



# 产品规格书

Specification

页次/page: 1 / 7

版本号/ Version number: A/0

MERCURY INDUSTRY CO LIMITED

## 蠕动泵规格书

Specification of peristaltic pump

客 户: \_\_\_\_\_

Customer

品 名: 蠕动泵

Part name: Peristaltic Pump

型 号: PP310-030

Model :

日 期: 2022-10-31

Date

页 数: 共 7 页 (包括封面)

Number of pages : 7 pages

作成/Made	审核/Audit	核准/Approval
余赋强	洪羊午	王幼泽

客户承认

Customer acknowledgment

--	--	--	--



# 产品规格书

Specification

页次/page: 2 / 7

版本号/ Version number: A/0

## 1. 适用范围 Application:

本规格书适用 PP310- 30 水泵之用。

The specifications apply PP310-030 use.

## 2. 测试环境 Standard test environment:

2-1	测试环境温度 Environment test	周围温度 20°C 相对湿度 65%RH 为标准, 如无争议发生可以在下述环境测试: 周围温度 5~45°C 相对湿度 30~80%RH。  The standard of environment test is the ambient temperature of 20°C and relative humidity of 65%RH. If no disputes occur, the test can be conducted under the below circumstance: the ambient temperature of 5~45°C and relative humidity of 30~80%RH.
2-2	測試姿勢 (Position)	垂直 (vertical)
2-3	负荷 (Load)	空气压 300mmHg
2-4	使用温度范围 Operation temperature range	5 ~45° C(Humidity to 30% to 80%RH)
2-5	保 存 温 度 范 围 Preservation temperature range	-20 ~60° C(Humidity to 30% to 80%RH)

## 3 电气特性 Electrical characteristics:

3-1	额定电压 Rated voltage	DC3V	
3-2	使用电压范围 Operating voltage range:	DC2.2V~3.8V (其流量根据电压变化而变化)	
3-3	负载电流 no-load current	在 DC3V 时, 水泵负载抽水时的最高负载电流 ≤900mA  At DC3V ,The highest current is less than 900mA while the pump no load.	≤900mA  Less than 900mA
3-4	负载流量 Water Flow	在 DC3V, 负载抽水量大于或等于 120mL/分钟. More than 800mL/min.  At DC3V ,the air flow is more than 120mL/min with no load..	≥120mL/min  More than 120mL/min .
3-5	噪音 Noise	下垫 5cm 之海綿, 距噪音计 30cm 之处, 依 DC 3V 之电源泵吸水所测得之 dB 值小于 60dB.  Putting a 5 cm sponge under the pump, and placing	<60dB  Less than 60dB

ADD: 11Bldg, 3# Pingan Ave, Longgang, Shenzhen, 518111, China



# 产品规格书

Specification

页次/page: 3 / 7

版本号/ Version number: A/0

		it about 30 cm away from the noise meter,The evaluated noise level shall be less than 65dB while pressurizing with DC 3V .	
3-6	最大水压 Maximum vocuum	输入 3V 之电压时, 水泵最大水压值大于 1.0Kg 负压吸力大于 25Kpa The maximum pressure value shall be more than 1.0Kg while pressurizing with DC 3.0 V .	≥1.0kg More than 1.0kg

## 4 环境试验 Environmental Tests:

4-1	低温放置试验 Low-temperature characteristic	放置在-20℃经 72 小时后, 再取出置于常温(20±5℃)中 2 小时依下列专案测试无异状 3-3, 3-4, 3-5, 3-6.  Putting the pump in the temperature at negative 20 °C for 72 hours;then taking it out and putting it in a room temperature at 20 ± 5 °C for 2 hours,Under this circumstance,running through test 3-3, 3-4, 3-5, 3-6and finding out that the pump still performs well.
4-2	高温放置试验 High-temperature characteristic	在 60℃经 72 小时放置后, 在放常温(20±5℃)中 2 小时依下列专案测试无异状 3-3, 3-4, 3-5, 3-6.  Putting the pump in the temperature at 60°C for 72 hours; then taking it out and putting it in a room temperature at 20 ± 5 °C for 2 hours,Under this circumstance,running through test 3-2,3-3, 3-4, 3-5, 3-6.and finding out that the pump still performs well.
4-3	高温高湿放置试验 High-temperature & High humidity	在温度 60℃,湿度 95%环境中经 72 小时取出置于常温(20±5℃)中 2 小时依下列专案测试无异状 3-3, 3-4, 3-5, 3-6.  Putting the pump in the temperature at 60°C and the humidity at 95% for 72 hours;then taking it out and putting it in a room temperature at 20 ± 5 °C for 2 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	温湿度循环放置测试 Temperature & humidity cycle test	在经过12次的温湿度循环测试后:-20℃* 2Hr → +25℃* 1Hr →+60℃ 85%RH* 2Hr →+25℃*1Hr,需维持相同的性能.依下列专案测试无异状 3-3, 3-4, 3-5, 3-6.After doing the temperature and humidity cycle test,-20℃* 2Hr → +25℃ * 1Hr→+60℃ 85%RH*

ADD: 11Bldg, 3# Pingan Ave, Longgang, Shenzhen, 518111, China



# 产品规格书

Specification

页次/page: 4 / 7

版本号/ Version number: A/0

		2Hr → +25 °C *1Hr, for twelve times, the pump shall still perform the same functions proved by running through test 3-3, 3-4, 3-5, 3-6.
4-5	寿命试验 Life test	水泵抽水工作, 工作 2 秒, 停 2 秒为一个循环, 测试 100000 次以后经下列专案测试无异状 3-3, 3-4, 3-5, 3-6.

## 5 特殊环境测试 Thermal test performance:

在经过发下 5-1 和 5-2 项目之特殊环境测试后, 要产品须可满足项目 3-3 至 3-9 之基本性能。

After the pump has been tested through test 5-1 and 5-2, it must be suitable the basic performance required by item 3-3 to 3-9.

5-1	低温环境测试 Low-temperature environment test	在温度 0°C 经五小时后, 立即在此温度下依下列专案测试无异状, 3-3, 3-4, 3-5, 3-6,3-7.  Under a temperature of 0 °C for 5 hours, then examining the pump by test 3-3, 3-4, 3-5, 3-6,3-7. and finding out it still perform well.
5-2	高温环境测试 High-temperature environment test	在温度 50°C 经五小时后, 立即在此温度下依下列专案测试无异状, 3-3, 3-4, 3-5, 3-6.  Under a temperature of 50 °C for 5 hours, then examining the pump by test 3-3, 3-4, 3-5, 3-6. and finding out it still perform well.

## 6 其它 Others:

6-1	落下实验 Fall test	使用标准的包装方式,在水泥地上将其从 30cm 的高度分别从正面,侧面,及边角落下,其性能及结构需无异常.  Basic performance and the struture shall not be defected after following test;With a standard packaging conditions,then dropping it at the front,side,and edges part from the height of 30 cm to the concrete floor.
6-3	外观 Appearance	产品无不适当的外观和刮伤, 脏污...等.  The appearances of the pump shall not contain cracks and impurities.
6-4	异常试验 Unusual test	以 DC3V 堵住出口,全负载连续 2 分钟通电无燃烧,发烟现象.  There is no burning and smoking occurrence while the power is on with DC 3V for 2 minute continuously.

ADD: 11Bldg, 3# Pingan Ave, Longgang, Shenzhen, 518111, China



# 产品规格书

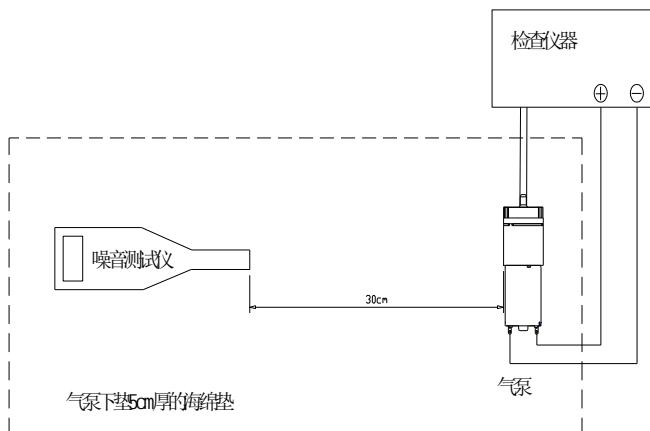
Specification

页次/page: 5 / 7

版本号/ Version number: A/0

6-5	焊锡要求 Solder requirements	马达端子焊锡作业需在焊锡温度 380°C 下,3 秒内操作完成. Motor terminal for Soldering process the heat temp. is controlled by 380°C, and operating time is for 3 sec only.
-----	--------------------------	---

## 7 噪音测试线路图 Noise test circuit diagram:



## 8 材料表 Materials

号码	名称	材料
1	塑胶 B1	PLASTIC
2	塑胶 B2	PLASTIC
3	塑胶 B3	PLASTIC
4	塑胶 B4	PLASTIC
5	塑胶 B5	PLASTIC
6	塑胶 B6	PLASTIC
7	钢针	STEEL
8	螺丝	SUS1006
9	橡胶	RUBBER
10	马达	DC 12V

ADD: 11Bldg, 3# Pingan Ave, Longgang, Shenzhen, 518111, China



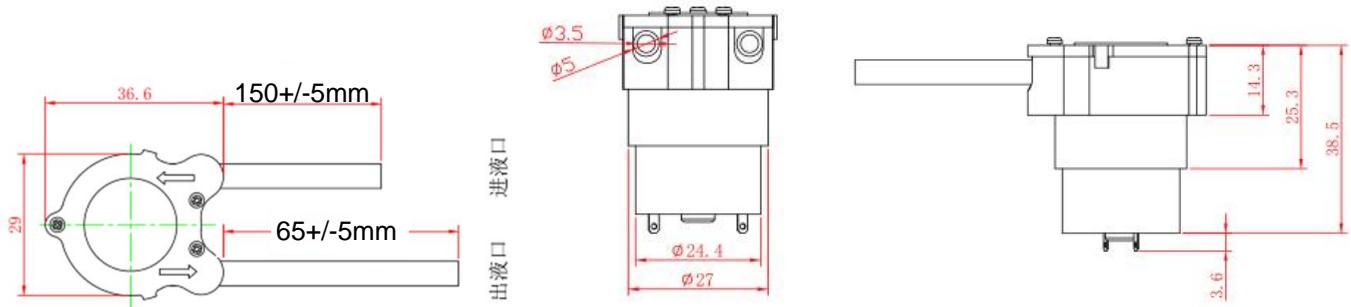
# 产品规格书

Specification

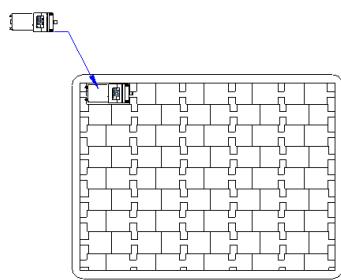
页次/page: 6 / 7

版本号/ Version number: A/0

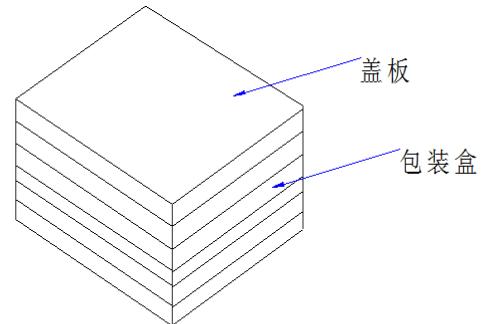
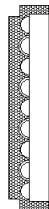
## 9. 成品外形图 Finished Outline



## 10. 包装图 Packaging



每盒45PCS  
45PCS/box



每箱共装6层保利龙  
共270pcs水泵  
 $6 \times 45 = 270$ PCS/Carton

ADD: 11Bldg, 3# Pingan Ave, Longgang, Shenzhen, 518111, China

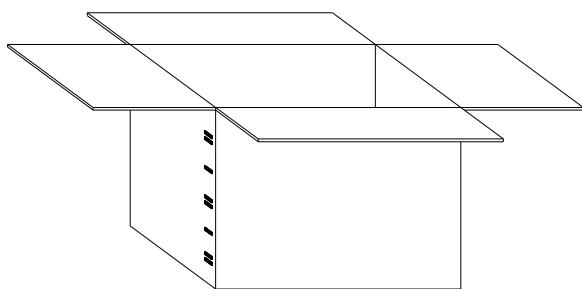


# 产品规格书

Specification

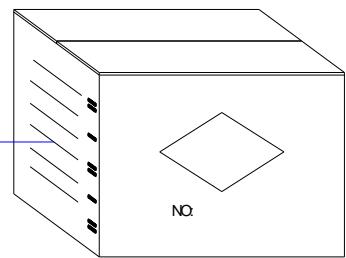
页次/page: 7 / 7

版本号/ Version number: A/0



TYPE: MROO.PUMP  
P/O.NO:  
QTY:  
GRS.WT:  
NET.WT

PCS  
KG  
KG



ADD: 11Bldg, 3# Pingan Ave, Longgang, Shenzhen, 518111, China