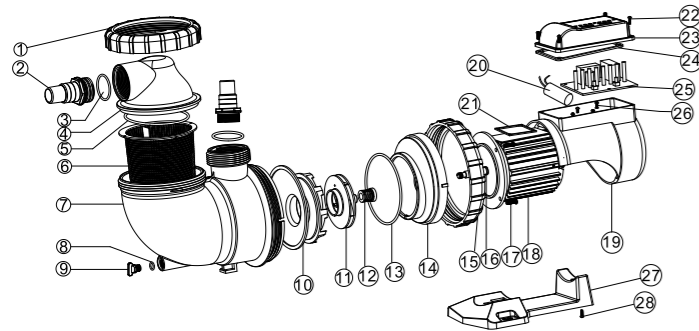
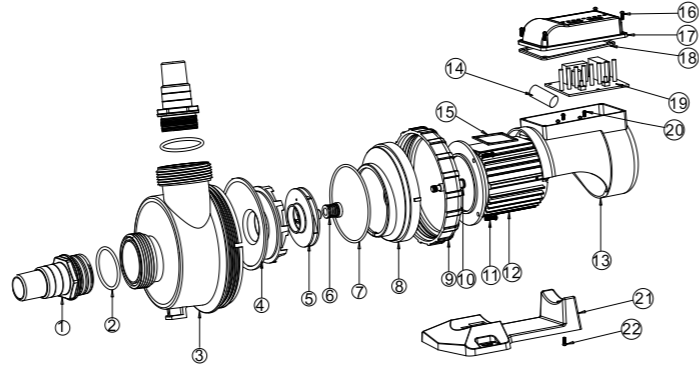


AMU012T/AMU012/AMU016T/AMU016/AMU020T/
AMU020 PUMP PARTS FOR AQUA-MINI
AMU012T/AMU012/AMU016T/AMU016/AMU020T/
AMU020 水泵零部件清单



| 项目 | 部件编号 | 中文 | 产品资料/说明 | 数量 |
|---------|----------|-----------|--------------------------------------------------------------------|-----|
| Key No. | Part No. | Chinese | Product Description | Qty |
| 1 | 01021067 | 透明盖螺母 | Nut for lid | 1 |
| 2 | 89280105 | 1.5"活接 | 1.5" union (optional) | 2 |
| | 01013015 | 1.5"牙头 | 1.5" Connector (for input) | 1 |
| 3 | 01013051 | 32-38 管接头 | 32-38 Union (optional) | 2 |
| | 02011104 | 1.5"活接胶圈 | O-Ring for 1.5" Union | 2 |
| 4 | 02020013 | 管接头胶圈 | O-Ring for 32-38 Union | 2 |
| | 01041045 | 透明盖 | Transparent Lid | 1 |
| 5 | 02020049 | 透明盖胶圈 | O-Ring for lid | 1 |
| 6 | 01111104 | 过滤篮 | Basket | 1 |
| 7 | 01021070 | 泵体 | AMU pump body | 1 |
| 8 | 02020014 | 胶圈 | O-Ring | 1 |
| 9 | 01111017 | 扭制 | Drain Plug | 1 |
| 10 | 01111103 | 分水轮 | Diffuser | 1 |
| 11 | 01311045 | 水叶 | Impeller (AMU012TP/AMU012P) (220V/50Hz) | 1 |
| | 01311046 | 水叶 | Impeller (AMU016TP/AMU016P) (220V/50Hz) | 1 |
| | 01311044 | 水叶 | Impeller (AMU020TP/AMU020P) (220V/50Hz) | 1 |
| | 01311051 | 水叶 | Impeller (AMU012TP/AMU012P) (220V/60Hz) | 1 |
| | 01311045 | 水叶 | Impeller (AMU016TP/AMU016P) (220V/60Hz) | 1 |
| | 01311046 | 水叶 | Impeller (AMU020TP/AMU020P) (220V/60Hz) | 1 |
| 12 | 04015002 | 机械密封 | 1/2" Mechanical seal | 1 |
| 13 | 02020011 | 法兰胶圈 | O-Ring for flange | 1 |
| 14 | 01021069 | 法兰 | Flange | 1 |
| 15 | 01021068 | 泵身螺母 | Nut for body | 1 |
| 16 | 02011156 | 电机止水胶垫 | Motor Slinger | 1 |
| 17 | 03011067 | 法兰螺丝 | Screw for flange | 4 |
| 18 | 04020099 | 电机 | Motor (AMU012TP/AMU012P) (220V/50Hz) (220V/60Hz) | 1 |
| | 04020100 | 电机 | Motor (AMU016TP/AMU016P) (220V/50Hz) (220V/60Hz) | 1 |
| | 04020101 | 电机 | Motor (AMU020TP/AMU020P) (220V/50Hz) (220V/60Hz) | 1 |
| 19 | 01321019 | 尾罩 | Fan Cover | 1 |
| 20 | 04016036 | 电容 | Capacitor for AMU012TP / AMU012P & AMU016TP/AMU016P (220V/50/60Hz) | 1 |
| | 04016030 | 电容 | Capacitor for AMU020TP/AMU020P (220V/50Hz, 220V/60Hz) | 1 |
| 21 | 02020048 | 防水胶垫 | Cover Slinger | 1 |
| 22 | 03011007 | 螺丝 | Screw for cable Box | 4 |
| 23 | 01321018 | 接线盒 | Cable Box | 1 |
| 24 | 02020012 | 防水胶垫 | Slinger for cable Box | 1 |
| 25 | 04015041 | 电子板 | PCB (for AMU012TP AMU016TP AMU020TP) | 1 |
| 26 | 03011100 | 螺丝 | Screw | 4 |
| 27 | 01111102 | 底座 | Base | 1 |
| 28 | 03011006 | 底座螺丝 | Screw for base | 1 |

AMU012TP/AMU012P/AMU016TP/AMU016P/AMU020TP/
AMU020P PUMP PARTS FOR AQUA-MINI
AMU012TP/AMU012P/AMU016TP/AMU016P/AMU020TP/
AMU020P 水泵零部件清单



| 项目 | 部件编号 | 中文 | 产品资料/说明 | 数量 |
|----------|----------|-----------|----------------------------------------------------------------|-----|
| Part No. | Part No. | Chinese | Product Description | Qty |
| 1 | 89280105 | 1.5"活接 | 1.5" union (optional) | 2 |
| 2 | 01013051 | 32-38 管接头 | 32-38 Union (optional) | 2 |
| | 02011104 | 1.5"活接胶圈 | O-Ring for 1.5" Union | 2 |
| 3 | 02020013 | 管接头胶圈 | O-Ring for 32-38 Union | 2 |
| | 01020018 | 泵体 | Body | 1 |
| 4 | 01111103 | 分水轮 | Diffuser | 1 |
| 5 | 01311045 | 水叶 | Impeller (AMU012T/AMU012) (220V/50Hz) | 1 |
| | 01311046 | 水叶 | Impeller (AMU016T/AMU016) (220V/50Hz) | 1 |
| 6 | 01311044 | 水叶 | Impeller (AMU020T/AMU020) (220V/50Hz) | 1 |
| | 01311051 | 水叶 | Impeller (AMU012T/AMU012) (220V/60Hz) | 1 |
| 7 | 01311045 | 水叶 | Impeller (AMU016T/AMU016) (220V/60Hz) | 1 |
| | 01311046 | 水叶 | Impeller (AMU020T/AMU020) (220V/60Hz) | 1 |
| 8 | 04015002 | 机械密封 | 1/2" Mechanical seal | 1 |
| 9 | 02020011 | 法兰胶圈 | O-Ring for flange | 1 |
| 10 | 01021069 | 法兰 | Flange | 1 |
| 11 | 01021068 | 泵身螺母 | Nut for body | 1 |
| 12 | 02011156 | 电机止水胶垫 | Motor Slinger | 1 |
| 13 | 03011067 | 法兰螺丝 | Screw for flange | 4 |
| | 04020099 | 电机 | Motor (AMU012T/AMU012) (220V/50Hz) (220V/60Hz) | 1 |
| 14 | 04020100 | 电机 | Motor (AMU016T/AMU016) (220V/50Hz) (220V/60Hz) | 1 |
| | 04020101 | 电机 | Motor (AMU020T/AMU020) (220V/50Hz) (220V/60Hz) | 1 |
| 15 | 01321019 | 尾罩 | Fan Cover | 1 |
| 16 | 04016036 | 电容 | Capacitor for AMU012T/AMU012P & AMU016T/AMU016P (220V/50/60Hz) | 1 |
| | 04016030 | 电容 | Capacitor for AMU020T / AMU020P (220V/50Hz) (220V/60Hz) | 1 |
| 17 | 02020048 | 防水胶垫 | Cover Slinger | 1 |
| 18 | 03011007 | 螺丝 | Screw for cable Box | 4 |
| 19 | 01321018 | 接线盒 | Cable Box | 1 |
| 20 | 02020012 | 防水胶垫 | Slinger for cable Box | 1 |
| 21 | 04015041 | 电子板 | PCB (for AMU012T AMU016T AMU020T) | 1 |
| 22 | 03011100 | 螺丝 | Screw | 4 |
| 23 | 01111102 | 底座 | Base | 1 |
| 24 | 03011006 | 底座螺丝 | Screw for base | 1 |



AQUA-MINI Series Centrifugal Pump Installation & Operating Instructions

Keep this manual for future reference.

AQUA-MINI 系列离心式水泵安装及操作说明

保留此份说明书

⚠ WARNINGS: 警告

- * EMAUX pumps must be wired to the main supply through an approved and licensed electrician.
- * If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard;
- * This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety; children should be supervised to ensure that they do not play with the appliance;
- * The maximum total head is 1 metre;
- * Pollution of the liquid could occur due to leakage of lubricants;
- * The pump must not be used when people are in the water;
- * The pump must be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA.
- 意万仕水泵电源布线必须通过专业的电力安装单位认可;
- 如果电线被损坏, 必须由制造商或类似的专业合格电工维修, 以避免危险;
- 此设备不能由体质薄弱或缺乏经验和知识人员(包括儿童)使用, 除非他们有相关人员监督或指导下使用该设备以确保他们的安全; 儿童应进行监督, 确保它们不会玩耍器具;
- 最大总水头1米;
- 污染的液体可能发生于泄漏的润滑油;
- 当人们在水中时水泵不能使用;
- 水泵必须装有漏电保护开关装置;

NOTICE 注意事项

Pump suction and discharge connections have moulded in thread stops, DO NOT try to tighten beyond these Stops. 水泵的进水口及出水口与水管相连接的接头扭紧即可, 不能扭太紧。

INSTALLATION 安装说明

IMPORTANT ELECTRICAL

Electrical Contractors Please Note: EMAUX pumps must be wired to the main power supply through an approved and correctly rated contactor.

电源安装提示

施工单位请注意: 意万仕水泵电源布线必须通过专业的电力安装单位认可。

CAUTION: THE PUMP SHOULD BE INSTALLED ACCORDING TO YOUR LOCAL ELECTRICAL INSTALLATION ORDINANCES AND REGULATIONS. ONLY QUALIFIED, LICENSED PERSONNEL SHOULD INSTALL PUMP AND WIRING.

1) Locate pump as close to pool as possible, preferably in a dry, well ventilated area away from direct sunlight. Pump Mount must:

- Be on solid, level, rigid and vibration free surface.
- Allow pump suction inlet height to be as close to water level as possible.
- Allow use of short, direct suction pipe (To reduce friction loss.)
- Allow for gate valves in suction and discharge piping.
- Have adequate floor drainage to prevent flooding.
- Be protected from excess moisture.
- Allow adequate access for servicing pump and piping.

2) Fixed the pump by screws onto the platform.

3) Connect the suction and discharge pipe to the outlet and inlet of the swimming pool.

注意: 泵的安装方式应根据当地条例和规定的电气安装。

只有经过培训鉴定合格的电工人员才能对水泵进行安装和配线。

水泵安装位置应尽可能接近泳池, 最好在干燥, 通风良好的区域, 避开阳光直射。安装水泵注意事项:

- 必须在一块坚硬平坦的表面位置安装。
- 使用一个简短而直接管道系统(减少水流量的损失), 水泵安装的位置不能高于水面3米。
- 在进水口和出水口各安装一个阀门。
- 机房位置的排水系统良好。
- 防止机房过于潮湿。
- 防止多余的水分。
- 为便于检修水泵和管道, 机房必须预留足够的空间。

注意: 水泵的进水口及出水口与水管相连接的接头扭紧即可, 不能扭太紧。

FUNCTIONS 功能

| CODE | MODEL NO | HORSE POWER | TIMER | PRE-FILTER |
|----------|----------|-------------|-------|------------|
| 88028419 | AMU012TP | 0.12hp | √ | √ |
| 88027519 | AMU012T | 0.12hp | √ | |
| 88027819 | AMU012P | 0.12hp | | √ |
| 88028119 | AMU012 | 0.12hp | | |
| 88028420 | AMU016TP | 0.16hp | √ | √ |
| 88027520 | AMU016T | 0.16hp | √ | |
| 88027820 | AMU016P | 0.16hp | | √ |
| 88028120 | AMU016 | 0.16hp | | |
| 88028401 | AMU020TP | 0.20hp | √ | √ |
| 88027501 | AMU020T | 0.20hp | √ | |
| 88027801 | AMU020P | 0.20hp | | √ |
| 88028101 | AMU020 | 0.20hp | | |

OPERATION 操作简介

- ▲ **NEVER** run pump dry! Running pump dry may damage seals, causing leakage and flooding! Fill pump with water before starting motor.
- ▲ Before removing lid:
STOP PUMP before proceeding.
 - CLOSE GATE VALVES in suction and discharge pipes.
 - RELEASE ALL PRESSURE from pump and piping system.
 - NEVER tighten or loosen screws while pump is operation.
- ▲ Do not block suction! To do so with body may cause severe or fatal injury. Children using pool must **ALWAYS** have close adult Supervision!
- ▲ 水泵内没有水, 请勿启动。否则会损坏轴密封, 导致水泵漏水或水浸。在启动电机前, 确保泵内的水已注满。
- ▲ 打开螺母面盖前, 应该注意:
 - 关闭水泵的电源。
 - 关闭进水口和出水口的阀门。
 - 排出水泵和水管内的气压。
 - 当水泵运行时, 不能松紧水泵的螺丝。
- ▲ 当水泵运行时, 不能松紧水泵的螺丝。游泳者不要阻塞阻塞泳池的排水口, 这会导致伤害或死亡。小孩游泳时必须由成人监管。

PRIMING PUMP 起动水泵

- *Release all air from filter and piping system: see filter owner manual.
 - *In a flooded suction system (water source higher than pump), pump will prime itself when suction and discharge valves are opened.
 - *If pump is not in a flooded suction system, unscrew and remove trap cover; fill trap and pump with water.
 - *Clean and inspect Ring; re-install on trap cover.
 - *Replace trap cover on trap; turn clockwise to tighten cover.
- NOTICE: Tighten trap cover by hand only.
Pump should prime now. Priming time will depend on vertical length of suction lift and horizontal length of suction piping.

- *排放所有来自过滤器和管道系统内的空气, 参阅过滤器的用户手册。
 - *当泳池的水位高于水泵的位置时, 打开进水口和出水口的阀门, 启动水泵。
 - *如果泳池的水位低于水泵的位置时, 打开面盖, 注满泵内的水后才再启动。
 - *清洁和检查密封圈, 再放回面盖。
 - *放上面盖后, 顺时针方向旋转拧紧面盖。
- 注意: 拧紧螺母面盖只能用手(或扳手)。必要时才用扳手。水泵的起动时间取决于垂直高度的提升力和吸水管的管径。

SERVICE & REPAIR PARTS 维修和配件的更换

Refer all service to your local agent or dealer as his knowledge of your equipment makes him the vest qualified source of information. Order all repair parts through your dealer. Give the following information when ordering repair parts:

- 1) Unit nameplate data or serial number on label.
- 2) Description of part.

向当地代理商或经销商索取设备的技术资料, 这些资料能证明授权资格的真实性。向代理商订购所需的维修配件, 订购配件时需提供下面的资料:

- 1) 设备标示牌的数据或产品编号。
- 2) 部件名称。

ROUTINE MAINTENANCE 保养程序

The only routine maintenance needed is inspection/cleaning of trap basket. Debris or trash that collects in basket, will choke off water flow through the pump. Follow instructions below to clean trap:

- 1) Stop pump, close gate valve in suction and discharge, and release all pressure from system before proceeding.
- 2) Unscrew trap lid (turn counterclockwise).
- 3) Remove strainer basket and clean. Be sure all holes in basket are clear, flush basket with water and replace in trap with large opening at pipe connection port (between ribs provided). If basket is replaced backwards cover will not fit on trap body.
- 4) Clean and inspect lid Ring; reinstall on trap cover.
- 5) Clean Ring groove on trap body and Replace lid. To help keep lid from sticking, tighten hand tight only.
- 6) Prime pump (see priming instructions above)

常规的保养就是检查和清洁隔发器。垃圾或碎屑积聚于隔发器的滤水篮, 会堵塞流入水泵的水。清理步骤如下:

- 1) 关闭水泵的电源和进水口、出水前的阀门, 排出各系统内的气压。
- 2) 扭开面盖。
- 3) 取出隔发器的滤水篮清洗干净, 保证滤水篮的每个空隙都是清洁的, 再将滤水篮放进桶内并注满水, 这个桶在进水处有一个极大的开口, 如果滤水篮放置不当, 和桶身就不能吻合。
- 4) 清洁和检查透明盖的密封圈, 再装上桶盖。
- 5) 清洁密封圈的周边后装回原处。
- 6) 起动水泵(参阅水泵的起动程序)。

TROUBLE SHOOTING 故障分析

MOTOR DOES NOT START

- 1) Disconnect switch or circuit breaker in off position
 - 2) Fuses blown or thermal overload open
 - 3) Locked motor shaft
 - 4) Motor windings burned out
 - 5) Defective starting switch inside single phase motor
 - 6) Disconnected or defective wiring
 - 7) Low voltage
- 马达不能启动
- 1) 电源断开或断路。
 - 2) 保险丝熔断或机件过热。
 - 3) 轴承卡死。
 - 4) 马达线圈烧坏。
 - 5) 离心开关损坏或过流保护失效。
 - 6) 电线连接不好或损坏。
 - 7) 电压不足。

PUMP DOES NOT REACH FULL SPEED

- 1) Low voltage
 - 2) Pump connected for wrong voltage
- 水泵未达到最佳状态
- 1) 电压不足。
 - 2) 电源与水泵电压不符。

MOTOR OVERHEATS (protector trips)

- 1) Low voltage
 - 2) Motor windings connected for wrong voltage on dual voltage model
 - 3) Inadequate ventilation
- 马达过热
- 1) 电压不足。
 - 2) 工作电压与电机电压不符。
 - 3) 通风环境不佳。

PUMP DELIVERS NO WATER

- 1) Pump is not primed
 - 2) Closed valve in suction or discharge line
 - 3) Leakage or air into suction system
 - 4) Impeller clogged
- 水泵不能抽水
- 1) 水泵没有启动。
 - 2) 进水或出水管阀门关闭。
 - 3) 管道系统有水或空气进入。
 - 4) 水叶损坏。

LEAKAGE OF WATER AT SHAFT

- 1) Shaft seal requires replacement
- 漏水
- 1) 更换密封圈。

LOW PUMP CAPACITY

NOTE: If the recommendations in the trouble shooting portion of this manual do not solve your particular problem(s), please contact your local dealer for service.

备注: 如果说明书中的故障分析仍不能解决您的问题, 请与当地经销商联系。