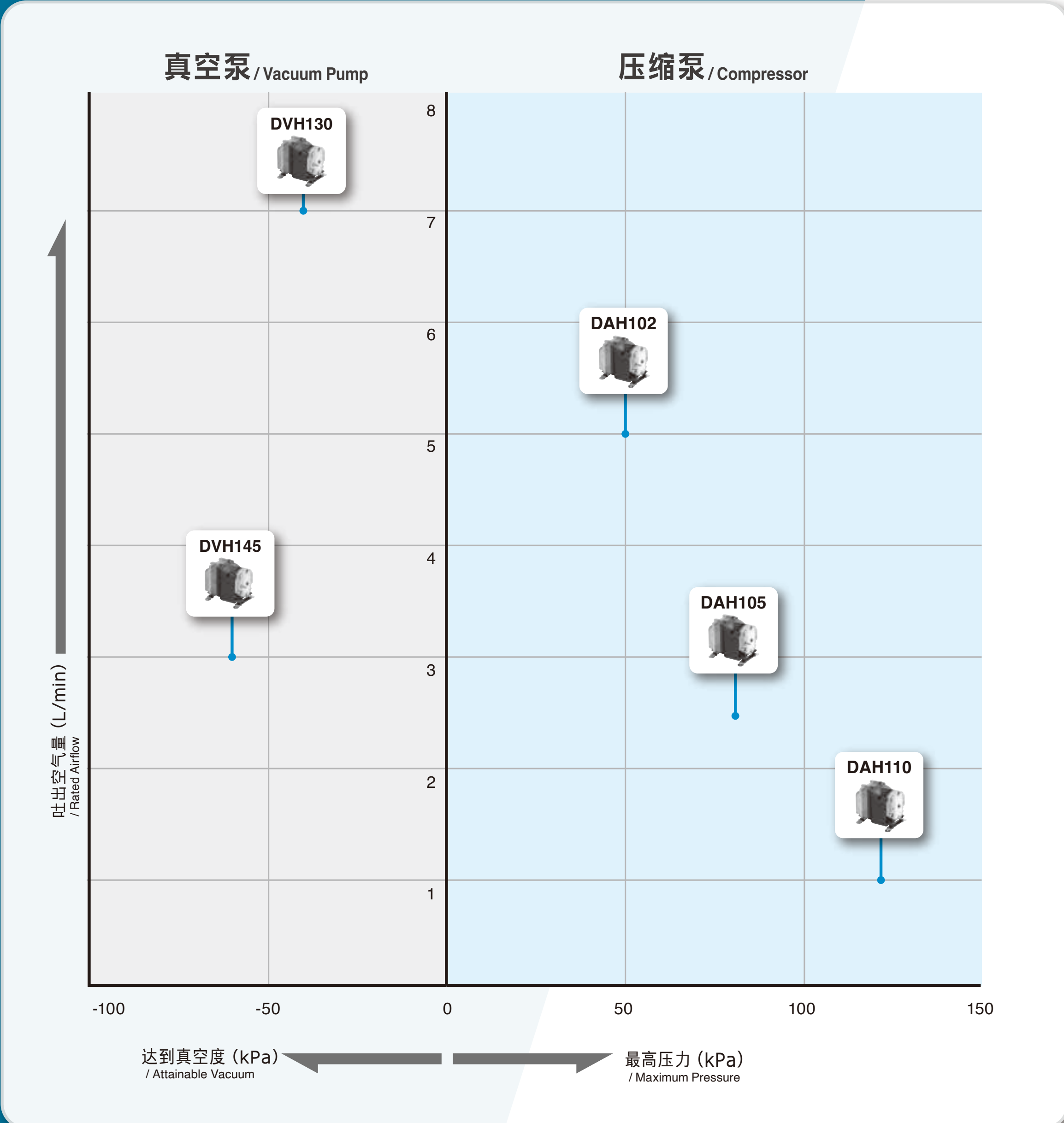


DC LINEAR
Free Piston Compressor
Free Piston Vacuum Pump

空气压缩泵,真空泵
/ AIR COMPRESSOR, VACUUM PUMP

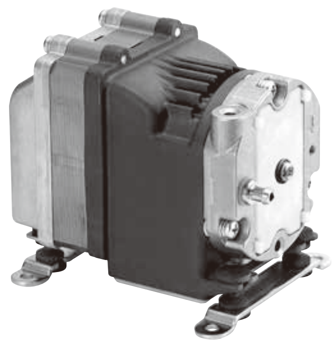
DC线性自由活塞压缩泵 DAH系列 DAH series
/ DC LINEAR Free Piston Compressor

DC线性自由活塞真空泵 DVH系列 DVH series
/ DC LINEAR Free Piston Vacuum Pump



压缩泵 / Compressor

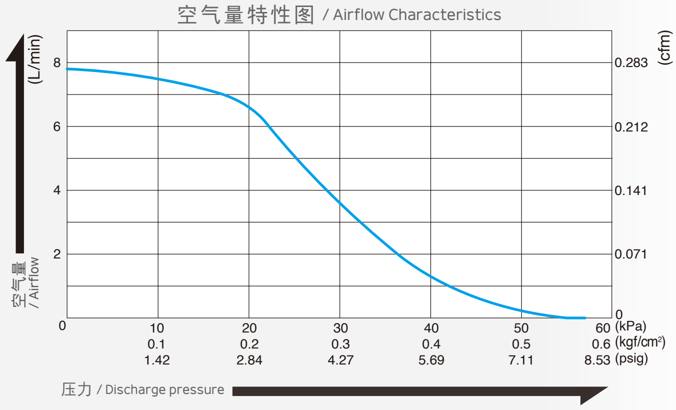
型号 DAH102-X1 12 V DC
DAH102-Y1 24 V DC



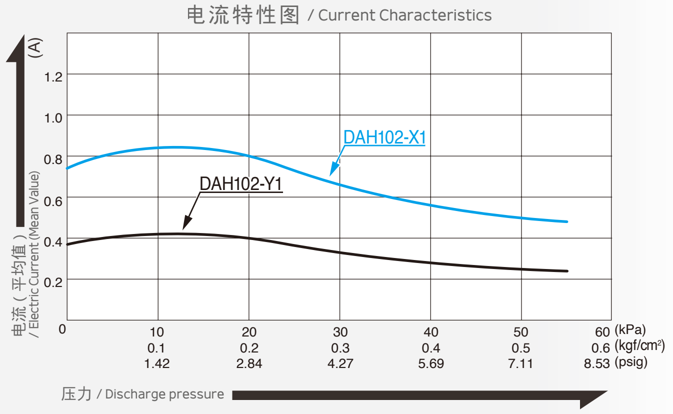
CE 12 V/24 V UKCA 12 V/24 V

空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



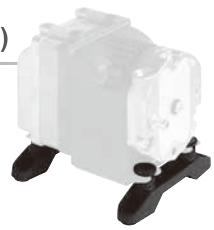
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

型号 / Model	DAH102-X1	DAH102-Y1
额定压力 / Rated Pressure	20 kPa (0.2 kgf/cm²) 0.2 bar 2.84 psig	
吐出空气量 / Rated Airflow	5 L/min* 0.177 cfm	
最高压力 / Maximum Pressure	50 kPa (0.5 kgf/cm²) 0.5 bar 7.11 psig	
额定电压 / Rated Voltage	12 V DC	24 V DC
电流（平均值） / Current (Mean Value)	0.81 A	0.40 A
消耗功率 / Power Consumption	9.8 W	9.5 W
耐用时间 (MTTF) / Rated Performance (MTTF)	10,000 小时 / hours	
吐出口尺寸 / Outlet	ϕ6 mm（外径）软管接头 / 6 mm O.D. hose barb	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	相当于 A 类 / Class A equivalent	
安装尺寸 / Mounting Dimensions	76 (L) x 70 (W) mm 2 - 63/64" (L) x 2 - 3/4" (W)	
本体重量 / Weight	0.91 kg 2.01 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	

* 额定压力下的空气量。 / Airflow at rated pressure.

可选附件 / Optional Accessory **(LB07793)**

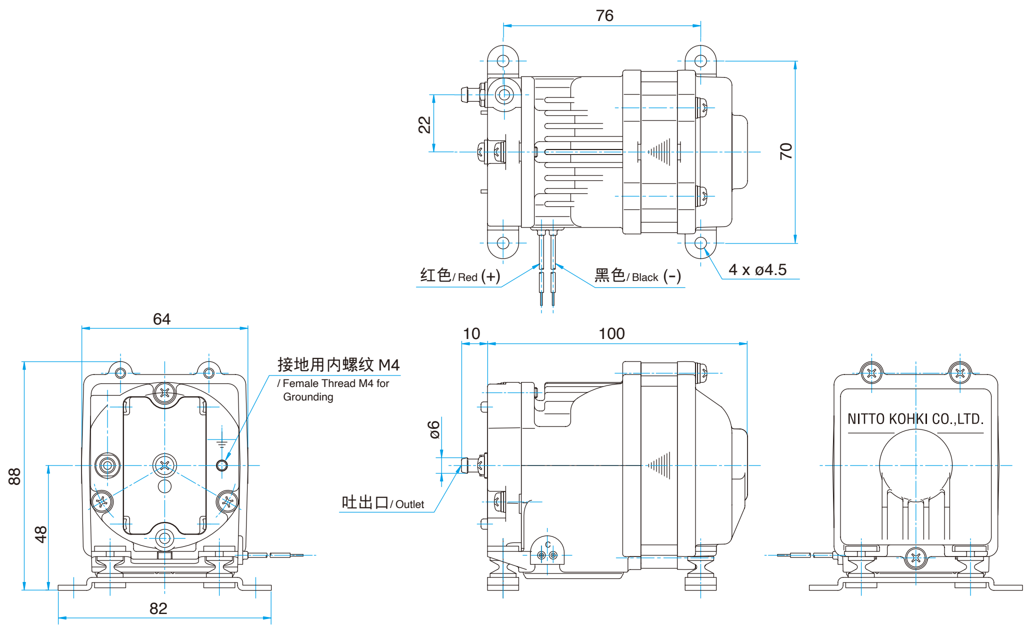


如有需要，可提供重载橡胶脚垫。
/ Heavy duty rubber feet available on request.

用途例 / Application Examples

医疗设备、分析仪等
/ Medical equipment, analyzers, etc.

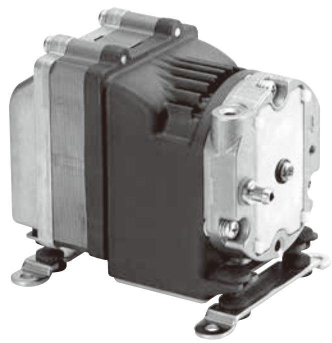
外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor

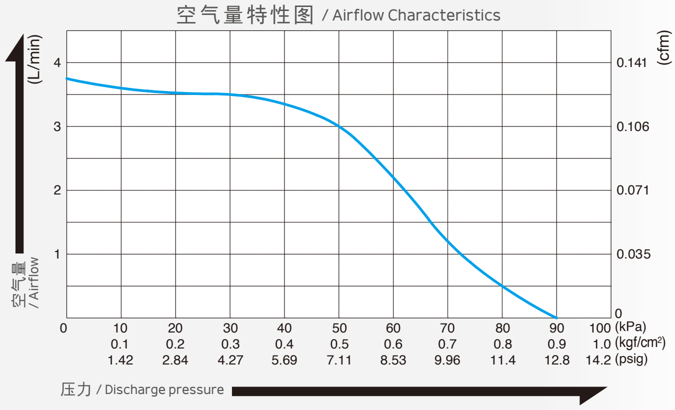
型号 DAH105-X1 12 V DC
DAH105-Y1 24 V DC

CE 12 V/24 V　UKCA 12 V/24 V

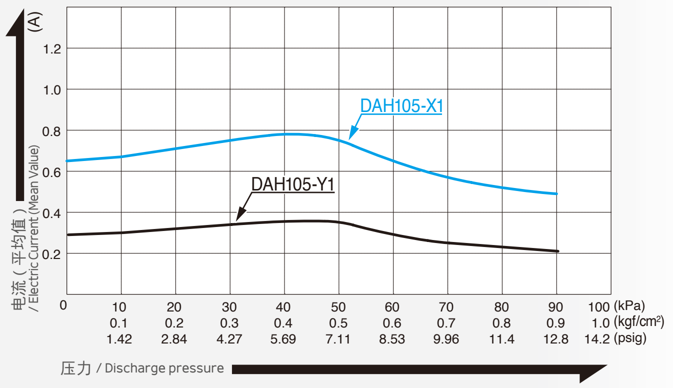


空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



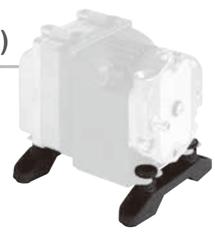
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

型号 / Model	DAH105-X1	DAH105-Y1
额定压力 / Rated Pressure	50 kPa (0.5 kgf/cm²) 0.5 bar 7.11 psig	
吐出空气量 / Rated Airflow	2.5 L/min* 0.088 cfm	
最高压力 / Maximum Pressure	80 kPa (0.8 kgf/cm²) 0.8 bar 11.4 psig	
额定电压 / Rated Voltage	12 V DC	24 V DC
电流（平均值）/ Current (Mean Value)	0.74 A	0.35 A
消耗功率 / Power Consumption	9.2 W	8.5 W
耐用时间 (MTTF) / Rated Performance (MTTF)	10,000 小时 / hours	
吐出口尺寸 / Outlet	ϕ6 mm（外径）软管接头 / 6 mm O.D. hose barb	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	相当于 A 类 / Class A equivalent	
安装尺寸 / Mounting Dimensions	76 (L) x 70 (W) mm 2 - 63/64" (L) x 2 - 3/4" (W)	
本体重量 / Weight	0.91 kg 2.01 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	

* 额定压力下的空气量。/ Airflow at rated pressure.

可选附件 / Optional Accessory **(LB07793)**

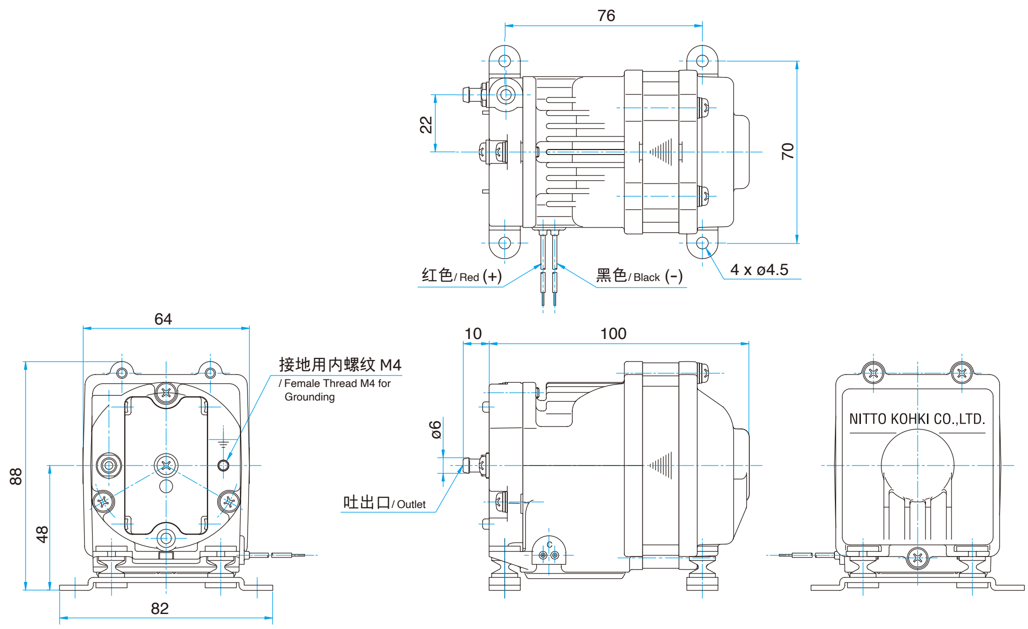


如有需要，可提供重载橡胶脚垫。
/ Heavy duty rubber feet available on request.

用途例 / Application Examples

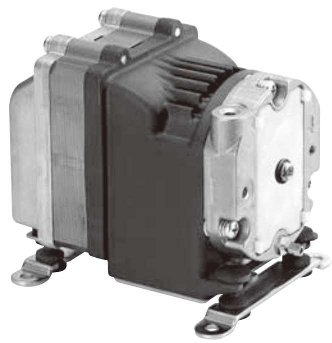
医疗设备、分析仪等
/ Medical equipment, analyzers, etc.

外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor

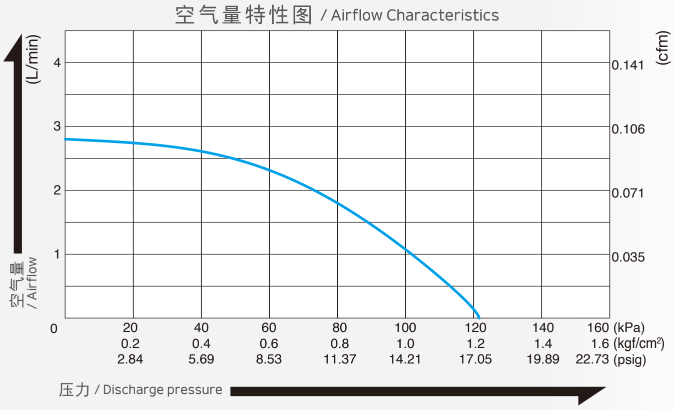
型号 DAH110-X1 12 V DC
DAH110-Y1 24 V DC



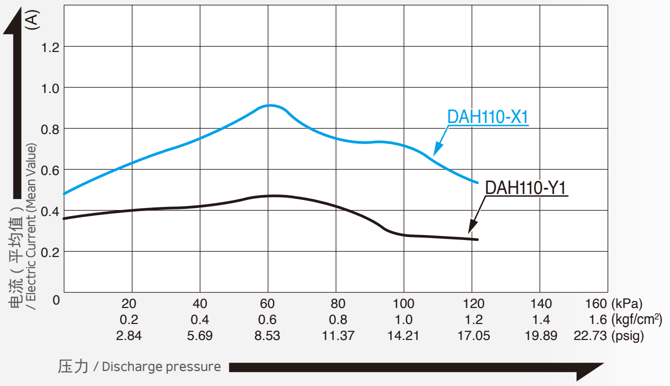
12 V/24 V 12 V/24 V

空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



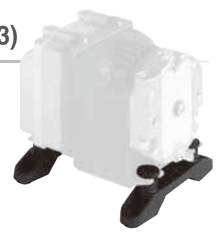
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

型号 / Model	DAH110-X1	DAH110-Y1
额定压力 / Rated Pressure	100 kPa (1.0 kgf/cm²) 1.0 bar 14.2 psig	
吐出空气量 / Rated Airflow	1.0 L/min* 0.035 cfm	
最高压力 / Maximum Pressure	120 kPa (1.2 kgf/cm²) 1.2 bar 17.1 psig	
额定电压 / Rated Voltage	12 V DC	24 V DC
电流（平均值） / Current (Mean Value)	0.74 A	0.27 A
消耗功率 / Power Consumption	8.5 W	8.0 W
耐用时间 (MTTF) / Rated Performance (MTTF)	10,000 小时 / hours	
吐出口尺寸 / Outlet	ϕ4.7 mm（外径）软管接头 / 4.7 mm O.D. hose barb	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	相当于 A 类 / Class A equivalent	
安装尺寸 / Mounting Dimensions	76 (L) x 70 (W) mm 2 - 63/64" (L) x 2 - 3/4" (W)	
本体重量 / Weight	0.91 kg 2.01 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	

* 额定压力下的空气量。/ Airflow at rated pressure.

可选附件 / Optional Accessory **(LB07793)**

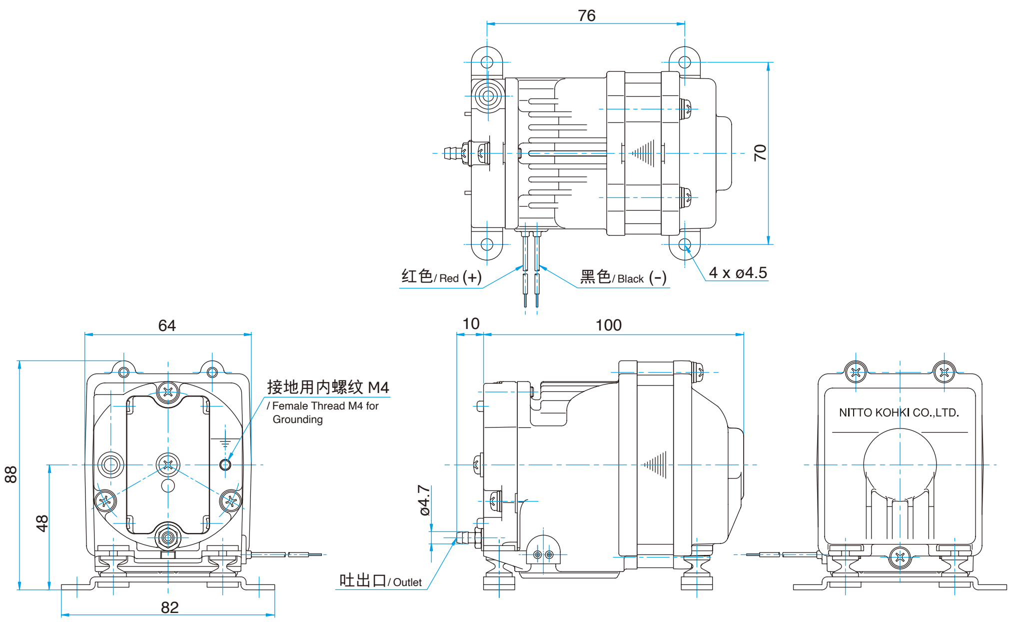


如有需要，可提供重载橡胶脚垫。
/ Heavy duty rubber feet available on request.

用途例 / Application Examples

医疗设备、分析仪等
/ Medical equipment, analyzers, etc.

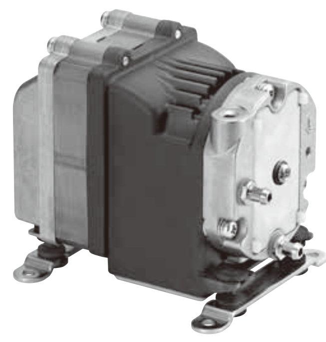
外形尺寸图 / External Dimensions (单位 / Unit : mm)



真空泵 / Vacuum Pump

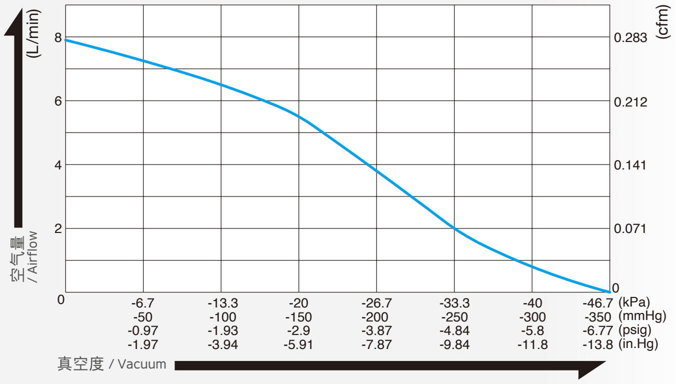
型号 DVH130-X1 12 V DC
DVH130-Y1 24 V DC

CE 12 V/24 V
UK CA 12 V/24 V

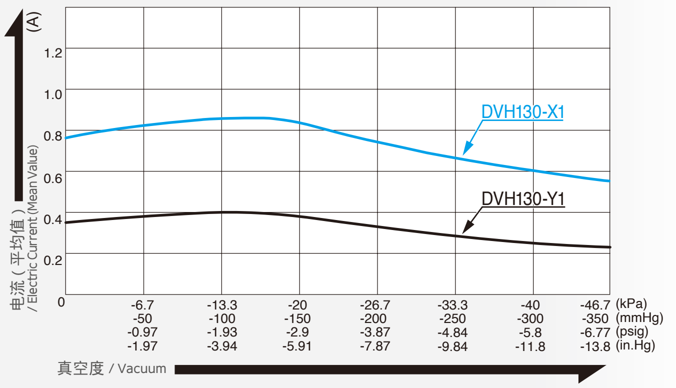


空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



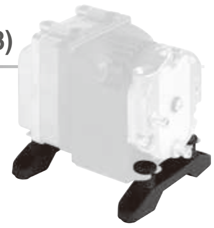
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

型号 / Model	DVH130-X1	DVH130-Y1
达到真空度 / Attainable Vacuum	-40 kPa (-300 mmHg) -400 mbar -11.8 in. Hg	
吐出空气量 / Rated Airflow	7 L/min* 0.247 cfm	
额定电压 / Rated Voltage	12 V DC	24 V DC
电流（平均值）/ Current (Mean Value)	0.86 A	0.41 A
消耗功率 / Power Consumption	10.3 W	10.0 W
耐用时间 (MTTF) / Rated Performance (MTTF)	10,000 小时 / hours	
吸入口尺寸 / Inlet	ϕ6 mm（外径）软管接头 / 6 mm O.D. hose barb	
吐出口尺寸 / Outlet	ϕ6 mm（外径）软管接头 / 6 mm O.D. hose barb	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	相当于 A 类 / Class A equivalent	
安装尺寸 / Mounting Dimensions	76 (L) x 70 (W) mm 2 - 63/64" (L) x 2 - 3/4" (W)	
本体重量 / Weight	0.91 kg 2.01 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	

* 空载运转时的空气量。
* Free air displacement at no-load operation.

可选附件 / Optional Accessory (LB07793)

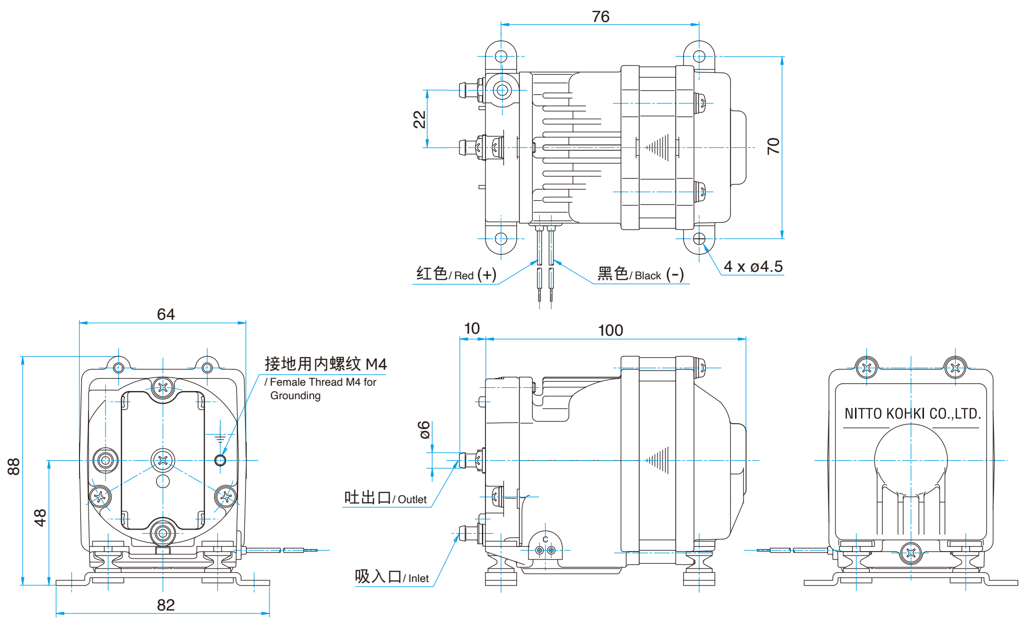


如有需要，可提供重载橡胶脚垫。
/ Heavy duty rubber feet available on request.

用途例 / Application Examples

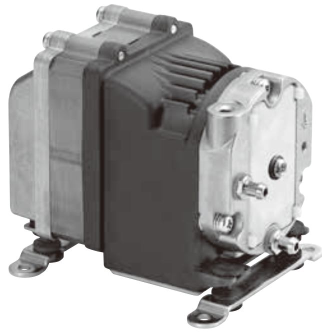
医疗设备、分析仪等
/ Medical equipment, analyzers, etc.

外形尺寸图 / External Dimensions (单位 / Unit : mm)



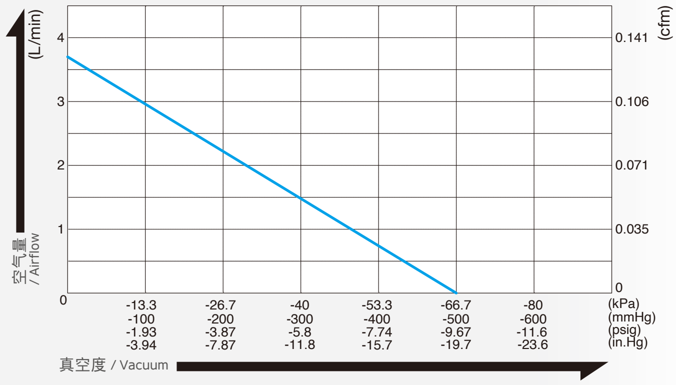
真空泵 / Vacuum Pump

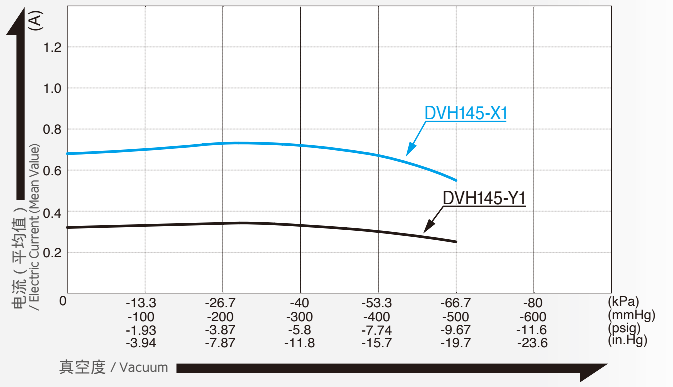
型号 DVH145-X1 12 V DC
DVH145-Y1 24 V DC



CE 12 V/24 V　UKCA 12 V/24 V

空气量和电流 / Airflow & Electric Current





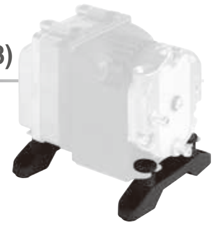
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

型号 / Model	DVH145-X1	DVH145-Y1
达到真空度 / Attainable Vacuum	-60 kPa (-450 mmHg) -600 mbar　-17.7 in. Hg	
吐出空气量 / Rated Airflow	3 L/min* 0.106 cfm	
额定电压 / Rated Voltage	12 V DC	24 V DC
电流（平均值）/ Current (Mean Value)	0.73 A	0.34 A
消耗功率 / Power Consumption	8.9 W	8.6 W
耐用时间 (MTTF) / Rated Performance (MTTF)	10,000 小时 / hours	
吸入口尺寸 / Inlet	ϕ6 mm（外径）软管接头 / 6 mm O.D. hose barb	
吐出口尺寸 / Outlet	ϕ6 mm（外径）软管接头 / 6 mm O.D. hose barb	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	相当于 A 类 / Class A equivalent	
安装尺寸 / Mounting Dimensions	76 (L) x 70 (W) mm 2 - 63/64" (L) x 2 - 3/4" (W)	
本体重量 / Weight	0.91 kg　2.01 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	

* 空载运转时的空气量。
* Free air displacement at no-load operation.

可选附件 / Optional Accessory (LB07793)

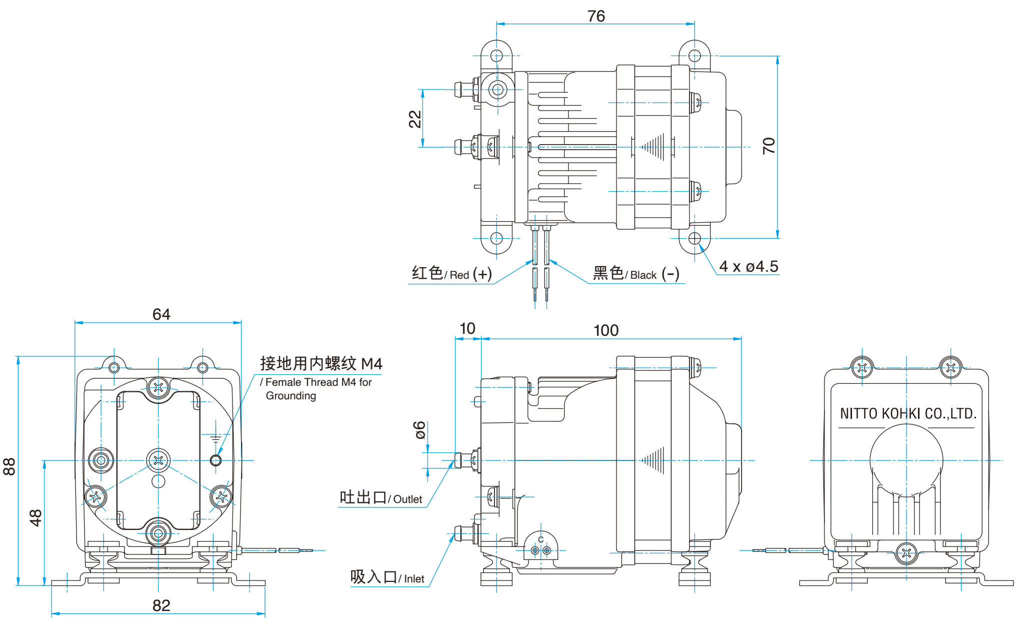


如有需要，可提供重载橡胶脚垫。
/ Heavy duty rubber feet available on request.

用途例 / Application Examples

医疗设备、分析仪等
/ Medical equipment, analyzers, etc.

外形尺寸图 / External Dimensions (单位 / Unit : mm)



Diaphragm Pump

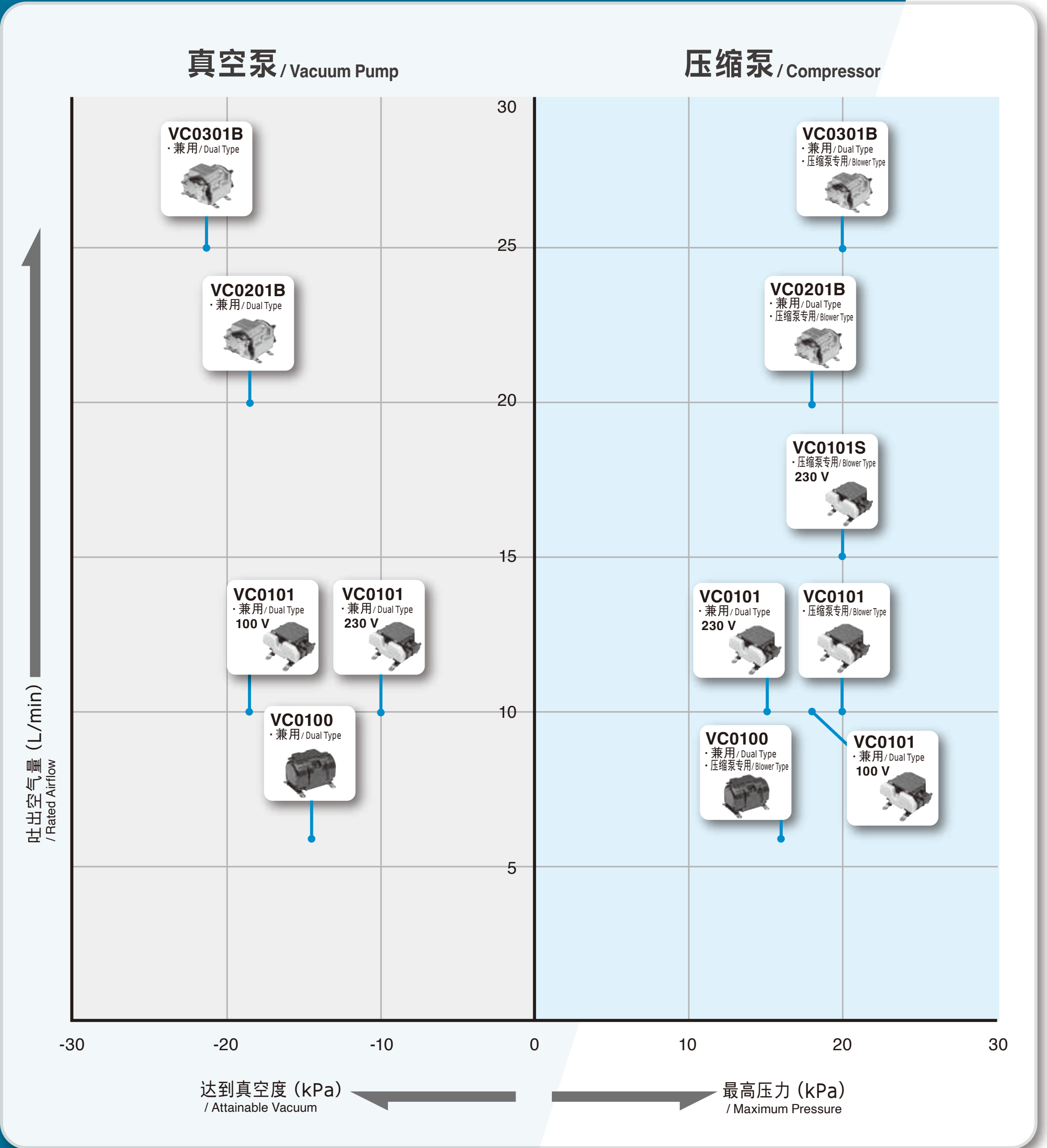
空气隔膜泵

/ Air Diaphragm Pump

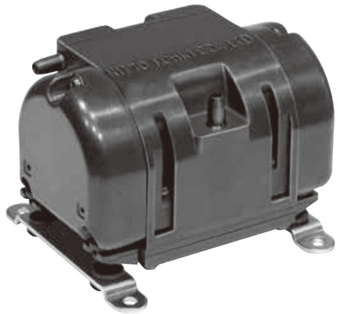
隔膜压缩泵&真空泵

/ Diaphragm Compressor and Vacuum Pump

VC系列
VC series



压缩泵 & 真空泵 / Compressor and Vacuum Pump



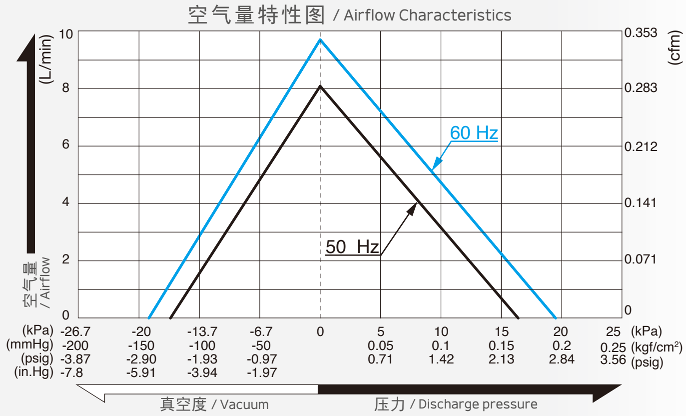
型号 VC0100

120 V | 120 V/230 V | 120 V/230 V

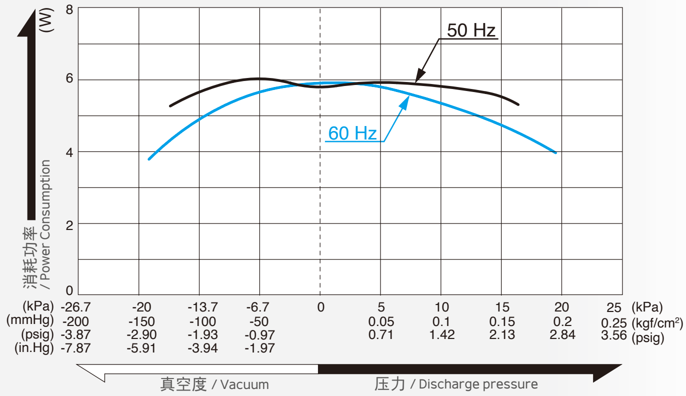
兼用 / Dual Type

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



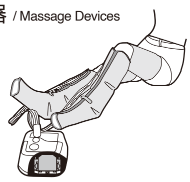
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

额定压力 / Rated Pressure	4 kPa (0.04 kgf/cm²) 0.04 bar 0.57 psig	
吐出空气量 / Rated Airflow	6 L/min 0.212 cfm	
最高压力 / Maximum Pressure	16 kPa (0.16 kgf/cm²) 0.16 bar 2.28 psig	
达到真空度 / Attainable Vacuum	-14.7 kPa (-110 mmHg) -147 mbar -4.33 in.Hg	
额定电压 / Rated Voltage	120 V AC	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz	
消耗功率 / Power Consumption	6 W	
耐用时间 / Rated Performance	5,000 小时 / hours	
使用压力范围 / Working Pressure Range	-14.7 kPa ~ 16 kPa (-110 mmHg ~ 0.16 kgf/cm²) -147 mbar ~ 0.16 bar -4.33 in.Hg ~ 2.28 psig	
吸入口尺寸 / Inlet	Φ6 mm (外径) 软管接头 / 6 mm O.D. hose barb	
吐出口尺寸 / Outlet	Φ6 mm (外径) 软管接头 / 6 mm O.D. hose barb	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品 : 相当于 A 类 / Class A for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	70 (L) x 72 (W) mm 2 - 3/4" (L) x 2 - 53/64" (W)	
本体重量 / Weight	0.45 kg 0.99 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	

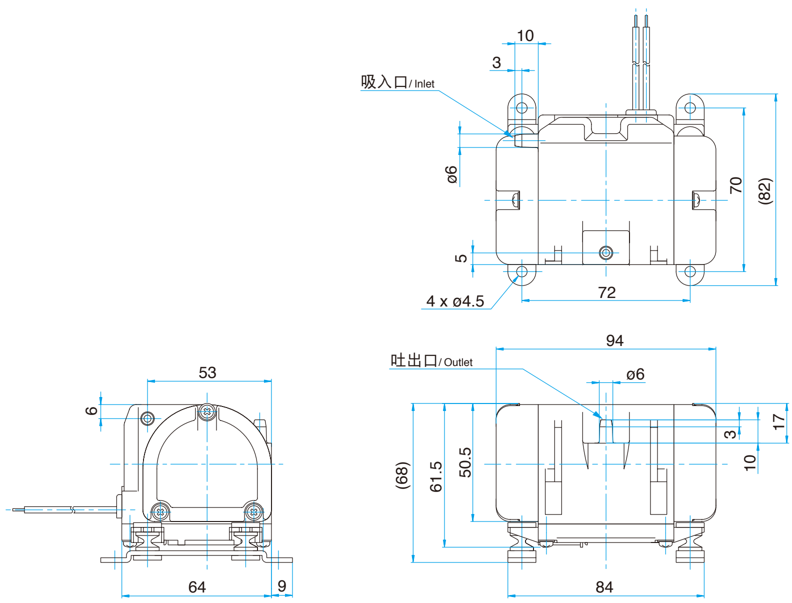
用途例 / Application Examples

按摩器 / Massage Devices



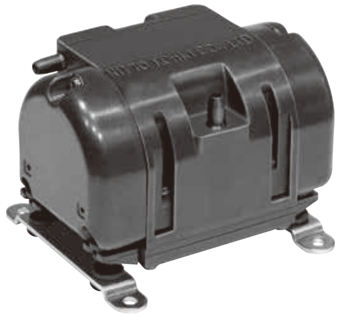
防褥疮垫 / Bedsore Prevention Mattress

外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor

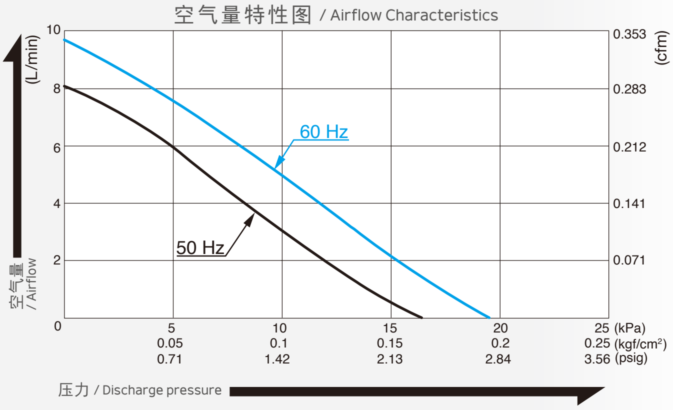
型号 VC0100

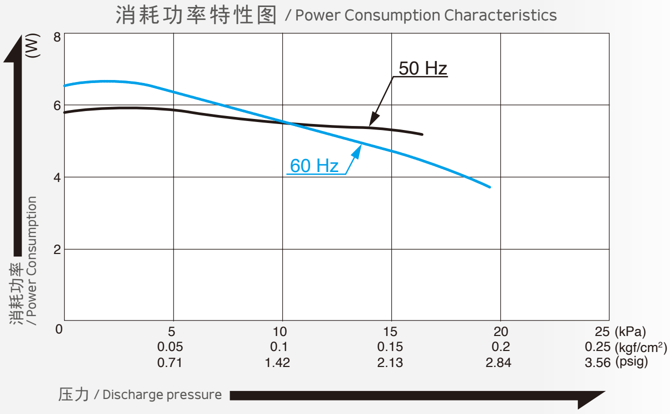


120 V | 120 V/230 V | 120 V/230 V

压缩泵专用 / Blower Type

空气量和消耗功率 / Airflow & Power Consumption





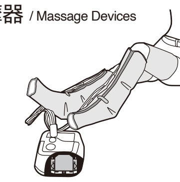
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规格 / Specifications

额定压力 / Rated Pressure	4 kPa (0.04 kgf/cm²) 0.04 bar 0.57 psig	
吐出空气量 / Rated Airflow	6 L/min 0.212 cfm	
最高压力 / Maximum Pressure	16 kPa (0.16 kgf/cm²) 0.16 bar 2.28 psig	
额定电压 / Rated Voltage	120 V AC	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz	
消耗功率 / Power Consumption	6 W	
耐用时间 / Rated Performance	10,000 小时 / hours	
使用压力范围 / Working Pressure Range	0 ~ 16 kPa (0 ~ 0.16 kgf/cm²) 0 ~ .16 bar 0 ~ 2.28 psig	
吐出口尺寸 / Outlet	ϕ6 mm (外径) 软管接头 / 6 mm O.D. hose barb	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 A 类 / Class A for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	70 (L) x 72 (W) mm 2 - 3/4" (L) x 2 - 53/64" (W)	
本体重量 / Weight	0.45 kg 0.99 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	320 mm 12 - 19/32"

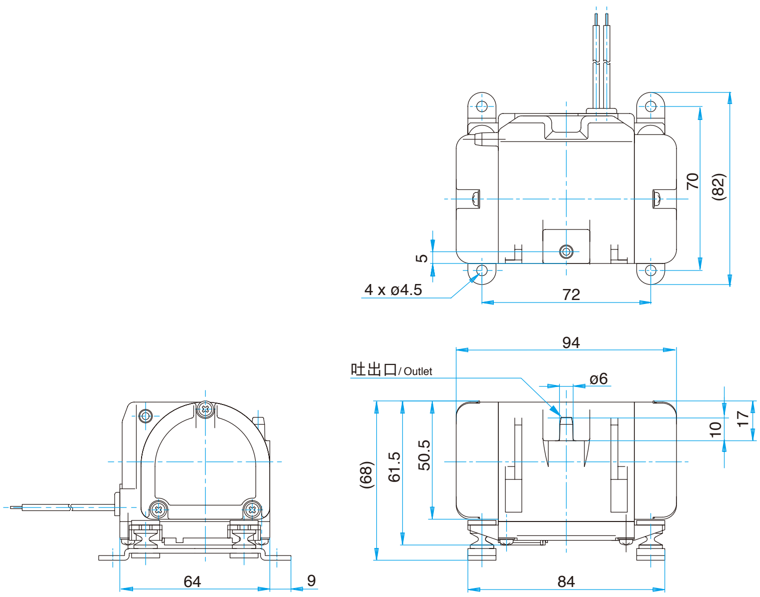
用途例 / Application Examples

按摩器 / Massage Devices



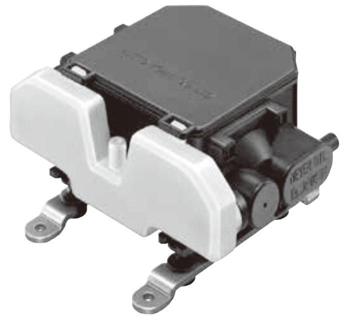
防褥疮垫 / Bedsore Prevention Mattress

外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 & 真空泵 / Compressor and Vacuum Pump

型号 VC0101

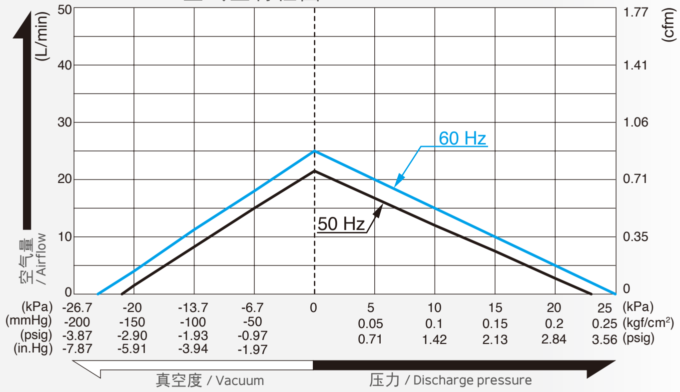


120 V | 120 V/230 V | 120 V/230 V

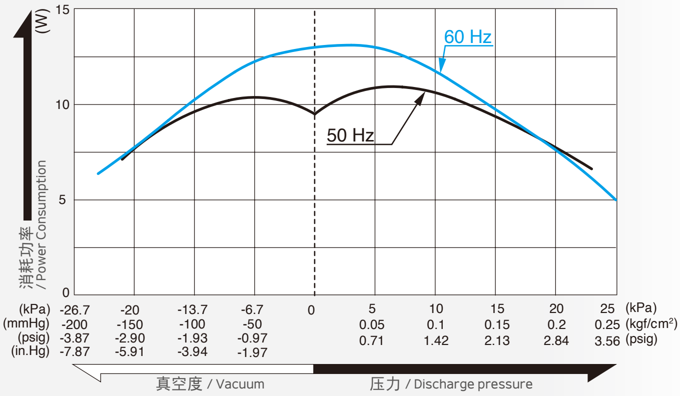
兼用 / Dual Type

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



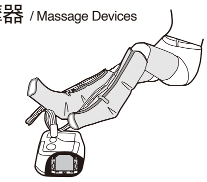
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

额定压力 / Rated Pressure	10 kPa (0.1 kgf/cm²) 0.1 bar 1.42 psig	
吐出空气量 / Rated Airflow	10 L/min 0.35 cfm	
额定电压 / Rated Voltage	120 V AC	230 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz
消耗功率 / Power Consumption	11 W	
最高压力 / Maximum Pressure	18 kPa (0.18 kgf/cm²) 0.18 bar 2.56 psig	15 kPa (0.15 kgf/cm²) 0.15 bar 2.13 psig
达到真空度 / Attainable Vacuum	-18.7 kPa (-140 mmHg) -187 mbar -5.51 in.Hg	-10 kPa (-76 mmHg) -100 mbar -2.95 in.Hg
使用压力范围 / Working Pressure Range	-18.7 kPa ~ 18 kPa (-140 mmHg ~ 0.18 kgf/cm²) -187 mbar ~ 0.18 bar -5.51 in.Hg ~ 2.56 psig	-10 kPa ~ 15 kPa (-76 mmHg ~ 0.15 kgf/cm²) -100 mbar ~ 0.15 bar -2.95 in.Hg ~ 2.13 psig
耐用时间 / Rated Performance	5,000 小时 / hours	
吸入口尺寸 / Inlet	ϕ7.5 mm（外径）软管接头 / 7.5 mm O.D. hose barb	
吐出口尺寸 / Outlet	ϕ7.5 mm（外径）软管接头 / 7.5 mm O.D. hose barb	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 B 类 / Class B equivalent
安装尺寸 / Mounting Dimensions	66 (L) x 100 (W) mm 2 - 19/32" (L) x 3 - 15/16" (W)	
本体重量 / Weight	0.82 kg 1.81 Lbs	0.84 kg 1.85 Lbs
导线长度 / Leadwire Length	300 mm 11 - 13/16"	200 mm 7 - 7/8"

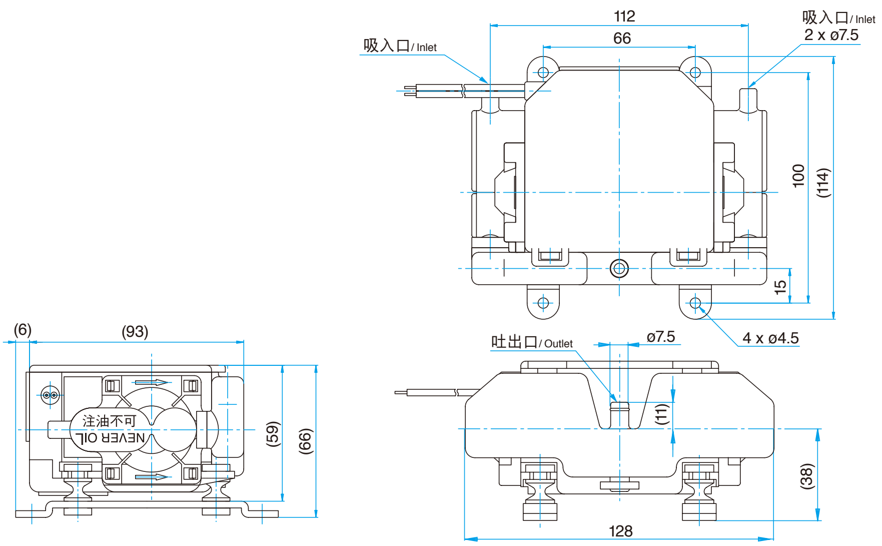
用途例 / Application Examples

按摩器 / Massage Devices

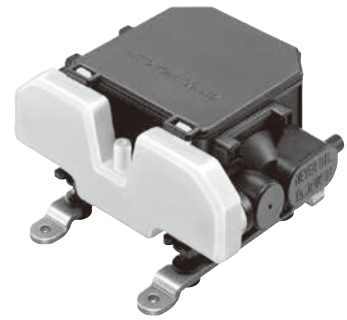


防褥疮垫 / Bedsore Prevention Mattress

外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor

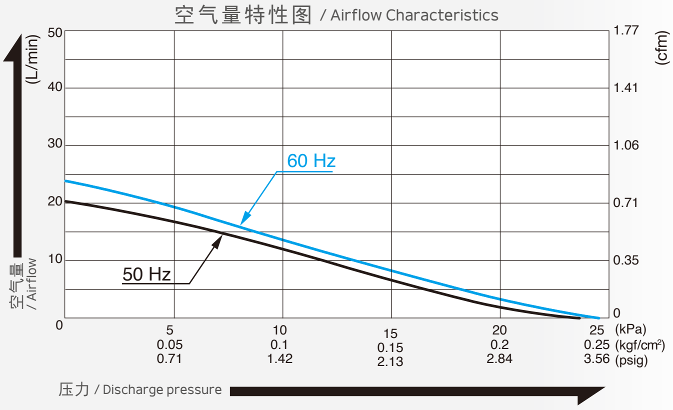


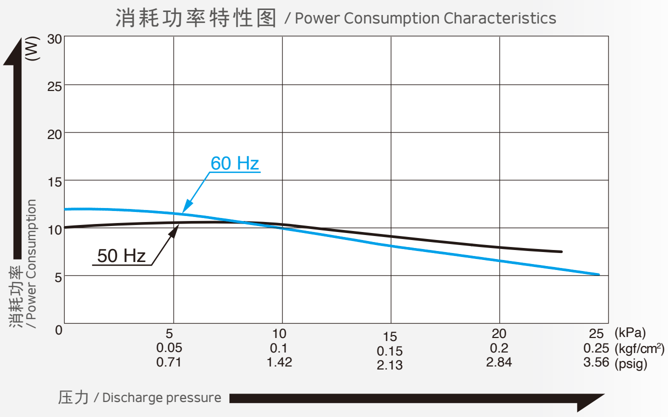
型号 VC0101

120 V | 120 V/230 V | 120 V/230 V

压缩泵专用 / Blower Type

空气量和消耗功率 / Airflow & Power Consumption





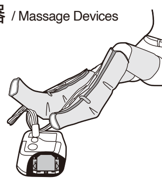
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

额定压力 / Rated Pressure	10 kPa (0.1 kgf/cm²) 0.1 bar 1.42 psig	
吐出空气量 / Rated Airflow	10 L/min 0.35 cfm	
最高压力 / Maximum Pressure	20 kPa (0.2 kgf/cm²) 0.2 bar 2.84 psig	
额定电压 / Rated Voltage	120 V AC	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz	
消耗功率 / Power Consumption	11 W	
耐用时间 / Rated Performance	10,000 小时 / hours	
使用压力范围 / Working Pressure Range	0 ~ 20 kPa (0 ~ 0.2 kgf/cm²) 0 ~ 0.2 bar 0 ~ 2.84 psig	
吐出口尺寸 / Outlet	ϕ7.5 mm (外径) 软管接头 / 7.5 mm O.D. hose barb	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	A 类 / Class A	相当于 B 类 / Class B equivalent
安装尺寸 / Mounting Dimensions	66 (L) x 100 (W) mm 2 - 19/32" (L) x 3 - 15/16" (W)	
本体重量 / Weight	0.82 kg 1.81 Lbs	0.84 kg 1.85 Lbs
导线长度 / Leadwire Length	300 mm 11 - 13/16"	

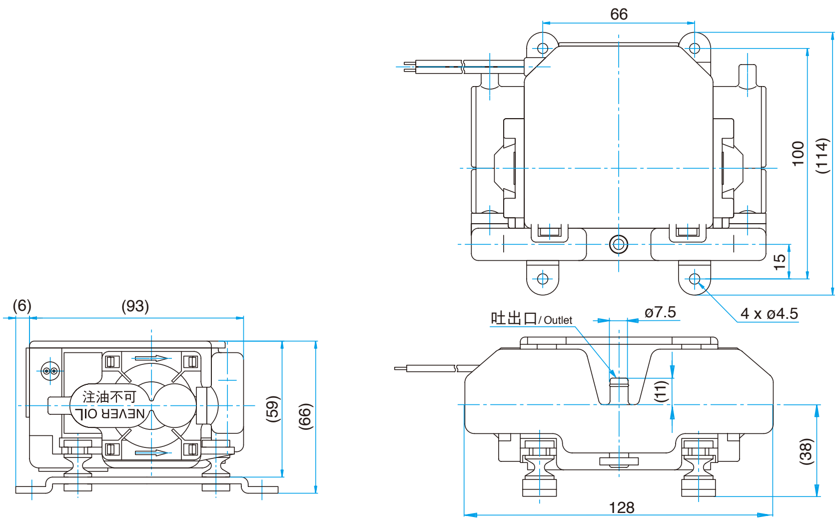
用途例 / Application Examples

按摩器 / Massage Devices

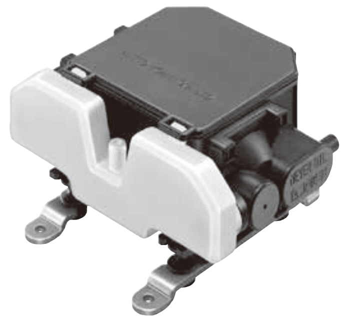


防褥疮垫 / Bedsore Prevention Mattress

外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor



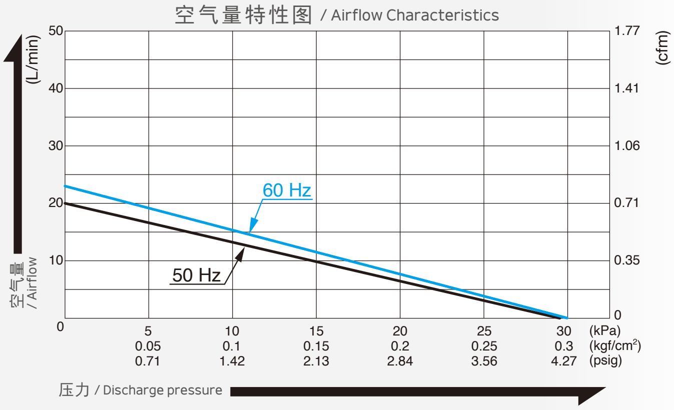
型号 VC0101S

CE 230 V　UKCA 230 V

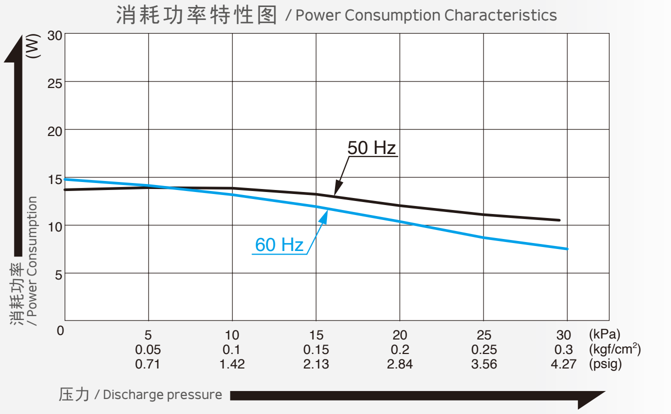
压缩泵专用 / Blower Type

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

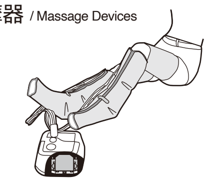
规 格 / Specifications

额定压力 / Rated Pressure	5 kPa (0.05 kgf/cm²) 0.05 bar　0.71 psig
吐出空气量 / Rated Airflow	15 L/min 0.53 cfm
最高压力 / Maximum Pressure	26 kPa (0.26 kgf/cm²) 0.26 bar　3.70 psig
额定电压 / Rated Voltage	230 V AC*
额定频率 / Rated Frequency	50 Hz / 60 Hz
消耗功率 / Power Consumption	14 W
耐用时间 / Rated Performance	5,000 小时 / hours
使用压力范围 / Working Pressure Range	0 ~ 26 kPa (0 to 0.26 kgf/cm²) 0 ~ 0.26 bar 0 ~ 3.70 psig
吐出口尺寸 / Outlet	ϕ7.5 mm (外径) 软管接头 / 7.5 mm O.D. hose barb
额定时间 / Duty Cycle	60 分钟 / 60 minutes
线圈绝缘等级 / Coil Insulation Class	相当于 B 类 / Class B equivalent
安装尺寸 / Mounting Dimensions	66 (L) x 100 (W) mm 2 - 19/32" (L) x 3 - 15/16" (W)
本体重量 / Weight	0.83 kg　1.81 Lbs
导线长度 / Leadwire Length	300 mm 11 - 13/16"

* 有关 120 V 规格的产品，请与我们联系。/Please contact us for 120 V AC model.

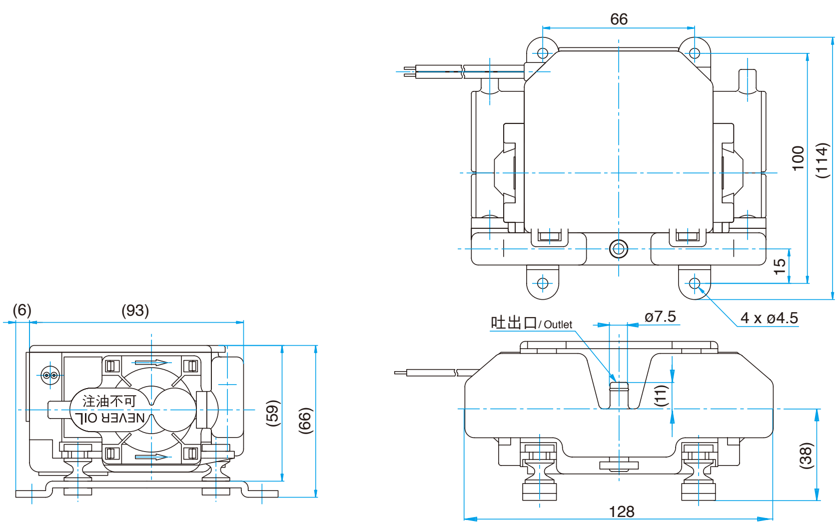
用途例 / Application Examples

按摩器 / Massage Devices



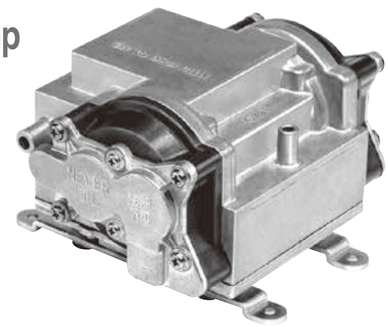
防褥疮垫 / Bedsore Prevention Mattress

外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 & 真空泵 / Compressor and Vacuum Pump

型号 VC0201B

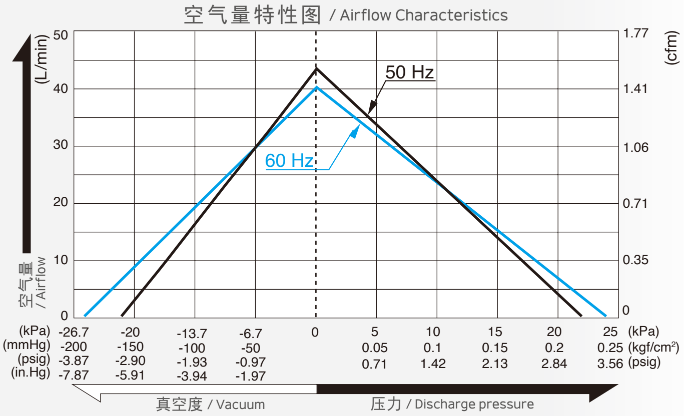


120 V　120 V/230 V　120 V/230 V

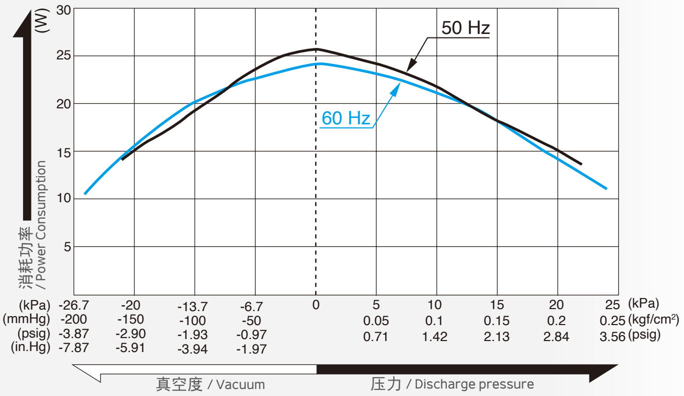
兼用 / Dual Type

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

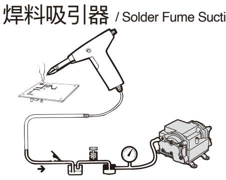
规 格 / Specifications

额定压力 / Rated Pressure	10 kPa (0.1 kgf/cm²) 0.1 bar　1.42 psig
吐出空气量 / Rated Airflow	20 L/min 0.71 cfm
最高压力 / Maximum Pressure	18 kPa (0.18 kgf/cm²) 0.18 bar　2.56 psig
达到真空度 / Attainable Vacuum	-18.7 kPa (-140 mmHg) -187 mbar　-5.51 in.Hg
额定电压 / Rated Voltage	120 V AC　　230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz
消耗功率 / Power Consumption	21 W
耐用时间 / Rated Performance	10,000 小时 / hours
使用压力范围 / Working Pressure Range	-18.7 kPa ~ 18 kPa (-140 mmHg ~ 0.18 kgf/cm²) -187 mbar ~ 0.18 bar -5.51 in.Hg ~ 2.56 psig
吸入口尺寸 / Inlet	ϕ10.5 mm (外径) 软管接头 / 10.5 mm O.D. hose barb
吐出口尺寸 / Outlet	ϕ8.5 mm (外径) 软管接头 / 8.5 mm O.D. hose barb
额定时间 / Duty Cycle	连续 / Continuous
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 A 类 / Class A for UL
安装尺寸 / Mounting Dimensions	125 (L) x 56 (W) mm 4 - 59/64" (L) x 2 - 13/64" (W)
本体重量 / Weight	1.7 kg　3.7 Lbs
导线长度 / Leadwire Length	300 mm 11 - 13/16"

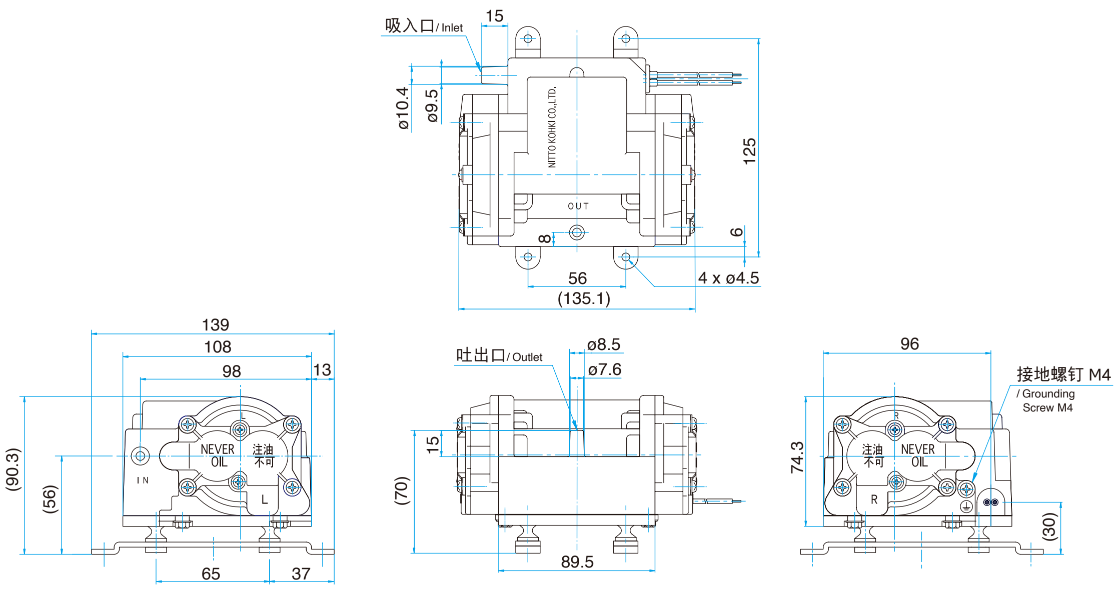
用途例 / Application Examples

防褥疮垫 / Bedsore Prevention Mattress

焊料吸引器 / Solder Fume Suction

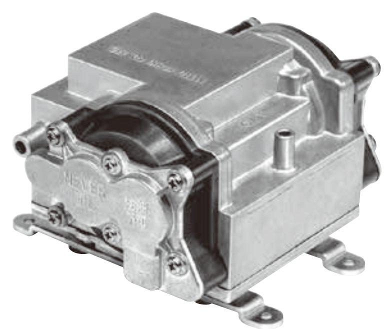


外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor

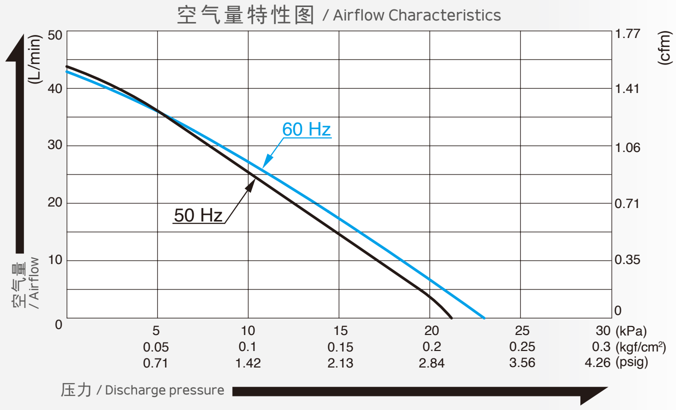
型号 VC0201B

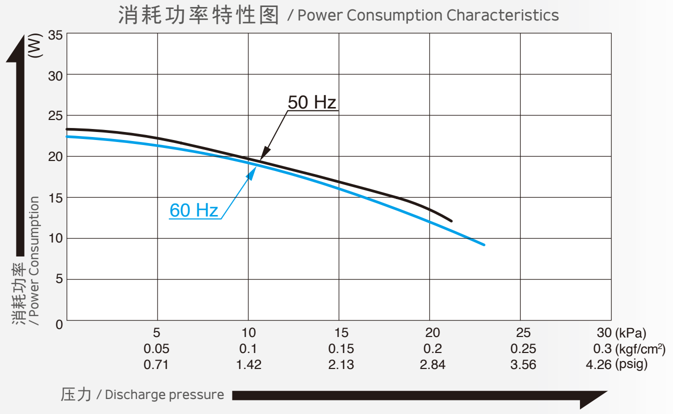


CE 230 V　UKCA 230 V

压缩泵专用 / Blower Type

空气量和消耗功率 / Airflow & Power Consumption





* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

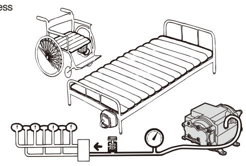
规 格 / Specifications

额定压力 / Rated Pressure	10 kPa (0.1 kgf/cm^2) 0.1 bar　1.42 psig
吐出空气量 / Rated Airflow	20 L/min 0.71 cfm
最高压力 / Maximum Pressure	18 kPa (0.18 kgf/cm^2) 0.18 bar　2.56 psig
额定电压 / Rated Voltage	230 V AC*
额定频率 / Rated Frequency	50 Hz / 60 Hz
消耗功率 / Power Consumption	21 W
耐用时间 / Rated Performance	10,000 小时 / hours
使用压力范围 / Working Pressure Range	0 ~ 18 kPa (0 ~ 0.18 kgf/cm^2) 0 ~ 0.18 bar 0 ~ 2.56 psig
吐出口尺寸 / Outlet	ϕ8.5 mm (外径) 软管接头 / 8.5 mm O.D. hose barb
额定时间 / Duty Cycle	连续 / Continuous
线圈绝缘等级 / Coil Insulation Class	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	125 (L) x 56 (W) mm 4 - 59/64" (L) x 2 - 13/64" (W)
本体重量 / Weight	1.7 kg　3.7 Lbs
导线长度 / Leadwire Length	300 mm 11 - 13/16"

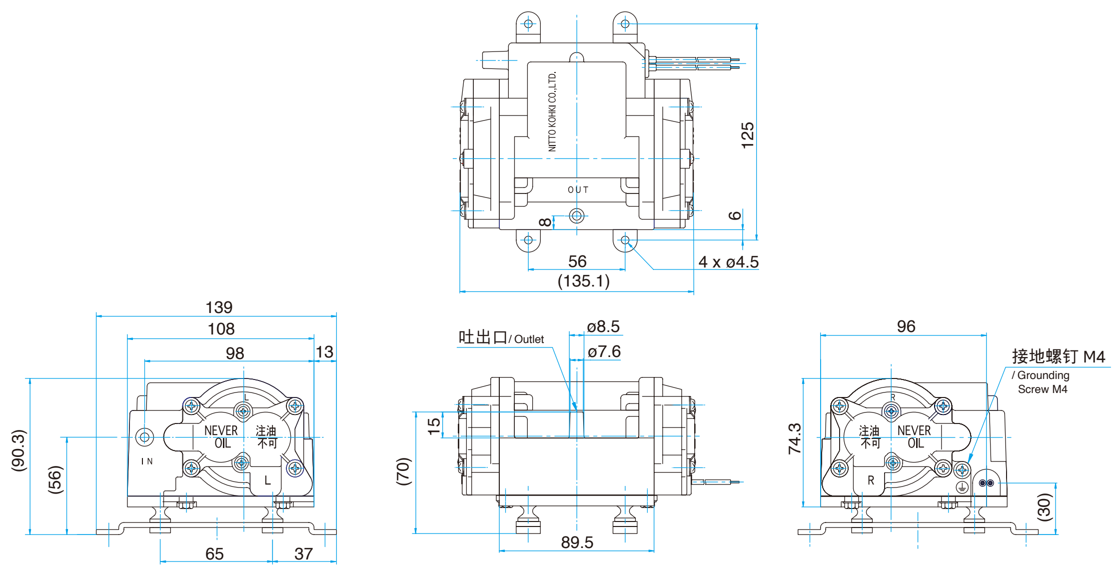
* 有关 120 V 规格的产品，请与我们联系。/Please contact us for 120 V AC model.

用途例 / Application Examples

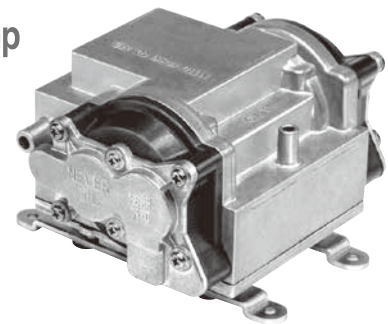
防褥疮垫 / Bedsore Prevention Mattress



外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 & 真空泵 / Compressor and Vacuum Pump



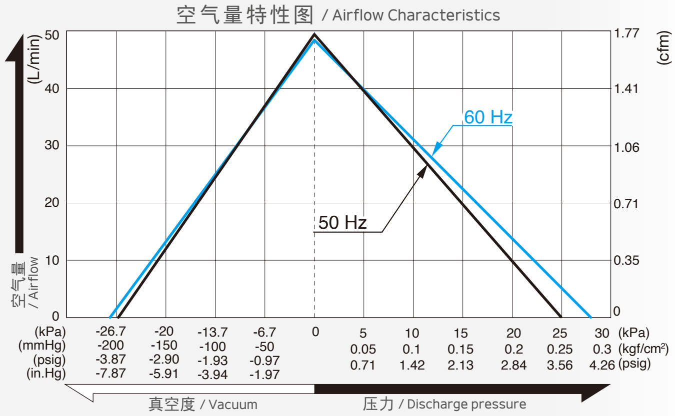
型号 VC0301B

120 V/230 V | 120 V/230 V | 120 V/230 V

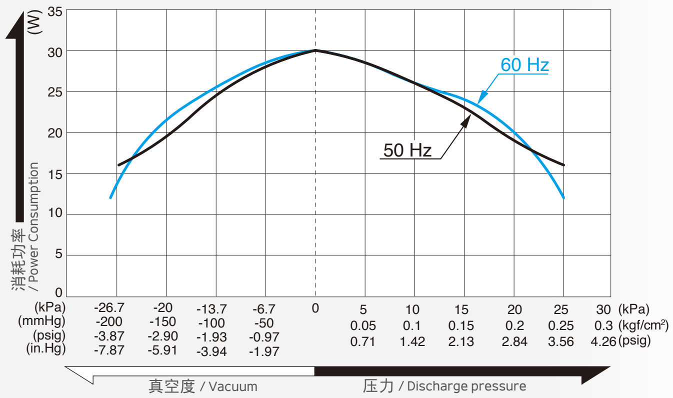
兼用 / Dual Type

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

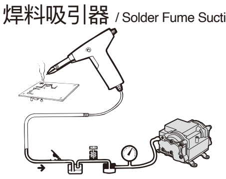
规 格 / Specifications

额定压力 / Rated Pressure	10 kPa (0.1 kgf/cm²) 0.1 bar 1.42 psig	
吐出空气量 / Rated Airflow	25 L/min 0.88 cfm	
最高压力 / Maximum Pressure	20 kPa (0.2 kgf/cm²) 0.2 bar 2.84 psig	
达到真空度 / Attainable Vacuum	-21.3 kPa (-160 mmHg) -213 mbar -6.3 in.Hg	
额定电压 / Rated Voltage	120 V AC	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz	
消耗功率 / Power Consumption	27 W	
耐用时间 / Rated Performance	10,000 小时 / hours	
使用压力范围 / Working Pressure Range	-21.3 kPa ~ 20 kPa (-160 mmHg ~ 0.2 kgf/cm²) -213 mbar ~ 0.2 bar -6.3 in.Hg ~ 2.84 psig	
吸入口尺寸 / Inlet	ϕ10.5 mm（外径）软管接头 / 10.5 mm O.D. hose barb	
吐出口尺寸 / Outlet	ϕ8.5 mm（外径）软管接头 / 8.5 mm O.D. hose barb	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 B 类 / Class B equivalent
安装尺寸 / Mounting Dimensions	125 (L) x 56 (W) mm 4 - 59/64" (L) x 2 - 13/64" (W)	
本体重量 / Weight	1.7 kg 3.7 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	

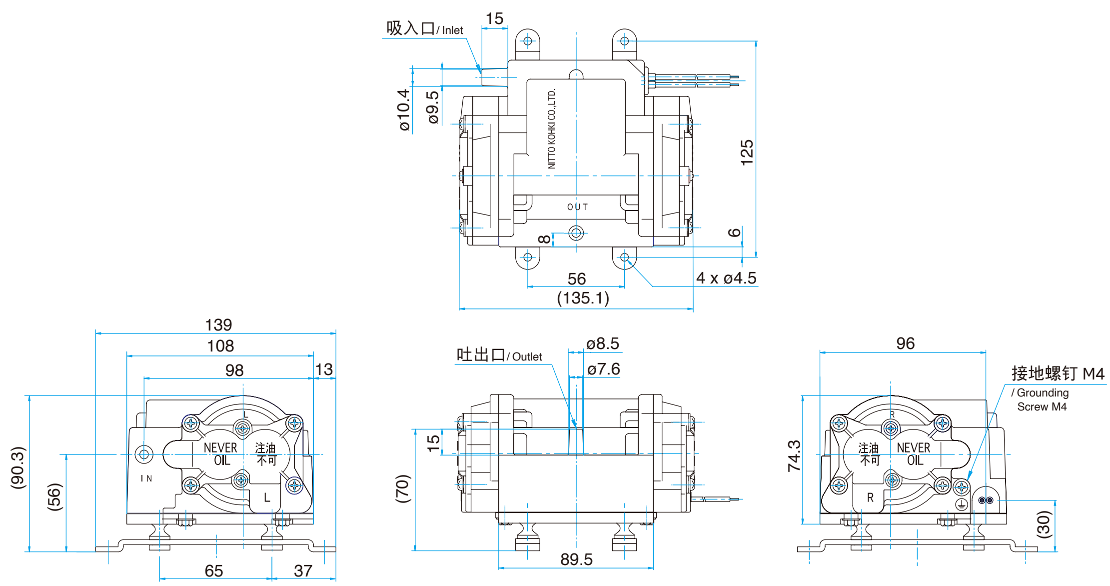
用途例 / Application Examples

防褥疮垫 / Bedsore Prevention Mattress

焊料吸引器 / Solder Fume Suction



外形尺寸图 / External Dimensions (单位 / Unit : mm)

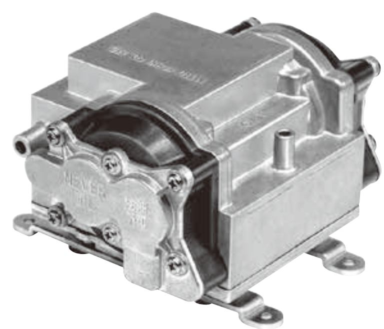


压缩泵 / Compressor

型号 VC0301B

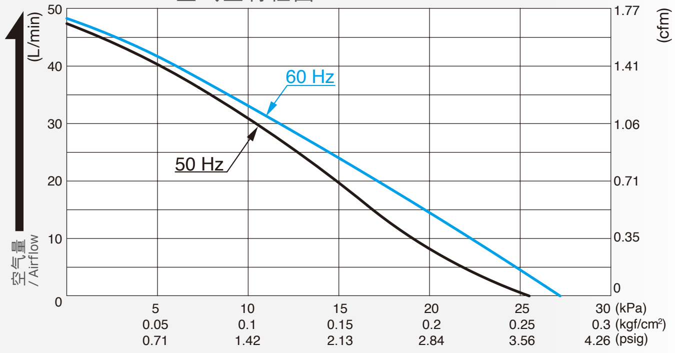
CE 230 V　UKCA 230 V

压缩泵专用 / Blower Type

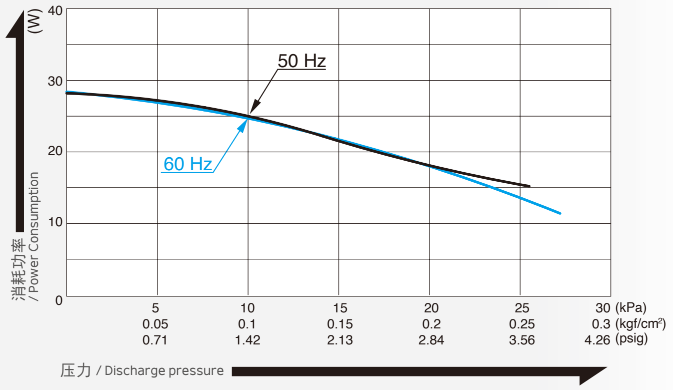


空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

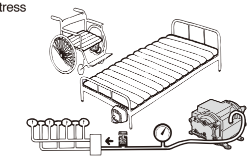
规 格 / Specifications

额定压力 / Rated Pressure	10 kPa (0.1 kgf/cm²) 0.1 bar 1.42 psig
吐出空气量 / Rated Airflow	25 L/min 0.88 cfm
最高压力 / Maximum Pressure	20 kPa (0.2 kgf/cm²) 0.2 bar 2.84 psig
额定电压 / Rated Voltage	230 V AC
额定频率 / Rated Frequency	50 Hz / 60 Hz
消耗功率 / Power Consumption	27 W
耐用时间 / Rated Performance	10,000 小时 / hours
使用压力范围 / Working Pressure Range	0 ~ 20 kPa (0 ~ 0.2 kgf/cm²) 0 ~ 0.2 bar 0 ~ 2.84 psig
吐出口尺寸 / Outlet	ϕ8.5 mm (外径) 软管接头 / 8.5 mm O.D. hose barb
额定时间 / Duty Cycle	连续 / Continuous
线圈绝缘等级 / Coil Insulation Class	相当于 B 类 / Class B equivalent
安装尺寸 / Mounting Dimensions	125 (L) x 56 (W) mm 4 - 59/64" (L) x 2 - 13/64" (W)
本体重量 / Weight	1.7 kg 3.7 Lbs
导线长度 / Leadwire Length	300 mm 11 - 13/16"

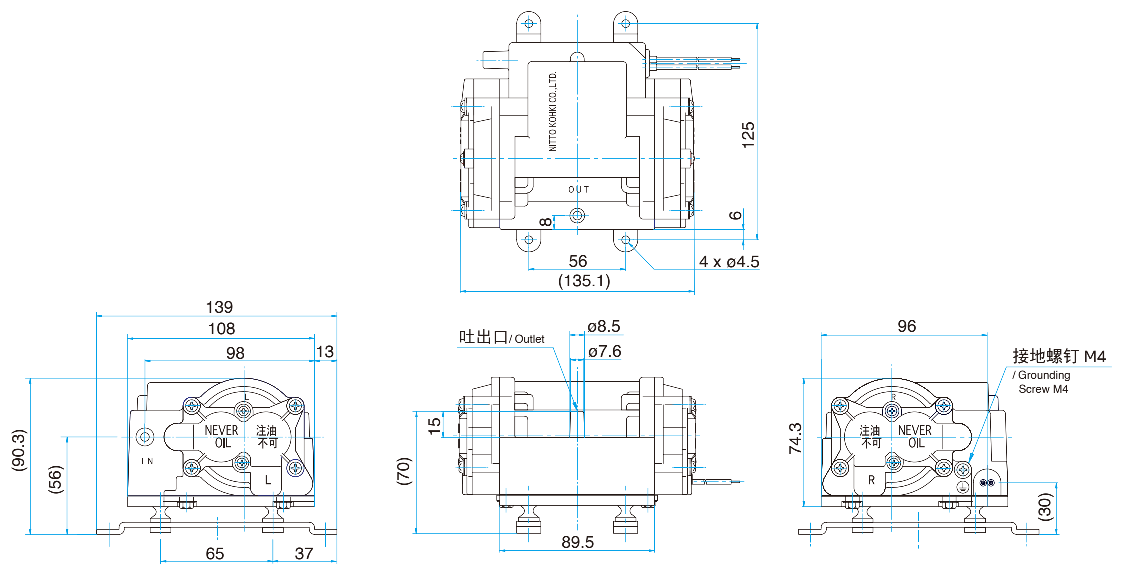
* 有关 120 V 规格的产品，请与我们联系。/Please contact us for 120 V AC model.

用途例 / Application Examples

防褥疮垫 / Bedsore Prevention Mattress



外形尺寸图 / External Dimensions (单位 / Unit : mm)



DC Motor Driven

Diaphragm Pump

Piston Pump

空气柱塞泵，隔膜泵

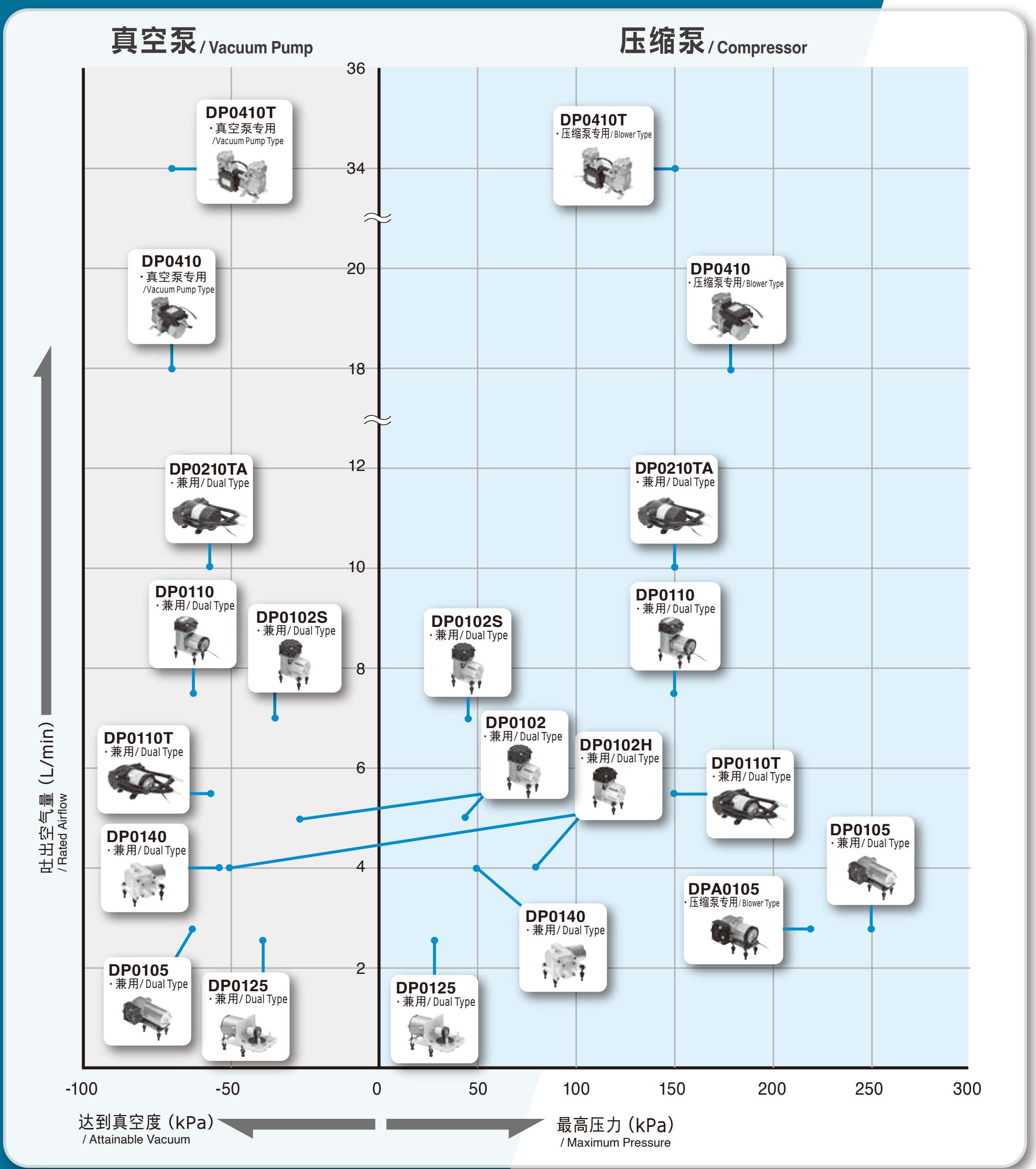
/ Air Piston Pump, Diaphragm Pump

DC马达 / DC motor

空气压缩泵&真空泵 / Air Compressor and Vacuum Pump

DP系列

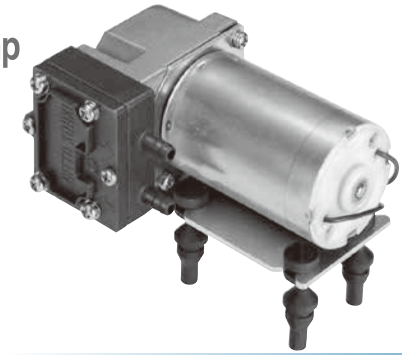
DP series



页 Page

压缩泵 & 真空泵 / Compressor and Vacuum Pump

型号 DP0105-X1 12 V DC
DP0105-Y1 24 V DC



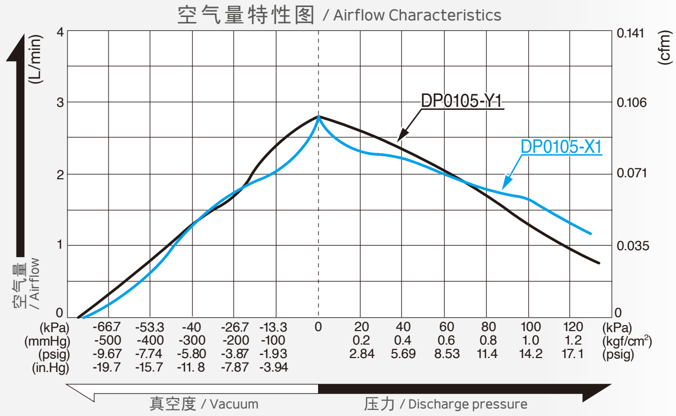
CE 12 V / 24 V | UK CA 12 V / 24 V | 面向中国 RoHS 机种 12 V / 24 V

有刷马达 / Brush DC Motor

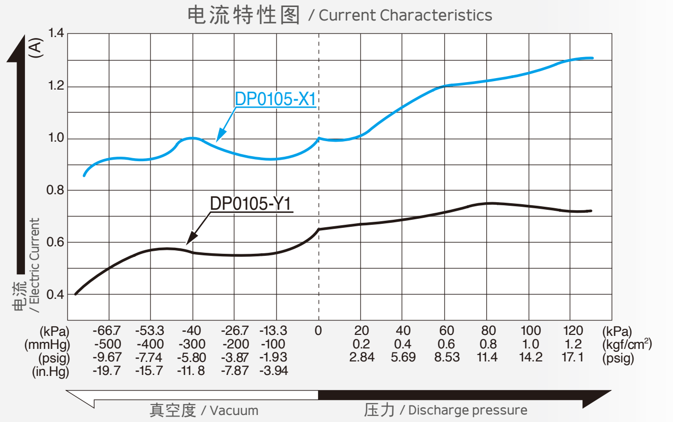
兼用 / Dual Type

空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



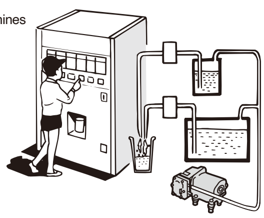
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

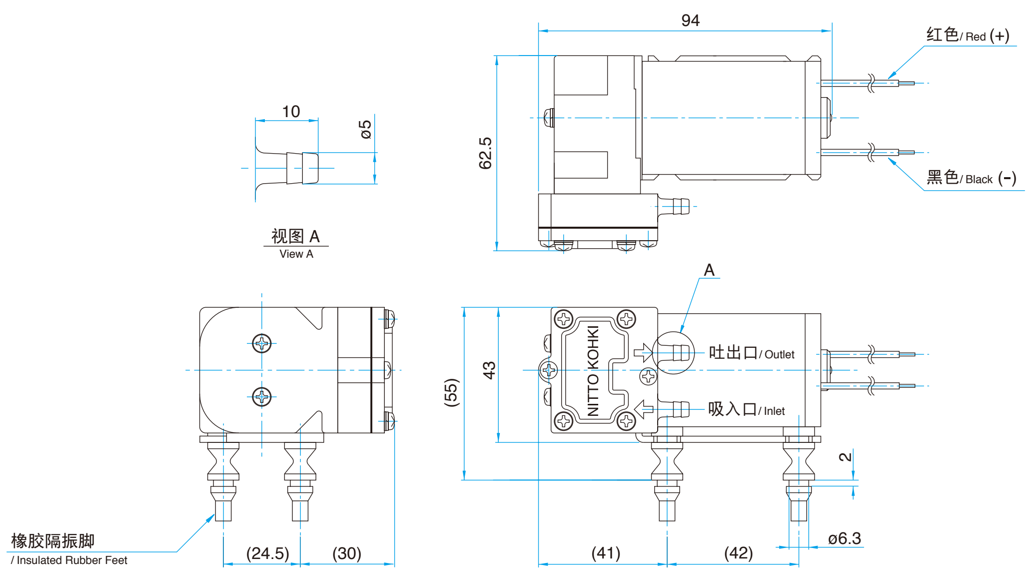
型号 / Model	DP0105-X1	DP0105-Y1
达到真空度 / Attainable Vacuum	-66.7 kPa (-500 mmHg) -667 mbar -19.7 in.Hg	
吐出空气量 / Free Air Displacement	2.8 L/min 0.099 cfm	
额定电压 / Rated Voltage	12 V DC	24 V DC
最大电流 / Maximum Current	1.9 A	0.95 A
最高压力 / Maximum Pressure	250 kPa (2.5 kgf/cm²) 2.5 bar 35.6 psig	
额定时间 / Duty Cycle	30 minutes	
使用压力范围 / Working Pressure Range	-66.7 ~ 100 kPa (-500 mmHg ~ 1 kgf/cm²) -667 mbar ~ 1 bar -19.7 in.Hg ~ 14.2 psig	
耐用时间 (MTTF) / Rated Performance (MTTF)	2,000 小时 / hours	
吸入口尺寸 / Inlet	ϕ5 mm（外径）直管接头 / 5 mm O.D. straight barb	
吐出口尺寸 / Outlet	ϕ5 mm（外径）直管接头 / 5 mm O.D. straight barb	
线圈绝缘等级 / Coil Insulation Class	相当于 E 类 / Class E equivalent	
安装尺寸 / Mounting Dimensions	42 (L) x 24.5 (W) mm 1 - 21/32" (L) x 1 - 31/32" (W)	
本体重量 / Weight	0.36 kg 0.79 Lbs	
导线长度 / Leadwire Length	360 mm 14 - 11/64"	

用途例 / Application Examples

自动售货机 / Vending Machines



外形尺寸图 / External Dimensions (单位 / Unit : mm)

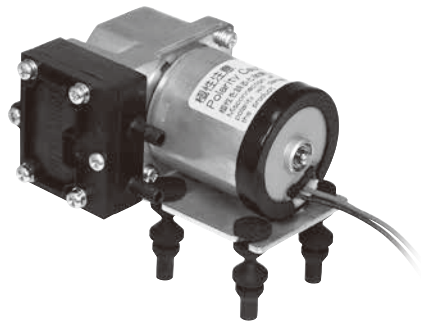


压缩泵 / Compressor

型号 DPA0105-X1 12 V DC
DPA0105-Y1 24 V DC

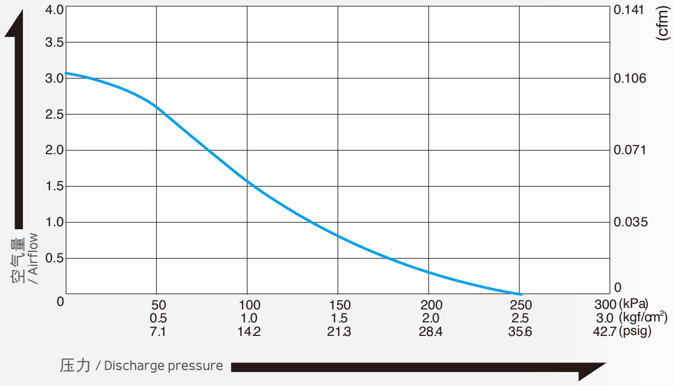
CE 12 V / 24 V　UKCA 12 V / 24 V

采用无碳刷马达 / Brushless DC Motor　　**压缩泵专用 / Blower Type**

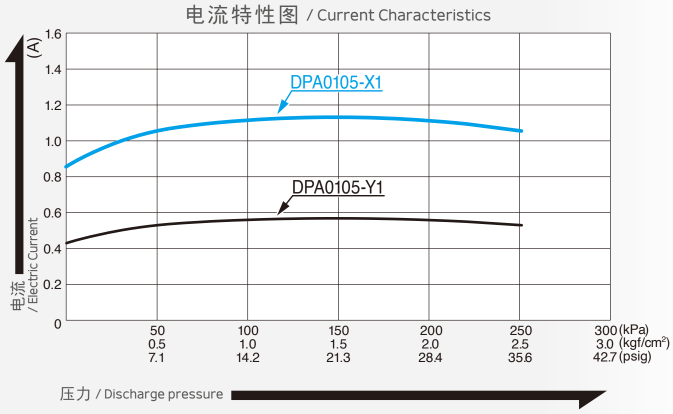


空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



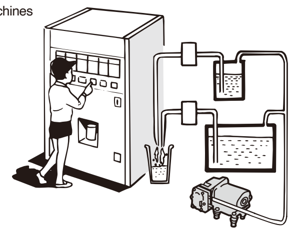
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

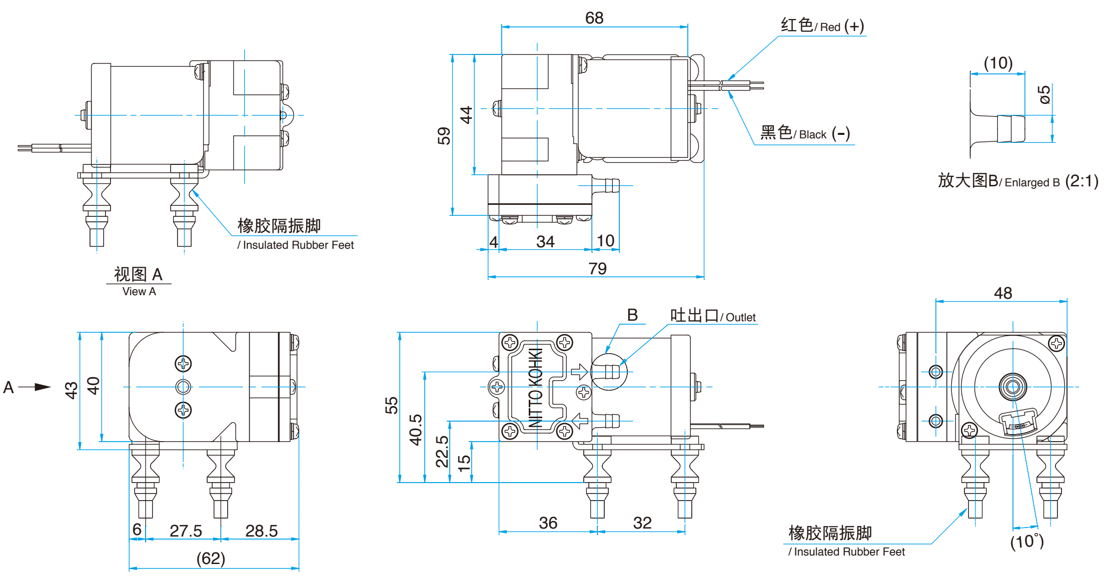
型号 / Model	DPA0105-X1	DPA0105-Y1
吐出空气量 / Free Air Displacement	2.8 L/min 0.099 cfm	
额定电压 / Rated Voltage	12 V DC	24 V DC
最大电流 / Maximum Current	1.4 A	0.7 A
最高压力 / Maximum Pressure	220 kPa (2.2 kgf/cm²) 2.2 bar 31.3 psig	
额定时间 / Duty Cycle	连续 / Continuous	
使用压力范围 / Working Pressure Range	0 ~ 100 kPa (0 ~ 1 kgf/cm²) 0 ~ 1 bar 0 ~ 14.2 psig	
耐用时间 (MTTF) / Rated Performance (MTTF)	5,000 小时 / hours	
吸入口尺寸 / Inlet	φ5 mm（外径）直管接头 / 5 mm O.D. straight barb	
吐出口尺寸 / Outlet	φ5 mm（外径）直管接头 / 5 mm O.D. straight barb	
线圈绝缘等级 / Coil Insulation Class	相当于 A 类 / Class A equivalent	
安装尺寸 / Mounting Dimensions	32 (L) x 27.5 (W) mm 1 - 17/64" x 1 - 5/64" (W)	
本体重量 / Weight	0.3 kg 0.66 Lbs	
导线长度 / Leadwire Length	360 mm 14 - 11/64"	

用途例 / Application Examples

自动售货机 / Vending Machines



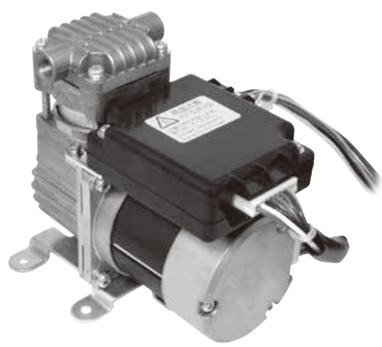
外形尺寸图 / External Dimensions (单位 / Unit : mm)



真空泵 / Vacuum Pump

型号 DP0410-X1 12 V DC
DP0410-Y1 24 V DC

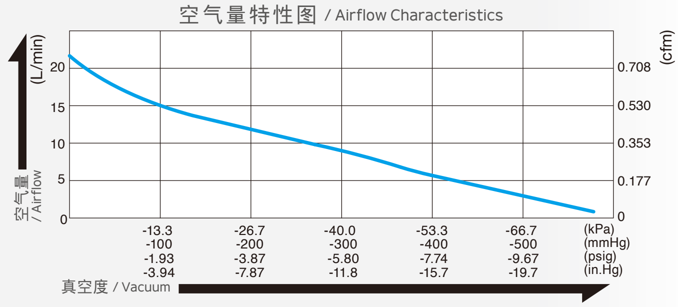
一般 /PWM 可控兼用机型
/ PWM controllable

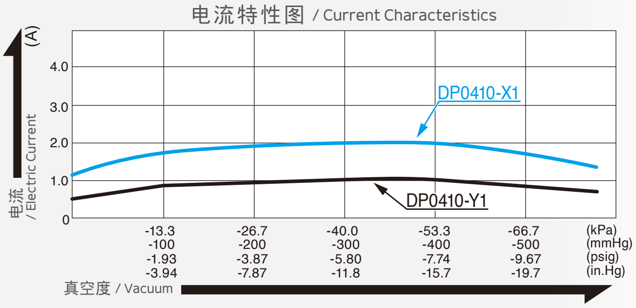


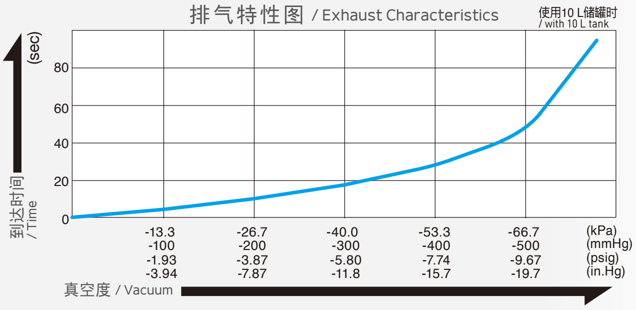
12 V / 24 V　12 V / 24 V

采用无碳刷马达 / Brushless DC Motor　**真空专用 / Vacuum Type**

空气量和电流 / Airflow & Electric Current







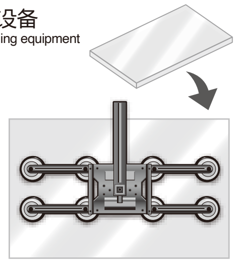
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

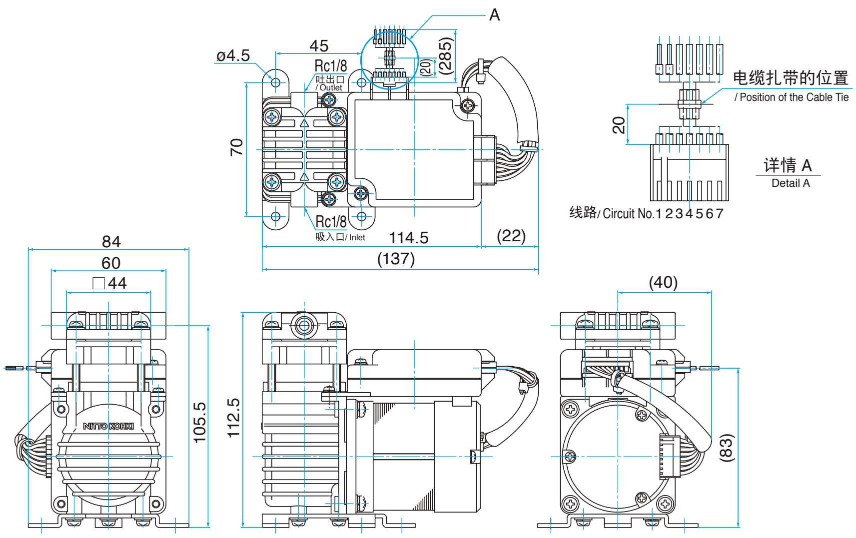
型号 / Model	DP0410-X1	DP0410-Y1
达到真空度 / Attainable Vacuum	-77.3 kPa (-580 mmHg) -773 mbar　-22.8 in.Hg	
吐出空气量 / Free Air Displacement	18 L/min 0.64 cfm	
额定电压 / Rated Voltage	12 V DC	24 V DC
最大电流 / Maximum Current	2.5 A	1.5 A
额定时间 / Duty Cycle	连续 / Continuous	
使用压力范围 / Working Pressure Range	0 to -77.3 kPa (0 to -580 mmHg) 0 to -773 mbar 0 to -22.8 in.Hg	
耐用时间 (MTTF) / Rated Performance (MTTF)	10,000 小时 / hours	
吸入口尺寸 / Inlet	Rc1/8 (内螺纹 / internal thread)	
吐出口尺寸 / Outlet	Rc1/8 (内螺纹 / internal thread)	
线圈绝缘等级 / Coil Insulation Class	相当于 E 类 / Class E equivalent	
安装尺寸 / Mounting Dimensions	70 (L) x 45 (W) mm 2 - 3/4" (L) x 1 - 49/64" (W)	
本体重量 / Weight	1.1 kg　2.4 Lbs	
导线长度 / Leadwire Length	285 mm 11 - 7/32"	

用途例 / Application Examples

真空玻璃板搬运设备
/ Vacuum glass sheet handling equipment



外形尺寸图 / External Dimensions (单位 / Unit : mm)



连接表 /Connection Table

	电源 / Power Source		控制信号 / Control Signal				
线路 / Circuit No.	1	2	3	4	5	6	7
线色 / Cord Color	红色 / Red	黑色 / Black	褐色 / Brown	橙色 / Orange	黄色 / Yellow	绿色 / Green	灰色 / Gray
机能 / Function	V+	V-	驱动 / 自由 DRIVE / FREE	脉冲 / PULSE	报警 / ALARM	速度 / SPEED	报警 / SGND
选项 / Option　无控制 Off / Function Off	ON		OFF				
选项 / Option　有控制 On / Function On	ON		ON				
线尺寸 / Cord Size	AWG20		AWG22				
线路类型 / Line Type	UL1007						

* 控制功能默认情况下是“OFF”
/ Control function is “OFF” by default.

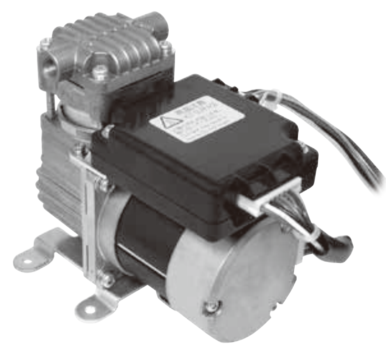
● 务必使用扎带固定引线。（请参见细节 A。）如果它们没有固定，连接器可能会接触不良并导致故障。
● 有关接线的详细信息，请参阅用户说明。

● Be sure to secure the lead wires with a cable tie. (See the detail A.) If they are not secured, poor contact of the connector may occur and result in failure.
● For the details of wiring, please see the user's instructions.

压缩泵 / Compressor

型号 DP0410-X2 12 V DC
DP0410-Y2 24 V DC

一般 /PWM 可控兼用机型
/ PWM controllable

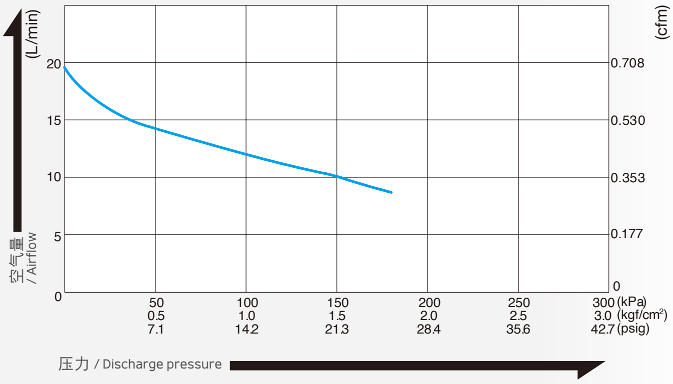


CE 12 V / 24 V　UKCA 12 V / 24 V

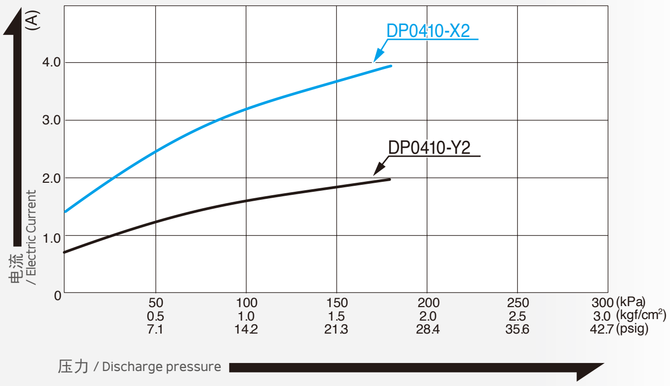
采用无碳刷马达 / Brushless DC Motor　**压缩泵专用 / Blower Type**

空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



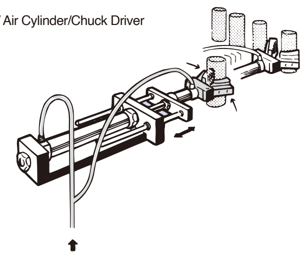
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

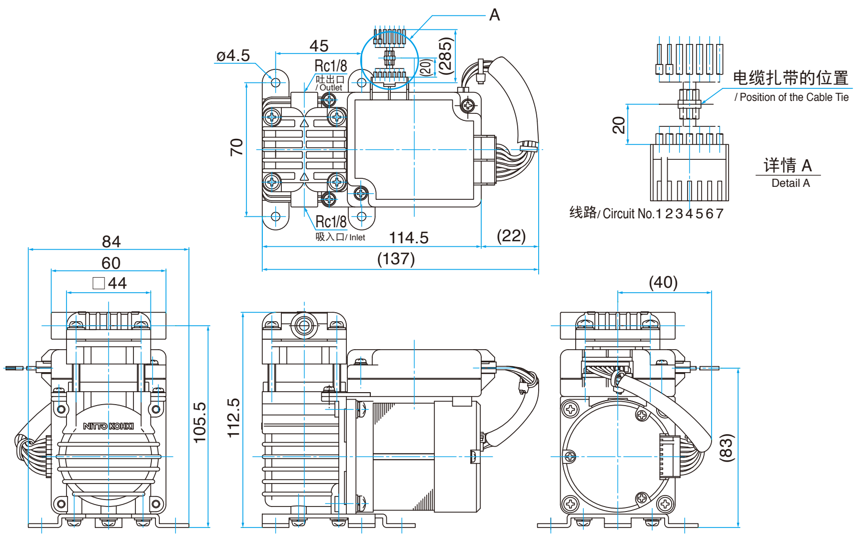
型号 / Model	DP0410-X2	DP0410-Y2
吐出空气量 / Free Air Displacement	18 L/min 0.64 cfm	
额定电压 / Rated Voltage	12 V DC	24 V DC
最大电流 / Maximum Current	5.0 A	2.7 A
最高压力 / Maximum Pressure	180 kPa (1.8 kgf/cm²) 1.8 bar 25.6 psig	
额定时间 / Duty Cycle	连续 / Continuous	
使用压力范围 / Working Pressure Range	0 ~ 180 kPa (0 ~ 1.8 kgf/cm²) 0 ~ 1.8 bar 0 ~ 25.6 psig	
耐用时间 (MTTF) / Rated Performance (MTTF)	10,000 小时 / hours	
吸入口尺寸 / Inlet	Rc1/8 (内螺纹 / internal thread)	
吐出口尺寸 / Outlet	Rc1/8 (内螺纹 / internal thread)	
线圈绝缘等级 / Coil Insulation Class	相当于 E 类 / Class E equivalent	
安装尺寸 / Mounting Dimensions	70 (L) x 45 (W) mm 2 - 3/4" (L) x 1 - 49/64" (W)	
本体重量 / Weight	1.1 kg 2.4 Lbs	
导线长度 / Leadwire Length	285 mm 11 - 7/32"	

用途例 / Application Examples

气缸 / 气动卡盘 / Air Cylinder/Chuck Driver



外形尺寸图 / External Dimensions (单位 / Unit : mm)



连接表 /Connection Table

	电源 / Power Source		控制信号 / Control Signal				
线路 / Circuit No.	1	2	3	4	5	6	7
线色 / Cord Color	红色 / Red	黑色 / Black	褐色 / Brown	橙色 / Orange	黄色 / Yellow	绿色 / Green	灰色 / Gray
机能 / Function	V+	V-	驱动 / 自由 DRIVE / FREE	脉冲 / PULSE	报警 / ALARM	速度 / SPEED	报警 / SGND
选项 / Option 无控制 Off / Function Off	ON		OFF				
选项 / Option 有控制 On / Function On	ON		ON				
线尺寸 / Cord Size	AWG20		AWG22				
线路类型 / Line Type	UL1007						

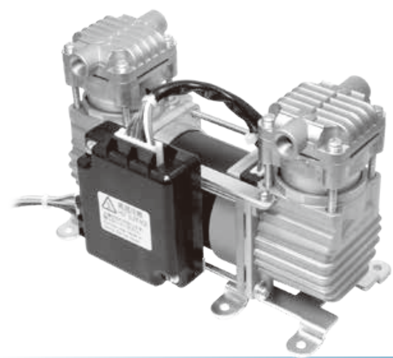
* 控制功能默认情况下是“OFF”
/ Control function is “OFF” by default.

- 务必使用扎带固定引线。（请参见细节 A。）如果它们没有固定，连接器可能会接触不良并导致故障。
- 有关接线的详细信息，请参阅用户说明。
- Be sure to secure the lead wires with a cable tie. (See the detail A.) If they are not secured, poor contact of the connector may occur and result in failure.
- For the details of wiring, please see the user's instructions.

真空泵 / Vacuum Pump

型号 DP0410T-Y1

一般 /PWM 可控兼用机型
/ PWM controllable



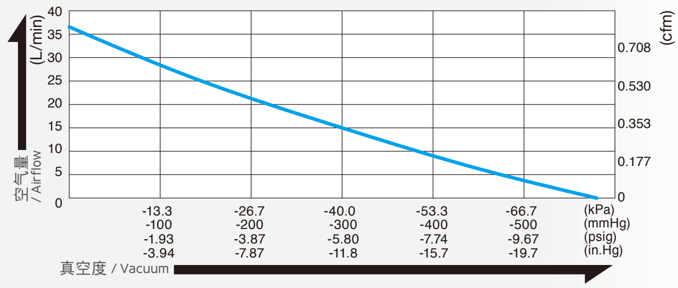
CE 24 V　UKCA 24 V

采用无碳刷马达
/ Brushless DC Motor
(24VDC)

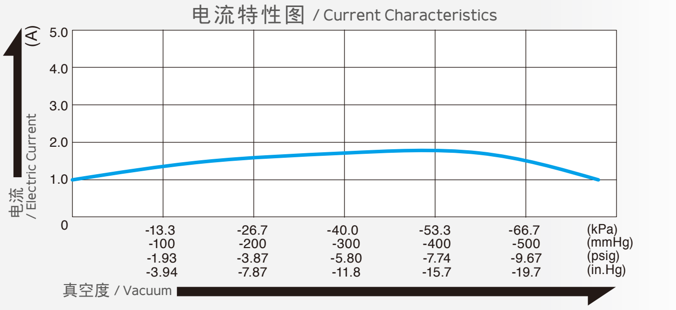
真空专用

空气量和电流 / Airflow & Electric Current

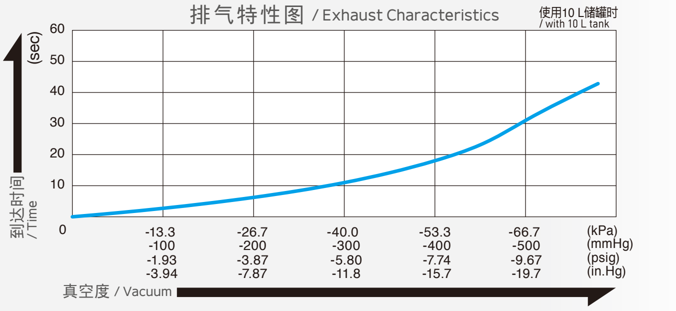
空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



排气特性图 / Exhaust Characteristics　使用10 L储罐时 / with 10 L tank



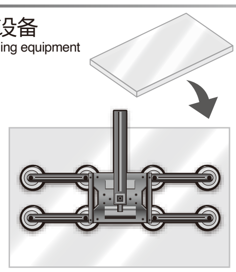
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

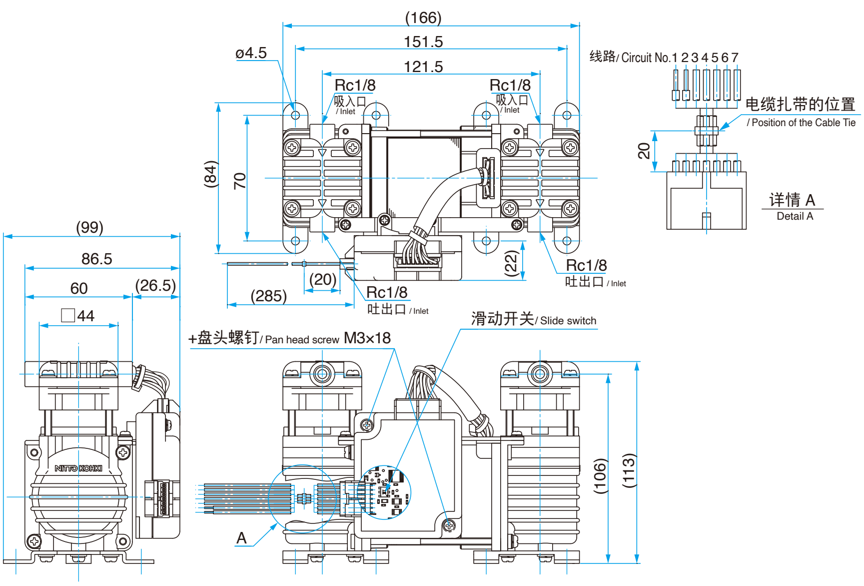
达到真空度 / Attainable Vacuum	-77.3 kPa (-580 mmHg) -773 mbar　-22.8 in.Hg
吐出空气量 / Free Air Displacement	34 L/min 1.2 cfm
额定电压 / Rated Voltage	24 V DC
最大电流 / Maximum Current	2.5 A
额定时间 / Duty Cycle	连续 / Continuous
使用压力范围 / Working Pressure Range	0 to -77.3 kPa (0 to -580 mmHg) 0 to -773 mbar 0 to -22.8 in.Hg
耐用时间 (MTTF) / Rated Performance (MTTF)	5,000 小时 / hours
吸入口尺寸 / Inlet	Rc1/8 (内螺纹 / internal thread)
吐出口尺寸 / Outlet	Rc1/8 (内螺纹 / internal thread)
线圈绝缘等级 / Coil Insulation Class	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	166 (L) x 84 (W) mm 6 - 17/32" (L) x 3 - 5/16" (W)
本体重量 / Weight	1.6 kg　3.5 Lbs
导线长度 / Leadwire Length	285 mm 11 - 7/32"

用途例 / Application Examples

真空玻璃板搬运设备
/ Vacuum glass sheet handling equipment



外形尺寸图 / External Dimensions (单位 / Unit : mm)



连接表 /Connection Table

		电源 / Power Source		控制信号 / Control Signal				
线路 / Circuit No.		1	2	3	4	5	6	7
线色 / Cord Color		红色 / Red	黑色 / Black	褐色 / Brown	橙色 / Orange	黄色 / Yellow	绿色 / Green	灰色 / Gray
机能 / Function		V+	V-	驱动 / 自由 DRIVE / FREE	脉冲 / PULSE	报警 / ALARM	速度 / SPEED	报警 / SGND
选项 / Option	无控制 Off / Function Off	ON		OFF				
	有控制 On / Function On	ON		ON				
线尺寸 / Cord Size		AWG20		AWG22				
线路类型 / Line Type		UL1007						

* 控制功能默认情况下是“OFF”
/ Control function is “OFF” by default.

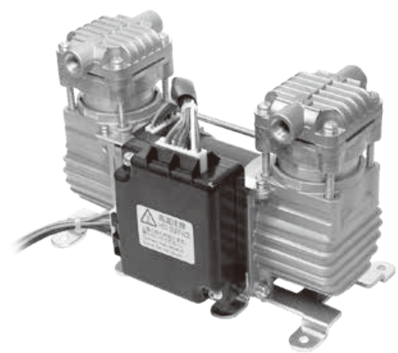
- 务必使用扎带固定引线。（请参见细节 A。）如果它们没有固定，连接器可能会接触不良并导致故障。
- 有关接线的详细信息，请参阅用户说明。

- Be sure to secure the lead wires with a cable tie. (See the detail A.) If they are not secured, poor contact of the connector may occur and result in failure.
- For the details of wiring, please see the user's instructions.

压缩泵 / Compressor

型号 DP0410T-Y2

一般 /PWM 可控兼用机型 / PWM controllable



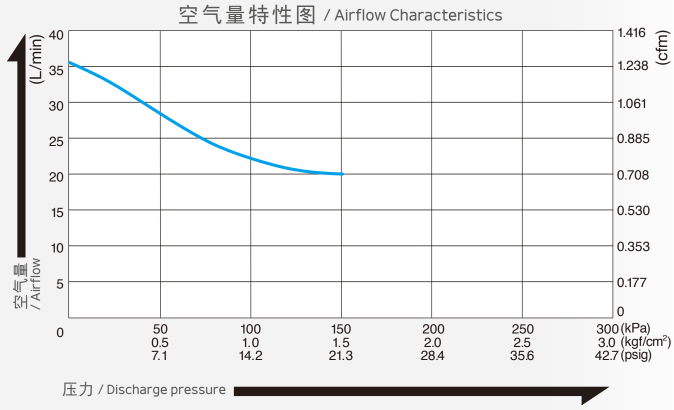
CE 24 V　UKCA 24 V

采用无碳刷马达 / Brushless DC Motor (24VDC)

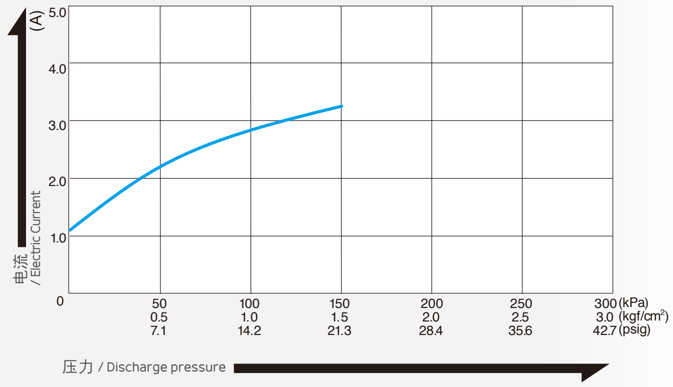
压缩泵专用 / Blower Type

空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



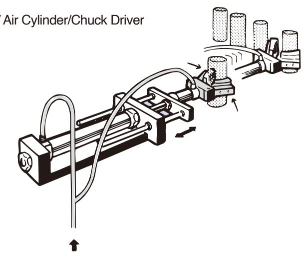
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

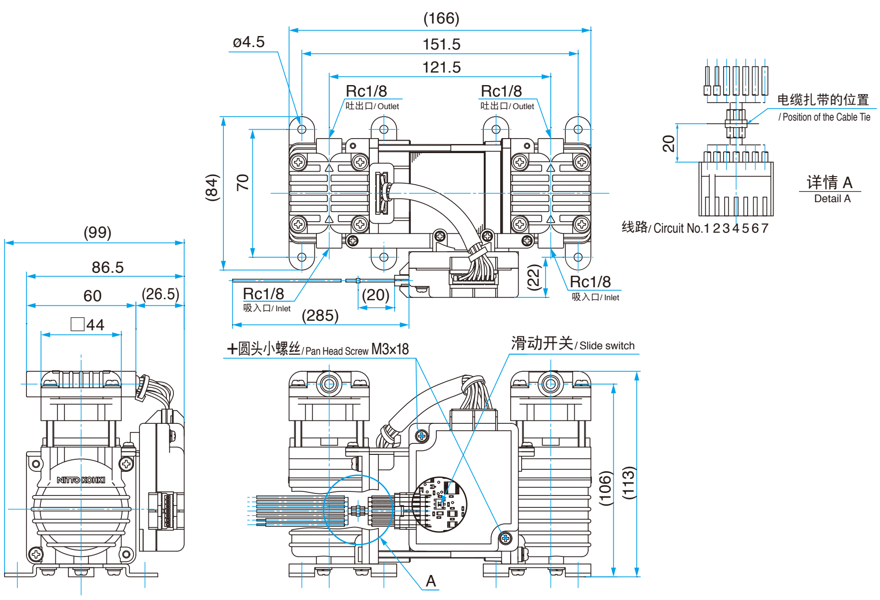
吐出空气量 / Free Air Displacement	34 L/min 1.2 cfm
额定电压 / Rated Voltage	24 V DC
最高压力 / Maximum Pressure	150 kPa (1.5 kgf/cm²) 1.5 bar 21.3 psig
最大电流 / Maximum Current	4.0 A
额定时间 / Duty Cycle	连续 / Continuous
使用压力范围 / Working Pressure Range	0 ~ 150 kPa (0 ~ 1.5 kgf/cm²) 0 ~ 1.5 bar 0 ~ 21.3 psig
耐用时间 (MTTF) / Rated Performance (MTTF)	5,000 小时 / hours
吸入口尺寸 / Inlet	RC 1/8 (内螺纹 / internal thread)
吐出口尺寸 / Outlet	RC 1/8 (内螺纹 / internal thread)
线圈绝缘等级 / Coil Insulation Class	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	166 (L) x 84 (W) mm 6 - 17/32" (L) x 3 - 5/16" (W)
本体重量 / Weight	1.6 kg 3.5 Lbs
导线长度 / Leadwire Length	285 mm 11 - 7/32"

用途例 / Application Examples

气缸 / 气动卡盘 / Air Cylinder/Chuck Driver



外形尺寸图 / External Dimensions (单位 / Unit : mm)



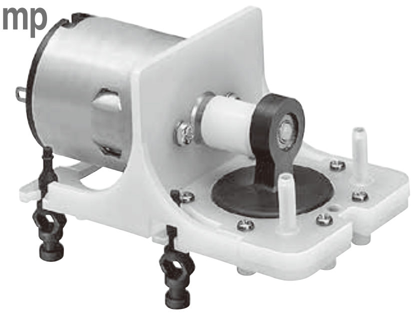
连接表 /Connection Table

	电源 / Power Source		控制信号 / Control Signal				
线路 / Circuit No.	1	2	3	4	5	6	7
线色 / Cord Color	红色 / Red	黑色 / Black	褐色 / Brown	橙色 / Orange	黄色 / Yellow	绿色 / Green	灰色 / Gray
机能 / Function	V+	V-	驱动 / 自由 DRIVE / FREE	脉冲 / PULSE	报警 / ALARM	速度 / SPEED	报警 / SGND
选项 / Option: 无控制 Off / Function Off	ON		OFF				
选项 / Option: 有控制 On / Function On	ON		ON				
线尺寸 / Cord Size	AWG20		AWG22				
线路类型 / Line Type	UL1007						

* 控制功能默认情况下是 "OFF"
/ Control function is "OFF" by default.

- 务必使用扎带固定引线。（请参见细节 A。）如果它们没有固定，连接器可能会接触不良并导致故障。
- 有关接线的详细信息，请参阅用户说明。
- Be sure to secure the lead wires with a cable tie. (See the detail A.) If they are not secured, poor contact of the connector may occur and result in failure.
- For the details of wiring, please see the user's instructions.

压缩泵 & 真空泵 / Compressor and Vacuum Pump



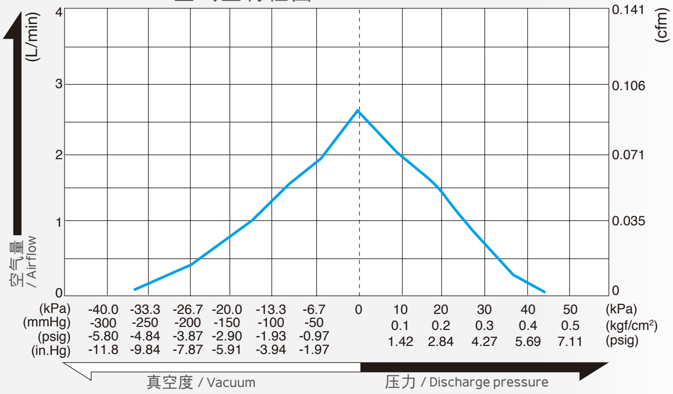
型号 DP0125

CE 12 V　UK CA 12 V

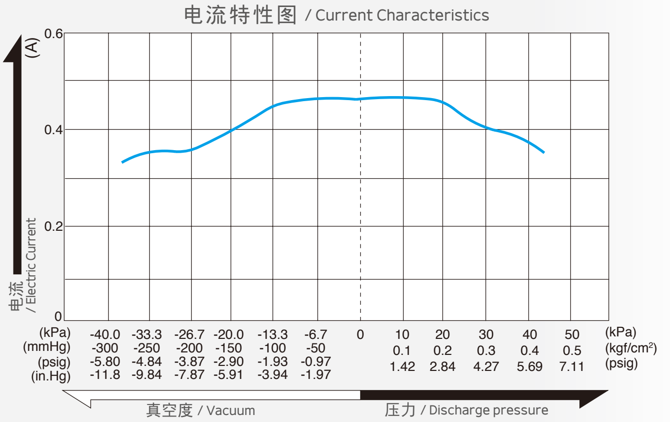
有刷马达 / Brush DC Motor (12VDC)　**兼用** / Dual Type

空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



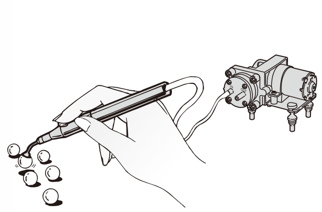
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

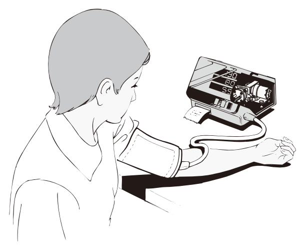
达到真空度 / Attainable Vacuum	-33.3 kPa (-250 mmHg) -333 mbar - 9.84 in.Hg
吐出空气量 / Free Air Displacement	2.5 L/min 0.088 cfm
额定电压 / Rated Voltage	12 V DC
最高压力 / Maximum Pressure	30 kPa (0.3 kgf/cm²) 0.3 bar 4.27 psig
最大电流 / Maximum Current	0.5 A
额定时间 / Duty Cycle	连续 / Continuous
耐用时间 (MTTF) / Rated Performance (MTTF)	400 小时 / hours
吸入口尺寸 / Inlet	ϕ3 mm (外径) 直管接头 / 3 mm O.D. straight barb
吐出口尺寸 / Outlet	ϕ3 mm (外径) 直管接头 / 3 mm O.D. straight barb
线圈绝缘等级 / Coil Insulation Class	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	32 (L) x 32.5 (W) mm 1 - 17/64" (L) x 1 - 9/32" (W)
本体重量 / Weight	0.08 kg 0.18 Lbs

用途例 / Application Examples

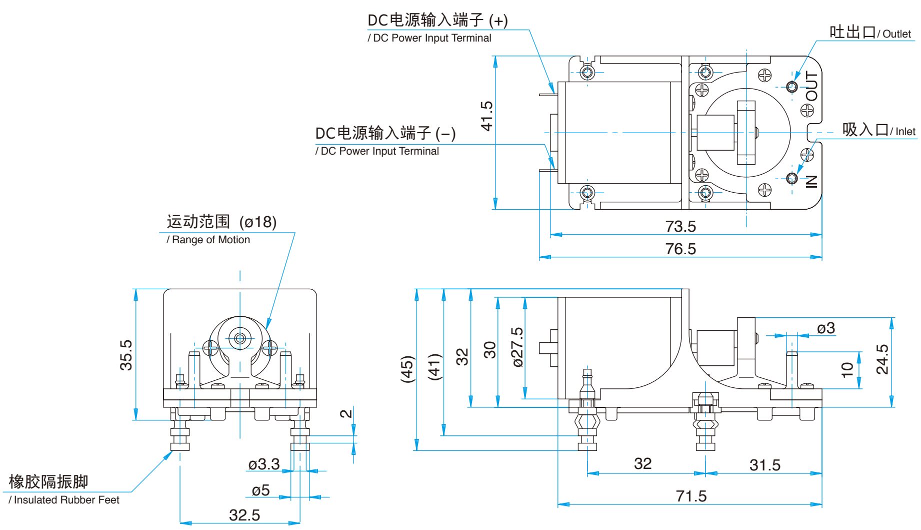
真空镊子 / Vacuum Sucking Pen



血压计 / Blood Pressure Tester



外形尺寸图 / External Dimensions (单位 / Unit : mm)

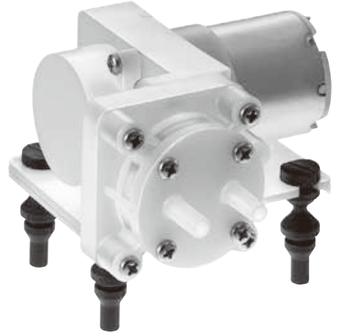


压缩泵 & 真空泵 / Compressor and Vacuum Pump

型号 DP0140

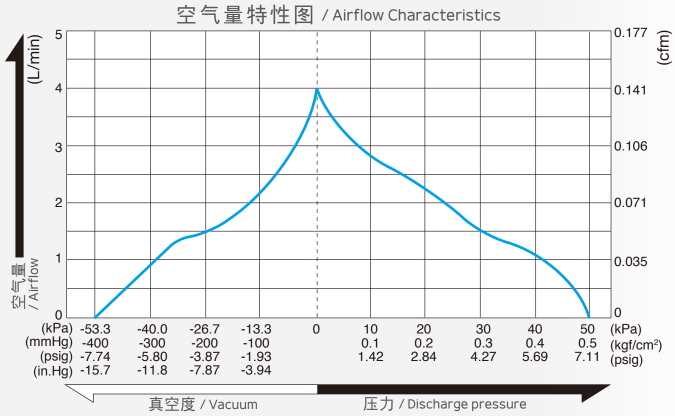
CE 12 V　UKCA 12 V

有刷马达 / Brush DC Motor (12VDC)　兼用 / Dual Type

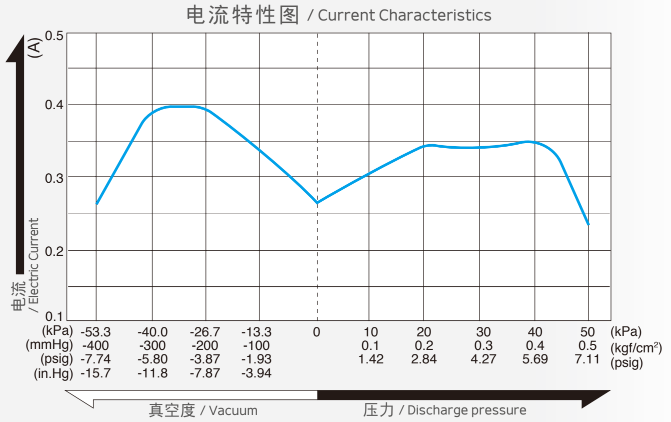


空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



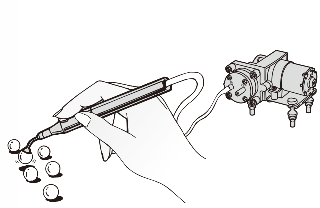
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

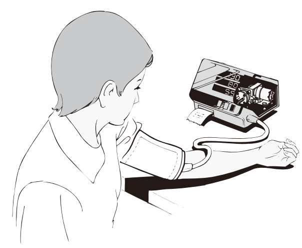
达到真空度 / Attainable Vacuum	-53.3 kPa (-400 mmHg) -533 mbar　-15.7 in.Hg
吐出空气量 / Free Air Displacement	4.0 L/min 0.141 cfm
额定电压 / Rated Voltage	12 V DC
最高压力 / Maximum Pressure	50 kPa (0.5 kgf/cm^2) 0.5 bar 7.11 psig
最大电流 / Maximum Current	0.5 A
额定时间 / Duty Cycle	连续 / Continuous
耐用时间 (MTTF) / Rated Performance (MTTF)	800 小时 / hours
吸入口尺寸 / Inlet	ϕ5 mm (外径) 直管接头 / 5 mm O.D. straight barb
吐出口尺寸 / Outlet	ϕ5 mm (外径) 直管接头 / 5 mm O.D. straight barb
线圈绝缘等级 / Coil Insulation Class	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	52 (L) x 36 (W) mm 2 - 3/64" (L) x 1 - 27/64" (W)
本体重量 / Weight	0.19 kg　0.42 Lbs

用途例 / Application Examples

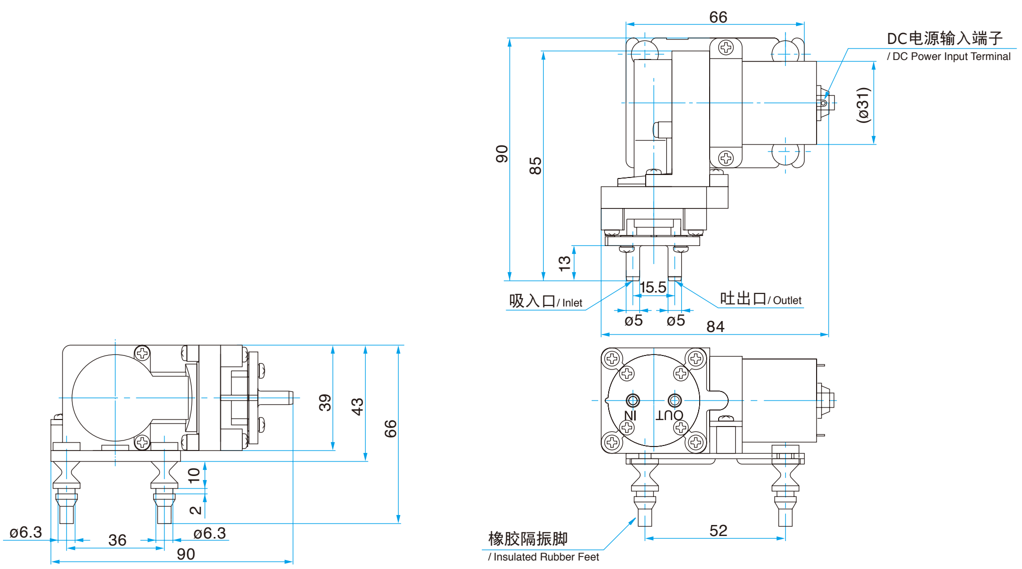
真空镊子 / Vacuum Sucking Pen



血压计 / Blood Pressure Tester



外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 & 真空泵 / Compressor and Vacuum Pump

型号 DP0102 12 V DC / DP0102S 24 V DC

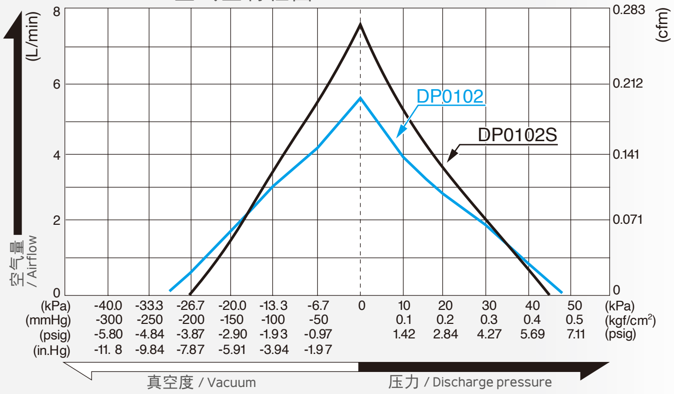
CE 12 V / 24 V | UKCA 12 V / 24 V | 面向中国 RoHS 机种 12 V

采用无碳刷马达 / Brushless DC Motor

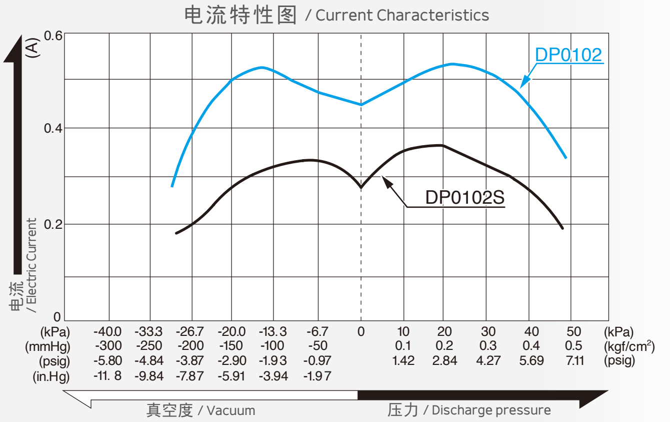
兼用 / Dual Type

空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



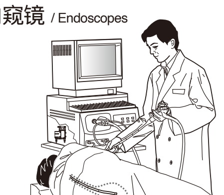
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

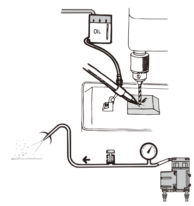
型号 / Model	DP0102	DP0102S
达到真空度 / Attainable Vacuum	-26.7 kPa (-200 mmHg) -267 mbar - 7.87 in.Hg	
吐出空气量 / Free Air Displacement	5.0 L/min 0.177 cfm	7.0 L/min 0.247 cfm
额定电压 / Rated Voltage	12 V DC	24 V DC
最大电流 / Maximum Current	0.7 A	0.5 A
最高压力 / Maximum Pressure	45 kPa (0.45 kgf/cm²) 0.45 bar 6.4 psig	
额定时间 / Duty Cycle	连续 / Continuous	
使用压力范围 / Working Pressure Range	-26.7 kPa ~ 45 kPa (-200 mmHg ~ 0.45 kgf/cm²) -267 mbar ~ 0.45 bar -7.87 in.Hg ~ 6.4 psig	
耐用时间 (MTTF) / Rated Performance (MTTF)	10,000 小时 / hours	
吸入口尺寸 / Inlet	ϕ6 mm (外径) 直管接头 / 6 mm O.D. straight barb	
吐出口尺寸 / Outlet	ϕ6 mm (外径) 直管接头 / 6 mm O.D. straight barb	
线圈绝缘等级 / Coil Insulation Class	相当于 E 类 / Class E equivalent	
安装尺寸 / Mounting Dimensions	50 (L) x 30 (W) mm 1 - 31/32" (L) x 1 - 3/16" (W)	
本体重量 / Weight	0.25 kg 0.55 Lbs	
导线长度 / Leadwire Length	400 mm 15 - 3/4"	

用途例 / Application Examples

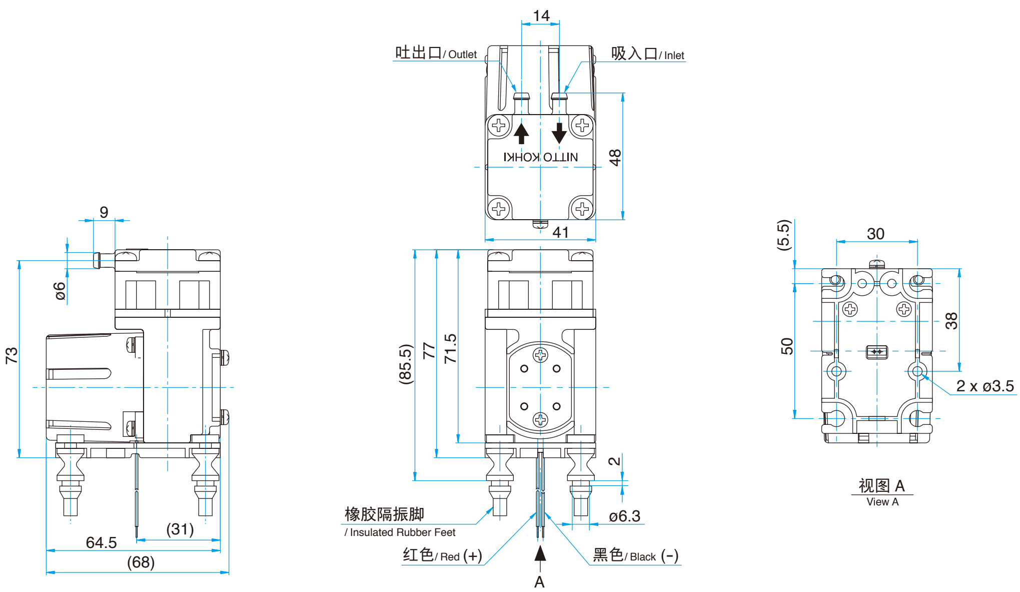
内窥镜 / Endoscopes



机械加工时的切屑去除 / Removal of micromachining chips

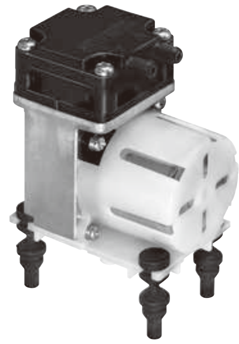


外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 & 真空泵 / Compressor and Vacuum Pump

型号 DP0102H-X1



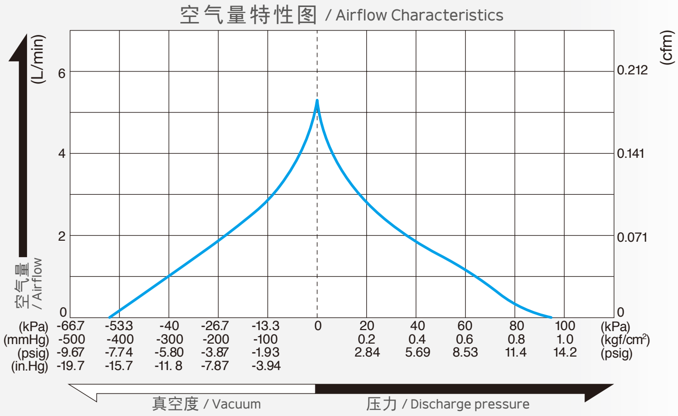
CE 12 V　UK CA 12 V

采用无碳刷马达
/ Brushless DC Motor
(12VDC)

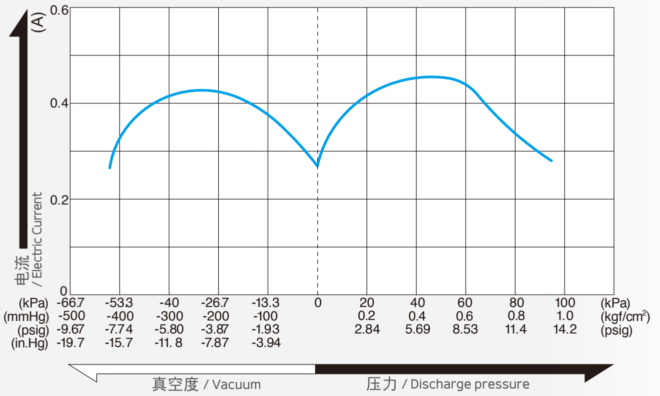
兼用 / Dual Type

空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



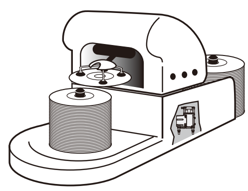
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

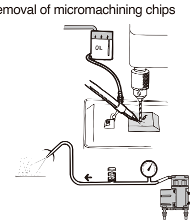
达到真空度 / Attainable Vacuum	-50.7 kPa (-380 mmHg) -507 mbar　-15 in.Hg
吐出空气量 / Free Air Displacement	4.0 L/min 0.141 cfm
额定电压 / Rated Voltage	12 V DC
最高压力 / Maximum Pressure	80 kPa (0.8 kgf/cm²) 0.8 bar　11.4 psig
最大电流 / Maximum Current	0.7 A
额定时间 / Duty Cycle	连续 / Continuous
使用压力范围 / Working Pressure Range	-50.7 kPa ~ 80 kPa (-380 mmHg ~ 0.8 kgf/cm²) -507 mbar ~ 0.8 bar -15 in.Hg ~ 11.4 psig
耐用时间 (MTTF) / Rated Performance (MTTF)	8,000 小时 / hours
吸入口尺寸 / Inlet	ϕ6 mm（外径）直管接头 / 6 mm O.D. straight barb
吐出口尺寸 / Outlet	ϕ6 mm（外径）直管接头 / 6 mm O.D. straight barb
线圈绝缘等级 / Coil Insulation Class	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	50 (L) x 30 (W) mm 1 - 31/32" (L) x 1 - 3/16" (W)
本体重量 / Weight	0.25 kg　0.55 Lbs
导线长度 / Leadwire Length	400 mm 15 - 3/4"

用途例 / Application Examples

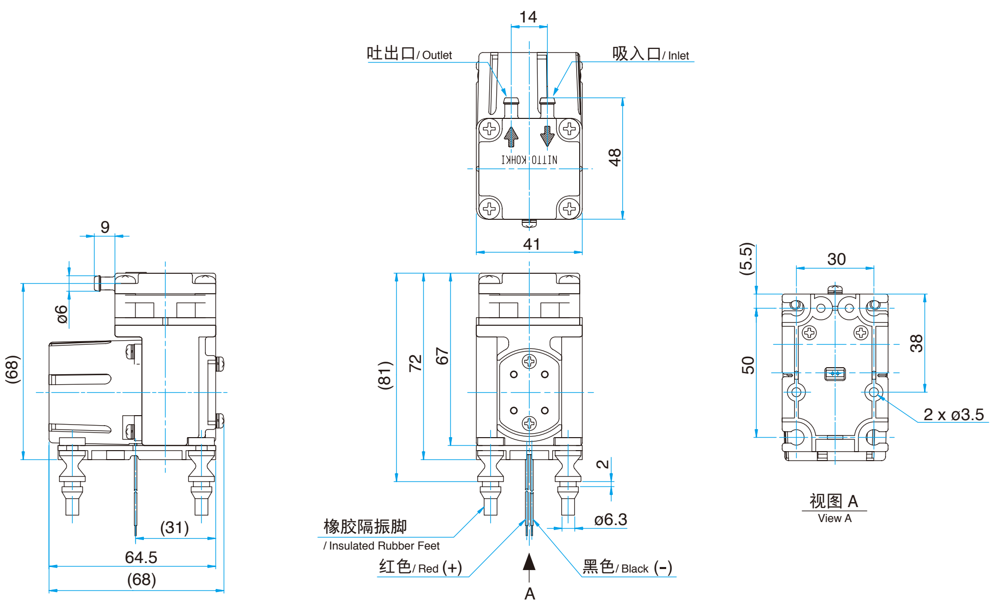
CD、DVD 媒介印刷机（搬送）
/ Vacuum pick up and place devices for CD & DVD



机械加工时的切屑去除
/ Removal of micromachining chips

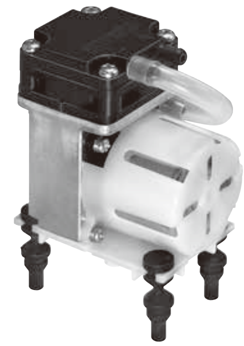


外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor

型号 DP0102H-X2



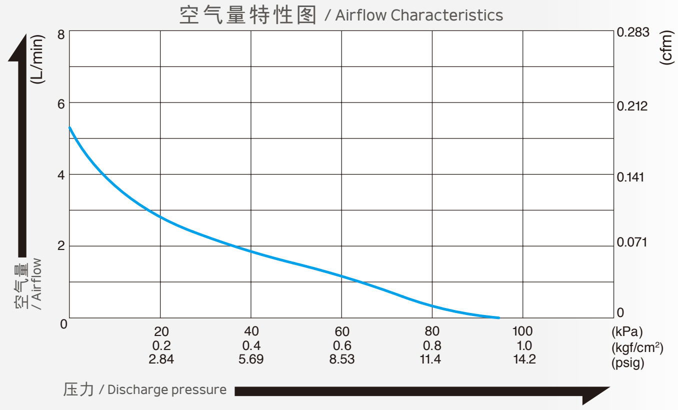
CE 12 V　UKCA 12 V

采用无碳刷马达 / Brushless DC Motor (12VDC)

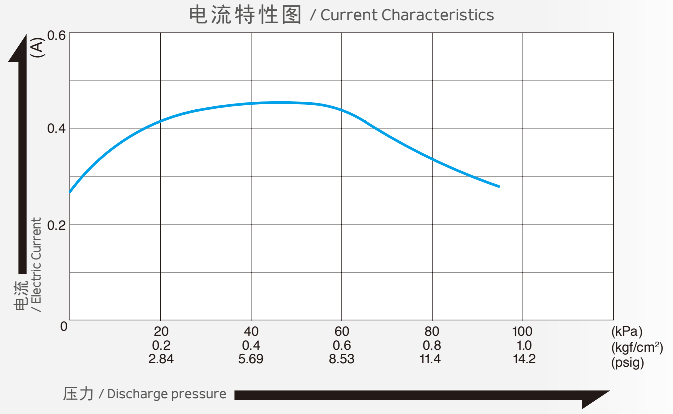
压缩泵专用 / Blower Type

空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



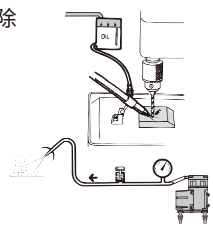
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

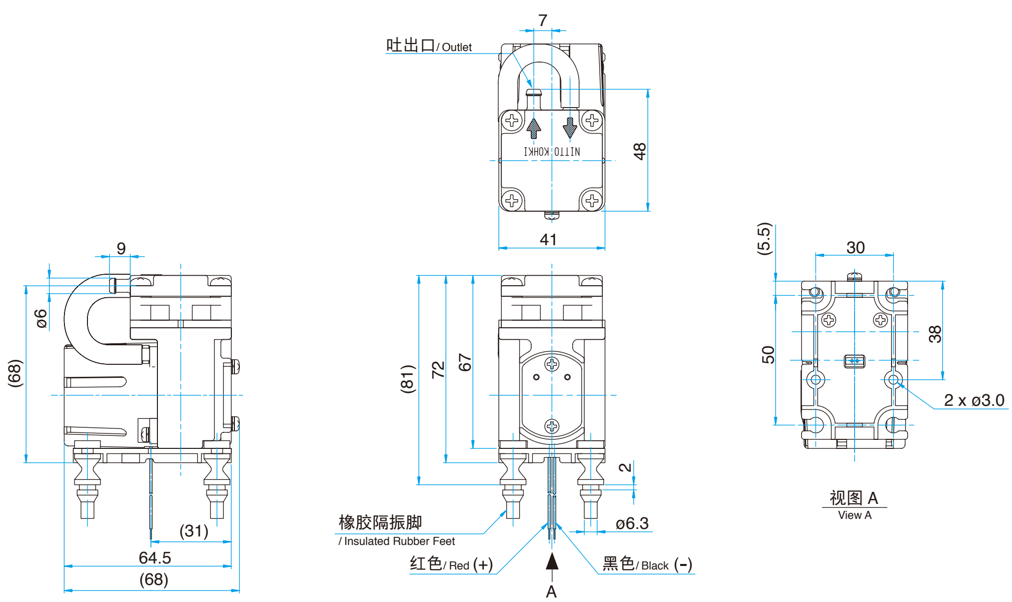
吐出空气量 / Free Air Displacement	4.0 L/min 0.141 cfm
额定电压 / Rated Voltage	12 V DC
最高压力 / Maximum Pressure	80 kPa (0.8 kgf/cm²) 0.8 bar 11.4 psig
最大电流 / Maximum Current	0.7 A
额定时间 / Duty Cycle	连续 / Continuous
使用压力范围 / Working Pressure Range	0 ~ 80 kPa (0 ~ 0.8 kgf/cm²) 0 ~ 0.8 bar 0 ~ 11.4 psig
耐用时间 (MTTF) / Rated Performance (MTTF)	8,000 小时 / hours
吸入口尺寸 / Inlet	ϕ6 mm（外径）直管接头 / 6 mm O.D. straight barb
吐出口尺寸 / Outlet	ϕ6 mm（外径）直管接头 / 6 mm O.D. straight barb
线圈绝缘等级 / Coil Insulation Class	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	50 (L) x 30 (W) mm 1 - 31/32" (L) x 1 - 3/16" (W)
本体重量 / Weight	0.25 kg 0.55 Lbs
导线长度 / Leadwire Length	400 mm 15 - 3/4"

用途例 / Application Examples

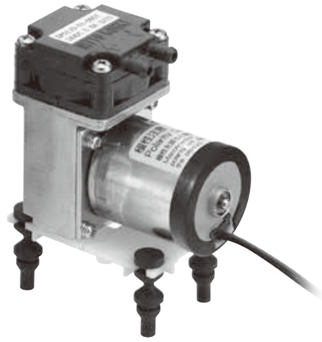
机械加工时的切屑去除
/ Removal of micromachining chips



外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 & 真空泵 / Compressor and Vacuum Pump



型号 DP0110-X1 12 V DC
DP0110-Y1 24 V DC

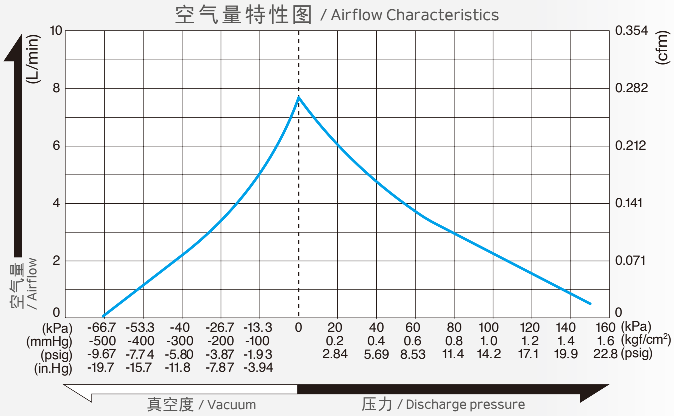
CE 12 V / 24 V　UKCA 12 V / 24 V

采用无碳刷马达 / Brushless DC Motor

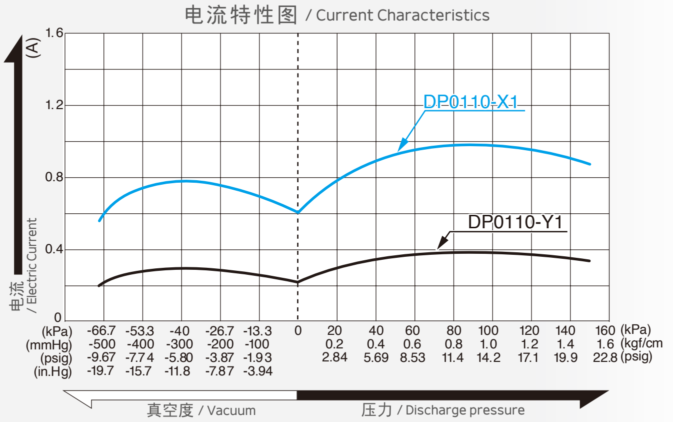
兼用 / Dual Type

空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



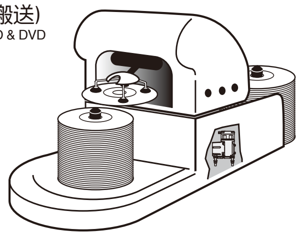
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

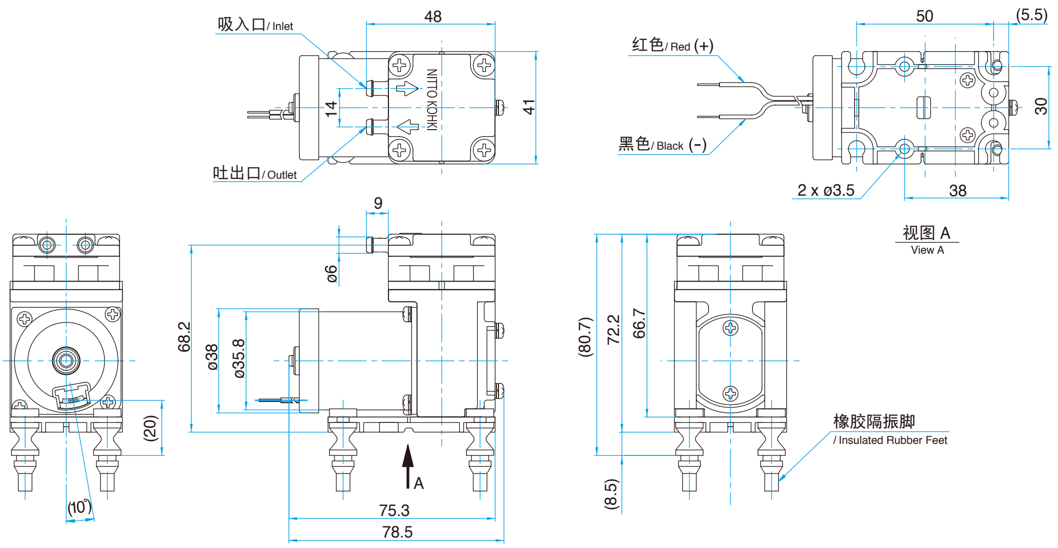
型号 / Model	DP0110-X1	DP0110-Y1
达到真空度 / Attainable Vacuum	-66.7 kPa (-500 mmHg) -667 mbar -19.7 in.Hg	
吐出空气量 / Free Air Displacement	7.5 L/min 0.265 cfm	
额定电压 / Rated Voltage	12 V DC	24 V DC
最大电流 / Maximum Current	1.2 A	0.6 A
最高压力 / Maximum Pressure	150 kPa (1.5 kgf/cm²) 1.5 bar 21.3 psig	
额定时间 / Duty Cycle	连续 / Continuous	
使用压力范围 / Working Pressure Range	-66.7 kPa to 150 kPa (-500 mmHg to 1.5 kgf/cm²) -667 mbar to 1.5 bar -19.7 in.Hg to 21.3 psig	
耐用时间 (MTTF) / Rated Performance (MTTF)	8,000 小时 / hoursz	
吸入口尺寸 / Inlet	Φ6 mm（外径）直管接头 / 6 mm O.D. straight barb	
吐出口尺寸 / Outlet	Φ6 mm（外径）直管接头 / 6 mm O.D. straight barb	
线圈绝缘等级 / Coil Insulation Class	相当于 A 类 / Class A equivalent	
安装尺寸 / Mounting Dimensions	50 (L) x 30 (W) mm 1 - 31/32" (L) x 1 - 3/16" (W)	
本体重量 / Weight	0.30 kg 0.66 Lbs	
导线长度 / Leadwire Length	360 mm 14 - 11/64"	

用途例 / Application Examples

CD、DVD 媒介印刷机（搬送）
/ Vacuum pick up and place devices for CD & DVD



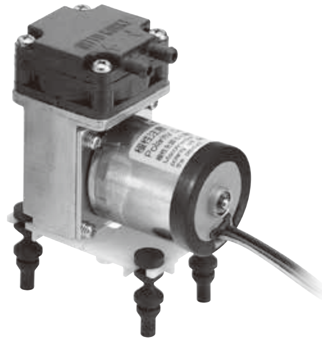
外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 & 真空泵 / Compressor and Vacuum Pump

型号 DP0110-X3

PWM 控制专用机型
/ PWM controlled model

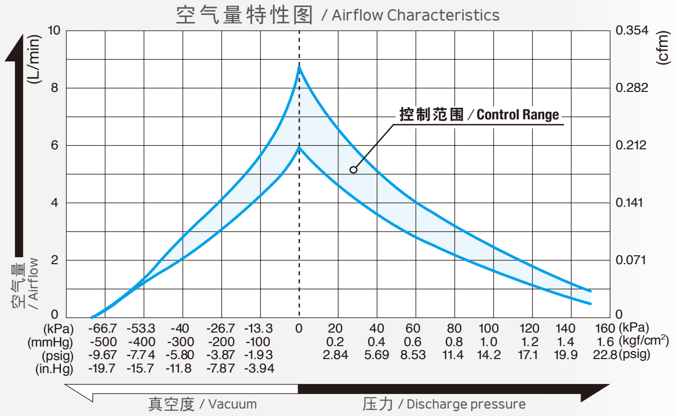


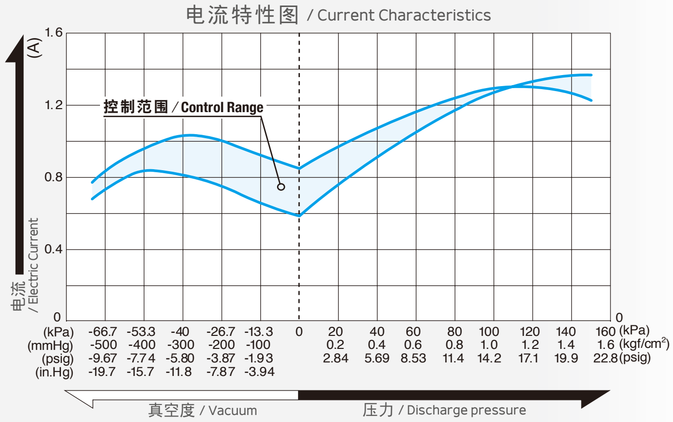
12 V 12 V

采用无碳刷马达
/ Brushless DC Motor
(12VDC)

兼用 / Dual Type

空气量和电流 / Airflow & Electric Current





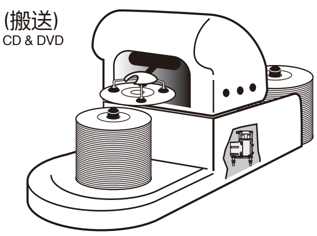
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

达到真空度 / Attainable Vacuum	-66.7 kPa (-500 mmHg) -667 mbar -19.7 in.Hg
吐出空气量 / Free Air Displacement	7.5 L/min 0.265 cfm
额定电压 / Rated Voltage	12 V DC
最高压力 / Maximum Pressure	150 kPa (1.5 kgf/cm²) 1.5 bar 21.3 psig
最大电流 / Maximum Current	1.4 A
额定时间 / Duty Cycle	连续 / Continuous
使用压力范围 / Working Pressure Range	-66.7 kPa to 150 kPa (-500 mmHg to 1.5 kgf/cm²) -667 mbar to 1.5 bar -19.7 in.Hg to 21.3 psig
耐用时间 (MTTF) / Rated Performance (MTTF)	8,000 小时 / hours
控制 (PWM) / Control (PWM)	2.5 - 5 V, 15-25 kHz, 占空比 / Duty cycle 80 - 100%
吸入口尺寸 / Inlet	ϕ6 mm（外径）直管接头 / 6 mm O.D. straight barb
吐出口尺寸 / Outlet	ϕ6 mm（外径）直管接头 / 6 mm O.D. straight barb
线圈绝缘等级 / Coil Insulation Class	相当于 A 类 / Class A equivalent
安装尺寸 / Mounting Dimensions	50 (L) x 30 (W) mm 1 - 31/32" (L) x 1 - 3/16" (W)
本体重量 / Weight	0.30 kg 0.66 Lbs
导线长度 / Leadwire Length	180 mm 7 - 3/32"

用途例 / Application Examples

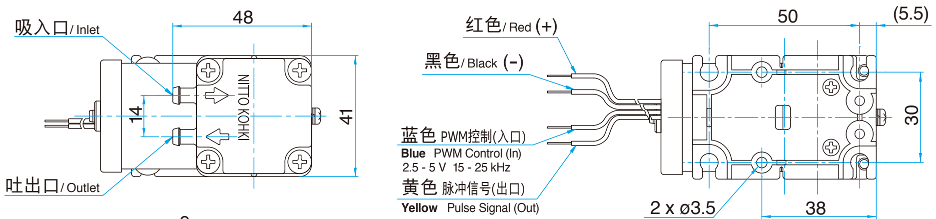
CD、DVD 媒介印刷机（搬送）
/ Vacuum pick up and place devices for CD & DVD

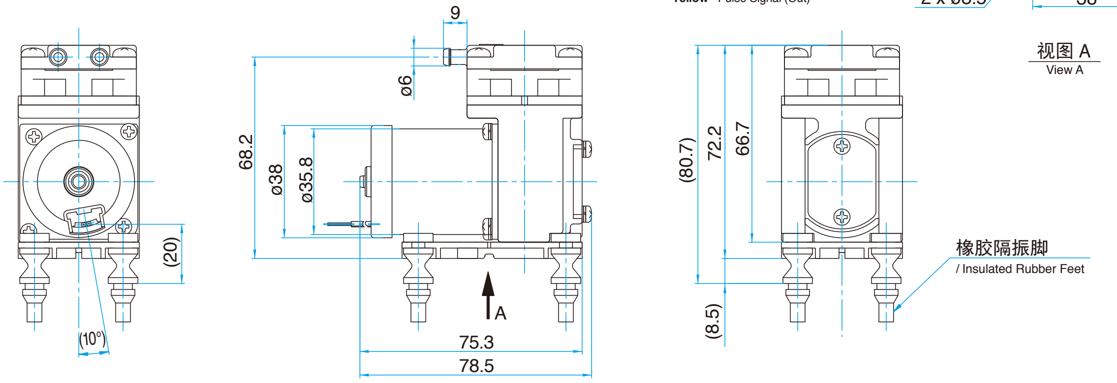


外形尺寸图 / External Dimensions (单位 / Unit : mm)

橡胶隔振脚安装尺寸:
板厚：t=2 mm,
孔径：ø6±0.1 mm
(橡胶隔振脚为产品附件)

Mounting Dimension of Insulated Rubber Feet:
Plate thickness : t = 2 mm,
Hole diameter : ø6±0.1 mm
(Rubber feet come with the product as accessories.)





压缩泵 & 真空泵 / Compressor and Vacuum Pump

型号 DP0110T-X1 12 V DC
DP0110T-Y1 24 V DC

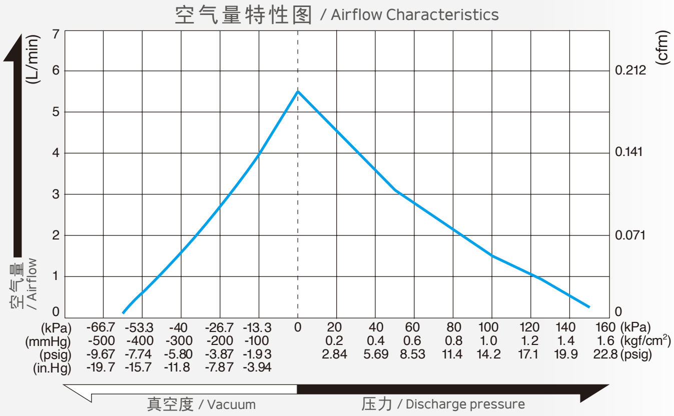
12 V / 24 V　12 V / 24 V

采用无碳刷马达 / Brushless DC Motor

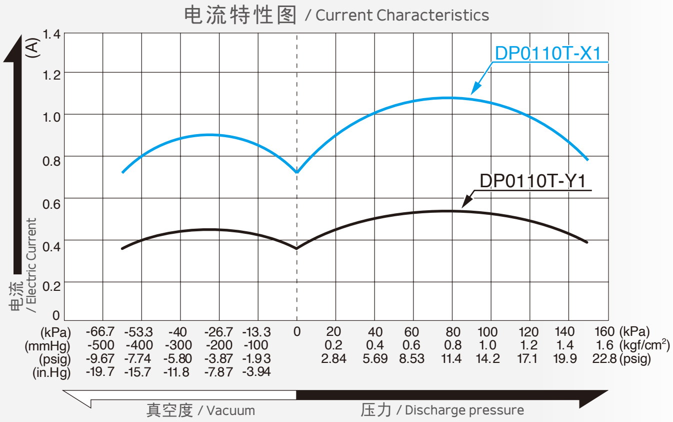
兼用 / Dual Type

空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



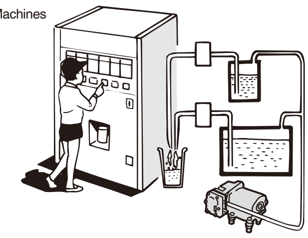
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

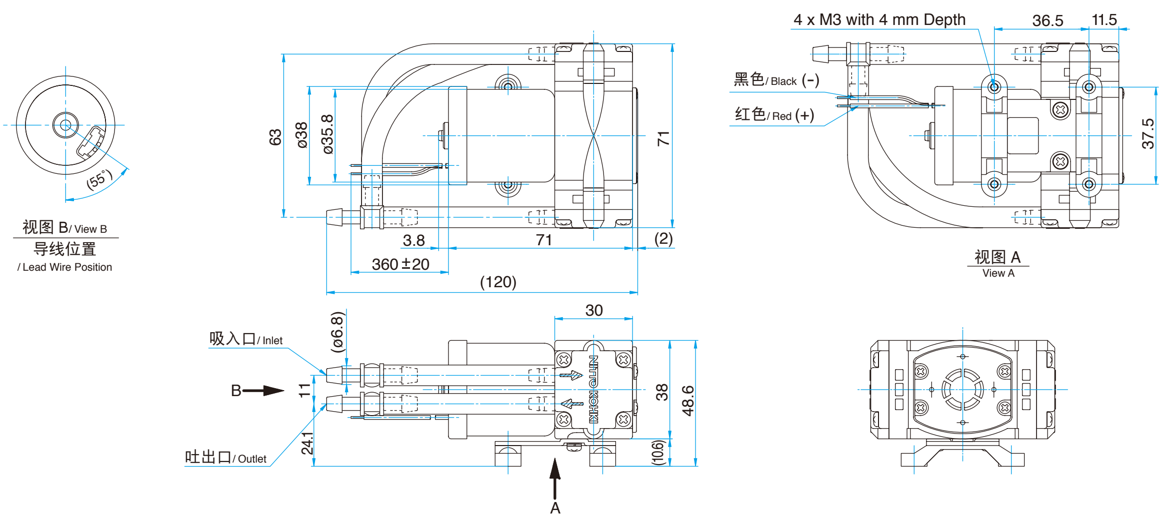
型号 / Model	DP0110T-X1	DP0110T-Y1
达到真空度 / Attainable Vacuum	-60.0 kPa (-450 mmHg) -600 mbar　-17.7 in.Hg	
吐出空气量 / Free Air Displacement	5.5 L/min 0.194 cfm	
额定电压 / Rated Voltage	12 V DC	24 V DC
最大电流 / Maximum Current	1.2 A	0.6 A
最高压力 / Maximum Pressure	150 kPa (1.5 kgf/cm²) 1.5 bar　21.3 psig	
额定时间 / Duty Cycle	连续 / Continuous	
使用压力范围 / Working Pressure Range	-60.0 kPa to 150 kPa (-450 mmHg to 1.5 kgf/cm²) -600 mbar to 1.5 bar -17.7 in.Hg to 21.3 psig	
耐用时间 (MTTF) / Rated Performance (MTTF)	5,000 小时 / hours	
吸入口尺寸 / Inlet	Φ6.8 mm (外径) 直管接头 / 6.8 mm O.D. straight barb	
吐出口尺寸 / Outlet	Φ6.8 mm (外径) 直管接头 / 6.8 mm O.D. straight barb	
线圈绝缘等级 / Coil Insulation Class	相当于 A 类 / Class A equivalent	
安装尺寸 / Mounting Dimensions	36.5 (L) x 37.5 (W) mm 1 - 7/16" (L) x 1 - 15/32" (W)	
本体重量 / Weight	0.27 kg 0.60 Lbs	
导线长度 / Leadwire Length	360 mm 14 - 11/64"	

用途例 / Application Examples

自动售货机 / Vending Machines



外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 & 真空泵 / Compressor and Vacuum Pump

型号 DP0210TA-Y1

一般 /PWM 可控兼用机型 / PWM controllable

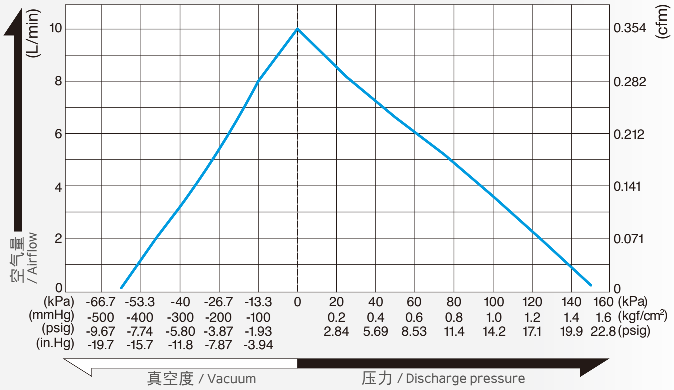
CE 24 V | UK CA 24 V

采用无碳刷马达 / Brushless DC Motor (24VDC)

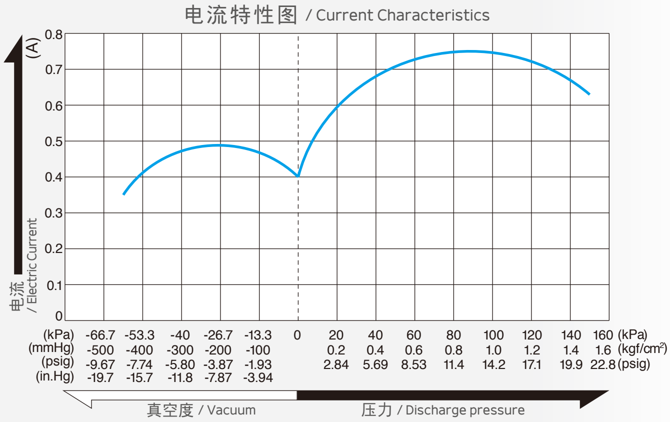
兼用 / Dual Type

空气量和电流 / Airflow & Electric Current

空气量特性图 / Airflow Characteristics



电流特性图 / Current Characteristics



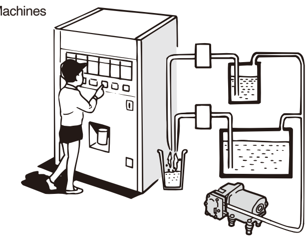
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

达到真空度 / Attainable Vacuum	-60.0 kPa (-450 mmHg) -667 mbar -17.7 in.Hg
吐出空气量 / Free Air Displacement	10 L/min 0.35 cfm
额定电压 / Rated Voltage	24 V DC
最高压力 / Maximum Pressure	150 kPa (1.5 kgf/cm²) 1.5 bar 21.3 psig
最大电流 / Maximum Current	0.8 A
额定时间 / Duty Cycle	连续 / Continuous
使用压力范围 / Working Pressure Range	-60.0 kPa to 150 kPa (-450 mmHg to 1.5 kgf/cm²) -600 mbar to 1.5 bar -17.7 in.Hg to 21.3 psig
耐用时间 (MTTF) / Rated Performance (MTTF)	5,000 小时 / hours
吸入口尺寸 / Inlet	ϕ6.8 mm (外径) 直管接头 / 6.8 mm O.D. straight barb
吐出口尺寸 / Outlet	ϕ6.8 mm (外径) 直管接头 / 6.8 mm O.D. straight barb
线圈绝缘等级 / Coil Insulation Class	相当于 B 类 / Class B equivalent
安装尺寸 / Mounting Dimensions	36.5 (L) x 37.5 (W) mm 1 - 7/16" (L) x 1 - 15/32" (W)
本体重量 / Weight	0.32 kg 0.71 Lbs
导线长度 / Leadwire Length	300 mm 11 - 13/16"

用途例 / Application Examples

自动售货机 / Vending Machines

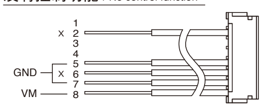


外形尺寸图 / External Dimensions (单位 / Unit : mm)

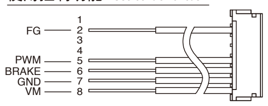
连接表 /Connection Table

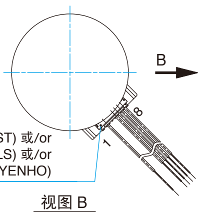
线路 / Circuit No.	1	2	3	4	5	6	7	8
线色 / Cord Color	—	黄色 / Yellow	—	—	白色 / White	蓝色 / Blue	黑色 / Black	红色 / Red
连接 / Connection	控制信号 / Control Signal						电源 / Power Source	
机能 / Function	—	FG	—	—	PWM	BRAKE	GND	VM
线尺寸 / Cord Size	AWG28						AWG26	
线路类型 / Line Type	UL1571							

没有控制功能 / No control function



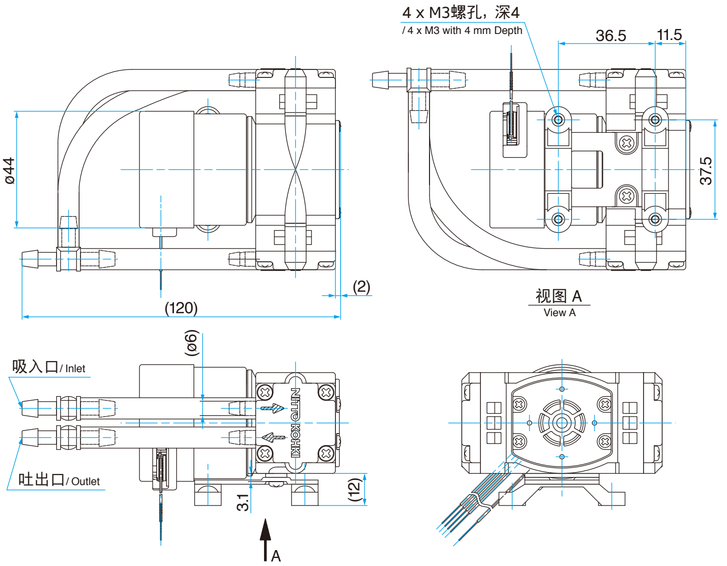
使用控制功能 / Use control function





S8B-ZR-SM4A(JST) 或/or
1027-66208(CNPLS) 或/or
15001WR-08A00(YENHO)

视图 B
View B



LIQUID PUMP
Piezoelectric Pump
DC Diaphragm Liquid Pump

液体泵 / LIQUID PUMP

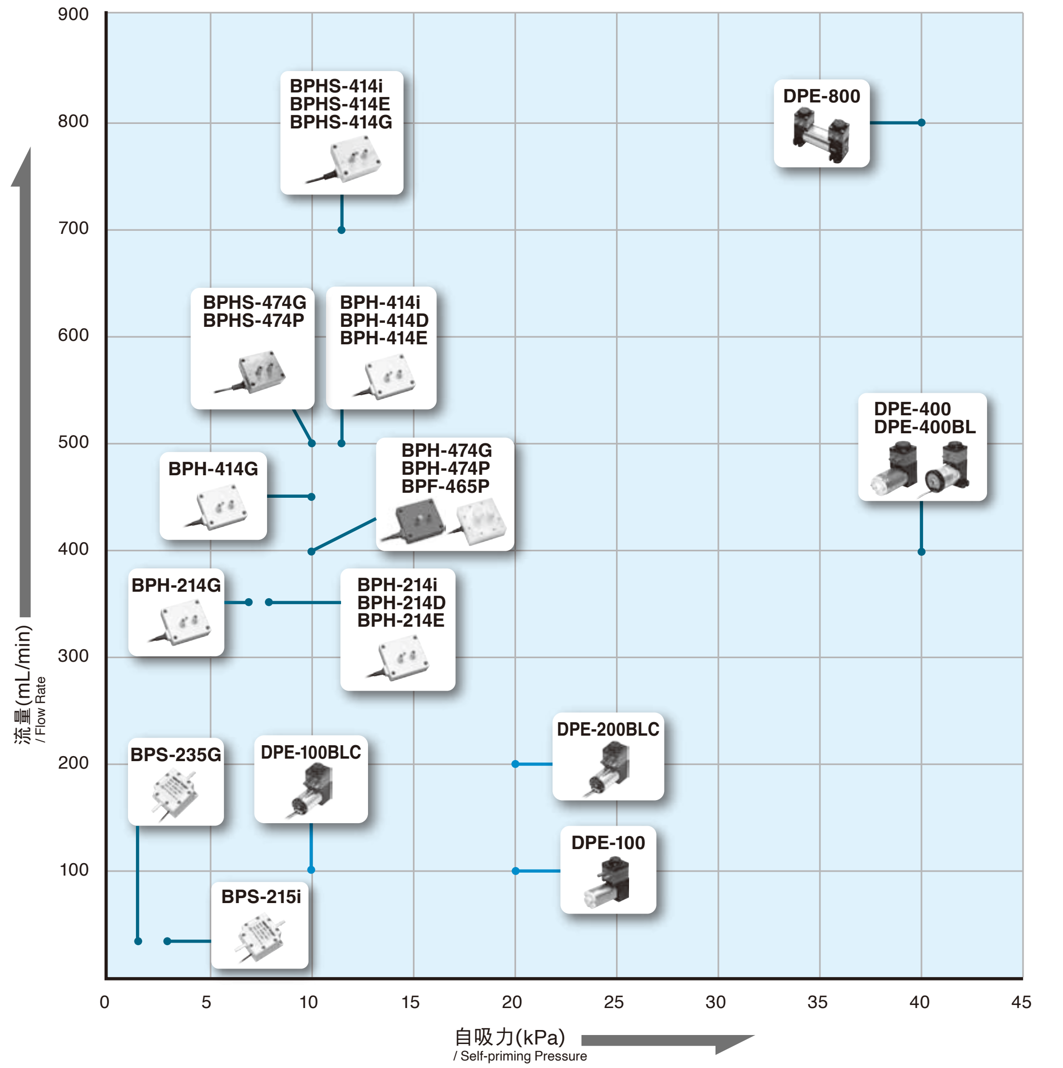
压电泵 / Piezoelectric Pump

BIMOR系列
BIMOR series

DC隔膜液体泵 / DC Diaphragm Liquid Pump

DPE系列
DPE series

液体泵系列 / Liquid Pump series

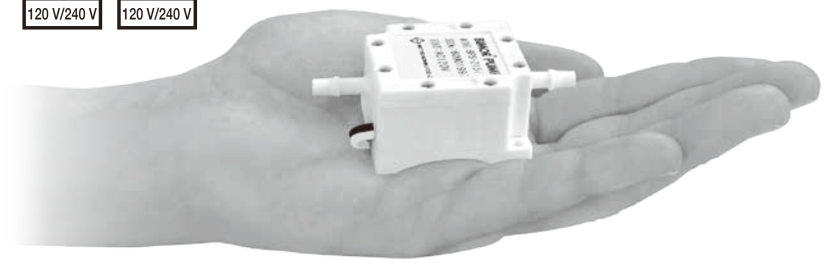


i … 丁基橡胶
Butyl Rubber
G … 氟素橡胶
Fluorine Rubber
D … 二甲基橡胶
Dimethyl Silicon Rubber
E … 乙丙橡胶
Ethylene Propylene Rubber
P … Perfluoroelastomer

压电泵 /Piezoelectric Pump

BIMOR泵 / BIMOR PUMP

120 V/240 V　120 V/240 V

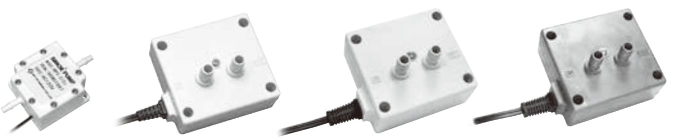


液体可抽吸！

Suitable for pumping liquids

用途例 / Applications

- 供水、排水用 / For water supply and drainage
- 用于注入药液 / For chemical injection
- 冷却水循环用 / For cooling water circulation
- 取样 / For liquid sampling



BPS 型号/ Type　BPH 型号/ Type　BPHS-414 型号/ Type　BPHS-474 型号/ Type

使用条件 / Conditions of Use	BIMOR泵 / BIMOR PUMP
使用环境温度 / Ambient temperature	5~50℃*1
使用环境湿度 / Ambient humidity	35~85%*2
使用流体温度 / Fluid temperature	5~50℃

*1）不结冰 / No freezing　*2）不结露 / No condensation

小型、轻量、长寿命、低噪音

由于压电双晶片也起到隔膜的作用，无马达、旋转轴和其他复杂机构，因此振动小、故障少。BIMOR泵比传统泵重量更轻、噪音更低、寿命更长。已实现60个月免维护连续运转。

低消耗功率、低电磁噪声

BIMOR泵由低耗能压电元件驱动。因此，运行成本低，几乎不会产生电磁噪声。

流量调节方便

BIMOR泵的流量与电压和频率成正比，因此调节流量与调节电压和频率一样方便。
可在额定电压或更低的情况下使用本产品。

用途广泛

零部件可用几种材料制成，因此无论是用于液体还是气体，均可选择最适合要求的材料。目前BIMOR泵已广泛应用于医药、科研、计算机和化工等多种领域。
下表中的“适用介质”仅供参考。请确认它们是否适合所有使用条件。

Compact, lightweight, durable & quiet

As BIMOR PUMP has no motors or shafts or other troublesome mechanisms, we have achieved maintenance free continuous operation for 60 months.

Low power consumption & electromagnetic noise

BIMOR PUMP is driven by low energy consuming piezoelectric elements. Consequently it costs very little to run and emits virtually no electromagnetic noise.

Simple flow rate adjustment

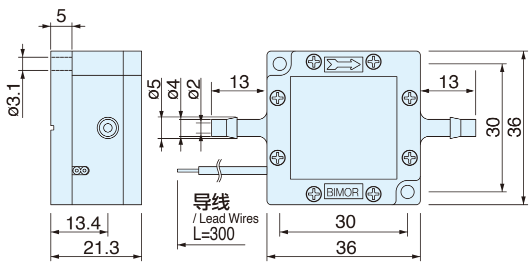
As the flow rate of BIMOR PUMP is proportional to the voltage and frequency, adjusting the flow rate is as simple as adjusting either one.
You may use the product at the rated voltage or lower.

Application versatility

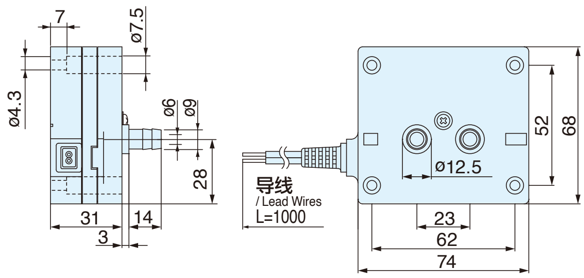
The parts can be made of several different materials, so you can select the material appropriate to your needs, be it a liquid application. BIMOR PUMP is currently employed in a variety of different fields including medicine, scientific research, and the PC and chemical industries.

外形尺寸图/ External Dimensions (单位/ Unit : mm)

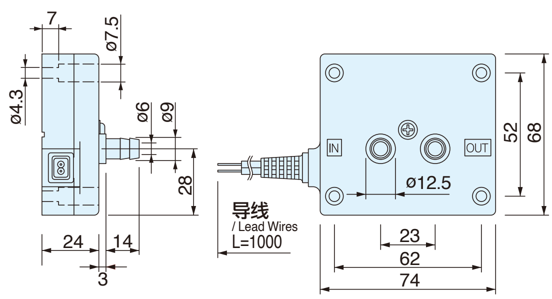
BPS
型号/type



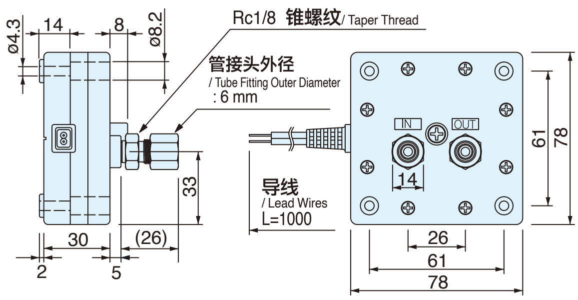
BPHS
型号/type



BPH
型号/type



BPF
型号/type



规 格
Specifications

电压/Voltage(AC)— 120 V *1					电压/Voltage(AC)— 240 V *1					接液部材质/Material of Wetted Parts			本体重量 / Weight (g)
型号/Model	消耗电流 / Current (mA)	自吸力 / Self-priming Pressure (kPa)*2	流量 / FlowRate (mL/min)*2	吐出压力 / Discharge Pressure (kPa)	型号/Model	消耗电流 / Current (mA)	自吸力 / Self-priming Pressure (kPa)*2	流量 / FlowRate (mL/min)*2	吐出压力 / Discharge Pressure (kPa)	壳体 / Housing	接液板 / Liquid Contact Sheet	止回阀/O形环 / Valve / O-ring	
BPS-215i	3	3	30	15	—	—	—	—	—	PP	PP	IIR	40
BPH-214E	15	8	350	18	BPH-214E	7.5	8	350	18	PP	PP	EPDM	140
BPH-214G	15	7	350	17	BPH-214G	7.5	7	350	17	PP	PTFE	FKM	140
BPH-414E	30	12	500	35	—	—	—	—	—	PP	PP	EPDM	140
—	—	—	—	—	BPH-474G	15	10	400	35	PPS	PTFE	FKM	170
—	—	—	—	—	BPH-474P	15	10	400	35	PPS	PTFE	FFKM/FEP	170

*1）记载为电源频率60 Hz时，使用25℃水的性能，50 Hz时流量减少20%。
/ The above performance is obtained by using 25°C water at AC frequency 60 Hz. When the pump is used at AC frequency 50 Hz, the flow rate will decrease by approximately 20%.

*2）液体在低温的情况下，止回阀会硬化，流量和自吸力会下降。特别是氟橡胶，在5℃时流量会减半，所以请选择比较宽裕的规格。粘度高的液体流量会降低，请根据实际情况来确认。
/ When the liquid temperature is low, the check valve will harden. As a result, the flow rate and the self-priming pressure will decrease. For fluorine rubber in particular, the flow rate will decrease by half at 5°C, so select a pump with sufficient allowance. Since highly viscous liquids decrease the flow rate, please check the flow rate with an actual pump before use.

*3）关于其他订货产品的型号，请浏览88页。/ Please see page 88 for other made-to-order models.

制品型号的标示方法
The meaning of each letter in the model name

BP H - 4 1 4 E

泵类型 / Pump type
- S :超小型度 / S : Small type
- H :分解型 / H: Dismantlable type
- F :耐药型 / F : Chemical-resistant type
- HS:高流量型泵类型 / HS : High flow type

隔膜类型 / Diaphragm type
- 2:单一 / 2: Single
- 4:双 / 4: Double

壳体材料 / Housing material
- 1:聚丙烯 / 1: Polypropylene (PP)
- 3:聚缩醛 / 3: Polyacetal (POM)
- 6:氟树脂(全氟烷氧基) / 6: Fluororesin (Perfluoroalkoxy) (PFA)
- 7:聚苯乙烯磺酸 / 7: Polyphenylene Sulfide (PPS)

泵类型 / Pump type
- 4:分解型 / 4: Dismantlable type
- 5:耐化学药品及超小型料 / 5: Chemical-resistant type and small type

橡胶材料(O形环、阀) / Rubber material (Valve, O-ring)
- i :丁基橡胶 / i : Butyl Rubber (IIR)
- D:二甲基硅橡胶 / D: Dimethyl Silicon Rubber (VMQ)
- E:乙丙橡胶 / E: Ethylene Propylene Rubber (EPDM)
- G:氟橡胶 / G: Fluorine Rubber (FKM)
- P:全氟 / P: Perfluoroelastomer (FFKM)

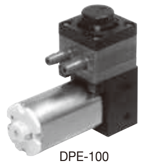
材料说明 / Material Description
- **EPDM** ········ 乙丙橡胶 / Ethylene Propylene Rubber
- **FEP** ··········· 氟乙烯丙烯 / Fluoroethylene Propylene
- **FFKM** ········ 全氟 / Perfluoroelastomer
- **FKM** ··········· 氟橡胶 / Fluorine Rubber
- **IIR** ··············· 丁基橡胶 / Butyl Rubber
- **PP** ··············· 聚丙烯 / Polypropylene
- **PPS** ··········· 聚苯乙烯磺酸 / Polyphenylene Sulfide
- **PTFE** ········· 四氟树脂 (聚四氟乙烯) / Tetrafluororesin (Polytetrafluoroethylene)

合适的/不合适的化学液体
Suitable / Unsuitable Chemical Liquids

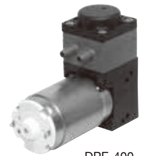
型号/Model	○ 适用介质 / Examples of suitable chemical liquids		× 不适用介质 / Examples of unsuitable chemical liquids	
BPS-215i	乙醇、稀盐酸、碳酸钠、苯甲醛、甲醛水	Ethanol, Dilute hydrochloric acid, Sodium carbonate, Benzaldehyde, Formalin	二甲苯、矿物油、四氧化碳、三氯乙烯、甲苯、苯	Xylene, Mineral oil, Carbon tetrachloride, Trichloroethylene, Toluene, Benzene
BPH214E BPH-414E	氨水、乙醇、稀盐酸、苛性钾、苛性苏打、甲醇	Ammonia water, Ethanol, Dilute hydrochloric acid, Caustic potash, Caustic soda, Methanol		
BPH-214G	乙醇、过氧化氢、矿物油、次氯酸钠	Ethanol, Hydrogen peroxide, Mineral oil, Sodium hypochlorite	丙酮、氨水、冰醋酸、氟酸、甲醛水	Acetone, Ammonia water, Glacial acetic acid, Hydrofluoric acid, Formalin
BPH-474G	乙醇、二甲苯、四氧化碳、硅油、三氯乙烯	Ethanol, Xylene, Carbon tetrachloride, Silicone oil, Trichloroethylene	丙酮、氨水、氯磺酸、冰醋酸、氟酸、甲醛水	Acetone, Ammonia water, Chlorosulfonic acid, Glacial acetic acid, Hydrofluoric acid, Formalin
BPH-474P	乙醇、三氯甲烷、冰醋酸、苯、甲基乙基酮	Ethanol, Chloroform, Glacial acetic acid, Benzene, Methyl ethyl ketone	氯磺酸、氟油、氟碳致冷剂 R-112、氟碳致冷剂 R-113	Chlorosulfonic acid, Fluorine oil, CFC 112, CFC 113

*本图表仅供参考。请在使用条件下确认后再使用。/ This chart is for reference only. Please confirm the suitability under the operating conditions before use.

DC 液体泵空 /DC Liquid Pump

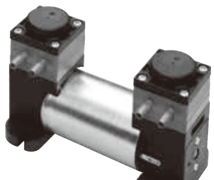


DPE-100



DPE-400

DPE-400BL
Brushless DC Motor



DPE-800

型号 DPE-100 / DPE-400 / DPE-400BL / DPE-800

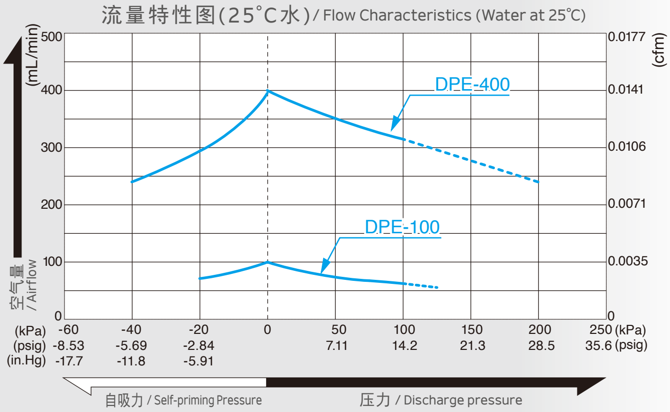
CE 12 V/24 V　UK CA 12 V/24 V

无碳刷马达 / Brushless DC Motor
有刷马达 / Brush DC Motor

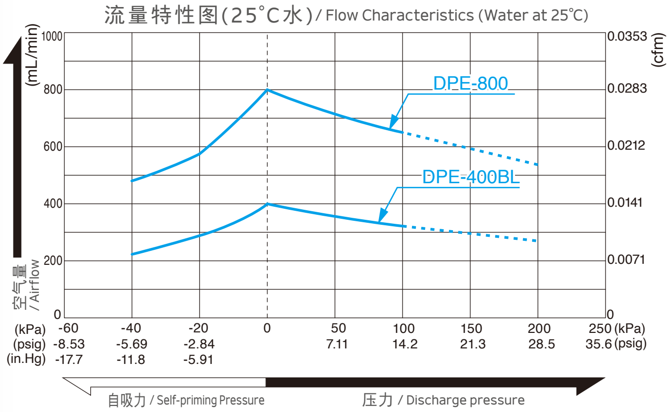
12 V / 24 V DC

流量和电流 / Flow & Electric Current

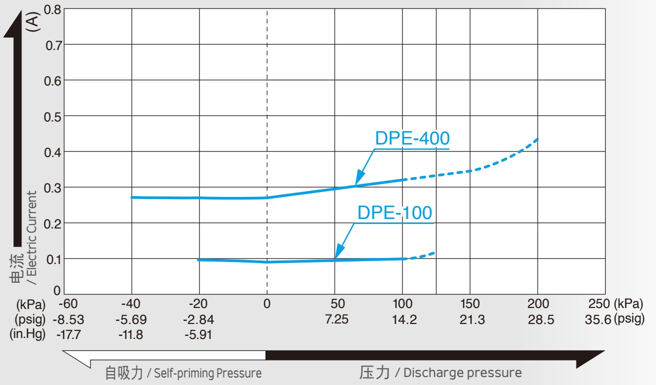
流量特性图(25˚C水) / Flow Characteristics (Water at 25℃)



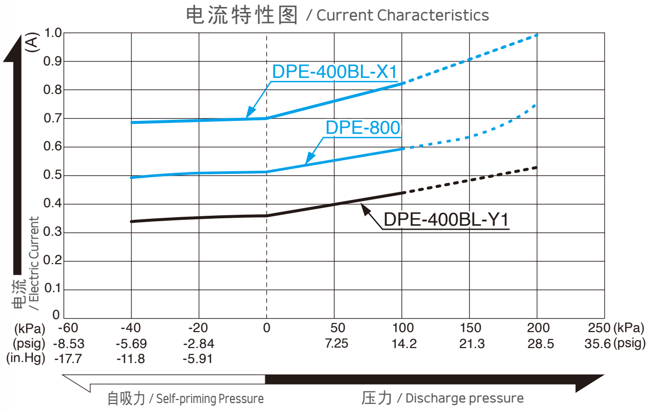
流量特性图(25˚C水) / Flow Characteristics (Water at 25℃)



电流特性图 / Current Characteristics



电流特性图 / Current Characteristics



规 格 / Specifications

型号 / Model	DPE-100	DPE-400	DPE-400BL-X1	DPE-400BL-Y1	DPE-800
额定电压 / Rated Voltage	24 V DC		12 V DC	24 V DC	
流量 / Flow Rate *1	100 mL/min 0.0035 cfm	400 mL/min 0.0141 cfm			800 mL/min 0.0283 cfm
使用压力范围 / Working Pressure Range	0 ~ 100 kPa (0 ~ 1 kgf/cm²) 0 ~ 1 bar 0 ~ 14.2 psig				
最高压力 *2 / Maximum Pressure	300 kPa (3 kgf/cm²) 3 bar 42.7 psig				
最大电流 / Maximum Current	100 mA	345 mA	900 mA	450 mA	600 mA
额定时间 / Duty Cycle	连续 / Continuous				
耐用时间 (MTTF) / Rated Performance (MTTF)	500 小时 / hours		6,000 小时 / hours		600 小时 / hours
自吸力 *1 / Self-priming Pressure	20 kPa (150 mmHg) 0.2 bar 2.84 psig	40 kPa (300 mmHg) 0.4 bar 5.69 psig			
吸入口尺寸 / Inlet	φ4.7 mm (外径) 直管接头 / 4.7 mm O.D. straight barb	φ5.4 mm (外径) 直管接头 / 5.4 mm O.D. straight barb			
吐出口尺寸 / Outlet	φ4.7 mm (外径) 直管接头 / 4.7 mm O.D. straight barb	φ5.4 mm (外径) 直管接头 / 5.4 mm O.D. straight barb			
线圈绝缘等级 / Coil Insulation Class	相当于 E 类 / Class E equivalent	相当于 F 类 / Class F equivalent	相当于 A 类 / Class A equivalent		相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	9.5 (L) x 17 (W) mm 3/8"(L) x 43/64"(W)	19 (L) x 26 (W) mm 3/4"(L) x 1 - 1/32"(W)	41 (W) mm 1 - 39/64 "(W)		74.5 (L) x 41 (W) mm 2 - 15/16"(L) x 1 - 39/64"(W)
本体重量 / Weight	67 g 0.148 Lbs	187 g 0.412 Lbs	230 g 0.507 Lbs		350 g 0.771 Lbs
马达 / Motor	有刷马达 / Brush DC Motor		无碳刷马达 / Brushless DC Motor		有刷马达 / Brush DC Motor

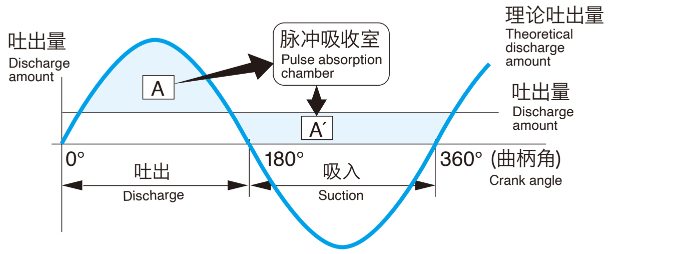
*1: 若止回阀因液体温度低而硬化，自吸性能和流量将降低。/When the check valve is hardened due to low liquid temperature,self-priming performance and flow rate will go down.
*2: 流路关闭时无法重新启动泵。/Restarting pumps with flow passage closed is impossible.
*3: 两个泵压头之间的管路必须并联。两个泵压头之间的管路不可串联。否则，会引起压力急剧上升，导致零部件损坏、液体飞溅甚至起火。
/Tubing between two pumping heads must be done in parallel. Tubing in series between the two pumping heads should not be made. This may cause extreme pressure hike that will result in broken parts, liquid splash out or possible ignition.

使用条件 / Condition of use

使用条件 / Conditions of Use	压电泵 / BIMOR PUMP
使用环境温度 / Ambient temperature	5~40°C*1
使用环境湿度 / Ambient humidity	35~85%*2
使用流体温度 / Fluid temperature	5~50°C

*1）不结冰 / No freezing　*2）不结露 / No condensation

脉冲吸收机制 / Pulse Absorption Mechanism



・脉动原因 (A) 进入吸收室并在吸气时被吐出 (A')，实现降低脉动
/The cause of pulsation (A) is taken into the pulse absorption chamber and discharged at the time of suction (A') to reduce pulse.

・脉动: 压力和流量变化引起的振动
/Pulsation: Vibration due to change in pressure and flow rate

用途例 / Application Examples

- 液体分析仪（例如，医疗、食品、水处理和环境）。
/Liquid analytical instruments e.g. medical, food, water treatment & environmental.
- 过滤、取样、灭菌器和洗涤器中的液体输送。
/Liquid transport within filtration, sampling, sterilizers and washers.
- 工业喷墨打印机中的墨水输送。
/Ink transport within industrial ink-jet printers.

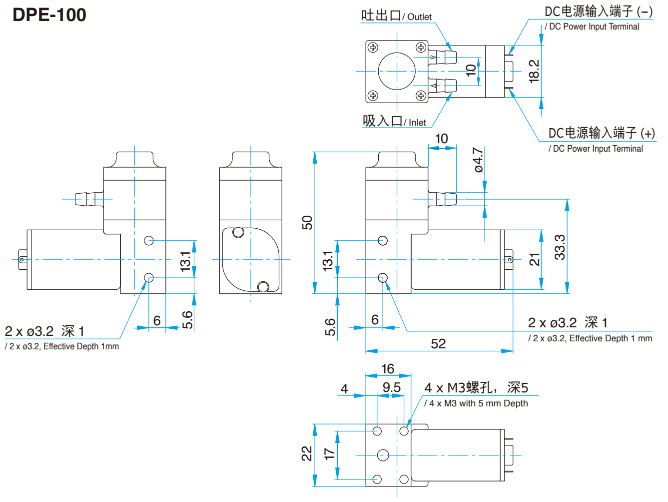
接液部材质和适用流体 / Material of wetted parts and applicable fluids

型号/Model	接液部材质/Material of wetted parts					适用化学液体示例* /Example of suitable chemical liquid*	不合适的化学液体示例 /Example of unsuitable chemical liquid
	缸盖/Cylinder Head	缸盖罩/Head Cover	隔膜/Diaphragm	阀/Valve	O形环/O-ring		
DPE-100-2E DPE-400-2E DPE-400BL-2E DPE-800-2E	PA 聚酰胺(尼龙) /Polyamide(Nylon)		PTFE 聚四氟乙烯 /Polytetrafluoroethylene	EPDM 乙丙橡胶 /Ethylene-propylene rubber		苛性苏打、柠檬酸、氨水、苛性钾、乙醇 /Caustic soda, Citric acid Ammonia water, Caustic potash, Ethanol	矿物油、三氯乙烯、苯甲醛、四氯化碳、甲苯 /Mineral oil, Trichloroethylene, Benxaldehyde, Carbon tetrachloride, Toluene
DPE-100-2G DPE-400-2G DPE-400BL-2G DPE-800-2G	PA 聚酰胺(尼龙) /Polyamide(Nylon)		PTFE 聚四氟乙烯 /Polytetrafluoroethylene	FKM 氟橡胶 /Fluoro rubber		乙醇、乙二醇、碳酸钠、矿物油 /Ethanol, Ethylene glycol Sodium carbonate, mineral oil	氯磺酸、甲醛水、冰醋酸、甲基乙基酮 /Chlorosulfonic acid, Folmalin, Glacial acetic acid, Methyl ethyl ketone
DPE-100-7G DPE-400-7G DPE-400BL-7G DPE-800-7G	PPS 聚苯硫醚 /Polyphenylene sulfide		PTFE 聚四氟乙烯 /Polytetrafluoroethylene	FKM 氟橡胶 /Fluoro rubber		二甲苯、四氯化碳、三氯乙烯、硅油 /Xylene, Carbon tetrachloride Trichloroethylene, Silicon oils, Ethanol	丙酮、氯磺酸、甲醛水、氨水、冰醋酸 /Acetone, Chlorosulfonic acid, Formalin, Ammonia water, Glacial acetic acid
DPE-100-7P DPE-400-7P DPE-400BL-7P DPE-800-7P	PPS 聚苯硫醚 /Polyphenylene sulfide		PTFE 聚四氟乙烯 /Polytetrafluoroethylene	FFKM 全氟橡胶 /Perfluoroelastomer		乙醇、三氯甲烷、苯、冰醋酸、甲基乙基酮 /Ethanol, Chloroform, Benzene Glacial acetic acid, Methyl ethyl ketone	氯磺酸、氟油、CFC112、CFC113 /Chlorosulfonic acid, Fluorine oil, CFC 112, CFC 113

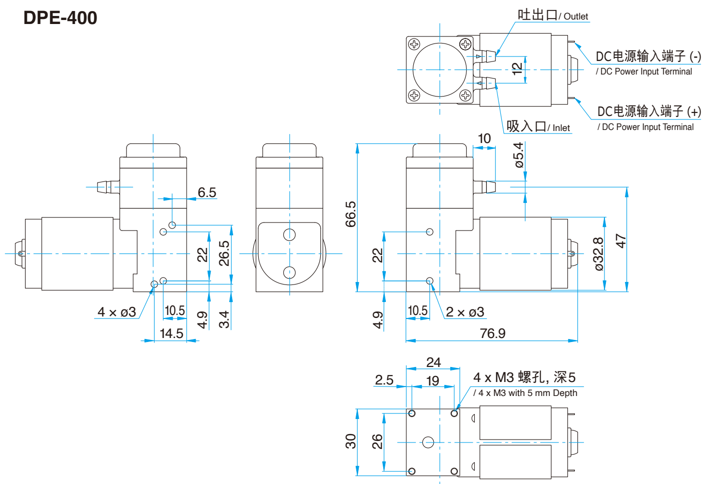
*本图表仅供参考。请在使用条件下确认后再使用。/*This chart is for reference only. Please confirm the suitability under the operating conditions before use.

外形尺寸图 / External Dimensions (单位 / Unit : mm)

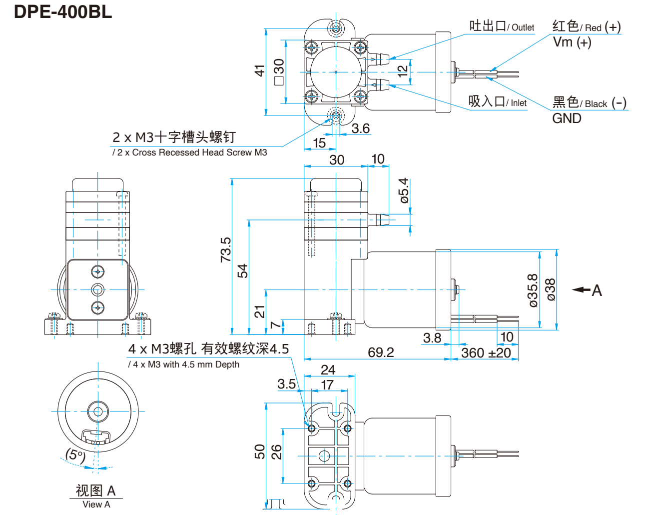
DPE-100



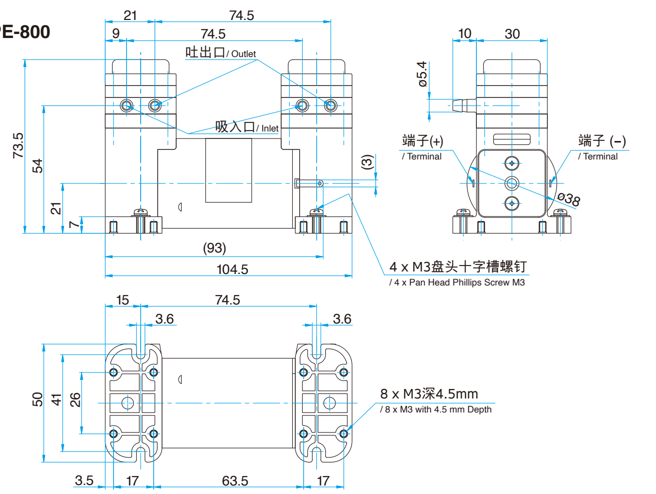
DPE-400



DPE-400BL

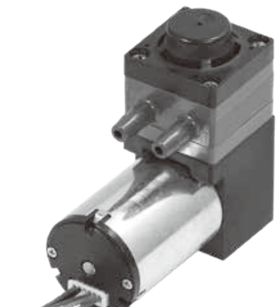


DPE-800



DC 液体泵空 /DC Liquid Pump

型号 DPE-100BLC / DPE-200BLC



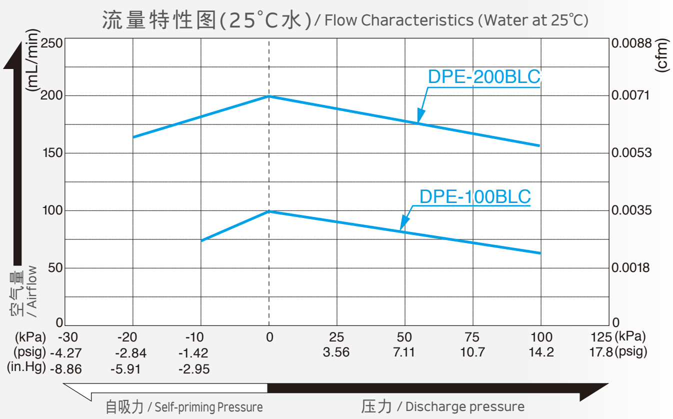
DPE-100BLC
DPE-200BLC

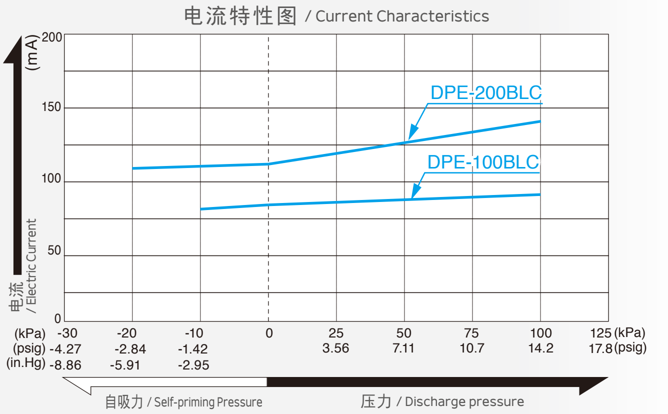
CE 24 V UKCA 24 V

无碳刷马达 / Brushless DC Motor

24 V DC

流量和电流 / Flow & Electric Current





规 格 / Specifications

型号 / Model	DPE-100BLC	DPE-200BLC
额定电压 / Rated Voltage	24 V DC	
流量 / Flow Rate *1	100 mL/min 0.0035 cfm	200 mL/min 0.0071 cfm
使用压力范围 / Working Pressure Range	0 ~ 100 kPa (0 ~ 1 kgf/cm²) 0 ~ 1 bar 0 ~ 14.2 psig	
最高压力 *2 / Maximum Pressure	300 kPa (3 kgf/cm²) 3 bar 42.7 psig	
最大电流 / Maximum Current	90 mA	140 mA
额定时间 / Duty Cycle	连续 / Continuous	
耐用时间 (MTTF) / Rated Performance (MTTF)	6000 小时 / hours	
自吸力 *1 / Self-priming Pressure	10 kPa (75 mmHg) 0.1 bar 1.42 psig	20 kPa (150 mmHg) 0.2 bar 2.84 psig
吸入口尺寸 / Inlet	ϕ4.7 mm（外径）软管接头 / 4.7 mm O.D. hose barb	
吐出口尺寸 / Outlet	ϕ4.7 mm（外径）软管接头 / 4.7 mm O.D. hose barb	
线圈绝缘等级 / Coil Insulation Class	相当于 E 类 / Class E equivalent	
安装尺寸 / Mounting Dimensions	9.5(L) x 17(W) mm 3/8"(L) x 43/64"(W)	
本体重量 / Weight	80 g 0.176 Lbs	

*1. 若止回阀因液体温度低而硬化，自吸性能和流量将降低。
/When the check valve is hardened due to low liquid temperature, self-priming performance and flow rate will go down.
*2. 在关闭压力状态下不可再次启动泵，另外，不可在最高压力下使用。
/The unit cannot be restarted with flow passage closed. It cannot be used at the maximum pressure.

使用条件 / Condition of use

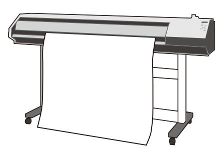
使用环境温度 /Operating Ambient Temperature	5 to 40°C
使用环境湿度 /Operating Ambient Humidity	30 to 85%
使用流体温度 /Operating Fluid Temperature	5 to 50°C

用途例 / Application Examples

1. 用于分析仪器的液体输送，例如医疗、食品、水处理和环境测量
/Liquid transport for analytical instruments e.g. medical, food, water treatment and environment measurement.

2. 过滤、取样、清洗器和灭菌器内的液体输送
/Liquid transport within filtration, sampling, washers and sterilizers.

3. 工业喷墨打印机中的墨水输送
/Ink transport within industrial ink-jet printers.

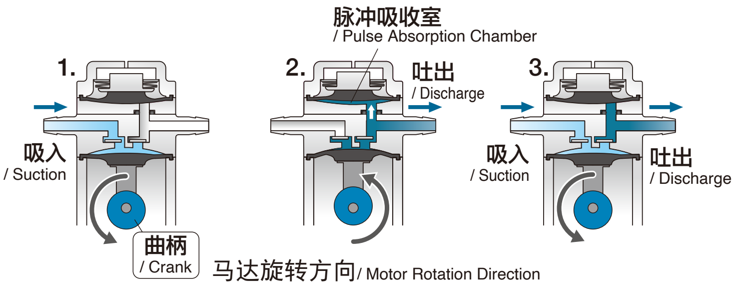


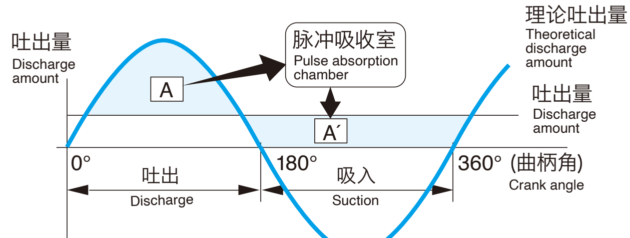
脉冲吸收机制 / Pulse Absorption Mechanism

1. 吸入。/Suction.

2. 吐出。部分液体被输送至脉冲吸收室，而不是直接强制进入吐出口。
/Discharge. Partial fluid delivery to pulse absorption chamber, not directly forced to outlet port.

3. 进入泵的循环吸入与吐出同步。通过 2 和 3 的处理，脉冲得到衰减。
/Cyclical suction drawn into pump is synchronized with the discharge.
Pulses are attenuated through the process of 2 and 3.





· 脉动原因 (A) 进入吸收室并在吸气时被吐出 (A')，实现降低脉动
/The cause of pulsation (A) is taken into the pulse absorption chamber and discharged at the time of suction (A') to reduce pulse.

· 脉动: 压力和流量变化引起的振动
/Pulsation: Vibration due to change in pressure and flow rate

接液部材质及适用流体 / Material of wetted parts and applicable fluid

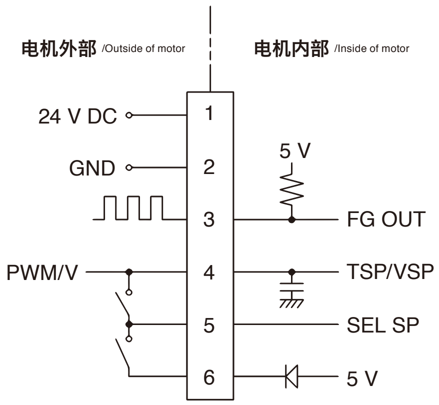
型号/Model	接液部材质/Material of wetted parts					适用化学液体示例*/Example of suitable chemical liquid	不合适的化学液体示例/Example of unsuitable chemical liquid
	缸盖/Cylinder Head	缸盖罩/Head Cover	隔膜/Diaphragm	阀/Valve	O形环/O-ring		
DPE-100BLC-2E DPE-200BLC-2E	PA 聚酰胺(尼龙) /Polyamide(Nylon)		PTFE 聚四氟乙烯 /Polytetrafluoroethylene	EPDM 乙丙橡胶 /Ethylene-propylene rubber		氨水、柠檬酸、苛性苏碳、乙醇、苛性钾 /Ammonia water, Citric acid, Caustic soda, Ethanol, Caustic potash	矿物油、三氯乙烯、苯甲醛、四氯化碳、甲苯 /Mineral oil, Trichloroethylene, Benzaldehyde, Carbon tetrachloride, Toluene
DPE-100BLC-7G DPE-200BLC-7G	PPS 聚苯硫醚 /Polyphenylene sulfide			FKM 氟橡胶 /Fluoro rubber		乙醇、四氯化碳、三氯乙烯、二甲苯、硅油 /Ethanol, Carbon tetrachloride, Trichloroethylene, Xylene, Silicone oil	丙酮、氯磺酸、甲醛水、氨水、冰醋酸 /Acetone, Chlorosulfonic acid, Formalin, Ammonia water, Glacial acetic acid
DPE-100BLC-7P DPE-200BLC-7P				FFKM 全氟橡胶 /Perfluoroelastomer		乙醇、冰醋酸、甲基乙基酮、三氯甲烷、苯 /Ethanol, Glacial acetic acid, Methyl ethyl ketone, Chloroform, Benzene	氯磺酸、CFC 112、氟油、CFC 113 /Chlorosulfonic acid, CFC 112, Fluorine oil, CFC 113

*适用的化学液体只是参考，使用时请在使用条件下确认。/*This chart is for reference only. Please confirm the suitability under the operating conditions before use.

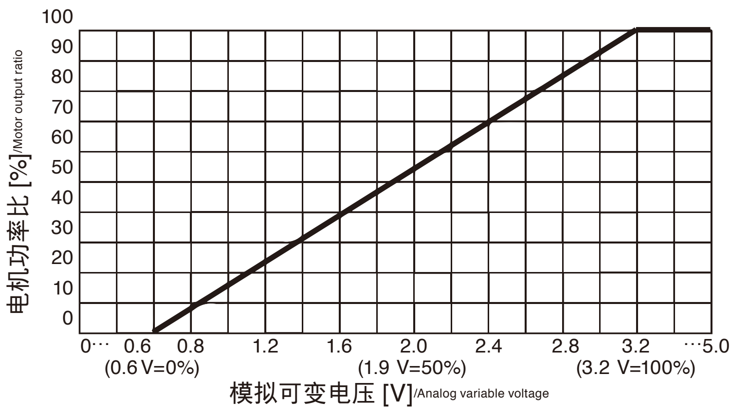
控制机能 / Control Function

型号 /No.	机能 /Function	规格值 /Specifications	条件 /Conditions
1	电源 /Power source	DC 24 V/24 V DC	
2		GND	
3	FG(旋转)信号输出 /FG signal output	6 个脉冲 / 转 1 圈 /6 Pulse/1 Rotation	开漏输出 /Open-drain output
	上拉电压 /Pull up voltage	DC 5 V/5 V DC	
4	PWM 控制输入 /PWM control input	0 ～ 100% /0 to 100%	DC2 ~ 5 V（最大值 =DC 5 V） 建议频率 15 k ~ 25 kHz /2 to 5 V DC (max=5 V DC) Recommended frequency 15 to 25 kHz
	电压控制输入 /Voltage control input	DC 0~5 V 最大值 =DC 5V /0 to 5 V DC max=5 V DC	可变范围 =DC 0.6 ～ 3.2V(Dutycycle:0 ～ 100%) /Variability range =0.6 to 3.2 V DC (Duty cycle: 0 to 100%)
5	PWM 控制选择 /PWM control selection	ON/OFF	PWM 控制开启 /PWM control ON with open circuit
	电压控制选择 /Voltage control selection	ON/OFF	电压控制输入 DC 2 ～ 5 V/Voltage control ON with 2 to 5 V DC input
6	DC 5 V 输出 /5 V DC output	ON/OFF	电机启动时始终输出 DC 5 V/5 V DC output during motor startup

参考电路图 /Reference circuit diagram



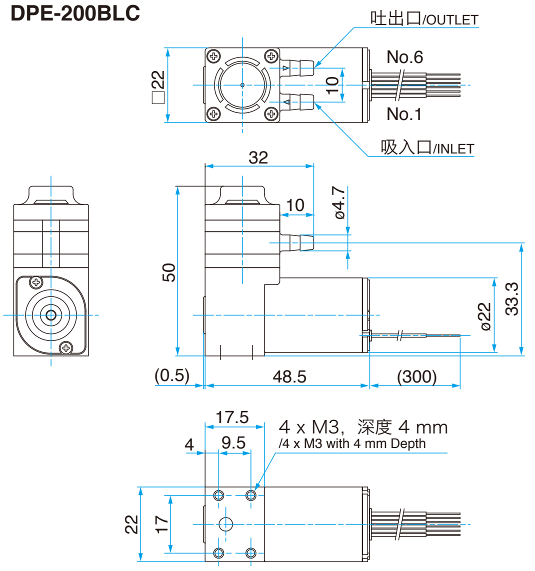
电压控制的标准 /Reference of voltage control



* 实际的电动机输出取决于电源电压和泵负载状态。/The actual number of rotations of motor depends on the power supply voltage and load conditions of pump.
请在实际使用条件下检查泵输出的可变状态。 /Examine the variable state of pump output under the conditions of actual use.

外形尺寸图 / External Dimensions (单位 / Unit : mm)

DPE-100BLC
DPE-200BLC



连接表 /Connection table

		电源 /Power Source		控制信号 /Control Signal			
线路编号 /Circuit No.		1	2	3	4	5	6
线色 /Cord Color		红色 /RED	黑色 /BLACK	黄色 /YELLOW	蓝色 /BLUE	绿色 /GREEN	褐色 /BROWN
机能 /Function		V+	V-	脉冲 /Pulse	PWM 或电压输入 /PWM or voltage input	电压控制 /Voltage control	DC 5 V 输出 /DC 5 V output
连接选择 / Selection of connection	无控制 /With no control	ON			ON*1		ON*1
	PWM 控制 /PWM control	ON			ON*2		
	电压控制 /Voltage control	ON			ON*3	ON*3	ON*3
线尺寸 /Cord Size		AWG26		AWG28			
UL 线种类 /Cord UL Style		UL1061					

*1 进行无控制驱动 (Duty cycle 100%) 时，请连接短接 4 针和 6 针。
/For non-control (Duty cycle: 100%) drive, short-circuit pins 4 and 6.

*2 进行 PWM 控制驱动时，请在 5 针打开的状态下，向 4 针输入 PWM 信号
/For PWM control drive, keep pin 5 in an open state and input PWM signal
(Duty cycle 0 ～ 100%、2 ～ 5 V DC、推荐频率数 15 k ～ 25 kHz)
/(Duty cycle: 0 to 100%, 2 to 5 V DC, and recommended frequency 15 to 25 kHz) to pin 4.

*3 进行模拟电压控制驱动时，短接 5 针和 6 针，向 4 针施加电压（0 ～ 5 V DC、可变范围 0.6~3.2 V DC)
/For analog voltage control drive, short-circuit pins 5 and 6 and apply the voltage (0 to 5 V DC and variable range 0.6 to 3.2 V DC) to pin 4.

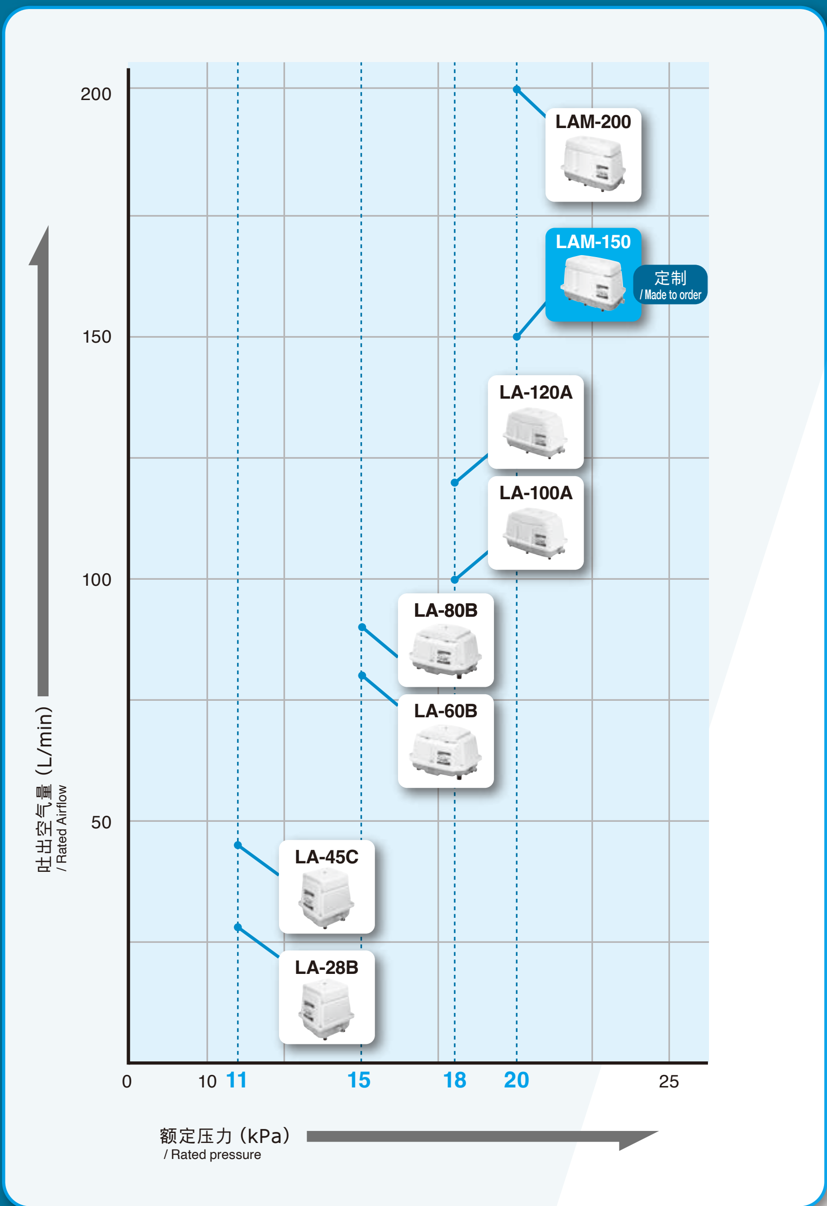
• 请根据需要对信号线实施噪音对策。/Take noise countermeasures for the signal wire if necessary.
• 请剪断不必要的导线，以免设备操作出现问题。/Please cut the unnecessary lead wires so that there is no trouble in operating the unit.

AC LINEAR
Free Piston Blower

MEDO BLOWER（曝气机/BLOWER）

曝气机（AC线性 自由活塞 曝气机）
/BLOWER (AC Linear Free Piston Blower)

LA系列
LA series



页
Page

定制 / Made to Order

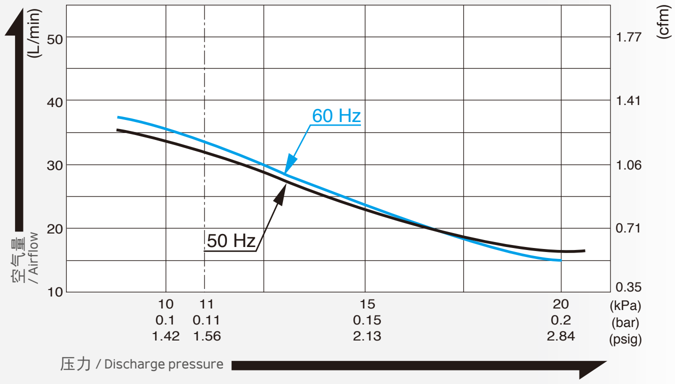
MEDO BLOWER（曝气机 /Blower）

型号 LA-28B / LA-45C

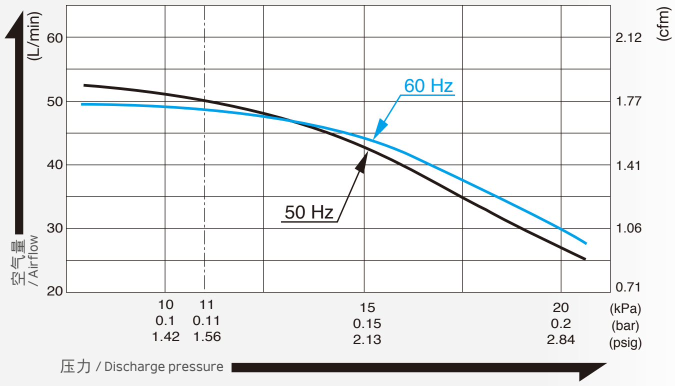
120 V (60 Hz) 230 V (50 Hz) 230 V (50 Hz)

空气量和消耗功率 / Airflow & Power Consumption

LA-28B



LA-45C



* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

型号 / Model	LA-28B		LA-45C	
电源 / Power Supply	120 V AC	230 V AC*	120 V AC	230 V AC*
额定频率 / Rated Frequency	60 Hz	50 Hz	60 Hz	50 Hz
消耗功率 / Power Consumption	25.5 W	29 W	45 W	47 W
额定压力 / Rated Pressure	11 kPa (0.11 kgf/cm^2) 0.11 bar 1.56 psig			
吐出空气量 / Rated Airflow	28 L/min 0.99 cfm		45 L/min 1.59 cfm	
本体重量 / Weight	2.9 kg 6.4 Lbs		3.2 kg 7.1 Lbs	

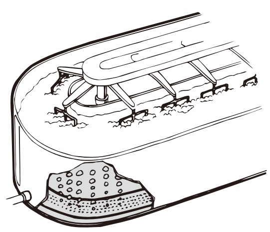
* 有关 240 V 规格的产品，请与我们联系。/Please contact us for 240 V AC model.

可选的软管组件 / Optional Hose Assemblies

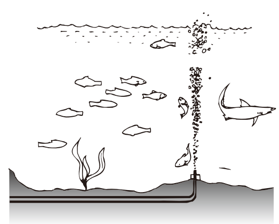
LB03185	LB08316
	

用途例 / Application Examples

电镀液搅拌装置 / Liquid Mixer Bubbling

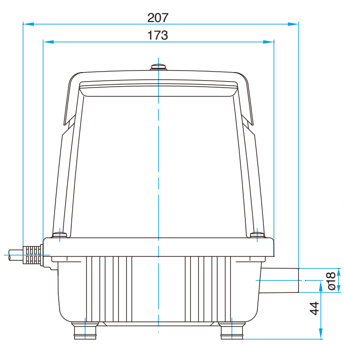


鱼缸隔离气幕 / Fish Farm Aquatic Fence

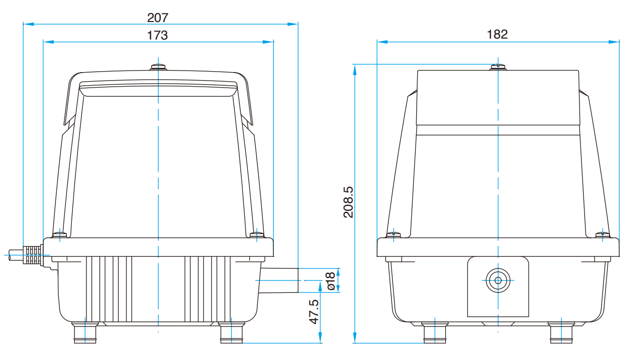


外形尺寸图 / External Dimensions (单位 / Unit : mm)

LA-28B



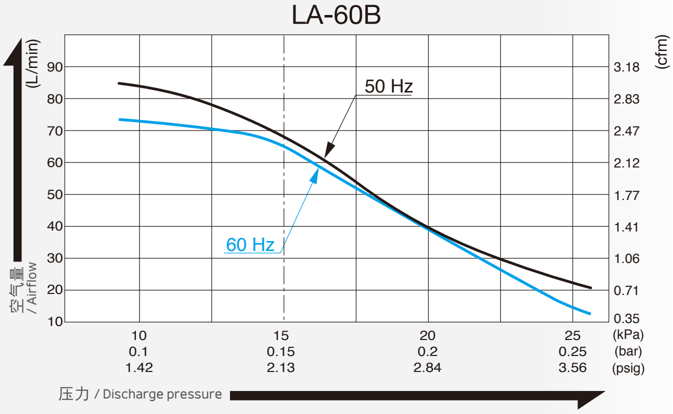
LA-45C

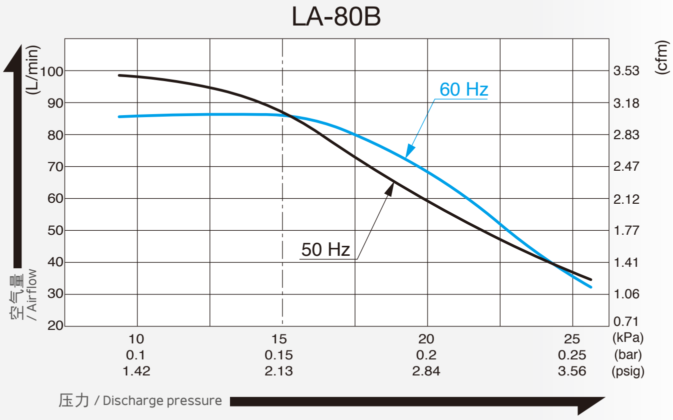


MEDO BLOWER (曝气机 /Blower)

型号 LA-60B / LA-80B

空气量和消耗功率 / Airflow & Power Consumption





* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

型号 / Model	LA-60B		LA-80B	
电源 / Power Supply	120 V AC	230 V AC*	120 V AC	230/240 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz	60 Hz	50 Hz
消耗功率 / Power Consumption	60 W	64 W	80 W	86 W
额定压力 / Rated Pressure	15 kPa (0.15 kgf/cm^2) 0.15 bar 2.13 psig			
吐出空气量 / Rated Airflow	60 L/min 2.12 cfm		80 L/min 2.83 cfm	
本体重量 / Weight	5.0 kg 11 Lbs		5.3 kg 11.7 Lbs	

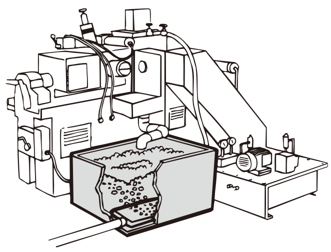
* 有关 240 V 规格的产品，请与我们联系。/Please contact us for 240 V AC model.

可选的软管组件 / Optional Hose Assemblies

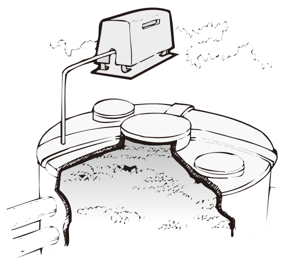
LB03185	LB08316
	

用途例 / Application Examples

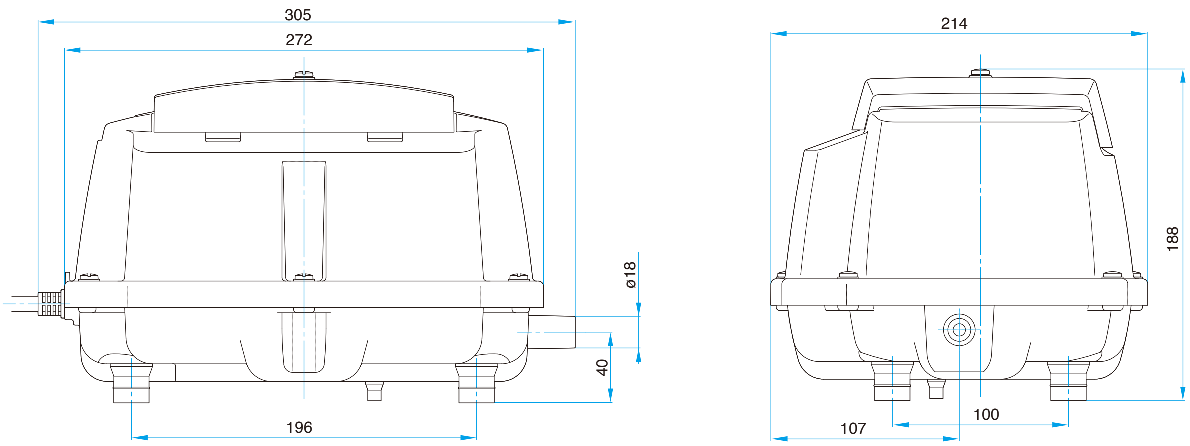
电镀液搅拌装置 / Liquid Mixer Bubbling



曝气式净化槽 / Home Aerobic Sewage Treatment System

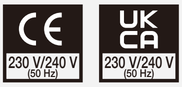


外形尺寸图 / External Dimensions (单位 / Unit : mm)

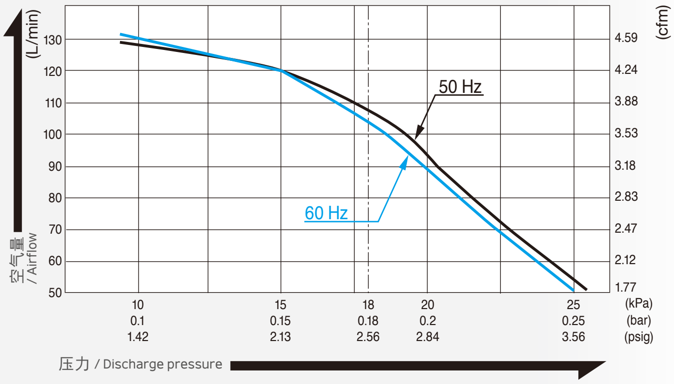


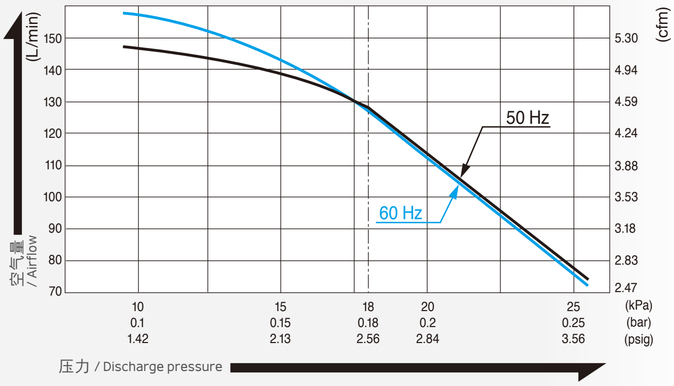
MEDO BLOWER (曝气机 /Blower)

型号 LA-100A / LA-120A



空气量和消耗功率 / Airflow & Power Consumption





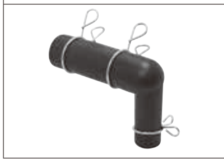
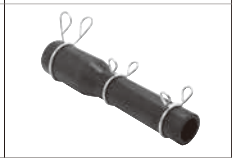
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

	LA-100A	LA-120A
型号 / Model	LA-100A	LA-120A
电源 / Power Supply	230 V AC*1	230/240 V AC*2
额定频率 / Rated Frequency	50 Hz	50 Hz
消耗功率 / Power Consumption	100 W	130 W
额定压力 / Rated Pressure	18 kPa (0.18 kgf/cm²) 0.18 bar 2.56 psig	
吐出空气量 / Rated Airflow	100 L/min 3.53 cfm	120 L/min 4.24 cfm
本体重量 / Weight	9.7 kg 21.4 Lbs	

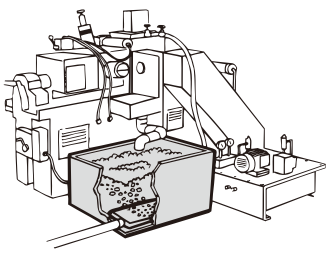
*1) 有关 120 V / 240 V 规格的产品，请与我们联系。/Please contact us for 120V AC model and 240 V AC model.
*2) 有关 120 V 规格的产品，请与我们联系。/Please contact us for 120 V AC model.

可选的软管组件 / Optional Hose Assemblies

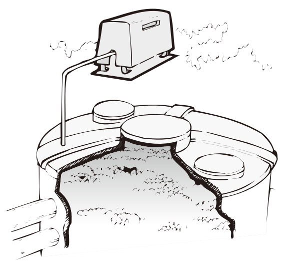
LB03965	LB01070
	

用途例 / Application Examples

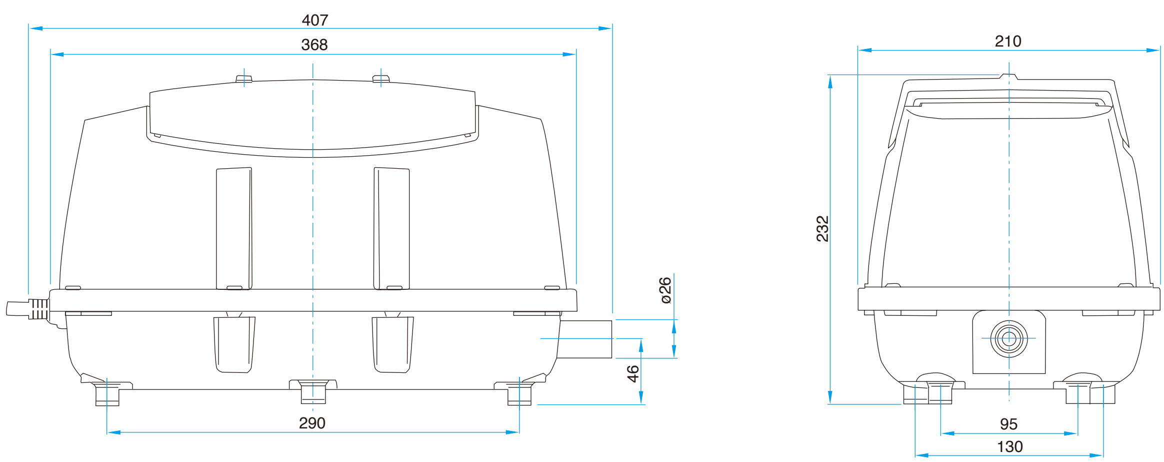
电镀液搅拌装置 / Liquid Mixer Bubbling



曝气式净化槽 / Home Aerobic Sewage Treatment System



外形尺寸图 / External Dimensions (单位 / Unit : mm)

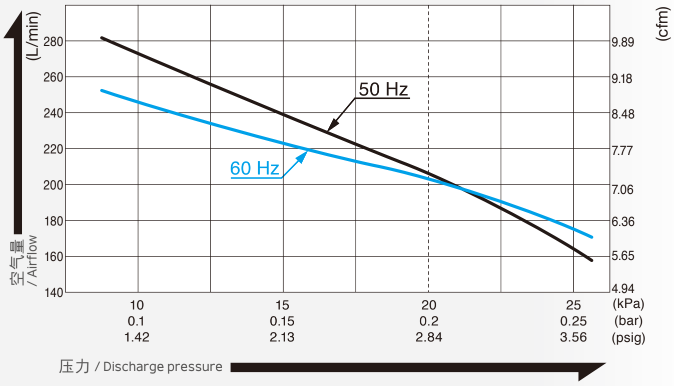


MEDO BLOWER (曝气机 /Blower)

型号 LAM-200

120 V (60 Hz) | 230 V/240 V (50 Hz) | 230 V/240 V (50 Hz)

空气量和消耗功率 / Airflow & Power Consumption



* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

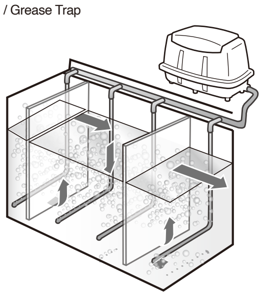
电源 / Power Supply	120 V AC	230/240 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz
消耗功率 / Power Consumption	215 W	
额定压力 / Rated Pressure	20 kPa (0.2 kgf/cm^2) 0.2 bar 2.84 psig	
吐出空气量 / Rated Airflow	200 L/min 7.06 cfm	
本体重量 / Weight	12.3 kg 27.1 Lbs	

可选的软管组件 / Optional Hose Assemblies

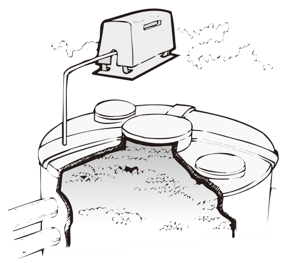
LB03965	LB01070
	

用途例 / Application Examples

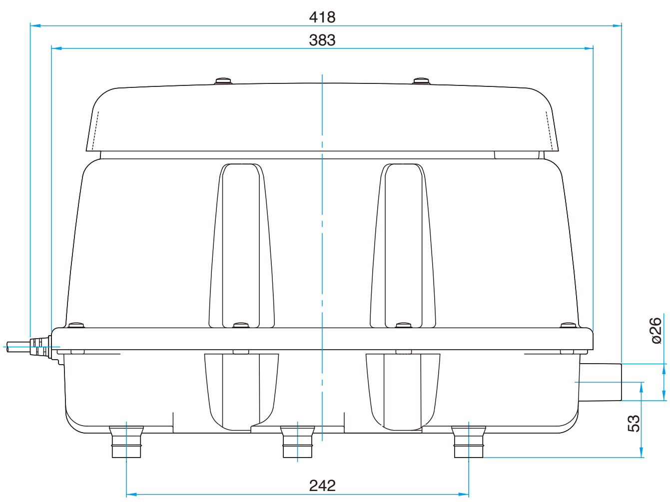
油分离分离器
/ Grease Trap

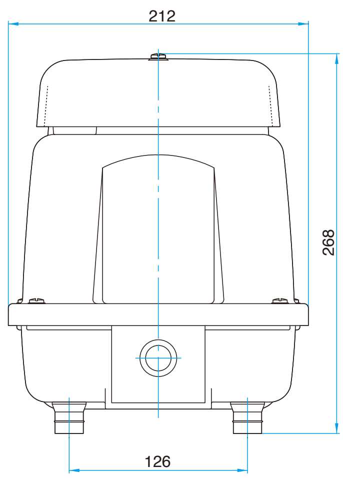


曝气式净化槽
/ Home Aerobic Sewage Treatment System



外形尺寸图 / External Dimensions (单位 / Unit : mm)

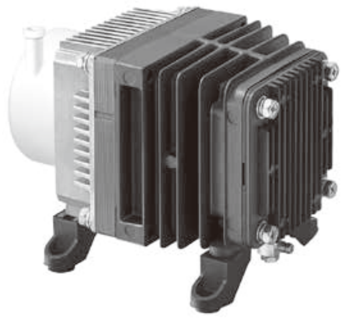




MADE TO ORDER

定制 / Made to order

压缩泵 / Compressor

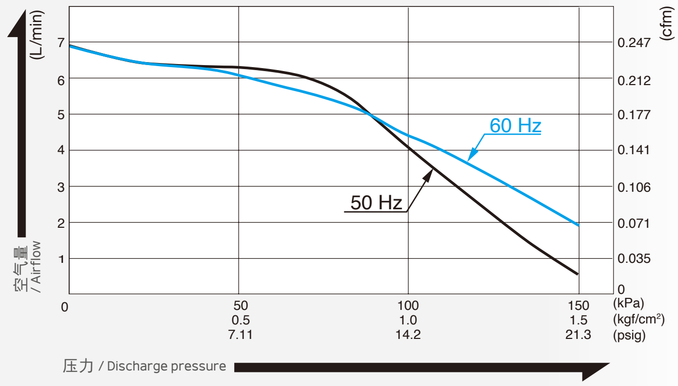


型号 AC0210 定制 /Made to order

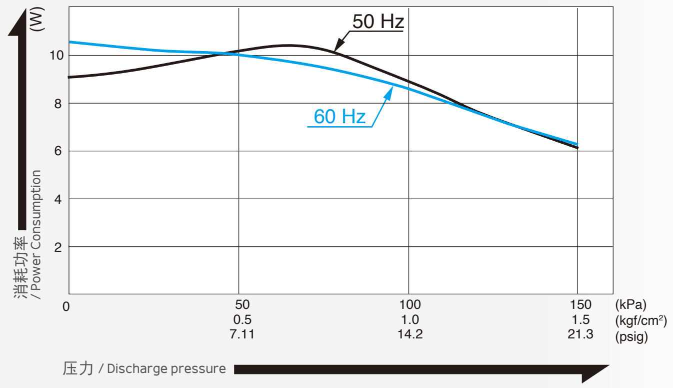
CE 115 V/230 V

空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



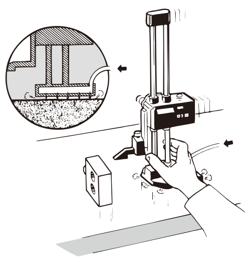
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

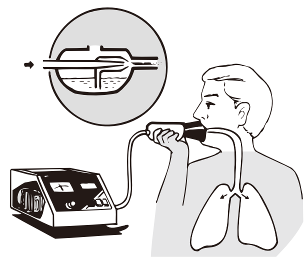
额定压力 / Rated Pressure	100 kPa (1.0 kgf/cm²) 1.0 bar 14.2 psig	
吐出空气量 / Rated Airflow	3.5 L/min 0.124 cfm	
最高压力 / Maximum Pressure	120 kPa (1.2 kgf/cm²) 1.2 bar 17.1 psig	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz
消耗功率 / Power Consumption	23 W	24 W
耐用时间 (MTTF) / Rated Performance (MTTF)	5,000 小时 / hours	
吐出口尺寸 / Outlet	ϕ4.7 mm（外径）软管接头 / 4.7 mm O.D. hose barb	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	UL 规格品：相当于 B 类 / Class B for UL	相当于 E 类 / Class E equivalent
安装尺寸 / Mounting Dimensions	76 (L) x 88 (W) mm 2 - 63/64" (L) x 3 - 15/32" (W)	
本体重量 / Weight	1.7 kg 3.7 Lbs	
导线长度 / Leadwire Length	300 mm 11 - 13/16"	

用途例 / Application Examples

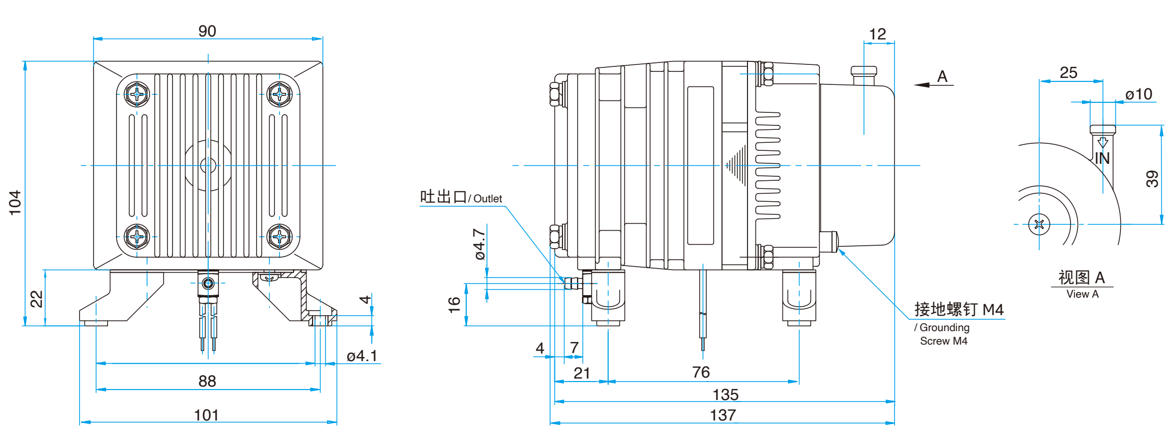
气浮式精密测量仪 / Air Bearing for Precision Machines



雾化器 / Nebulizer



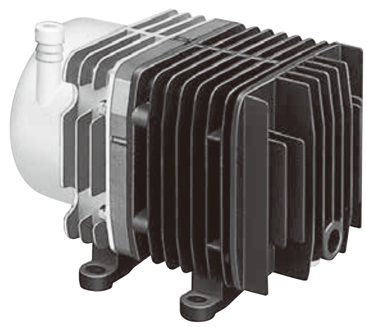
外形尺寸图 / External Dimensions (单位 / Unit : mm)



压缩泵 / Compressor

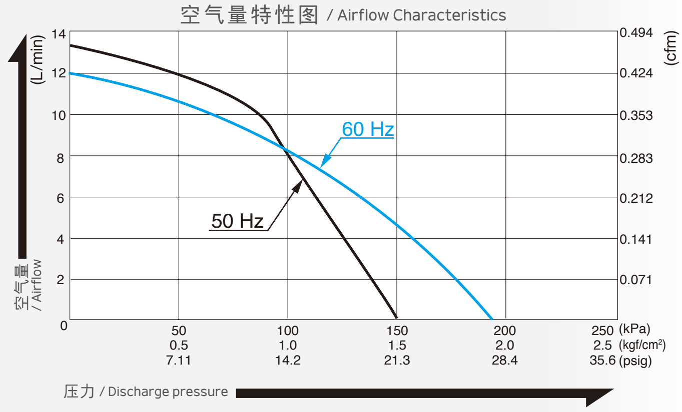
型号 AC0610A

定制 / Made to order

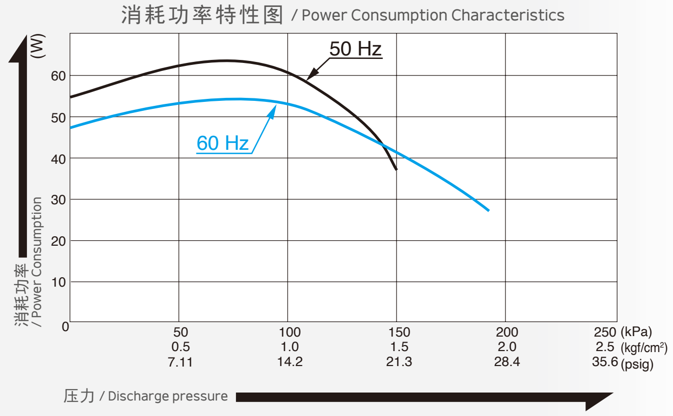


空气量和消耗功率 / Airflow & Power Consumption

空气量特性图 / Airflow Characteristics



消耗功率特性图 / Power Consumption Characteristics



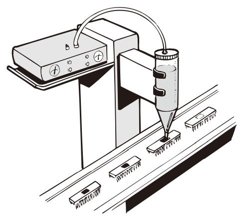
* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

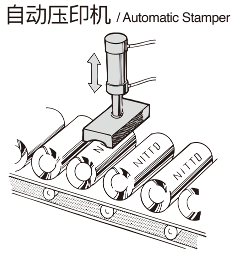
额定压力 / Rated Pressure	100 kPa (1.0 kgf/cm^2) 1.0 bar 14.2 psig	
吐出空气量 / Rated Airflow	8 L/min 0.283 cfm	
最高压力 / Maximum Pressure	150 kPa (1.5 kgf/cm^2) 1.5 bar 21.3 psig	
额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz
消耗功率 / Power Consumption	52 W	60 W
耐用时间 / Rated Performance	10,000 小时 / hours	
吐出口尺寸 / Outlet	ISO Rc 1/4 (内螺纹 / internal thread)	
额定时间 / Duty Cycle	连续 / Continuous	
线圈绝缘等级 / Coil Insulation Class	相当于 F 类 / Class F equivalent	
安装尺寸 / Mounting Dimensions	68 (L) x 84 (W) mm 2 - 43/64" (L) x 3 - 5/16" (W)	
本体重量 / Weight	3.2 kg 7.1 Lbs	
导线长度 / Leadwire Length	200 mm 7 - 7/8"	

用途例 / Application Examples

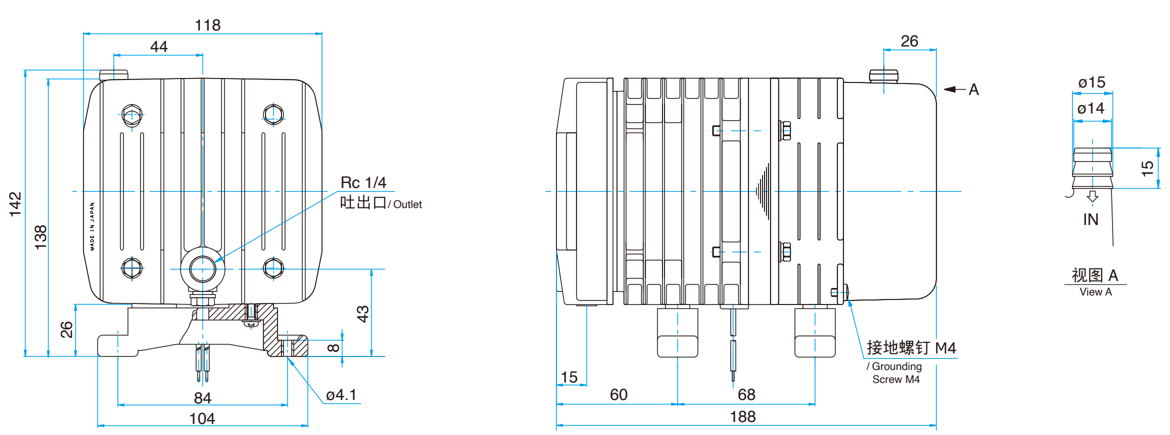
自动点胶机 / Dispenser



自动压印机 / Automatic Stamper



外形尺寸图 / External Dimensions (单位 / Unit : mm)



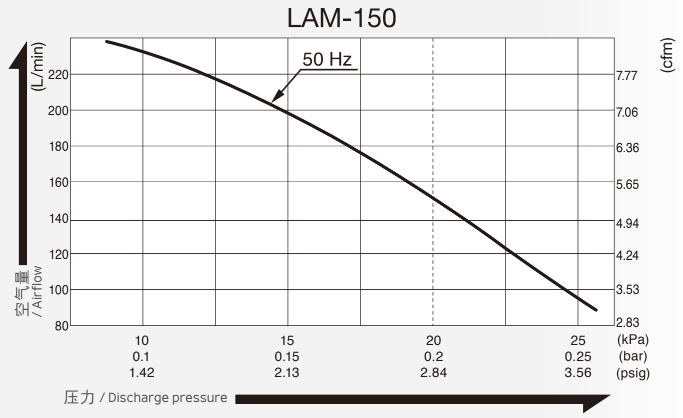
MEDO BLOWER（曝气机 / Blower）

型号 LAM-150

定制 / Made to order

CE 230 V (50 Hz)　UKCA 230 V (50 Hz)

空气量和消耗功率 / Airflow & Power Consumption

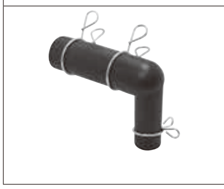
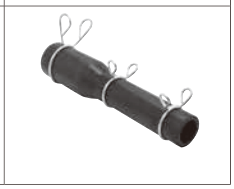


* 特性图只是参考值，并不是保证值。
/The characteristic charts are for reference only and are not guaranteed.

规 格 / Specifications

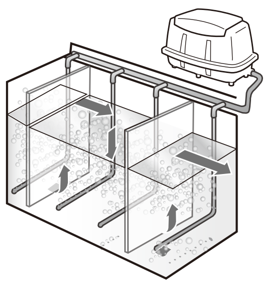
电源 / Power Supply	230 V AC
额定频率 / Rated Frequency	50 Hz
消耗功率 / Power Consumption	140 W
额定压力 / Rated Pressure	20 kPa (0.2 kgf/cm^2) 0.2 bar　2.84 psig
吐出空气量 / Rated Airflow	150 L/min 5.3 cfm
本体重量 / Weight	12.3 kg　27.1 Lbs

可选的软管组件

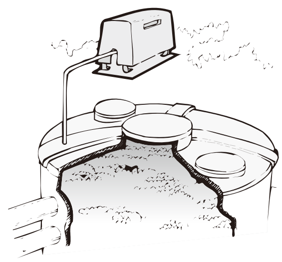
LB03965	LB01070
	

用途例 / Application Examples

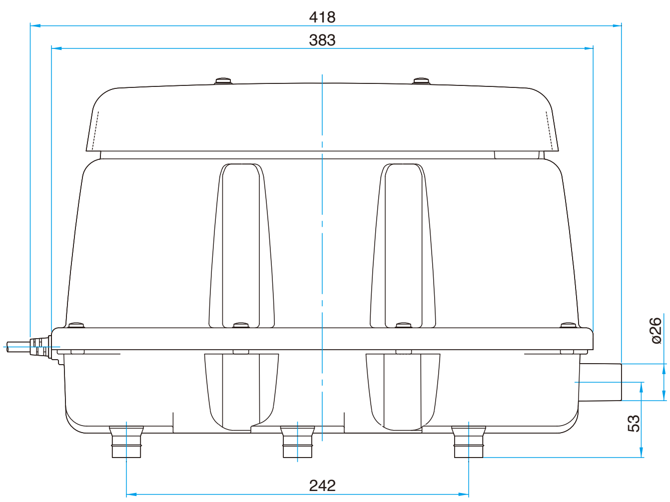
油分离分离器
/ Grease Trap

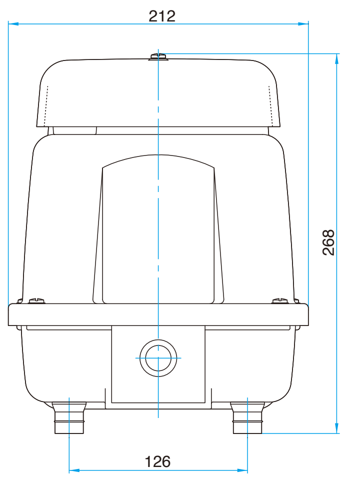


曝气式净化槽
/ Home Aerobic Sewage Treatment System



外形尺寸图 / External Dimensions (单位 / Unit : mm)





压电泵 /Piezoelectric Pump

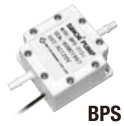
BIMOR PUMP

BPHS-414 Type

BPHS-474 Type

BPH Type

BPF Type



BPS Type

定制模型 / Made to order model

这些模型是按订单生产的模型。请委托附近的代理商报价。

These models are made-to-order models. Please send a request for quotation to your nearest distributor.

*外观图请浏览71页。/ Please see page 71 for external dimensions.

规格/Specifications

电压/Voltage(AC) — 120 V *1					电压/Voltage(AC) — 240 V *1					接液材料/ Liquid Surface Materials			本体重量 / Weight (g)
型号/ Model	消耗电流 / Current (mA)	自吸力*2 / Self-priming Pressure (kPa)	流量*2 / FlowRate (mL/min)	吐出压力 / Discharge Pressure (kPa)	型号/ Model	消耗电流 / Current (mA)	自吸力*2 / Self-priming Pressure (kPa)	流量*2 / FlowRate (mL/min)	吐出压力 / Discharge Pressure (kPa)	壳体 / Housing	接液板 / Liquid Contact Sheet	止回阀/O形环 / Valve / O-ring	
—	—	—	—	—	BPS-215i	1.8	3	30	15	PP	PP	IIR	40
—	—	—	—	—	BPS-235G	1.8	1.5	30	15	POM	PTFE	FKM	40
BPH-214i	15	8	350	18	BPH-214i	7.5	8	350	18	PP	PP	IIR	130
—	—	—	—	—	BPH-214D	7.5	8	350	18	PP	PP	VMQ	130
—	—	—	—	—	BPH-414i	15	12	500	35	PP	PP	IIR	140
BPH-414D	30	12	500	35	BPH-414D	15	12	500	35	PP	PP	VMQ	140
—	—	—	—	—	BPH-414E	15	12	500	35	PP	PP	EPDM	140
BPH-414G	30	10	450	32	BPH-414G	15	10	450	32	PP	PTFE	FKM	140
BPH-474G	30	10	400	35	—	—	—	—	—	PPS	PTFE	FKM	170
BPH-474P	30	10	400	35	—	—	—	—	—	PPS	PTFE	FFKM/FEP	170
—	—	—	—	—	BPHS-414i	15	12	700	35	PP	PP	IIR	160
—	—	—	—	—	BPHS-414E	15	12	700	35	PP	PP	EPDM	160
—	—	—	—	—	BPHS-414G	15	12	700	35	PP	PTFE	FKM	160
—	—	—	—	—	BPHS-474G	15	10	500	35	PPS	PTFE	FKM	180
—	—	—	—	—	BPHS-474P	15	10	500	35	PPS	PTFE	FFKM/FEP	180
BPF-465P	30	10	400	35	BPF-465P	15	10	400	35	PFA	PTFE	FFKM/FEP	350

*1) 记载为电源频率60 Hz时，使用25℃水的性能，50 Hz时流量减少20%。
/ The above performance is obtained by using 25°C water at AC frequency 60 Hz. When the pump is used at AC frequency 50 Hz, the flow rate will decrease by approximately 20%.

*2) 液体在低温的情况下，逆止阀会硬化，流量和自吸力会下降。
特别是氟橡胶，在5℃时流量会减半，所以请选择比较宽裕的规格。
粘度高的液体流量会降低，请根据实际情况来确认。
/When the liquid temperature is low, the check valve will harden. As a result, the flow rate and the self-priming pressure will decrease. For fluorine rubber in particular, the flow rate will decrease by half at 5°C, so select a pump with sufficient allowance. Since highly viscous liquids decrease the flow rate, please check the flow rate with an actual pump before use.

材料说明 / Material Description

- **EPDM** ········ 乙丙橡胶 / Ethylene Propylene Rubber
- **FEP** ··········· 氟乙烯丙烯 / Fluoroethylene Propylene
- **FFKM** ········ 全氟 / Perfluoroelastomer
- **FKM** ·········· 氟橡胶 / Fluorine Rubber
- **IIR** ············· 丁基橡胶 / Butyl Rubber
- **PFA** ··········· 氟树脂(全氟烷氧基) / Fluororesin (Perfluoroalkoxy)
- **POM** ·········· 聚缩醛 / Polyacetal
- **PP** ·············· 聚丙烯 / Polypropylene
- **PPS** ··········· 聚苯乙烯磺酸 / Polyphenylene Sulfide
- **PTFE** ········· 四氟树脂 (聚四氟乙烯) / Tetrafluororesin (Polytetrafluoroethylene)
- **VMQ** ·········· 二甲基硅橡胶 / Dimethyl Silicone Rubber

合适的/不合适的化学液体/Suitable / Unsuitable Chemical Liquids

型号/ Model	○ 适用介质 / Examples of suitable chemical liquids		× 不适用介质 / Examples of unsuitable chemical liquids	
BPS-215i BPH-214i BPH-414i BPHS-414i	乙醇、稀盐酸、碳酸钠、苯甲醛、甲醛水	Ethanol, Dilute hydrochloric acid, Sodium carbonate, Benzaldehyde, Formalin	二甲苯、矿物油、四氯化碳、三氯乙烯、甲苯、苯	Xylene, Mineral oil, Carbon tetrachloride, Trichloroethylene, Toluene, Benzene
BPH-414E BPHS-414E	氨水、乙醇、稀盐酸、苛性钾、苛性苏打、甲醇	Ammonia water, Ethanol, Dilute hydrochloric acid, Caustic potash, Caustic soda, Methanol	二甲苯、矿物油、四氯化碳、三氯乙烯、甲苯、苯	Xylene, Mineral oil, Carbon tetrachloride, Trichloroethylene, Toluene, Benzene
BPS-235G	乙醇、二甲苯、硅油、煤油、甲苯、苯	Ethanol, Xylene, Silicone oil, Kerosene, Toluene, Benzene	氨水、盐酸、过氧化氢、次氯酸钠、硝酸、硫酸	Ammonia water, Hydrochloric acid, Hydrogen peroxide, Sodium hypochlorite, Nitric acid, Sulfuric acid
BPH-214D BPH-414D	氨水、乙醇、次氯酸钠、甲醇	Ammonia water, Ethanol, Sodium hypochlorite, Methanol	苛性苏打、四氧化碳、硅油、三氯乙烯、甲苯、苯	Caustic soda, Carbon tetrachloride, Silicone oil, Trichloroethylene, Toluene, Benzene
BPH-414G BPHS-414G	乙醇、过氧化氢、矿物油、次氯酸钠	Ethanol, Dilute hydrogen peroxide, Mineral oil, Sodium hypochlorite	丙酮、氨水、冰醋酸、氟酸、甲醛水	Acetone, Ammonia water, Glacial acetic acid, Hydrofluoric acid, Formalin
BPH-474G BPHS-474G	乙醇、二甲苯、四氧化碳、硅油、三氯乙烯	Ethanol, Xylene, Carbon tetrachloride, Silicone oil, Trichloroethylene	丙酮、氨水、氯磺酸、冰醋酸、氟酸、甲醛水	Acetone, Ammonia water, Chlorosulfonic acid, Glacial acetic acid, Hydrofluoric acid, Formalin
BPH-474P BPHS-474P	乙醇、三氯甲烷、冰醋酸、苯、甲基乙基酮	Ethanol, Chloroform, Glacial acetic acid, Benzene, Methyl ethyl ketone	氯磺酸、氟油、氟碳致冷剂 R-112、氟碳致冷剂 R-113	Chlorosulfonic acid, Fluorine oil, CFC 112, CFC 113
BPF-465P	乙醇、王水、臭氧、四氧化碳、浓硝酸、浓硫酸、发烟硫酸	Ethanol, Aqua regia, Ozone, Carbon tetrachloride, Concentrated nitric acid, Concentrated sulfuric acid, Fuming sulfuric acid	氟油、氟碳致冷剂 R-112、氟碳致冷剂 R-113	Fluorine oil, CFC 112, CFC 113

*本图表仅供参考。请在使用条件下确认后再使用。/ This chart is for reference only. Please confirm the suitability under the operating conditions before use.

其他产品 / Other Product

切削液收集装置 /Cutting oil collecting unit

型号 HK-400A

CE 24 V　UK CA 24 V

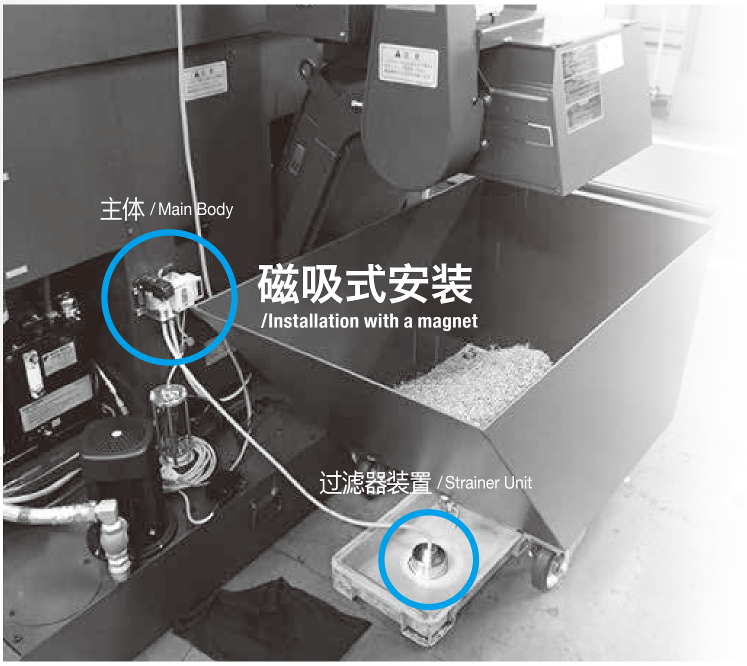
HK-400A 用于收集机床溢出的少量切削液。

/ The HK-400A collects small amounts of cutting oil that spill from machine tools.

＊同时兼容油性和水溶性切削液

/ Compatible with oil-based cutting oils and water-soluble cutting oils

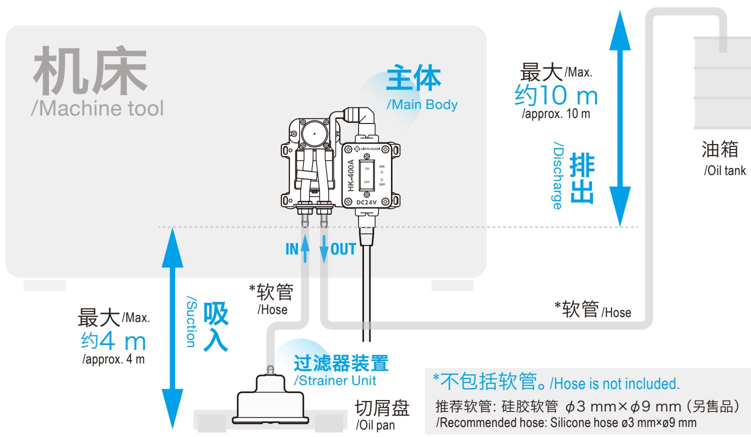
- **用磁铁安装于设备的侧面。**
  / Install on the side of machines with a magnet.
- **无需空气管道。**
  / No air piping required.
- **替代真空喷射器，更省能源。**
  /Save energy by switching from vacuum ejectors.
- **配有过滤器，可防止吸入铝屑。**
  /Comes with a strainer to prevent suction of cutting chips.
- **可以进行气液混合吸引，即使空转也不用担心马达烧毁。**
  /Capable of suction of gas & liquid mixture, no worry of motor burns even when idling.



规 格 / Specifications

额定电压 / Rated Voltage		24 V DC
最大电流 (*1、作业压力范围、流体：水 25℃) / Maximum current (*1, Operating pressure range, Fluid: Water 25°C)		450 mA
流量 (*1、*3、*4、开放式排液 (0 kPa)、流体：水 25℃) / Flow rate (*1, *3, *4, open discharge (0 kPa), Fluid: Water 25°C)		400 mL/min 0.0141 cfm
作业压力范围 (*1、*2、流体：水 25℃) / Operating pressure range (*1, *2, Fluid: Water 25°C)		0 ~ 100 kPa (0 ~ 1 kgf/cm^2) 0 ~ 1 bar 0 ~ 14.2 psig
自吸力 (*1、*3、流体：空气 20℃) / Self-priming pressure (*1, *3, Fluid: Air 20°C)		40 kPa 0.4 bar 5.69 psig
额定时间 (流体：水 25℃) / Duty cycle (Fluid: Water 25°C)		连续 / Continuous
耐用时间 (*5) / Rated performance (*5)		6000 小时 (MTTF) / 6000 hours (MTTF)
断路器额定电流 / Circuit breaker rated current		1 A
电源箱防尘防水防护等级 / Circuit Breaker Box protection grade		IP65
适用流体 / Applicable fluid		切削液（水溶性和非水溶性）/ Cutting oil (water-soluble and water-insoluble)
推荐流体粘度 (*4、*6) / Recommended fluid viscosity (*4, *6)		30 mPa•s or less
使用场所 / Place of use		室内 / Indoors
外观尺寸 / External dimensions		119 mm (L)×118 mm (W)×81 mm (H) 4-11/16"(L) x 4-41/64"(W) x 3-3/16
重量 / Weight	主体（泵、电源盒）/ Main Body (Pump Unit, Circuit Breaker Box)	0.6 kg 1.32 Lbs
	电源线 / Power Cable	0.3 kg 0.66 Lbs
	过滤器装置 / Strainer Unit	0.3 kg 0.66 Lbs

安装示例 / Installation examples



*不包括软管。/Hose is not included.
推荐软管：硅胶软管 ϕ3 mm×ϕ9 mm（另售品）
/Recommended hose: Silicone hose ø3 mm×ø9 mm

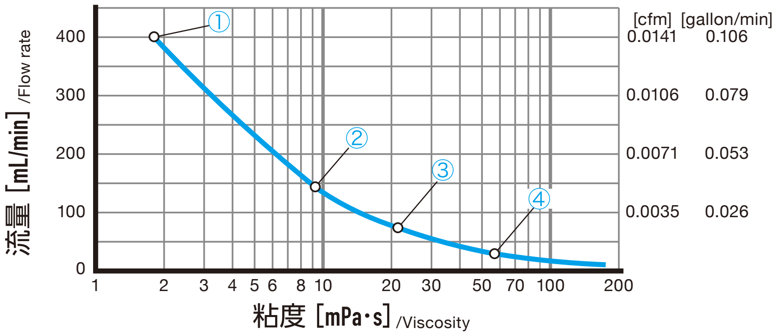
*1: 该条件主要适用于额定电压、冷却装置及初始运行。/Conditions are for rated voltage, cool unit, and initial operation.
*2: 本产品不可从压力关闭状态重启或于工作压力范围外使用。/The product cannot be restarted from the closed pressure state or used beyond the working pressure range.
*3: 流体温度下降后，止回阀变硬，流量和自吸力随之降低。/When the fluid reaches a low temperature, the check valve hardens and the flow rate and self-suction power will decrease.
*4: 收集高粘度切削液（2 mPa・s 或以上）时，流量降低。尤其是在使用非水溶性切削液时，流体粘度会随温度变化剧烈波动，因此请检查泵是否可以在实际操作条件下使用。
/When highly viscous cutting oil (2 mPa•s or more) is collected, the flow rate decreases. Especially when using with water-insoluble cutting oil, the fluid viscosity fluctuates significantly according to temperature change, so check whether the pump can be used under actual operating conditions.
*5: 耐用时间（MTTF：平均失效前时间）是指在额定电压、开放式排液（0 kPa）和 25℃水温下，流量降低到规定值的 80%（320 mL/min) 或以下时已累积作业时间的平均值。耐用时间因作业条件（作业压力、作业流体温度、作业流体粘度、作业环境等）而异。/Rated performance (MTTF: Mean Time to Failure) is the mean value of the accumulated operating time at the rated voltage, open discharge (0 kPa) and water temperature of 25°C and when the flow rate becomes 80% (320 mL/min) or less of the specified value.
*6: 动粘度 [mm^2/s] 到粘度 [mPa s] 的换算请参照以下公式。
粘度 [mPa・s]= 动粘度 [mm^2/s]× 密度 [g/cm^3](动粘度 :1 mm^2/s= 1 cSt 粘度 :1 mPa・s= 1cP)
/The rated performance varies depending on the operating conditions (operating pressure, operating fluid temperature, operating fluid viscosity, operating environment, etc.).
Refer to the following formula for conversion from kinematic viscosity [mm^2/s] to viscosity [mPa•s].
Viscosity [mPa•s] = Kinematic viscosity [mm^2/s] × Density [g/cm^3]
(Kinematic viscosity: 1 mm^2/s = 1 cSt　Viscosity: 1 mPa•s=1 cP)

切削液收集能力 /Cutting oil collecting capability

* 请参考以下特性图和换算公式，确认产品是否适用。/*Refer to the characteristic diagram and conversion formula below and consider whether the product can be used or not.

粘度-流量特性图
/Viscosity vs. Flow Rate Characteristics

- 输入电源/Input power... 24 V DC 棕色线/Brown wire: +24 V
  蓝色线/Blue wire : GND
- 配管条件/Piping conditions... 硅胶软管内径/Silicone hose Inner diameter : ϕ3 mm, 长度/length: 4 m
  无扬程负荷/No lifting load



	液体种类 Liquid type	动粘度 Kinematic viscosity [cSt] [mm²/s] (40℃)	粘度 Viscosity [mPa·s] (24±1℃)	流量 Flow rate [mL/min] (24±1℃)
①	水 /Water	–	1.9	400
②	样品A /Sample A	7.0	9.4	145
③	样品B /Sample B	15.0	21.9	74
④	样品C /Sample C	32.5	56.8	27

粘度换算公式 /Viscosity conversion formula

粘度 [mPa・s] = 动粘度 [mm²/s] × 密度 [g/cm³]
(动粘度: 1 mm²/s = 1 cSt　粘度: 1 mPa・s=1 cP)

Viscosity [mPa•s] = Kinematic viscosity [mm²/s] × Density [g/cm³]
(Kinematic viscosity: 1 mm²/s = 1 cSt　Viscosity: 1 mPa•s = 1 cP)

●使用爱宕株式会社的数字粘度计VISCO低粘度样品适配器 (ULA) 的测量值。
●动粘度到粘度的换算请参照上述公式。有关所用切削油动粘度和密度的相关信息，请联系切削油制造商。
●特性图仅供参考，非保证值。
●基于不同的作业条件 (作业环境、液体类型、管道材料)，可能无法达到上述性能。尤其是使用不溶性切削油时，流体粘度会随温度变化剧烈波动，因此请于实际作业条件下确认泵是否可用。

- Viscosity is measured with the digital viscometer VISCO Low Viscosity Sample Adapter (ULA) manufactured by Atago Co., Ltd.
- Refer to the above formula for conversion from kinematic viscosity to viscosity. For the kinematic viscosity and density of the cutting oil used, contact the cutting oil manufacturer.
- Characteristic diagrams are for reference only and are not guaranteed values.
- The above performance may not be attained depending on the operating conditions (operating environment, liquid type, piping material). Especially when using water-insoluble cutting oil, the fluid viscosity fluctuates significantly depending on the

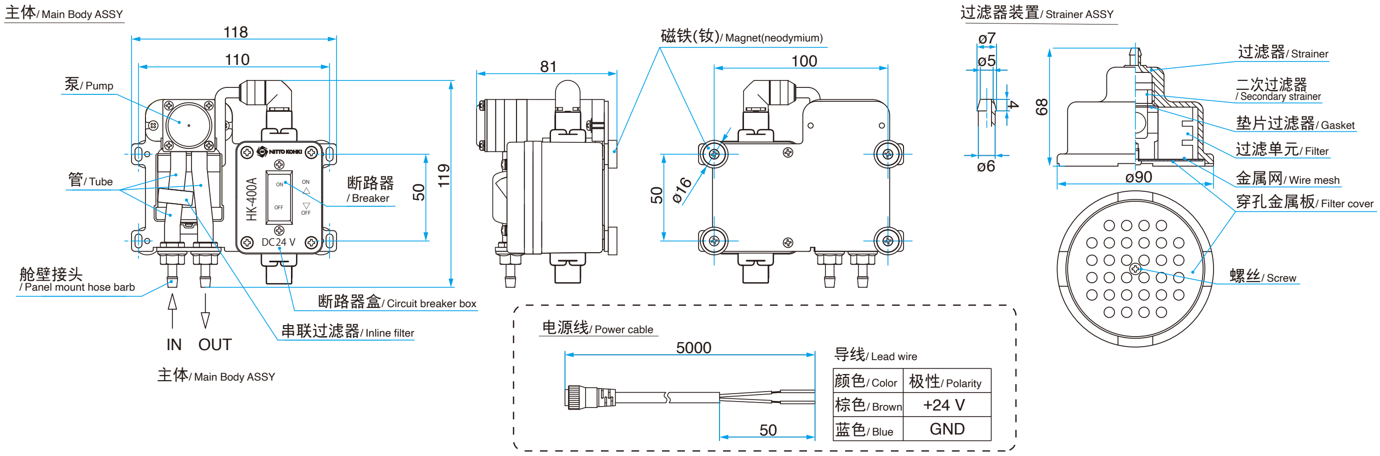
更换部件一览 / List of replacement parts

部件名称/Part Name	部件编号/Part No.		部件名称/Part Name	部件编号/Part No.	
泵单元/Pump Unit	LB09133		串联过滤器/Inline Filter	LB09137	
过滤单元/Filter Unit	LB09141		穿孔金属板/Filter Cover [部件构成] 穿孔金属板、螺丝 /[Components] Filter Cover, Screw	LB09139	
电源线 (5 m) /Power Cable (5 m)	LB09140		断路器盒 /Circuit Breaker Box	LB09608	
过滤器装置/Strainer Unit [部件构成] 过滤器、过滤单元、金属网、穿孔金属板、螺丝 /[Components]Strainer, Filter Unit, Screw, Wire Mesh, Filter Cover	LB09134		金属网/Wire Mesh	LB09138	
连接器盖/Connector Cover	LB09994				

选购件 /Optional accessory

部件名称/Part Name	部件编号/Part No.	
硅胶软管 /Silicone Hose (ø3×ø9×4000 mm)	LB09135	

外形尺寸图 / External Dimensions (单位 / Unit : mm)



Linicon®（真空泵 / Vacuum Pump）

型号 LV-125A

CE 230 V　UKCA 230 V

无油压缩机 / Oil-less Compressor

- **AC 线性自由活塞真空泵**
  / AC linear free piston vacuum pump
- **配备保险丝和可拆卸电源线**
  / Equipped with fuse and removable power cable
- **小型 / 轻量** / Compact and lightweight
- **低噪音** / Low noise level
- **无油式结构** / Oil-less construction

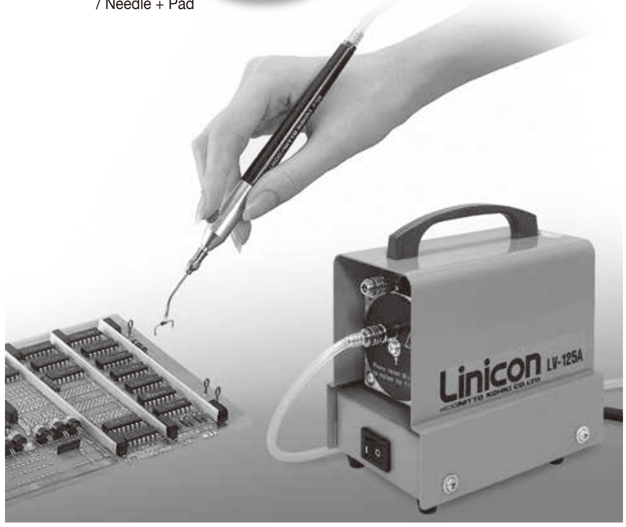
规 格 / Specifications

额定电压 / Rated Voltage	115 V AC	230 V AC
额定频率 / Rated Frequency	60 Hz	50 Hz
消耗功率 / Power Consumption	14 W	15 W
达到真空度 / Maximum Vacuum	-33.3 kPa (-250 mm Hg, -333 mbar, -9.84 in. Hg)	
安装尺寸 / Dimensions	135 (L) x 91 (W) x 146 (H) mm (5-5/16" x 3-37/64" x 5-3/4")	
额定时间 / Duty Cycle	连续 / Continuous	ON: 10 min, OFF: 10 min or ON: 15 min, OFF: 20 min
线圈绝缘等级 / Coil Insulation Class	相当于 B 类 Class B equivalent	相当于 E 类 Class E equivalent
本体重量 / Weight	1.5 kg (3.3 Lbs)	

可选配件 / Optional Accessories

① LB07629 镊子 / Vacuum pen assembly
② LQ01267 镊 3 x 5 x 2000 / Tube 3 x 5 x 2000
③ LA71242 吸针 1 x 1.5 x 40 (6 pcs/set) / Needle 1 x 1.5 x 40 (6 pcs/set)
④ LA71251 衬垫 6 mm dia. / Pad 6 mm dia.
⑤ LA71249 衬垫 4 mm dia. / Pad 4 mm dia.
⑥ LA71143 台架 / Pen stand

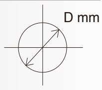
***LA71069 真空拾取套装 P-100 包括 ① – ⑤**
LA71069 Vacuum Pick-Up Set P-100 includes ① – ⑤



出色的吸附力 / High Absorption Power

真空度 -33.3 kPa{-250 mmHg}、表面为光滑平面的情况
/ In the case that the depth of vacuum is -33.3 kPa (-250 mmHg) and the surface to be vacuumed is flat.

衬垫尺寸 / Pad Diameter	A 将吸附面水平吊上的吸附力 / Suction power when the adsorption face is placed horizontally and moved upward.	B 将吸附面垂直吊上的吸附力 / Suction power when the adsorption face is placed vertically and moved laterally.
4 mm	20 g	10 g
6 mm	50 g	25 g

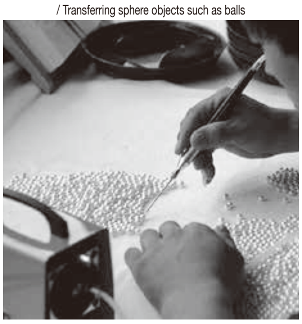


吸附力 /Adsorption power: $W\ (g) = D^2 \times 7.85 \times 250/736$

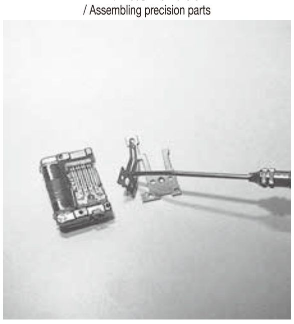
(A) 将吸附面水平吊上的时候：安全系数 0.5% 以下
A is calculated by multiplying the safety rate of 0.5 to the above equation, and then rounded.
(B) 将吸附面垂直吊上的时候：安全系数 0.25% 以下
B is calculated by multiplying the safety rate of 0.25 to the above equation, and then rounded.

用途例 / Application Examples

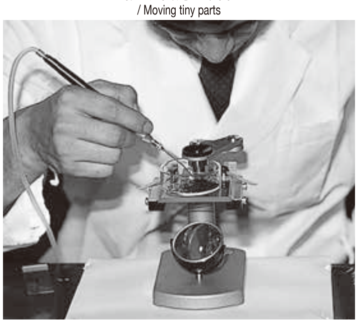
移送球形物体（如圆珠）
/ Transferring sphere objects such as balls



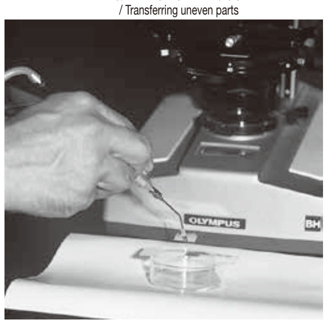
组装精密零件
/ Assembling precision parts



移动微小零件
/ Moving tiny parts



移送不平整零件
/ Transferring uneven parts



适用于移动 IC 和 LSI 等电子部件。也适用于手表等精密微型零件、化学品和其他小零件。
/ Most suitable for handling electronic parts such as ICs and LSIs. Also precise micro parts such as watches, chemicals and other small parts.

安全注意事项

使用产品前，请仔细阅读下述安全注意事项及产品附带的使用说明书。

压缩泵、真空泵的注意事项

⚠注意

⚠警告

请勿吸入、排出空气以外的流体。 否则可能会导致爆炸、火灾、触电。

使用时，请勿进水或沾水。 否则可能会因漏电而引起火灾、触电。

本机必须置入适当的壳体和有配线的机器内使用。 若未置入就使用，可能会造成火灾、触电、烫伤。

请勿对产品施加强烈冲击。 否则可能会造成性能及耐久性下降。

请勿超出本机规定的电源电压范围使用。 否则可能会因漏电而引起火灾、触电。	**请勿置于完全密封的箱（盒）内。** 否则可能会因漏电而引起火灾、触电。	**请在使用环境温度的范围使用。** 超出范围使用可能会导致火灾、触电。	**绝对不可对本机进行改造。** 否则可能会导致火灾、触电。
请勿在本机附近置放可燃物。 否则可能会引起火灾。	**请进行接地。（置于双重绝缘的设备时除外）** 若未接地可能会导致火灾、触电。	**用于产生气泡时，必须将本机安装在高于液面的位置。** 若安装在低于液面的位置，可能会因液体流入而引起触电。	**请勿将物品放置或掉落在导线上。** 导线损伤可能会导致火灾、触电。
请勿拉伸、损伤、强行弯曲、扭转、加热本机导线。 导线损伤可能会导致火灾、触电。	**请用焊接、压接、螺钉固定等方式，牢靠连接本机导线与置入设备之间的配线。** 连接不牢靠可能会引起火灾、触电。	**未接受过本公司技术指导的人员绝对不可进行拆解、修理。（按照使用说明书进行维护、检查除外）** 否则可能会因异常动作而引起火灾。	**清扫、更换过滤器时，请务必切断电源。** 否则可能会导致触电、受伤。

吸入空气中的水分、粉末、灰尘时，请安装将其除去的装置。 若吸入含有水分、粉末、灰尘等的空气，可能会导致触电。

曝气机的注意事项

⚠注意

⚠警告

请勿吸入、排出空气以外的流体。 否则可能会导致爆炸、火灾、触电。

请勿将曝气机设置在会进水和被雪埋没的场所。 否则可能会导致触电、火灾。	**请勿在高温、多湿环境下使用。** 否则可能会导致触电、故障、火灾。	**必须安装在高于水面的位置。** 否则可能会导致触电、故障。	**曝气机的电源请使用防水型插座。** 否则可能会导致触电、火灾。
请使用装有漏电断路器、过流断路器的电源。 否则可能会导致触电、火灾。	**电气施工必须由专业施工公司进行。** 否则可能会导致触电、火灾。	**绝对不可对本机进行改造。** 否则可能会导致触电、故障、火灾、事故。	**请勿在排出配管开放或闭锁的状态下使用。** 否则可能会导致触电、故障、火灾。
请勿使用各机种的标牌或者使用说明书上记载规格以外的电源。 否则可能会导致触电、故障、火灾。	**请勿湿手接触电源插头。** 否则可能会导致触电。	**请勿湿手接触电源插头。** 否则会导致触电。	**请将电源插头牢固的插到最深根部。** 否则会导致触电。
请勿在曝气机附近（约 50 cm）放置物品。 否则可能会导致触电、火灾。	**请勿在有汽油、稀释剂油漆，挥发油等可燃物场所使用本机。** 否则可能会导致火灾、爆炸。	**每年一次检查电源插头上是否附有灰尘。** 否则可能会导致触电、火灾。	**清扫、更换过滤器前，必须先将电源插头从电源插座拔出。** 否则可能会导致触电、受伤。
从电源插座拔出时，必须握住电源插头。 若抓住电源线拉拔，可能会导致触电、故障。	**再次起动运转，必须将拆下的过滤器外罩安装好。** 否则可能会导致触电、故障。	**请勿拆解、修理。** 否则可能会导致触电、故障、火灾、受伤。 任何维修，必须由日东经商授权的电工进行。	**请勿将箱子等物盖在曝气机上。** 否则可能会导致故障、火灾。

DC驱动泵的注意事项

本端子的＋端子或者红色导线连接到 DC 电源的＋端子。相反连接时，可能会导致故障或工作不良，还有耐用时间会变短。

液体泵的注意事项

⚠注意

⚠警告

使用前，请确认通机器的药品是否适合。 若没有确认就使用，可能会引起泄漏、爆炸、火灾、触电。

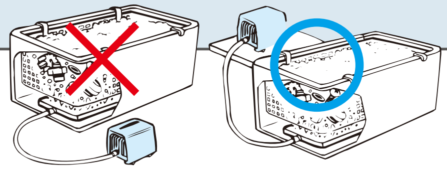
请勿吸入灰尘等固体物混入的液体。 若阀门沾着垃圾或者灰尘，性能无法很好的发挥。预测可能有垃圾或灰尘混入时，必须在吸入侧前端设置过滤器。	**请勿吸入有结晶化的流体。** 若阀门附着洁晶，性能无法很好发挥。事前，推荐使用流体的预备测试。	泵的性能值是在正确的安装方位（详见使用说明书）下测得的，因此可能会因安装方向，喷嘴朝向而略有变化。 由于虹吸现象，微小的液压液可能打开阀门。为了确保在泵停止时液体完全不流动，请将吐出口设置在供液箱的液面上，或安装止回阀。

压缩泵、真空泵使用时的注意事项

压缩泵，真空泵开放（压力 0 kPa）的状态下使用，真空泵吸入口关闭后使用，
或在最高压力下使用压缩泵时，请垂询本公司。

压缩泵，真空泵都是使用「自我冷却系统」，所以当超过额定压力使用时，某些机型的额定时间可能会变短。

- 需要延长额定时间时，推荐使用风扇冷却。
- 请勿在有可燃性液体气体的场所使用。
- 请勿在雨中或在潮湿的场所使用。
- 请勿在吸入腐蚀性气体的场所使用。
- 压缩泵必须在高出水面的位置使用。



异常时的措施

如发生以下情况，请马上停止使用并切断电源。确定停止工作后，请委托经销商进行维修。

- 不慎注入了润滑油等油时
- 不慎施加了强烈冲击（如掉落等）时
- 不慎流入了水时
- 发生冒烟、异臭、异音等异常状态时。

附带碳刷马达搭载机型的注意事项

伴随着工作时间的增加，绝缘抵抗值比初期值会下降。
马达外围和电源 GND 共同使用时，必须要注意。

产品保证以及免除责任事项

本公司产品根据以下条件，保证附带限制保证（[保证」）。
1. 期间：根据每个产品和其规格
2. 保证内容：由本公司判断 修理或者更换。请知悉，无法用现金退还。
3. 对象：指从本公司指定的销售店的正规购入者。
4. 担保不适用。

故障的原因无论符合哪种情况，都不保证。

- 本公司产品的使用方法以外使用的
- 本目录书记载的「规格」，使用说明书的记载以外使用的
- 使用与本目录书记载的「安全注意事项」相反的
- 除本公司以外改造，修理的原因
- 从本公司出货时的技术水准无法预知的原因
- 不可阻力或不是本公司起因事态的原因
- 关于设计、材质、品质以外的原因

责任界限

关于本公司及本公司产品的销售店的特殊损害或结果上造成的损害，
一概不负责任。还有，购买者的金钱上的责任也一概不负责。

Safety Guide

Be sure to carefully read the following precautions and the operation manual that comes with the product before use.

Precautions for Compressors and Vacuum Pumps

CAUTION

WARNING Do not let the unit draw in or discharge any gas other than air. This may cause an explosion, fire or electric shock.

Avoid drawing in water and splashing any water on the unit. Otherwise there is the risk of a short circuit causing a fire or electric shock.

The unit must be incorporated into a device that has an appropriate case and wiring. Not doing so may cause a fire, electric shock or burns.		Avoid any strong impact to the unit as this may reduce the performance and durability of the unit.	
Do not use the unit with a power supply other than the voltage shown on the unit. Doing so may cause a fire or electric shock.	Do not install the unit in a completely enclosed case (box) without proper or adequate ventilation. This may cause a fire or electric shock.	Use the unit within the proposed ambient temperature range. Using it out of the range may cause a fire or electric shock.	Units must not be modified. Modifications may cause a fire or electric shock.
Do not place combustible materials near the unit. This may cause a fire.	The grounding screw of the unit should be utilized, except when connected to a double insulation device. Not grounding the unit may result in a fire or electric shock.	The unit must be installed at a level higher than the water surface when it is used for bubbling. If the unit is installed at a level lower than the water surface, fluid may flow into the unit and cause an electric shock.	Do not allow anything to be placed on or to fall onto the lead wires. This may damage them and cause a fire or electric shock.
Do not pull, scratch, forcefully bend, twist or heat the lead wires. This may damage them and cause a fire or electric shock.	When incorporating the unit into a device, the lead wires from the unit should be connected securely to the wiring of the device by means of soldering, crimping or by the use of screws. Insufficient connections may cause a fire or electric shock.	The unit must not be disassembled or repaired by anyone other than a person who has received Nitto Kohki technical training. (Except in the case of filter and piston maintenance and inspection in accordance with the operation manual.) Otherwise it may result in a fire or electric shock.	The unit must be disconnected from its power source before cleaning or replacing filters. Failure to do so may result in an electric shock or injury.
When drawing in air contaminated with moisture, powder, or dust, add an external device to the unit for removing them. If these contaminants are drawn in, it may cause an electric shock. *Only for vacuum pumps.			

Precautions for Blowers

CAUTION

WARNING Do not let the unit draw in or discharge any gas other than air. This may cause an explosion, fire or electric shock.

Do not install the unit in a place where it may be soaked with water or covered with snow. This may cause an electric shock or fire.	Do not use the unit in hot and humid conditions. This may cause an electric shock, breakdown or fire.	Always place the unit above water level. Failure to do so may result in an electric shock or breakdown.	Use a waterproof wall outlet to supply power to the unit. Failure to do so may cause an electric shock or fire.
Use a power supply equipped with a ground-fault interrupter and overcurrent breaker. Failure to do so may cause an electric shock or fire.	Have a qualified electrician do the electrical work. Failure to do so may cause an electric shock or fire.	Never modify the unit. This may cause an electric shock, breakdown, or fire.	Do not use the unit with the outlet port closed or at free displacement. This may cause an electric shock, breakdown, or fire.
The power supply voltage must be limited to the individual unit specifications as stated on the nameplate or instruction manual. Failure to do so may cause an electric shock or fire.	Never touch the power plug with wet hands. This may cause an electric shock.	Insert the power plug securely into the innermost position. Failure to do so may cause an electric shock.	Do not put anything on the power cable. Doing so may cause a fire or electric shock.
Do not place anything near the unit (within about 50cm). Doing so may cause an electric shock or fire.	Do not use the unit in a place where flammable materials, such as gasoline, thinner, lacquer, benzene, etc. are being used. This may cause a fire or explosion.	Check the power plug at least once a year for dirt and dust and clean if necessary. Failure to do so may result in an electric shock or fire.	The power plug must be disconnected before the air filter is cleaned or replaced. Failure to do so may cause an electric shock or accident.
Always grasp the power plug to disconnect the unit from the socket. Pulling it out by the cord may cause an electric shock or breakdown.	Any removed air filter must be replaced before the operation is resumed. Failure to do so may cause an electric shock or breakdown.	Never try to disassemble or repair the unit. This may cause an electric shock, breakdown, fire or injury. Any repairs must be done by an electrician authorized by Nitto distributors.	Do not cover the Blower with a box or the like without proper or adequate ventilation. Doing so may cause a breakdown or fire.

Precautions for DC-Motor Pumps

Connect the plus terminal (If there is no indication of the plus terminal, use the terminal with a red mark as the plus terminal.) or the red lead wire of the unit to the plus terminal of the DC power source. Reverse connection may cause a breakdown, malfunction, or reduced rated performance.

Precautions for Liquid Pumps

CAUTION

WARNING Confirm the suitability of the liquid that passes through the unit before use. Failure to do so may cause a leak, explosion, fire or electric shock.

Avoid pumping liquids containing solid matter such as debris and dust. If debris or dust is expected to get into the liquid, take countermeasures, such as using a filter on the intake side.	Do not pump liquids that may crystallize. The valve will not perform as intended if crystals adhere to it. Preliminary testing on the unit with the liquid to be used is recommended.	The performance of the unit is measured with the pump in its proper mounting position, which is described in the user's manual. Different mounting positions or nozzle directions may result in different performances. Due to the siphon phenomenon, there is a risk the valve will open at even slight liquid pressures. To completely stop the flow when the pump is stopped, place the outlet port at a position higher than the level of the liquid in the liquid supply tank or install a check valve.

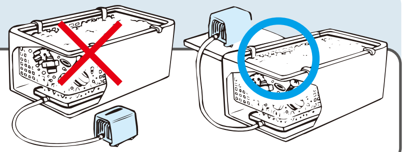
When Using Compressors and Vacuum Pumps

Check with our distributor in advance if you plan to use the compressor/vacuum pump at free displacement (0 kPa), or the vacuum pump with inlet port closed, or the compressor at maximum pressure.

As compressors and vacuum pumps employ a self-cooling system, if the units are used at more than the rated pressure, the duty cycle of some of the models will need to be shortened.

- When wanting to increase the duty cycle, it is recommended to use a fan to cool the compressor.
- Do not use the compressor near flammable liquid gas.
- Do not use the compressor in the rain or in wet and damp places.
- Do not allow the pump to draw in corrosive gas.

- Be sure to install and use the compressor at a position higher than water level.



Handling Problems

In any of the below cases, stop operation immediately, switch off the power and disconnect the unit from the power supply. Ask our distributor for repair.

- When oil such as a lubricant has been applied to the unit in error.
- When the unit has suffered a severe impact such as being dropped.
- When liquid such as water has entered into the unit by mistake.
- When an abnormal operation is observed, such as the emission of smoke, or an unusual smell or noise.

Precautions for Pumps with Brush Motor

As operational time is increased, the value of insulation resistance becomes lower than that of the initial insulation resistance. If the outer surface of motor and the grounding of the power source are connected, do a preliminarily check to assure no issues occur.

Our Product Warranty

Our Products are covered by a limited warranty ("Warranty") under the following conditions.
1. Duration: depends on individual products and their specifications
2. Service: repair or replacement at our option
   Please be aware that a warranty claim will not be reimbursed with a cash payment.
3. Object Person: original purchaser from our designated distributors

4. Out of Warranty

The following conditions are not covered by Warranty

- purchaser improperly used our products.
- purchaser did not comply with specifications and instructions stipulated in this Catalog when using our products, or
- purchaser did not comply with Caution for Safety stipulated in this Catalog when using our products, or
- repairing of our products was done by someone other than us, or
- We are not able to anticipate or predict such defects or causes of failure based on general technical knowledge of the specific application before or at the time of shipment, or
- defects are caused by the force majeure or other situations not attributable to us, or
- defects are not clearly attributable to us and
- defects are not about design, material or workmanship.

Limitation of Liability

We, including designated distributors, will not be liable for any special damages or consequential damages and will not have any monetary liability to purchasers.

CUPLA

快速流体接头"CUPLA"可以在各种流体管道中实现灵活、快速和安全的连接。

/CUPLA Quick Connect Couplings, Enable Flexible, Fast, and Secure Connections in Various Fluid Lines.

小巧型 ZEROSPILL 快速接头 /COMPACT ZEROSPILL CUPLA

小型・大流量/冷却水配管用
/Small, high flow type for coolant piping

最高使用压力 /Working pressure: 1.0 MPa {10 kgf/cm²}
阀门构造 /Valve structure: 双路开关型 /Two-way shut-off
适用流体 /Applicable fluids: 空气 /Air, 水 /Water

- 小巧型尺寸，省空间化。最大外径16mm(1/8")、18.5mm(1/4")
- 提高冷却效率，大流量。
- 单手操作(one-touch)，作业性强。
- 通过特有的 "减低液体泄漏阀门构造"，大幅度降低连接时，分离时的空气混入量以及液体泄漏量。

- Compact size saves space. Outer diameters of 16 mm (CZL-1SM) and 18.5 mm (CZL-2SM)
- High flow rate for efficient cooling.
- Easy operation, push-to-connect function.
- Valve structure reduces air inclusion on connection and liquid spillage when disconnecting.

立方形快速接头 /CUBE CUPLA

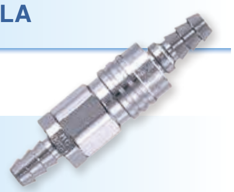
小型・轻量、空压机器配管用
/Small and lightweight coupling for air supply lines.

最高使用压力 /Working pressure: 1.0 MPa {10 kgf/cm²}
阀门构造 /Valve structure: 双路开关型 /Two-way shut-off, 单路开关型 /One-way shut-off, 单路开关型 /Straight through
适用流体 /Applicable fluids: 空气 /Air, 水 /Water

- 通过共计5种颜色，防止配管连接错误。
- 树脂材质，超轻量。小巧型设计，可节省空间。
- 按入即可连接。分离时也只需按一下按钮。
- 产品序列包括在插塞和套筒两边都内置阀门型，以及降低压力损失的无阀型。
- 新出了适合狭小空间配管上的L型插塞。

- In all five color variations to prevent piping mistakes.
- Ultra-lightweight, made of polyacetal resin. Compact design for space saving.
- Just push plug into socket for connection.
- Simply press the button on the socket for disconnection.
- Two-way shut-off type with valve on both sides and straight through type with low pressure loss are available.
- L type plug ideal for piping in narrow spaces are available.

微型快速接头 /MICRO CUPLA



空压控制器配管用
/For piping in pneumatic control devices

最高使用压力 /Working pressure: 1.0 MPa {10 kgf/cm²}
阀门构造 /Valve structure: 单路开关型 /One-way shut-off
适用流体 /Applicable fluids: 空气 /Air, 水 /Water

- 在套筒上配有阀门，小型、套环外径9.5mm。
- 与套筒、插塞的连接只要插入即可One-Touch连接。
- 节省空间的设计，适合有限空间内的配管作业。
- 本体为黄铜和不锈钢材质镀处理，有良好的耐腐蚀性。
- 各种标准化的安装形状，可满足多种多样的空压用途。

- Even though the valve is built in the socket, the sleeve outer diameter is confined to 9.5 mm.
- Push-to-connect design.
- Compact design for piping in narrow spaces.
- Plated brass and stainless steel bodies are available for excellent corrosion resistance.
- Available in various end configurations to satisfy a wide range of pneumatic applications.

SUPER CUPLA

轻量・小型空气配管用
/Light, compact for air piping connections

最高使用压力 /Working pressure: 1.0 MPa {10 kgf/cm²}
阀门构造 /Valve structure: 单路开关型 /One-way shut-off
适用流体 /Applicable fluids: 空气 /Air

- 部分主体材质为铝合金制，以实现轻便化。
- 插塞、套筒的连接只需插入即可One-Touch连接。
- 各种安装形状实现标准化，可用于广泛的空压用途。
- 也备有带TubeFitter的型号。

- Aluminum body is adopted for some models to reduce the weight.
- Just push the plug into socket for easy one hand connection.
- Available in various end configurations for a wide range of pneumatic applications.
- Also available with quick connect/disconnect Tube Fitter type.

HI CUPLA

通用型空气配管用
/Universal purpose couplings for air lines

最高使用压力 /Working pressure: 1.5 MPa {15 kgf/cm²}, 1.0 MPa {10 kgf/cm²}
阀门构造 /Valve structure: 单路开关型 /One-way shut-off
适用流体(钢铁仅适于空气) /Applicable fluids (Steel applies to air only): 空气 /Air, 水 /Water

- 有优越通用性的快速接头，可用于从工厂的空气配管到空气工具的软管连接的各类用途。
- 钢铁材质适用于空气，黄铜、不锈钢材质适用于水。
- 钢铁材质的重要构成部件经过热处理增加了强度。有良好的耐磨损性和耐久性。
- 主体材质与尺寸种类丰富，安装形状标准化，可用于广泛的空压用途。

- An excellent general purpose coupling for connecting factory air supply to pneumatic tools.
- Steel coupling is suitable for air. Brass or stainless steel is suitable for water.
- Critical structural parts of steel models are heat-treated for increased strength giving greater durability and resistance to wear.
- Available in various body materials, sizes and end configurations applicable to a wide range of applications.

塑料快速接头 /HI CUPLA ACE

轻量、带自动锁扣功能空气配管用
/Lightweight plastic coupling with automatic safety lock for air line applications

最高使用压力 /Working pressure: 1.5 MPa {15 kgf/cm²}, 1.0 MPa {10 kgf/cm²}
阀门构造 /Valve structure: 单路开关型 /One-way shut-off
适用流体 /Applicable fluids: 空气 /Air, 水 /Water

- 具有与金属制同等的耐压性能。
- 在连接的同时，内置有 "锁定结构"，可给套环上锁，防止意外脱离。
- 插塞、套筒的连接只需按入即可One -Touch连接。
- 重量仅有金属材质的约1/4，因此操作简便。
- 不仅适用于气流，也适用于水流。
- 流体可从插塞侧、套筒侧的双方向流动。

- Pressure ratings comparable to steel CUPLA.
- A built-in "lock mechanism" locks the sleeve upon connection, thus prevents accidental disconnection.
- Just push plug into socket for simple connection.
- The weight is a quarter of steel HI CUPLA for easy handling.
- Can be used for air and water.
- Air flows in either direction from plug or from socket side when coupled.

如需更多信息，请访问 https://www.nitto-kohki.co.jp/e/prd/d_cat/ 并在此处查看电子目录。

For more information, please visit https://www.nitto-kohki.co.jp/e/prd/d_cat/ and see our eCatalog here.

空气压缩泵/真空泵/液体泵

Air Compressors, Vacuum Pumps & Liquid Pumps

eCatalog
www.nitto-kohki.co.jp/e/prd/d_cat/

NITTO KOHKI CO., LTD.

总部/研究所/ Head Office

2-9-4, Nakaikegami, Ota-ku, Tokyo 146-8555, Japan
Tel: +81-3-3755-1111 Fax: +81-3-3753-8791 E-mail: overseas@nitto-kohki.co.jp
Web **www.nitto-kohki.co.jp/e/**

ISO9001 JQA-2025
ISO14001 JQA-EM4057
总部/研究所

海外关联公司/办事处 (Overseas Affiliates / Offices)

NITTO KOHKI U.S.A., INC.
46 Chancellor Drive, Roselle, Illinois 60172, U.S.A.
For Pump
Tel : +1-630-924-8811 Fax : +1-630-924-0808
For CUPLA
Tel : +1-630-924-5959 Fax : +1-630-924-1174
For Tool
Tel : +1-630-924-9393 Fax : +1-630-924-0303
www.nittokohki.com/

NITTO KOHKI EUROPE GMBH
Gottlieb-Daimler-Str. 10, 71144 Steinenbronn, Germany
Tel : +49-7157-989555-0 Fax : +49-7157-989555-40
www.nitto-kohki.eu/

NITTO KOHKI EUROPE GMBH UK Branch
Unit A5, Langham Park Industrial Estate, Maple Road,
Castle Donington, Derbyshire DE74 2UT, United Kingdom
Tel : +44-1332-653800 Fax : +44-1332-987273
www.nitto-kohki.eu/

NITTO KOHKI CO., LTD. Bangkok Representative Office
2 Jasmine Building, 22nd Floor, Soi Prasarnmitr(Sukhumvit23),
Sukhumvit Road, North Klongtoey, Wattana, Bangkok 10110, Thailand
Tel : +66-2612-7388
Thai www.nitto-kohki.co.jp/network/th/
Vietnamese www.nitto-kohki.co.jp/network/vi/

NITTO KOHKI CO., LTD. India Liaison Office
14th Floor, Tower 5B, DLF Epitome, DLF Cyber City, Phase 3, Gurugram,
Haryana 122002, India
Tel : +91-124-460-7701
www.nitto-kohki.co.jp/network/

NITTO KOHKI CO., LTD. Singapore Branch
18, Kaki Bukit Road 3, #02-12, Entrepreneur Business Centre, Singapore 415978
Tel : +65-6227-5360 Fax : +65-6227-0192
www.nitto-kohki.co.jp/network/

NITTO KOHKI CO., LTD. Indonesia Representative Office
Plaza Marein 23rd Floor Jl. Jend. Sudirman Kav. 76-78, Jakarta 12910, Indonesia
Tel : +62-21-8065-7808
www.nitto-kohki.co.jp/network/id/

NITTO KOHKI AUSTRALIA PTY LTD
77 Brandl Street, Eight Mile Plains, Queensland 4113, Australia
Tel : +61-7-3340-4600 Fax : +61-73340-4640
www.nitto-australia.com.au/

NITTO KOHKI (SHANGHAI) CO., LTD.
Room 2602, Shanghai International Trade Centre,
No.2201 Yan An West Road, Shanghai 200336, China
Tel : +86-21-6415-3935 Fax : +86-21-6472-6957
www.nitto-kohki.cn/

NITTO KOHKI (SHANGHAI) CO., LTD. Shenzhen Branch
Room 708, Building 1, Wanting Building, No. 2009 Baoyuan Road,
Baoan District, Shenzhen, Guangdong 518102, China
Tel : +86-755-8375-2185 Fax : +86-755-8375-2187
www.nitto-kohki.cn/

日东工器省力机器贸易(上海)有限公司

NITTO KOHKI (SHANGHAI) CO., LTD.

地址: 上海市长宁区延安西路2201号 上海国际贸易中心2602室 邮政编码200336
电话: **021-6415-3935** 传真: **021-6472-6957**
邮箱: **sh-office@nitto-kohki.cn**

www.nitto-kohki.cn

日东工器省力机器贸易（上海）有限公司 深圳分公司

地址: 深圳市宝安区宝源路2009号万庭大厦1栋708室 邮政编码 518102
电话: **0755-8375-2185** 传真: **0755-8375-2187**
邮箱: **szn-office@nitto-kohki.cn**

销售代理商:

⚠为了您能正确安全的使用本公司的产品，在使用前请务必仔细阅读 “使用说明书” 以及 “注意书”。To use your unit properly, be sure to carefully read the “instructions” before use.

本产品样本为2024年05月制作。如产品改良，内容可能发生变化。恕不另行通知，敬请谅解。/このカタログの記載内容は2024年05月現在のものです。改良のため予告なしに変更する場合がありますのでご了承ください。

Printed in China 24ECn-①