



NINGBO KLS ELECTRONIC CO.,LTD.

水泵规格书

Specification of water pump

客 户: _____

Customer

品 名: 直流微型水气泵

Part name

型 号: L-KLS23-PYSP310-XA

Model

日 期: _____

Date

页 数: 共 9 页 (包括封面)

Number of pages

作 成	审 核	核 准
易晓波	N/A	曹生元

客户承认

Customer acknowledgment

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1. 适用范围 Application:

本规格书适用于水泵 **L-KLS23-PYSP310-XA** 之用。

The specifications apply **L-KLS23-PYSP310-XA** use。

2. 测试条件 Test condition

2-1	测试环境温度湿度 Environment test	周围温度 20℃，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℃相对湿度 30-80%RH。 The standard of environment test is the ambient temperature of 20℃ and relative humidity of 65%RH. If no disputes occur, the test can be conducted under the blow 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	额定负载 (Load)	空气压 300mmHg (Air pressure 300mmHg) 空气压-300mmHg (Air pressure -300mmHg)
2-4	使用温度范围 Operation temperature range	5 ~45° C(Humidity to 30% to 85%RH)
2-5	保存温度范围 Preservation temperature range	-20 ~60° C(Humidity to 30% to 85%RH)

3 性能 Function

3-1	额定电压 Rated voltage	DC6.0V	
3-2	使用电压范围 Operating voltage range:	DC5.4V~6.6V	
3-3	负载电流 Rated current	供电 DC6.0V, 气泵抽水时的最高电流 ≤350 mA. The highest current is less than 350 mA while the pump for drawing water with DC6.0V.	≤350 mA Less than 350 mA
3-4	空载流量 (水体) Water Flow	在 DC6.0V, 过水流量大于 400 毫升/分钟。 At DC6.0V, the water flow is more than 400 mL/min with no load.	≥400 mL/min
3-5	噪音 Noise	下垫 5cm 之海绵, 距噪音计 30cm 之处, 依 DC 6.0V 之电源, 泵吸水时所测得之 dB 值小于 60dB. Putting a 5 cm sponge under the pump, and placing it about 30 cm away from the noise meter, The	≤60dB Less than 60dB

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		evaluated noise level shall be less then 60dB while pressurizing with DC6.0V .	
3-6	最大水压 Maximum pressure	输入 6.0V 之电压时, 水泵的最大水压大于 1.8Kg. The maximum pressure value shall be more than 1.8Kg while pressurizing with DC 6.0 V .	$\geq 1.8\text{Kg}$ more than 1.8Kg
3-7	起动电压 Restart voltage	输入 5.4V 之电压可使水泵启动. The input voltage of DC 5.4V ,can make the pumps are turned on.	DC5.4V

4 环境试验 Environmental Tests:

4-1	低温特性 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, 3-7. 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, 3-6,3-7 and finding out that the pump still performs well.
4-2	高温特性 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, 3-4,3-5,3-6,3-7 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, 3-6,3-7 and finding out that the pump still performs well.
4-3	高温高湿特性 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, 3-6,3-7. 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, 3-6,3-7 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, 3-6,3-7.After doing the temperature and humidity cycle test,-20℃* 2Hr → +25℃* 1Hr→

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		+60℃ 85%RH* 2Hr → +25℃*1Hr,for twelve times,the pump shall still perform the same functions proved by running through test 3-3, 3-4, 3-5, 3-6,3-7.
4-5	寿命试验 Life test	<p>气泵抽水工作, 通电 40 秒, 停 20 秒为一个循环, 测试 500 小时以后经下列专案测试无异状 3-3, 3-4, 3-5, 3-6, 3-7.</p> <p>The pump for drawing water, on 40 seconds, stopping for 20 seconds is as one cycle, Doing it for 500 hours, then examine the pump by test 3-3, 3-4, 3-5, 3-6,3-7,and figure out than the pump is still in a good function.</p>

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 3-8 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 3-8.

5-1	低温环境测试 Low-temperature environment test	<p>在温度 0℃ 经五小时后,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.</p> <p>Under a temperature of 0℃ 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.</p>
5-2	高温环境测试 High-temperature environment test	<p>在温度 50℃ 经五小时后,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.</p> <p>Under a temperature of 50℃ 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.</p>

6 其它 Others:

6-1	端子强度 The lead tension	<p>以 0.5 公斤法码与端子平行负载无异常者.</p> <p>Hanging a 0.5 Kg static load on the terminal of the pump will not cause a damage on the pump.</p>
6-2	落下实验 Fall test	<p>使用标准的包装方式,在水泥地上将其从 50cm 的高度分别从正面,侧面,及边角自由落下,其性能及结构需无异常.</p> <p>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 50 cm to the concrete floor.</p>
6-3	外观 Appearance	产品无不适当的外观和刮伤, 脏污...等.

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		The appearances of the pump shall not contain cracks and impurities.
6-4	异常试验 Unusual test	以 DC6.6V 连续 8 小时通电无燃烧,发烟现象. There is no burning and smoking occurrence while the power is on with DC6.6V for 8 hours continuously.
6-5	焊锡要求	马达端子焊锡作业需在焊锡温度 380℃ 下,3 秒内操作完成. Motor terminal for Soldering process the heat temp. is controlled by 380℃,and operating time is for 3 sec only.
6-6	马达温升	气泵通电抽水时, 马达表面达到的最高温度小于 70 度。 The pump for drawing water, motor surface temperature less than 70℃

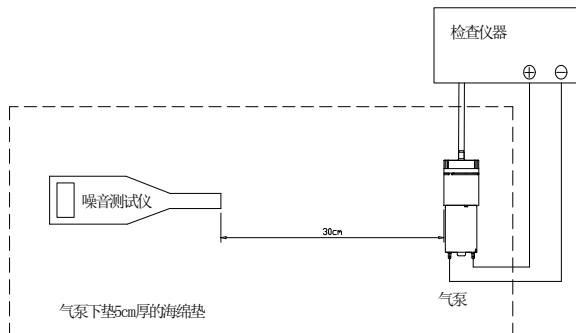
7 标签内容 Labels:

无

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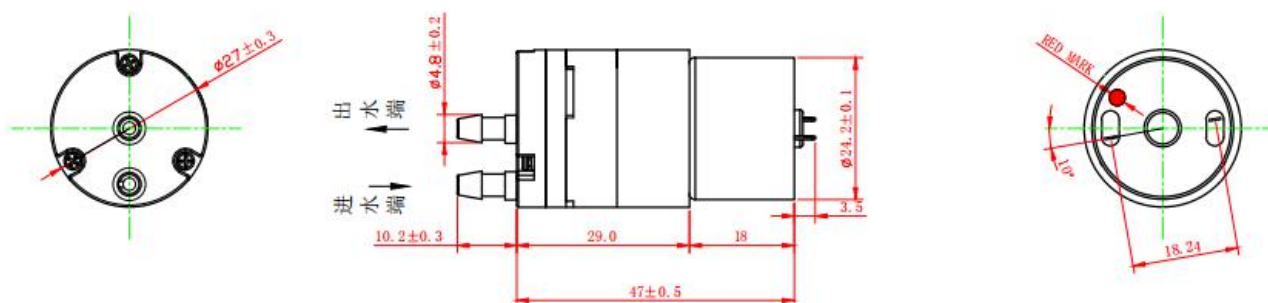
8 噪音测试线路图 Noise test circuit diagram:



9 材料表 Material list:

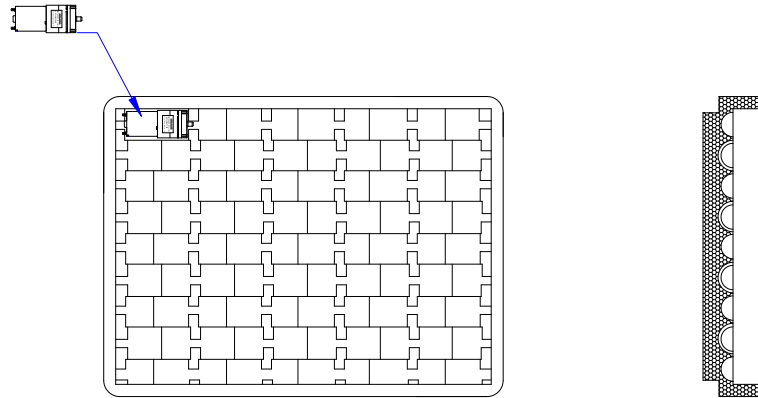
号码 NO.	名称 NAME.	材料 MATERIAL.
1	塑胶 B1	PLASTIC
2	塑胶 B2	PLASTIC
3	塑胶 B3	PLASTIC
4	塑胶 B4	PLASTIC
5	塑胶 B5	PLASTIC
6	塑胶 B6	PLASTIC
7	钢针	STEEL
8	螺丝	SUS1006
9	橡胶	RUBBER
10	马达	DCxx.0V

10.成品外形图 Finished Outline

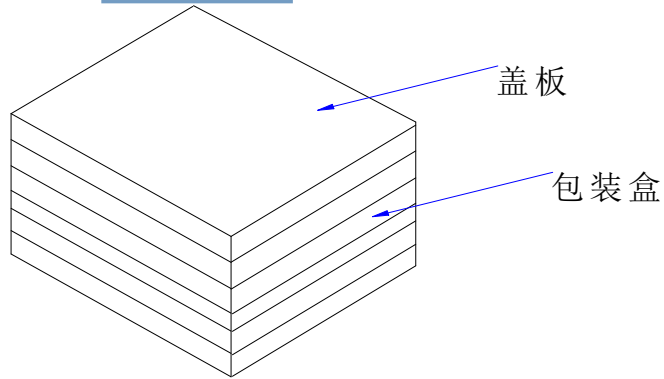


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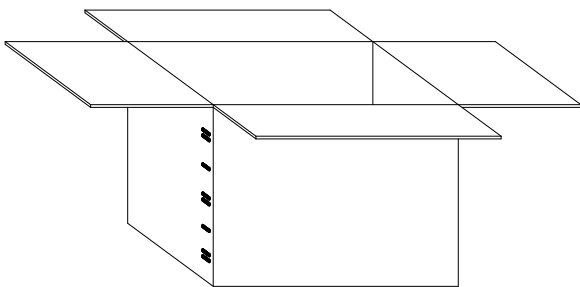
12. 包装图 Packaging



35pcs/盒



35pcs*6=210pcs/箱



TYPE: MRCCO.PUMP
P/ONO:
QTY: PCS
GRS.WT: KG
NET.WT: KG

