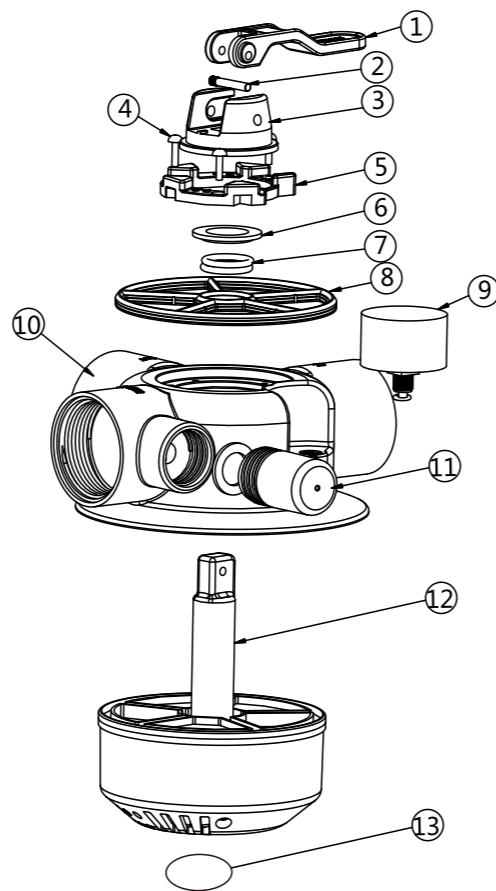


VALVE FOR "ULTRA" REPLACEMENT PARTS 用于 "ULTRA" 的阀门更换零部件

Key No.	Part No.	Product Description		Qty
图示号	零件号	零件名称		数量
1	01013130	Handle for 1.5"4-way Valve	1.5"4路阀门手柄	1
2	03018160	Pin for handle	手柄销子	1
3	01013131	Fixation for 1.5"4-way Valve Handle	1.5"4路阀门手柄固定装置	1
4	03011003	Ø 4*12 Self-drilling screw	Ø 4*12自攻螺丝	3
5	01013132	Pressing Ring	压环	1
6	01181060	Washer for 1.5"4-way Valve Handle	1.5"4路阀门手柄垫圈	1
7	02011095	O-Ring for Rotor	阀芯密封圈	2
8	02311010	Spider Gasket	星形垫片	1
9	06021014	Plastic pressure gauge With O-Ring (28Psi)	带密封圈的塑料压力表 (28Psi)	1
10	01013134	1.5"4-way Valve Body	1.5"4路阀门体	1
11	89280104	Sight Glass with O-Ring	带密封圈的观察孔	1
12	01013137	1.5"4-way Valve Rotor Connector	1.5"4路阀芯接头	1
	01013133	Rotor for 1.5"4-way Valve	1.5"4路阀芯	1
	01013135	Diffuser for 1.5"4-way Valve	1.5"4路阀门扩散器	1
13	02011184	O-Ring for Diffuser	扩散器密封圈	1



Valve Position 阀门位置	Function 功能
FILTER 正常过滤	Normal Filtration 正常过滤
BACKWASH 倒冲洗	Cleaning Filter by reversing the flow 倒冲洗 (将过滤器内的污物排出)
RINSE 底管清洗	Used after backwash to flush dirt from valve 底管清洗
WASTE 无过滤排水	By-passes filter, used for vacuuming to waste or lowering water level 排水
RECIRCULATE 无过滤循环	By-passes filter for circulating water to pool 不经过滤器循环
CLOSED 关闭	Shuts off all flow to filter or pool 关 (将过滤器内之功能关上)

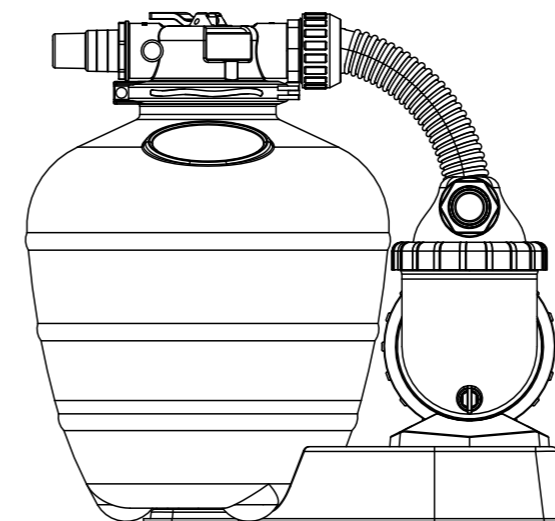
WARNING 警告

- ⚠ THIS FILTER OPERATES UNDER HIGH PRESSURE. WHEN ANY PART OF THE CIRCULATING SYSTEM (e.g., CLAMP, PUMP, FILTER, VALVES, ETC.) IS SERVICED, AIR CAN ENTER THE SYSTEM AND BECOME PRESSURIZED. PRESSURIZED AIR CAN CAUSE THE LID OR VALVE TO BE BLOWN OFF WHICH CAN RESULT IN SEVERE INJURY, DEATH, OR PROPERTY DAMAGE.
- ⚠ TURN PUMP OFF BEFORE CHANGING VALVE POSITION.
- ⚠ TO PREVENT DAMAGE TO THE PUMP AND FOR PROPER OPERATION OF THE SYSTEM, CLEAN PUMP STRAINER AND SKIMMER BASKETS REGULARLY.
- ⚠ DO NOT UNSCREW SCREWS OF FLANGE CLAMP WHILE PUMP IS RUNNING.
- ⚠ 此过滤器工作在高压之下。当对循环装置的任何零部件（如卡箍、水泵、过滤器、阀门等）进行维修保养时，空气可能进入装置并变得加压。加压的空气能吹走盖子或阀门，从而导致严重伤害、死亡或财产损失。
- ⚠ 改变阀门的位置之前要关闭水泵。
- ⚠ 为了防止水泵损坏和确保装置的正常运转，要定期清洁水泵滤网和撇渣器桶。
- ⚠ 水泵运转时不要松开法兰卡箍的螺钉。

**FSU-4TP FSU-4P FSU-6TP
FSU-6P FSU-8TP FSU-8P**

**FILTER & PUMP COMBO
Installation & Operating Instruction**

**过滤器和水泵组合
安装和操作说明书**



INSTALLATION 安装

- * Install filtration system including pump, filter tank and multiport valve.
- * The filter system should be installed as close as possible to the swimming pool and preferably at a level of 0.50 metres below the surface of the water in the swimming pool. Make sure there is drainage available at the place where the filter is to be installed.
- * **PUMP**
- 1) Only qualified, licensed personnel should install pump and wiring.
- 2) Electrical Contractors Please Note: All 220 volt 50Hz pump must be wired to the main power supply through an approved and correctly rated contractor.
- 3) Allow for gate valve in suction piping.
- 4) Pump suction and discharge connections have moulded in thread stops, do not try to screw pipe in beyond these stops.
- * **FILTER TANK and MULTIPORT VALVE**
- 1) Loading the sand media. Filter sand media is loaded through the top opening of the filter.
 - a. Loosen the plastic clamps from tank neck.
 - b. Cap internal pipe with plastic cap to prevent sand from entering it.
 - c. We recommend filling tank approximately 1/2 way with water to provide a cushion effect when the filter sand is poured in. This helps protect the under-drain laterals from excessive shock.
 - d. Carefully pour in correct amount and grade of filter sand. Be sure center pipe remains centered in opening. Sand surface should be leveled and should come to about the middle of the filter tank. Remove plastic cap from internal pipe.
- 2) Assemble filter control valve to filter tank.
 - a. Insert filter control valve (with O-ring in place) into the tank neck, taking care that the center pipe slips into the hole in the bottom of the valve.
 - b. Place two plastic clamps around valve flange and tank neck and tighten just enough so that the valve may be rotated on tank for final positioning.
 - c. Carefully screw pressure gauge (with O-ring in place) into tapped hole in valve body. Do not over-tighten.
 - d. Connect pump to control valve opening marked PUMP with hose. After connections are made, tighten clamps with screwdriver, tapping around clamp with screwdriver handle to help seat valve flange clamp.
- 3) Make return to pool pipe connection to control valve opening marked RETURN and complete other necessary plumbing connections, suction lines to pump, waste, etc.
- 4) To prevent water leakage, be sure all pipe connections are tight.
- * 安装包括水泵、过滤器和多通阀门在内的过滤系统。
- * 过滤系统应该安装在尽可能靠近泳池的地方，最好位于泳池水平面之下0.5米的位置。确保过滤器安装的地方配有排水系统。
- * **水泵**
- 1) 应该只能由有资格、持证的人员安装水泵和接线。
- 2) 请电气承包商注意：所有220V60Hz的水泵必须由经过批准和正确评估的承包商连接到主电源上。
- 3) 抽水管道上允许安装闸阀。
- 4) 水泵抽水和排水接头上有模压的螺纹止位，在旋入管子时不要试图超过这些止位。
- * **过滤器和多通阀**
- 1) 装入沙子媒质。过滤沙是通过过滤器顶部的开口装进去的。
 - a. 松开缸颈上的塑料卡箍。
 - b. 用塑料塞子塞住内管，以防止沙子进入管子里。
 - c. 建议在滤缸内充入大约1/2缸体容量的水，当过滤沙倒入时可以产生缓冲效果。这样有助于保护下排水底管不遭受过度的震动。
 - d. 小心地倒入正确数量和等级的过滤沙。确保沙子停留在开口的中心位置。应抹平沙子表面，沙子应该到达滤缸中间。取下内管上的塑料塞子。
- 2) 把过滤器控制阀安装到滤缸上。
 - a. 把过滤器控制阀（密封圈已安装到位）插进滤缸颈部，注意中心管要插入阀门底部的孔里。
 - b. 在阀门法兰和滤缸颈部放上2个塑料卡箍，上紧卡箍，力度达到刚好可以让阀门在滤缸上转动，方便最后定位。
 - c. 小心地把压力表（密封圈已安装到位）拧入阀体上的螺纹孔里。不要拧得过紧。
 - d. 把水泵用软管连接到控制阀上标有PUMP字样的接口上。连接好后，用螺丝刀的手柄轻敲卡箍，帮助卡箍安装到位。
- 3) 把回到泳池的回水管连接到控制阀上标有RETURN字样的接口上，并完成其它必要的管道连接、抽水管连接到水泵、废水管连接等。
- 4) 为了防止漏水，确保所有的管道连接紧密。

- ❖ Release all air from filter and piping system.
- ❖ 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.
- ❖ 排空过滤器和管道系统内的所有空气。
- ❖ 在一个溢水的抽水系统（水源高于水泵）里，当抽水阀和排水阀都开启时，水泵会自注水以便启动。
- ❖ 如果水泵不是在溢水的抽水系统里，拧松并移开水箱的盖子，把水注入水箱和水泵内。
- ❖ 清洁和检查密封圈；重新安装到水箱盖上。
- ❖ 把水箱盖子重新放到水箱上；沿顺时针方向拧紧。
- 注意：**只能用手拧紧水箱盖。水泵现在应该注水启动了。注水时间取决于抽水压头的纵向长度和抽水管道的横向长度。

INSTALL/START-UP OF FILTRATION 过滤系统的安装和启动

- 1) Be sure correct amount of filter media sand is in tank and that all connections have been made and are secure.
- 2) Depress control valve handle and rotate to BACKWASH position. (To prevent damage to control valve seal, always depress handle before turning.)
- 3) Prime and start pump. Never run pump dry! Running pump dry may damage seals, causing leakage and flooding! Fill pump with water before starting motor. (be sure all suction and return lines are open), allowing the filter tank to fill with water. Once water is flowing out of the waste line, run the pump for at least 1 minute. The initial back-washing of the filter is recommended to remove any impurities or fine sand particles in the sand media.
- 4) Turn pump off and set valve to RINSE position. Start pump and operate until water in sight glass is clear, about 1/2 to 1 minute. Turn pump off and set valve to FILTER position and restart pump. The filter is now operating in the normal filter mode, filtering dirt particles from the pool water.
- 5) Adjust pool suction and return valves to achieve desired flow. Check system and filter for water leaks and tighten connections, bolts, nuts, as required.
- 6) Note the initial pressure gauge reading when the filter is clean. (It will vary from pool to pool depending upon the pump and general piping system.) As the filter removes dirt and impurities from the pool water, the accumulation in the filter will cause the pressure to rise and flow to diminish. When the pressure gauge reading is 1.5 bar, higher than the initial "clean" pressure you noted, it is time to backwash the filter (see BACKWASH under filter and control valve functions).

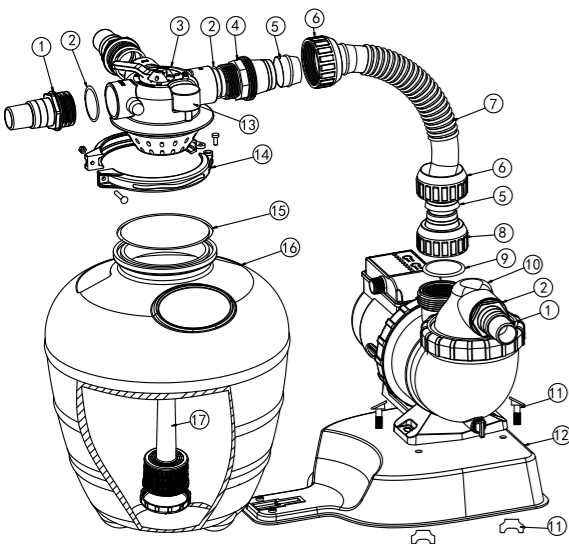
NOTE: During initial clean-up of the pool water it may be necessary to backwash frequently due to the unusually heavy initial dirt load in the water.

- 1) 确保滤缸内过滤媒质沙子的数量正确，所有接头连接紧固。
- 2) 按下控制阀手柄，转动到BACKWASH位。（为了防止对控制阀的密封造成破坏，每次转动之前要按下手柄。）
- 3) 对水泵进行注水和启动。绝不能让水泵干运转！水泵干运转会破坏密封件，引起漏水和溢水！启动电机前要为水泵注水。（确保所有的抽水和回水管道是开启的），让滤缸内充水。一旦水从废水管流出，运转水泵至少1分钟。建议对过滤器进行首次反冲洗，清除沙子媒质里的杂质或细沙颗粒。
- 4) 关闭水泵，把阀门调到RINSE位。启动并运转水泵1/2至1分钟，直至观察孔里的水变得清澈。关闭水泵，把阀门调到FILTER位，重新启动水泵。过滤器现在在正常过滤模式运转，过滤掉池水里的灰尘颗粒。
- 5) 调整泳池的抽水和回水阀以获得理想的流量。检查系统和过滤器是否漏水，按要求拧紧各接头、螺栓和螺母。
- 6) 记下过滤器在洁净状态下压力表的初始读数。（泳池与泳池之间会因所用的水泵和一般管道系统不同而有差异。）由于过滤器清除池水中的灰尘和杂质，过滤器中的堆积物会引起压力的上升和水流的减少。当压力表的读数比您记录的初始“干净”压力高1.5bar时，是时候对过滤器进行反冲洗了（参阅过滤器和控制阀的功能一节介绍的BACKWASH的内容）。

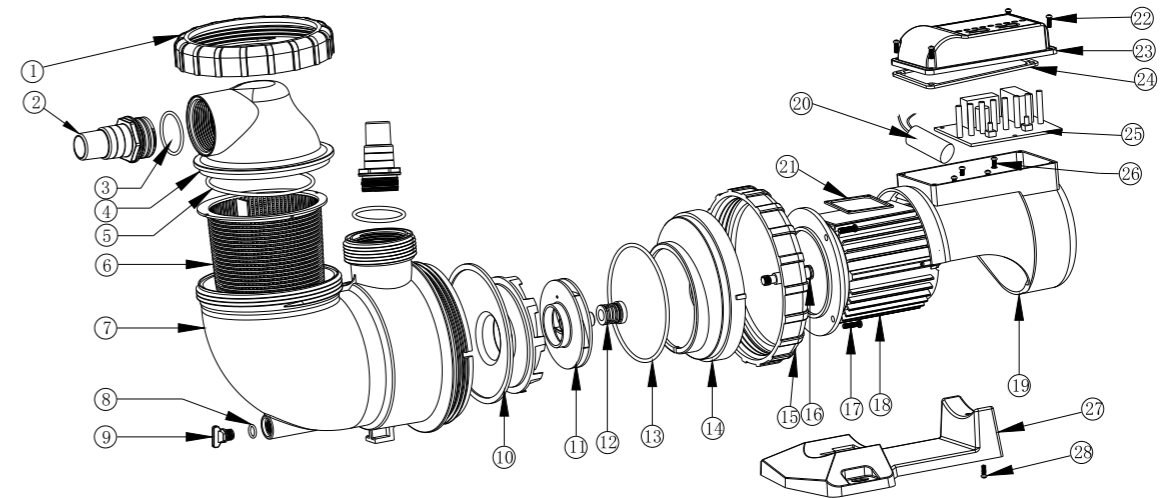
注意：初次对池水进行净化时，可能有必要频繁地进行反冲洗，因为水中初始的污垢异常严重。

REPLACEMENT PARTS OF FILTER 过滤器零部件清单

Item	Part No.	Description English	Qty
项目	零件编号	零件名称	数量
1	01013051	32mm & 38mm Adaptor	32mm & 38mm转换接头 3
2	02020013	O-Ring	密封圈 4
3	88281105	4 Way Valve	4路阀门 1
4	01013047	Hose adaptor	软管转换接头 1
5	02011026	Sleeve for Hose	软管套筒 2
6	01013046	Nut for Hose	软管螺母 2
7	01370011	Hose	软管 1
8	01013049	Hose adaptor with nut	带螺母的软管转换接头 1
9	02011104	O-Ring	密封圈 1
10	88028319	AMU012TP AQUA-MINI Pump (with timer & pre-filter)	AMU012T AQUA-微型水泵 1
	88027719	AMU012P AQUA-MINI Pump (with pre-filter)	AMU012 AQUA-微型水泵 1
	88028320	AMU016TP AQUA-MINI Pump (with timer & pre-filter)	AMU012 AQUA-微型水泵 1
	88027720	AMU016P AQUA-MINI Pump (with pre-filter)	AMU016 AQUA-微型水泵 1
	88028301	AMU020TP AQUA-MINI Pump (with timer & pre-filter)	AMU020T AQUA-微型水泵 1
	88027701	AMU020P AQUA-MINI Pump (with pre-filter)	AMU020 AQUA-微型水泵 1
11	89033601	Pump Assembly Screw	水泵安装螺丝 1
12	01111105	Combo Base	组合底座 1
13	06021014	Plastic Pressure Gauge With O-Ring (28psi)	塑料压力表带密封圈(28psi) 1
14	89033602	Clamp Lock with Screws & Nut	带螺丝&螺母的夹式锁制 1
15	02010045	O-Ring	密封圈 1
16	01331061	13" Filter Tank	13"滤缸 1
17	89033603	Lateral Assembly with Center Pipe	带中心管的底管总成 1



AMU PUMP REPLACEMENT PARTS AMU 水泵更换零部件



Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
项目	零件编号	零件名称	数量	项目	零件编号	零件名称	数量
1	01021067	Nut for lid	1	14	01021069	Flange	1
	89280105	1.5" union (optional)	2	15	01021068	Nut for body	1
2	01013015	1.5" Connector (for input)	1	16	02011156	Motor Slinger	1
	01013051	32-38 Union (optional)	2	17	03011067	Screw for flange	4
	02011104	O-Ring for 1.5" Union	2		04020099	Motor (AMU012TP/AMU012P) (220V/50Hz) (220V/60Hz)	1
	02020013	O-Ring for 32-38 Union	2	18	04020100	Motor (AMU016TP/AMU016P) (220V/50Hz) (220V/60Hz)	1
4	01041045	Transparent Lid	1		04020101	Motor (AMU020TP/AMU020P) (220V/50Hz) (220V/60Hz)	1
5	02020049	O-Ring for lid	1	19	01321019	Fan Cover	1
6	01111104	Basket	1		04016036	Capacitor for AMU012TP/AMU012P & AMU016TP/AMU016P (220V/50Hz, 220V/60Hz)	1
7	01021070	AMU pump body	1		04016030	Capacitor for AMU020TP/AMU020P (220V/50Hz, 220V/60Hz)	1
8	02020014	O-Ring	1	21	02020048	Cover Slinger	1
9	01111017	Drain Plug	1	22	03011007	Screw for cable Box	4
10	01111103	Diffuser	1	23	01321018	Cable Box	1
	01311045	Impeller (AMU012TP/AMU012P) (220V/50Hz)	1	24	02020012	Slinger for cable Box	1
	01311046	Impeller (AMU016TP/AMU016P) (220V/50Hz)	1	25	04015041	PCB (for AMU012TP AMU016TP AMU020TP)	1
	01311044	Impeller (AMU020TP/AMU020P) (220V/50Hz)	1	26	03011100	Screw	4
12	04015002	1/2" Mechanical seal	1	27	01111102	Base	1
13	02020011	O-Ring for flange	1	28	03011006	Screw for base	1

PRIMING PUMP 水泵的注水启动

⚠ 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.
- ⚠意万仕水泵必须由经批准和持证的电工连接到主电源上。如果电源线损坏，为了避免危险，必须由制造厂家、其维修代理或有同等资格的人员进行更换；
- ⚠本设备设计的使用者不包括身体、感觉和精神能力受限或者缺乏经验和知识的人士(包括儿童)，除非他们受到负责其安全的人士的监管或对如何使用该设备的指导；应该对儿童进行监管，以确保他们不会把此设备当作玩具。
- ⚠最大的总水头为1米。
- ⚠润滑剂泄漏可能导致液体污染；
- ⚠当有人在水中时不得使用水泵；
- ⚠水泵必须通过一个漏电工作电流不超过30mA的漏电保护器（RCD）连接到主电源上。