



液体泵

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

压电泵 / PIEZOELECTRIC PUMP

# BIMOR PUMP

## 液体和气体均可抽吸!

Suitable for pumping both liquids and gases!

### 小型、轻量、长寿命、低噪音


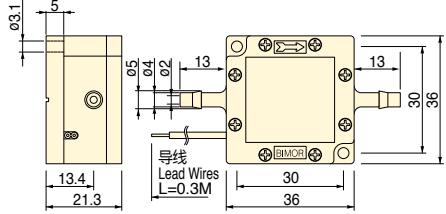

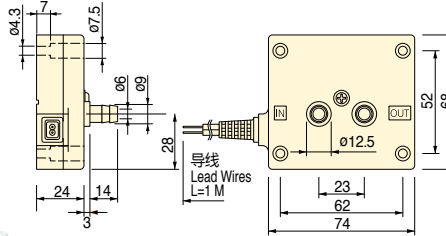

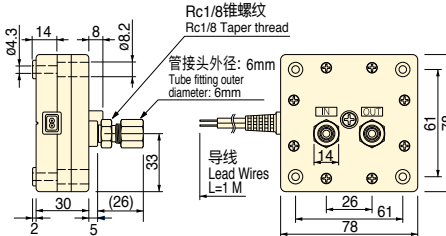
由于压电双晶片也起到隔膜的作用，无马达、旋转轴和其他复杂机构，因此振动小、故障少。BIMOR®泵比传统泵重量更轻、噪音更低、寿命更长。

已实现60个月免维护连续运转。

### Compact, lightweight, durable & quiet

As the Bimorph also acts as a diaphragm it has no motors or shafts or other troublesome mechanisms, and thus minimal vibrations and fewer breakdowns. The Bimor is lighter, quieter and more durable than traditional pumps. We have achieved maintenance free continuous operation for 60 months.



规格 / Specifications	外形尺寸 / Dimensions	额定电压 / Voltage(AC) — 120V 60Hz				
		型号 / Model	消耗电流 / Current (mA)	自吸力 / Self-priming Pressure (kPa)	流量 / FlowRate (mL/min)	吐出压力 / Discharge Pressure (kPa)
<b>BPS type</b> 		BPS-215i	3	3	30	15
		BPS-235G	3	1.5	30	15
<b>BPH type</b> 		BPH-214i	15	8	350	18
		BPH-214D				
		BPH-214E				
		BPH-214G	7	17		
		BPH-414i	30	12	500	35
		BPH-414D				
		BPH-414E				
		BPH-414G	450	32		
BPH-474G	10	400	35			
BPH-474P						
<b>BPF type</b> 		BPF-465P	30	10	400	35

### 性能数据是在额定条件下测得的。

- 1) 参考数据是使用25°C的水在空载条件下测得的。
- 2) 使用环境温度范围为5-50°C, 环境液体温度范围为5-50°C(不可冻结), 使用环境湿度范围为35-85% (不可凝结)。若液体温度过低, 止回阀会发生硬化, 从而会导致流量降低。上述条件适用于高粘度的液体。受所用液体或气体影响的材料包括泵壳、接液板、止回阀、O形环等。请确认它们是否适合所有使用条件。某些液体中的微量添加剂和复合材料可能在几个月后会对泵产生影响。
- 3) 可在低电压下使用本产品, 但这会导致出口压力变低。
- 4) 若泵在实际应用中的配管或安装位置受限, 其性能可能会有所损失。
- 5) 以上性能数据是在所述的额定条件下测得的。

### The performance data is measured at the rated conditions.

- 1) The reference data is based on water at 25 degrees Celsius with unloaded condition.
- 2) The ambient operating temperature range is from 5 to 50 degrees Celsius, the ambient liquid temperature range is from 5 to 50 degrees Celsius (non-freezing), and the ambient operating humidity range is from 35 to 85% (non-condensing). When the liquid temperature is low, the valve will be hardened. As a result, the flow rate will be decreased. This could be applied for liquids with high viscosity. The materials that will be under influence of the applied liquids or gases are the housing, liquid contact sheets, valves, and O-rings. Please confirm the suitability under any applied conditions. Any minute quantities of additives and composite materials found in certain liquids may influence the performance of the unit several months later.
- 3) You may use the product at low voltage, but it will result in lower outlet pressure.
- 4) Performance may be compromised by restrictive tubing/piping or mounting position of the pump in the application.
- 5) The above performance data is measured at the rated condition as we described.

注: BIMOR®泵在任何用途中均不具备防爆结构。为确保安全, 请在配线时安装隔离变压器或类似的保护装置。

Note: The Bimor does not fulfill explosion-proof construction in any applications. Please install isolating transformers or similar protective devices on the wiring for your safety.

## 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。

## Low power consumption & electromagnetic noise

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

## 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。

## Simple flow rate adjustment

As the flow rate of the Bimor 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.

## 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。

## 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 or gas application. The Bimor is currently employed in a variety of different fields including medicine, scientific research, and the PC and chemical industries. The following "Examples of suitable chemical liquids and gases" should be used for reference only. Please confirm the suitability under any applied conditions by yourself.

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。

## 用途例 / Applications



- 供排 / For supply and drainage
- 冷却循环 / For cooling circulation
- 医用灌注 / For medical injection
- 取样 / For sampling



- 压力膨胀 / For pressure expansion
- 取样(吸气) / For sampling (inhale)

额定电压 / Voltage(AC) — 230V 50Hz						接液材料 / Liquid Surface Materials			重量 Mass (g)	适用介质 / Examples of suitable chemical liquids and gases	不适用介质 / Examples of unsuitable chemical liquids and gases
型号 / Model	消耗电流 / Current (mA)	自吸力 / Self-priming Pressure (kPa)	流量 / FlowRate (mL/min)	吐出压力 / Discharge Pressure (kPa)	泵壳 / Housing	接液板 / Liquid Contact Sheet	止回阀 / O形环 Valve/O-ring				
BPS-215i	4	0.4	10	10	PP	PP	IIR	40	乙醇、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	
BPS-235G									POM	PTFE	FKM
BPH-214i	15	7	220	18	PP	PP	IIR	140	乙醇、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-214D							VMQ		氨水、乙醇、稀过氧化氢、次氯酸钠、甲醇 Ammonia water, Ethanol, Dilute hydrogen peroxide, 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-214E							EPDM		氨水、乙醇、盐酸、苛性钾、苛性苏打、甲醇 Ammonia water, Ethanol, 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	
BPH-214G							FKM		乙醇、稀过氧化氢、矿物油、甲醇 Ethanol, Dilute hydrogen peroxide, Mineral oil, Sodium hypochlorite	丙酮、氨水、冰醋酸、氢氟酸、甲醛水 Acetone, Ammonia water, Glacial acetic acid, Hydrofluoric acid, Formalin	
BPH-274G	15	7	250	35	PPS	PP	IIR	170	乙醇、盐酸、碳酸钠、苯甲醛、甲醛水 Ethanol, 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	
							VMQ		氨水、乙醇、稀过氧化氢、次氯酸钠、甲醇 Ammonia water, Ethanol, Dilute hydrogen peroxide, 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	
							EPDM		氨水、乙醇、盐酸、苛性钾、苛性苏打、甲醇 Ammonia water, Ethanol, 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	
							FKM		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、氢氟酸、甲醛水 Acetone, Ammonia water, Glacial acetic acid, Hydrofluoric acid, Formalin	
BPH-274P	15	7	250	35	PPS	PPS	FFKM FEP	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、氢氟酸、甲醛水 Acetone, Ammonia water, Chlorosulfonic acid, Glacial acetic acid, Hydrofluoric acid, Formalin		
BPF-265P							PFA	FFKM FEP	乙醇、王水、臭氧、四氯化碳、浓硝酸、浓硫酸、发烟硝酸 Ethanol, Aqua regia, Ozone, Carbon tetrachloride, Concentrated nitric acid, Concentrated sulfuric acid, Fuming sulfuric acid	氟油、CFC112、CFC113 Fluorine oil, CFC 112, CFC 113	

BPS type

BPH type

BPF type

## 材料说明 / Material Description

- EPDM --- 乙丙橡胶 / Ethylene Propylene Rubber
- FEP --- 氟乙稀丙烯 / Fluoroethylene Propylene
- FFKM --- 氟橡胶(全氟) / Fluorine Rubber (Perfluoro)
- FKM --- 氟橡胶 / Fluorine Rubber
- IIR --- 丁基橡胶 / Butyl Rubber
- POM --- 聚缩醛 / Polyacetal
- PFA --- 氟树脂(全氟烷基) / Fluororesin (Perfluoroalkyl)
- PP --- 聚丙烯 / Polypropylene
- PPS --- 聚苯硫醚 / Polyphenylene Sulphide
- PTFE --- 四氟树脂(聚四氟乙烯) / Tetrafluoro resin (Polytetrafluoroethylene)
- VMQ --- 二甲甲基硅橡胶 / Dimethyl Silicon Rubber

## 耐久性 / Durability

### 寿命测试 / Longevity test

● 样品 / Sample A ● 样品 / Sample B ● 样品 / Sample C ● 样品 / Sample D

