

压电泵 / Piezoelectric Pump

BIMOR 泵 / BIMOR PUMP



液体可抽吸!

Suitable for pumping liquids

用途例 / Applications

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

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.

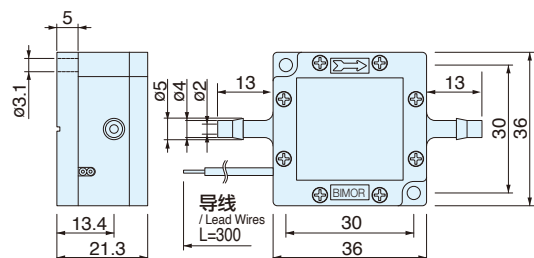
Application versatility

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.

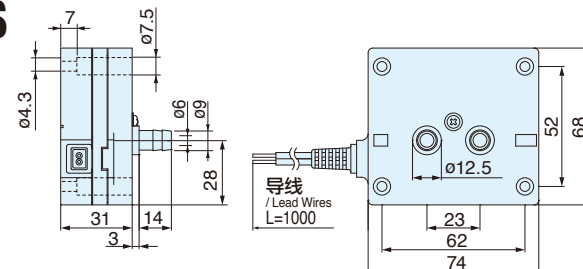
外形尺寸图/ External Dimensions (単位/ Unit : mm)

BPS

型号/type

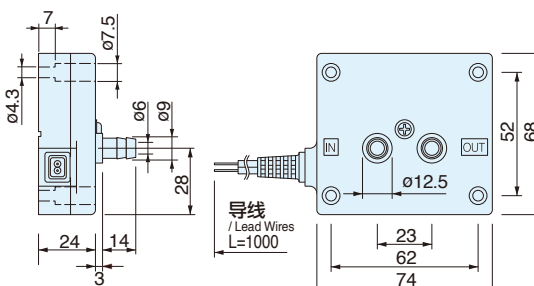
**BPHS**

型号/type



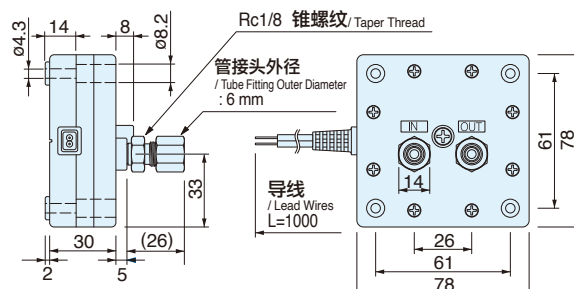
BPH

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	BPS-215i*3	1.8	3	30	15	PP	PP	IIR	40
—	—	—	—	—	BPS-235G*3	1.8	1.5	30	15	POM	PTFE	FKM	40
BPH-214i*3	15	8	350	18	BPH-214i*3	7.5	8	350	18	PP	PP	IIR	130
—	—	—	—	—	BPH-214D*3	7.5	8	350	18	PP	PP	VMQ	130
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-414i*3	15	12	500	35	PP	PP	IIR	140
BPH-414D*3	30	12	500	35	BPH-414D*3	15	12	500	35	PP	PP	VMQ	140
BPH-414E	30	12	500	35	BPH-414E*3	15	12	500	35	PP	PP	EPDM	140
BPH-414G*3	30	10	450	32	BPH-414G*3	15	10	450	32	PP	PTFE	FKM	140
BPH-474G*3	30	10	400	35	BPH-474G	15	10	400	35	PPS	PTFE	FKM	170
BPH-474P*3	30	10	400	35	BPH-474P	15	10	400	35	PPS	PTFE	FFKM/FEP	170
—	—	—	—	—	BPHS-414i*3	15	12	700	35	PP	PP	IIR	160
—	—	—	—	—	BPHS-414E*3	15	12	700	35	PP	PP	EPDM	160
—	—	—	—	—	BPHS-414G*3	15	12	700	35	PP	PTFE	FKM	160
—	—	—	—	—	BPHS-474G*3	15	10	500	35	PPS	PTFE	FKM	180
—	—	—	—	—	BPHS-474P*3	15	10	500	35	PPS	PTFE	FFKM/FEP	180
BPF-465P*3	30	10	400	35	BPF-465P*3	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℃ 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 fluoro rubber in particular, the flow rate will decrease by half at 5℃, 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) 按订单生产的型号。请委托附近的代理商报价。/ Made-to-order models. Please send a request for quotation to your nearest distributor.

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)

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: fluoro rubber (FKM)
P:全氟 / P: Perfluoroelastomer (FFKM)

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

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 / Fluoro 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) / Tetrafluoroelastomer (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-214E 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、四氯化碳、硅油、三氯乙烯、甲苯、苯	Caustic soda, Carbon tetrachloride, Silicone oil, Trichloroethylene, Toluene, Benzene
BPH-214G BPH-414G BPHS-414G	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 BPHS-474G	乙醇、二甲苯、四氯化碳、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、四氯化碳、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。请在适用条件下确认后在使用。/ This chart is for reference only. Please confirm the suitability under the operating conditions before use.