

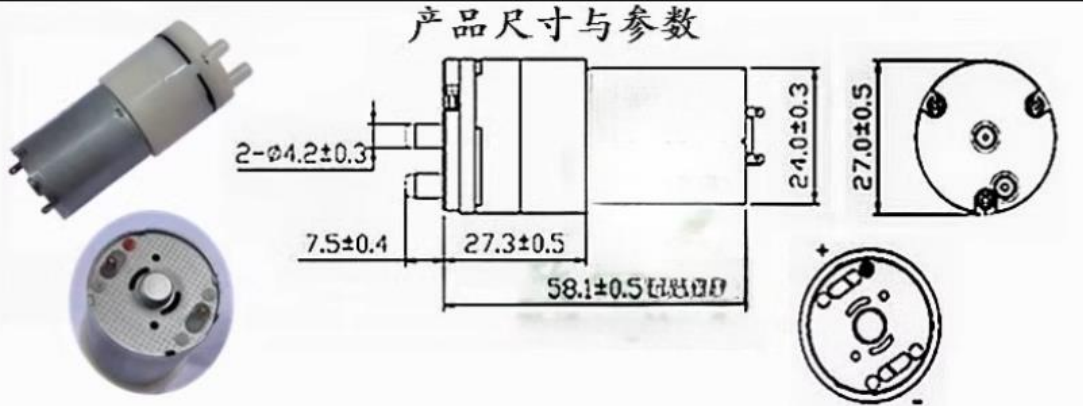
## 产品概述

微型气泵是指体积小,工作介质为气态,主用途分为:微型负压泵,微型真空泵,微型气体循环泵,腕式电子血压计气泵,微型气泵,微型气体采样泵,微型打气泵,微型抽气泵,微型抽气打气两用泵等。按工作原理分为:隔膜式、电磁式、叶轮式、活塞式等。

微型隔膜泵基本原理:电机的圆周运动,通过机械装置使泵内部的隔膜做往复式运动,从而对固定容积的泵腔内的空气进行压缩、拉伸形成真空(负压),在泵抽气口处与外界大气压产生压力差,在压力差的作用下,将气体压(吸)入泵腔,再从排气口排出。

应用范围:因为真空泵不会污染工作介质,而且具有体积小、噪音低、免维护,可以连续24小时运转等优点,所以微型气泵被作为动力装置,广泛用于气体采样、气体循环加速过滤、汽车真空助力、科研、仪器仪表、化工分析、医疗保健、医药卫生、生物工程,自动控制、环保、水处理、环保等领域得到了广泛的应用。致荣华冠微型气泵具有稳定可靠的性能,使用寿命长,符合国家环保要求的低能耗。

## 产品尺寸与参数



额定电压 (Rated Voltage)	DC4.5V	DC6.0V	DC12.0V	DC24.0V
电压范围 (Voltage Range)	DC4.05V-4.95V	DC4.8V-7.2V	DC10.8V-13.2V	DC21.6V-26.4V
负载电流 (Load current)	<500mA	<420mA	<280mA	<120mA
功率 (Power)	<2W	<2W	<2W	<2W
压力范围 (Pressure Range)	-450mmHg ~ 900mmHg (-60 Kpa ~ 120Kpa)			
流量 (Flow)	>2.8LPM			
噪音 (Noise)	泵体下垫 5cm 厚的海绵, 放置在噪音仪 30cm 位置, 额定电压下充气压力从 0 到 420mmHg 所测得的值小于 60dB。(Pump body underlay is 5 cm thick sponge, placed on the noise meter 30 cm, Rated voltage under inflation pressure from 0 to 420mmHg the measured value is less than 60dB)			
寿命 (Life)	气泵开 10 秒, 停 5 秒为一个周期测试 30,000 次, 测试在 15% 的衰减范围内。(pumping 10 seconds, on 5 seconds for a cycle, test for 30,000 cycles, the under performance range is within 15%.)			
工作介质 (Working Fluid)	空气(Air)			
使用温度 (Operating Temperature Range)	0° C-55° C			
产品净重 (Product net weight)	60g			

勝特力電材超市-龍山店 886-3-5773766  
 勝特力電材超市-光復店 886-3-5729570  
 勝特力电子(上海) 86-21-34970699  
 勝特力电子(深圳) 86-755-83298787  
<http://www.100y.com.tw>

## 常见客户问题

型号: ZR370-03PM 功率: 3 ~ 4W 电机: 有刷电机 DC直流电压

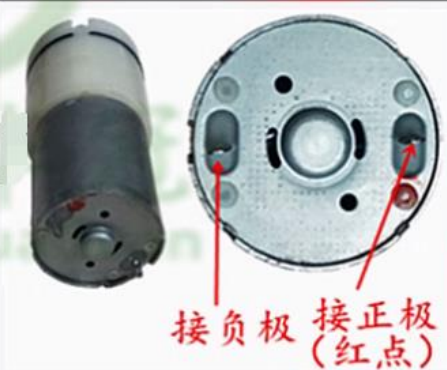
1. 关于同型号气泵各种电压有什么区别?  
产品电压越大, 电流越小, 耗电量随之就少  
电压的大小与压力无关, 与流量有关, 电  
压越大, 流量随之就大。产品型号相同,  
电压不同, 产品外观尺寸相同, 功能相同。

2. 关于气泵使用寿命。

气泵如果24小时连续不停的运转, 使用  
寿命是400~500H, 如果气泵不是连续  
运转, 间断使用, 气泵寿命有所延长。

3. 关于使用什么电源的问题。

本型号产品使用的是DC直流电压, 所以您  
需要正确选择匹配产品电压的直流电源,  
如: 电池、充电宝、电瓶等直流电压电源,  
如果您需要使用220V家用电, 您需要选择  
匹配的电源适配器进行转换才能使用。



**注意:** 本型号产品是充气抽气两用泵, 电机的正反转, 进出气口固定不变。

## 产品规格书

(PRODUCT SPECIFICATION)

1. 适用范围 (Application):

本规格书适用于微型气泵 ZR370-03PM DC4.5V DC 6.0V DC12.0V DC:24.0V 之用。(The specifications apply ZR370-03PM DC4.5V DC 6.0V DC12.0V DC:24.0V use.)

2. 测试条件 (Test condition):

2-1 测试环境温度湿度: 周围温度20℃, 相对湿度65%RH 为标准。如無爭議發生可以在下述環境測試:  
周圍溫度5-45℃, 相對濕度30-80%RH (The standard of environment test is the ambient temperature  
of 20℃ and relative humidity of 65%RH. If no disputes omlur, the test can be conducted under  
the below circumstance:the ambient temperature of 5-45℃and relative humidity of 30~80% RH.)

2-2 测试姿势 (position): 水平 (Horizontal)

2-3 负荷 (Load): 空氣正压900mmHg (air Positive pressure 900mmHg) 空氣负压450mmHg (Air Negative  
pressure >450mmHg)

3. 性能 (Function):

3-1 额定电压 (Rated voltage)	DC4.5V	DC 6.0V	DC 12.0V	DC24V
3-2 使用电压: (Operating voltage)	DC4.05V-4.95V	DC4.8V-7.2V	DC10.8V-13.2V	DC21.6V-26.4V
	<500mA	<420mA	<280mA	<120mA
3-3 负载电流: (Load current)	在500ml容器中使用额定电压供应气泵吸气到最高压力电流小于负载电 流。In a 500ml container, the highest current is less than Load current while the air pump is powered with Rated voltage.			

3-4 噪音 (Noise) : 泵体下垫5cm厚的海绵, 放置在噪音仪30cm位置, 額定電壓下充气压力从0到420mmHg所測得的值小于60dB。(Pump body underlay is 5 cm thick sponge, placed on the noise meter 30 cm, Rated voltage under inflation pressure from 0 to 420mmHg the measured value is less than 60dB)
3-5 流量 (Flow) : $\geq 2.8\text{LPM}$
3-6 最大壓力 (Maximum pressure) : 在使用額定電壓使充氣壓力從0到停止升壓之最高壓力值 (正压 $\geq 900\text{mmHg}$ 负压 $\geq 450\text{mmHg}$ )。In Rated voltage voltage causes inflation pressure from 0 to stop the booster of the highest pressure value is (Positive pressure $\geq 900\text{mmHg}$ Negative pressure $\geq 450\text{mmHg}$ )
3-7 使用溫度範圍 (Operation temperature range) : 在溫度 $5^{\circ}\text{C}$ 到 $50^{\circ}\text{C}$ 及濕度30%RH 到80%RH 之間氣泵運作良好。(The temperature have to be between $5^{\circ}\text{C}$ and $50^{\circ}\text{C}$ and humidity must is between 30% and 80%RH to function the pump well.)
3-8 保存溫度範圍 (Preservation temperature range) : 在溫度 $-20^{\circ}\text{C}$ 到 $60^{\circ}\text{C}$ 及濕度30%RH 到85%RH 之間氣泵保持在良好的狀態。(The temperature has to be between negative $20^{\circ}\text{C}$ and positive $60^{\circ}\text{C}$ and humidity has to be between 30%and 85% RH to keep the pump in a good condition.)
4. 可靠性試驗 (Reliability test) :
4-1 低溫特性 (Low-temperature characteristic) : 放置在 $-20^{\circ}\text{C}$ 經72小時後, 再取出置於常溫 ( $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ ) 中2小時按3-3 3-4 3-5 3-6 測試無異常。(Putting the pump in the temperature at negative $20^{\circ}\text{C}$ for 72 hours; then taking it out and putting it in a room temperature at $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for two hours. Under this circumstance, running through test 3-3 3-4 3-5 3-6 and finding out that the pump still performs well.)
4-2 高溫特性 (High-temperature characteristic) : 在 $60^{\circ}\text{C}$ 經72小時放置後, 再取出置於常溫 ( $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ ) 中2小時按3-3 3-4 3-5 3-6測試無異常。(Putting the pump in the temperature at $60^{\circ}\text{C}$ for 72 hours; then taking it out and putting it in a room temperature at $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for two hours. Under this circumstance, running through test 3-3 3-4 3-5 3-6 and finding out that the pump still performs well.)
4-3 高溫高濕 (High-temperature & High humidity) : 在溫度 $60^{\circ}\text{C}$ , 濕度80~85%環境中72小時取出置於常溫 ( $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ ) 中2小時按3-3 3-4 3-5 3-6 測試無異常。(Putting the pump in the temperature at $60^{\circ}\text{C}$ and the $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for two hours. Under this circumstance, running through test 3-3 3-4 3-5 3-6 and finding out that the pump still performs well.)
4-4 低溫環境測試 (Low- temperature environment test) : 在 $5^{\circ}\text{C}$ 經5小時後在此溫度下測試無異常。(Measuring after 5 hours neglect and there are no abnormalities a deed following test in $5^{\circ}\text{C}$ .)
4-5 高溫環境測試 (High- temperature environment test) : 在 $50^{\circ}\text{C}$ 經5小時後在此溫度下測試無異常。(Measuring after 5 hours neglect and there are no abnormalities a deed following test in $50^{\circ}\text{C}$ .)
4-6 壽命試驗 (Life test) : 在100ml容器中, 開10秒, 停5秒為一個周期測試30,000後按3-3 3-4 3-5 3-6的測試要求在15%的衰減範圍內。In 100ml tank, pumping 10 seconds, on 5 seconds for a cycle, test for 30,000 cycles, and the tested by point 3-3 3-4 3-5 3-6, the under performance range is within 15%
5. 其他 (Others)
5-1 跌落試驗 (Fall test) : 使用標準的包裝方式, 在水泥地面上將其從50CM 的高度分別從正面、側面、邊角自由落下其性能及結構無異常。(Fall test: basic performance and the structure shall not be defected after following test: With a standard packaging conditions, the dropping it at the front, side, and edges part from 50cm height to the concrete floor.)
5-2 異常試驗 (Unusual test) : 用額定電壓連續通電8 小時無燃燒、冒煙現象。(There is no burning and smoking omlurrence while the power is on with Rated voltage for 8 hours continuously.)
5-3 馬達端子 (Motor Terminal) : 以0.3 公斤砝碼與端子負載無異常。端子須在 $380^{\circ}\text{C}$ 熔鐵溫度下焊接, 要求在2S內操作完成。(No abnormality omlurs when a 0.5Kg static is hanging in the parallel direction of the Terminals. The terminals must be $380^{\circ}\text{C}$ temperature soldering iron, the requirements to complete the operation in 2 seconds.
5-4 外觀 (Appearance) : 產品不能有破損, 脏污。(The appearances of the valve shall not contain cracks and impurities)