

东莞市三生电器有限公司
DONGGUAN SANSHENG ELECTRICAL APPLIANCE CO., LTD

样品规格承认书
SPECIFICATION FOR APPROVAL

客户名称: ★Customer	
客户编号: ★Description	
本公司编码: ★Part No.	SWP-1818
送样日期: ★Date	2023-8-25

本公司确认 Supplier approval:

制作 Edited by	审核 Audited by	批准 Approved by	签章 Stamped by
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客户确认 Customer approval:

研发 R&D	品质 QA	批准 Approved by	签章 Stamped by

Rev.	DESCRIPTION	ISSUED DATE	REVISED PAGE	PREPARED BY
A0	Primary 初版发布	2023-08-25	---	欧世清

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产品规格书

Specifications

(本规格中如未特别指出, 测试条件均应满足: 工作电压24VDC, 介质温度 $25\pm5^{\circ}\text{C}$, 环境温度 $25\pm5^{\circ}\text{C}$, 湿度30%-80%, 自吸100cm扬程20cm, 管内径Φ6mm) (Without particularly pointing out, the test conditions should be followed: test voltage 24VDC, water temperature $25 \pm 5^{\circ}\text{C}$, ambient temperature $25 \pm 5^{\circ}\text{C}$, humidity 30% -80%, suction 100cm and lift 20cm, tube inner diameter $\Phi 6\text{mm}$)

1. 机械特性 Mechanical Characteristics

1-1. 规格 Description	FOURONLY VOLTS: DC 24V FLUX: 2.0-2.5L/min
1-2. 外型尺寸 Dimensions	107.4*76*49.1mm.
★备注 Remark	<p>1.水泵正/负极不能接反, 否则影响电机寿命. The positive/negative poles of the water pump cannot be connected backwards, otherwise the motor life will be affected</p> <p>2.外界环境温度的变化和水泵负载大小影响产品寿命. Changes in the external ambient temperature and the load size of the pump affect the life</p>

2. 总体规格 Basic Specifications

序号 No.	项目 Item	规格 Specifications	单位 Unit	条件 Test Conditions
2-1.	额定电压 Rated Voltage	24	VDC	电机额定电压 Rated voltage of the motor
2-2.	工作电压 Working Voltage Range	22~26	VDC	水泵适用电压范围 Voltage range allowed for the pump

2-3.	空载电流 No-load Current	<500	mA	泵体内没有液体Free flow with air
2-4.	吸程 Suction	≥1	Meter	自吸吸程高度Self priming height
2-5.	负载电流 Load Current	<800	mA	Φ6mm内径管泵体内的(清水)流动顺畅Free flow with clean water
2-6.	开口流量 Open Flow	2.2±0.3	L/Min	Φ6mm内径管泵体内的(清水)流动顺畅Free flow with clean water
2-7.	闭水电流 Max Load Current	≤1.5	A	进/出水内径Φ6mm内径管泵体内的(清水)流动顺畅后封堵出水口时 电流Close the outlet with free flow when measuring the current
2-8.	闭水压力 Max Pressure	>0.1	MPa	进/出水内径Φ6mm内径管泵体内的(清水)流动顺畅后封堵出水口时 压力Close the outlet with free flow when measuring the pressure
2-9.	负载噪音 Noise	≤55	dB	距离1米泵体内的(清水)流动顺畅 时所测分贝值Measure the noise at the distance 1 meter from pump to the microphone

3. 特性规格Characteristics

3-1. 适用电压范围Working Voltage Range	22V~ 26V DC
3-2. 起动电压Starting Voltage	20V DC(ON/OFF)
3-3. 适用流体温度范围Fluid Temperature	0°C~45°C
3-4. 环境温度Ambient Temperature	-10°C~+60°C
3-5. 环境湿度Ambient Humidity	≤ 85%
3-6. 寿命Lifetime	≥500 hours
3-7. 密封性Sealing	保持水压0.1Mpa,连续工作2小时,水泵连接处无漏水. 2 hours no leakage with working pressure 0.1Mpa
3-8. 运转方向Rotation Direction	逆时针(CCW)
3-9. 绝缘耐压Insulation Strength	对隔膜泵的充电部位（电极）和非充电部位（电机壳）之间施加电压AC 500V/10mA/1s，60秒钟时不得有闪络、击穿等异常情况。Putting AC 500V/10mA/1s between electrode and motor housing, no flashover and breakdown in 60 seconds
3-10. 平均寿命(MTBF):指在额定电压及正常温度(25°C)条件下(ON-20S,OFF-10S)运转 .Average life (MTBF): refers to operation under rated voltage and normal temperature (25°C) (ON-20S, OFF-10S).	
3-11. 特性定义Definitions	
3-11-1. 额定电流 & 额定转速 & 额定操作功率, 须在额定电压下; 马达连续运转30秒达到规格下限, 60秒达到正常值。 . Rated current & rated speed & rated operating power, which shall be at rated voltage; The motor runs continuously for 30 seconds to reach the lower limit of the specification and 60 seconds to reach the normal value	
3-11-2. 起动电压是指当突然通电后能够使抽水泵起动之最低电压。The starting voltage refers to the minimum voltage that can make the pump start when suddenly energized.	

4. 材料/零件 Materials and Parts

No.	部件名称 Parts Name	备注 Remark
4-1.	上盖板、下盖板、主体、阀座 Up cover, down cover, housing body, check valve base	ABS
4-2.	轴承支架、偏心轴、马达支架Bearing set, bearing eccentric shaft, Motor flange	PA
4-3.	轴承 Drive bearing	滚珠轴承Ball bearing
4-4.	接触水橡胶件 Diaphragms and valves	食品级硅胶 Food Grade Silicone

4-5.	防震脚垫 Mounting feet	普通硅胶 Silicone
4-6.	电机 Motor	555PH, 含油轴承电机外壳电解板 Oil bearing motor housing electrolytic plated

5. 出货检验程序Product Inspection Procedure

本公司出货检验程序均依照下列步骤实施Inspection procedures below are extremely followed

5-1. 100% 生产线上电性 100% Electric inspection on production line

5-2. 100% 生产线上以吸程,流量和电流作正常筛选 100% suction, flow, current test on the production line

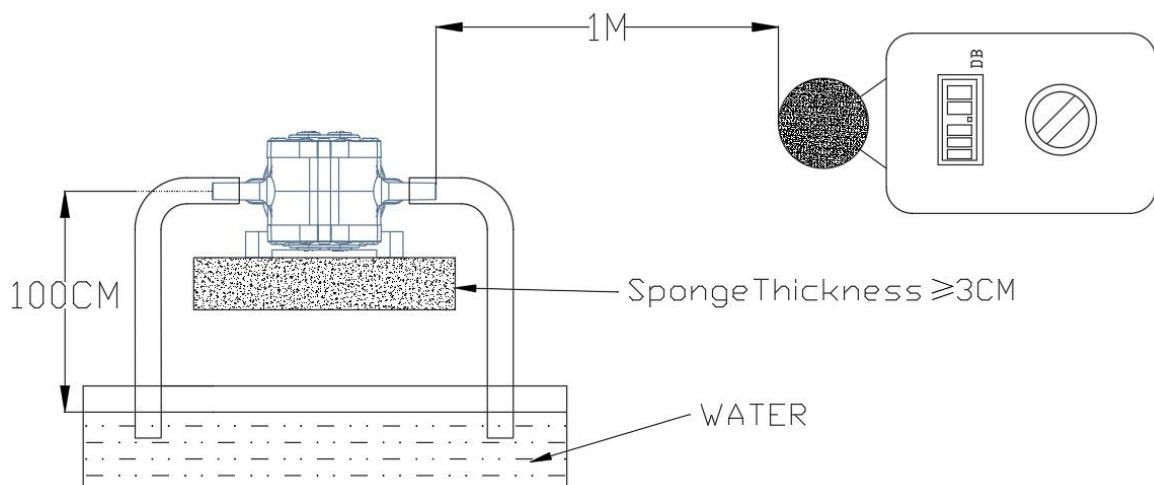
5-3. 出货抽样检验依 MIL-STD- 105E 作允退判定 Sampling inspection in accordance with MIL-STD-105E standard

5-4. 允收标准如下 Pass/Reject standard

AQL: CR=0.1 MA=0.65 MI=4.0

5-5. 噪音 Noise

5-5-1 参照标准GB/T6881.3-2002/ISO3743-2:1994如图示: Test refers to drawings:

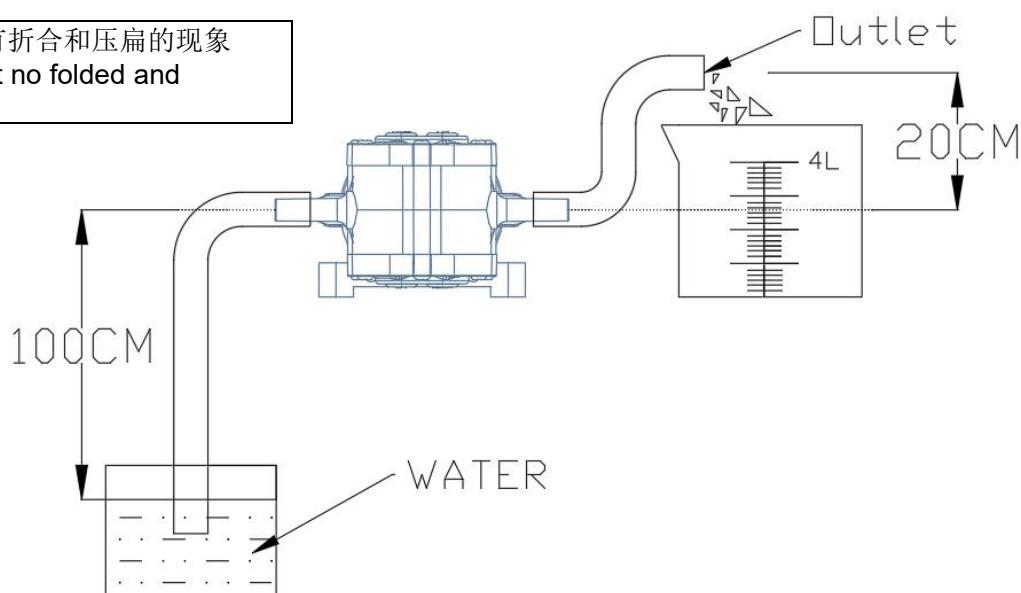


5-5-2 测试条件:Test Condition

隔膜泵空载噪音测试时（泵体内没有液体）水泵上没有接触硬物；背景噪音低于35dB,在距离水泵1米处,出水咀方向与噪音计相反；电泵负载噪音测试时（清水流动顺畅）水泵卧式放在软垫上,且出水管接进水里避免产生撞水声；在距离水泵1米处,出水咀方向与噪音计相反.When testing diaphragm pump no-load noise(No liquid in the pump body), no contact with hard objects on the pump and background≤35dB; when the load pump noise test (smooth water flow), pump lying formula on the cushion, and then put outlet pipe into the water to avoid collision sound of water; at a distance of 1 m at the pump, spout opposite direction of the noise meter.

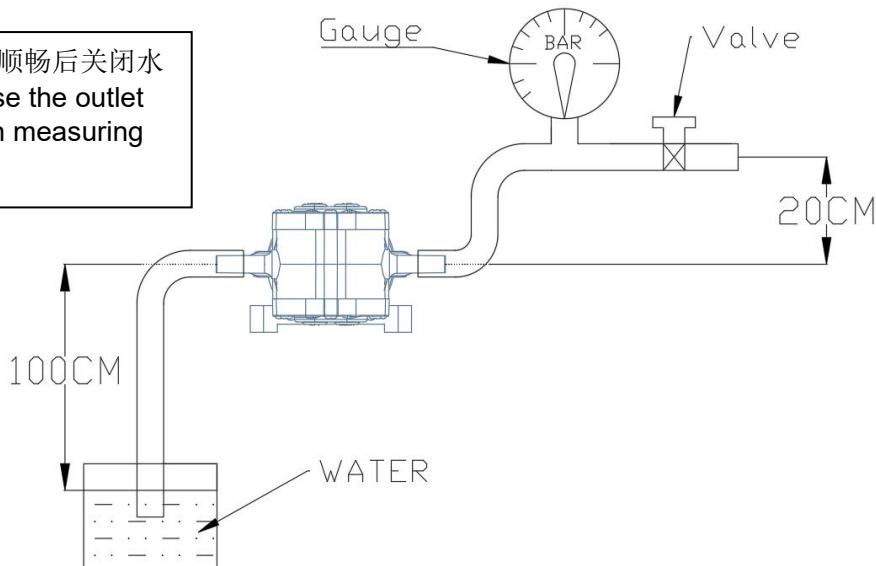
5-6 流量测试: Flow Test drawings

水管转弯时不得有折合和压扁的现象
Pipe bending part no folded and flattened place

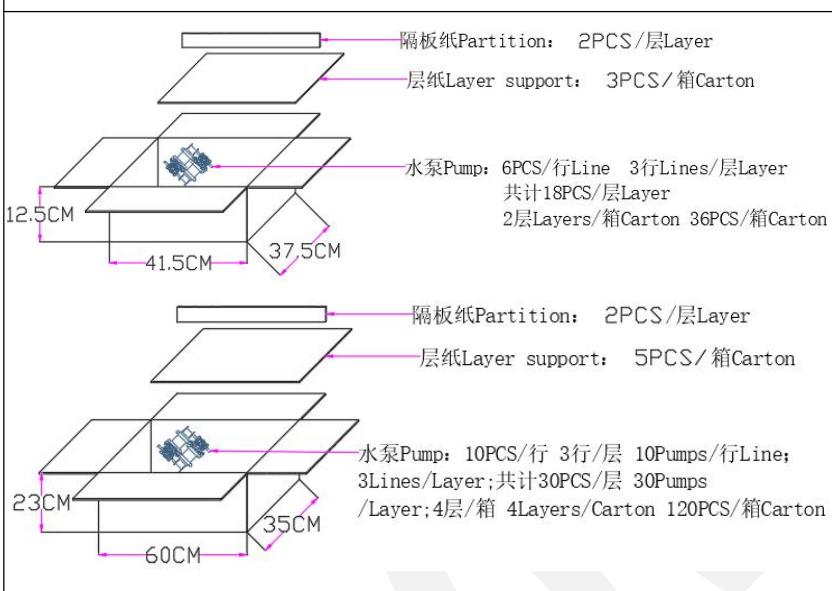


5-7 压力测试: Pressure Test

泵体内的(清水)流动顺畅后关闭水阀时读取压力值 Close the outlet while free flow when measuring the pressure



6. 包装方式 Package Types



装品包装示意图 Packaging illustration

FOURONLY®



2023XX0001
VOLTS: 24VDC FLUX: 2.1-2.5L

水泵标识图示 Label

7. 注意事项: Notice

7-1. 使用时请勿超出本规格所规定之极限, 否则我们不保证此产品. When using do not exceed the limits prescribed in these rules, otherwise we do not guarantee that this product.

7-2. 倘若要变更此份文件的任何规格, 请务必事先提出需求. If you want to change any of the specifications of this document, be sure to demand in advance.

7-4. 本产品不保证因粉尘, 沙粒, 小虫进入, 而影响寿命与不良品产生. This product is not guaranteed due to dust, sand, insects enter and affect the life and defective products.

7-5. 如有任何资料及文件与此份资料不同, 将以此份资料为主要参考. If you have any information and documents different from this information, take this information as the main reference.

7-6. 请勿在可燃性气体与任何有害环境中使用. Do not use any flammable gases and hazardous environments.

7-7. 当马达在运转中, 请勿企图将马达锁死特别长的时间. 如此, 会因连续停止不转, 产生高热而烧坏马达. When the motor is in operation, do not attempt to lock the motor especially long time. So, it will not stop because of continuous turn, generate heat and burn the motor.

7-8. 不适当的安装可能产生共振或振动和噪音, 请可装可靠. 不适当的安装可能产生共振或振动和噪音, 请安装可靠. Improper installation may cause resonance or vibration and noise, install reliably.

7-9. 定期维护和保养: 长期闲置的水泵应做定期维护和保养, 每3-6个月至少通电通水一次. Regular Maintenance by pumping water one time at least per 3-6 months.

声 明 Statements

1. 产品应在规格书指定的条件内使用,如果您的应用超出规格极限我司对此产品不做保证. 1. The product should be used with the specification specified conditions, if your application exceeds the specification limits, our company has no guarantee on the product.
2. 如对这份规格书中所未指明的问题,或令人不满意、不便、怀疑的细节,请书面通知我司具体事项. If this problem is not specified in the specifications book, or unsatisfactory, inconvenience, doubts details, please notify in writing our specific matters.
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5. 除我司事先通知有需求的参数之外,否则出货产品与此份规格书一致,未在此份规格书中指定的参数与贵公司最终承认的样品相同. Except there is a prior notice of the demand outside the parameters, otherwise parts of the product shipped is consistent with this specification, the parameter which is not specified in the specifications sheet will be the same to the samples admitted by your company.
6. 对于此产品应用在贵司的产品有任何修改或有新的应用请事先通知我司,有可能需要对规格书作修订. Any changes or new application for the product, please notify our company, there may need to revise the specifications.
7. 对于确认我司产品的工艺和物料缺陷引起的产品质量问题,并确定是交货的一年内,我司承担质量保证,在这个前提下我司唯一的责任是限于对产品修理或者将它替换,任凭我们处理,对由于使用者处置不当,操作不当,误用造成产品发生故障我司不负责任,如这种保证发生,客户应立即通知我开发中心查证,被发现有缺陷的任何我们的产品对客户设备造成的任何间接损害我司不负责. For the quality problem caused by production process and material defects, we take the responsibility to replace it or repair it. Otherwise, we are not responsible for the damage caused for the situation such as improper use and storage. Once it happens, please notify us in the first time to check it. For the defect product, we are not responsible for any indirect damage.