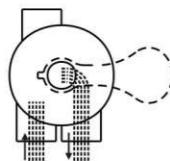


FUNCTIONS OF VALVE POSITIONS 阀门功能

| Valve Position 阀门位置 | Functional 功能 |
|---------------------|--|
| FILTER | Normal Filtration 正常过滤 |
| BACKWASH | Cleaning Filter by reversing the flow 倒冲洗 (将过滤器内渍物排出) |
| RINSE | Used after backwash to flush dirt from valve 当倒冲洗后剩余在管内之渍物排出 |
| WASTE | By-passes filter, used for vacuuming to waste or lowering water level 排水 |
| RECIRCULATE | By-passes filter for circulating water to pool 不经过滤器循环 |
| CLOSED | Shuts off all flow to filter or pool 关 (将过滤器内之功能关上) |

FILTER 正常过滤

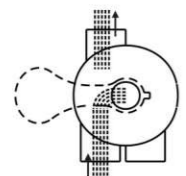
WASTE 排水口



IN FLOW OUT FLOW
进水口 出水口

BACKWASH 倒冲洗

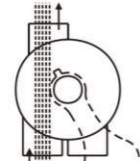
WASTE 排水口



IN FLOW OUT FLOW
进水口 出水口

WASTE 不经过滤直接排水

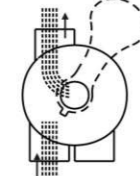
WASTE 排水口



IN FLOW OUT FLOW
进水口 出水口

RINSE 倒冲洗后冲洗管道

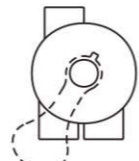
WASTE 排水口



IN FLOW OUT FLOW
进水口 出水口

CLOSED 关闭过滤功能

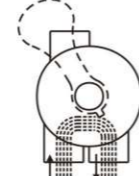
WASTE 排水口



IN FLOW OUT FLOW
进水口 出水口

RECIRCULATE 不经过滤器循环

WASTE 排水口



IN FLOW OUT FLOW
进水口 出水口

GENERAL

- 1) Pipe tap boss provided for optional influent pressure gauge.
- 2) SERVICING VALVE(Stop pump, close gate valve in suction&discharge before proceeding):
 - a) Set handle in filter position.
 - b) Remove cover screws.
 - c) Lift cover and key assembly out.

TO ASSEMBLE:

- 1) Place valve key so that wedge opening is at TOP port (handle in Filter psn.). Flat edge of cover screw lug should align with flat edge of body screw lug.
- 2) Position cover O'Ring.
- 3) Secure assembly to body with cover screws. Tighten cover screws evenly and alternately. Do not over-tighten.

综合简介:

- 1) 喉管上的水龙头能控制水流, 而能随意影响到压力表。
- 2) 维修缸头(维修缸头前, 请先关闭水泵及管道阀制)。
- a) 手柄应设定在正常过滤位置。 b) 扭开沙缸头面盖上的螺丝。 c) 抬起手柄, 将面盖连分水器取出。

装配简介:

1. 面盖胶圈放于面盖正确位置。
2. 握住手柄, 将面盖连分水器放入缸头身, 面盖上定位钉插入缸头身上小孔, 手柄对着压力表孔(手柄在正常过滤位置), 将螺丝孔及边对齐。
3. 对称上好螺丝, 均匀用力, 将螺丝拧紧, 但不能拧得过紧。

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. DO NOT UNSCREW SCREWS OF FLANGE CLAMP WHILE FILTER OPERATING.

TURN PUMP OFF BEFORE CHANGING VALVE POSITION.

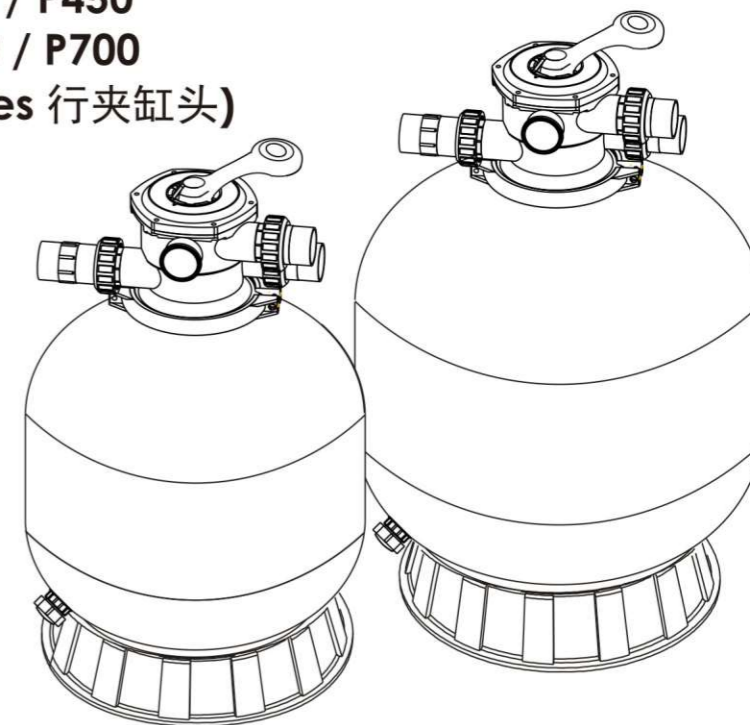
TO PREVENT DAMAGE TO THE PUMP AND FOR PROPER OPERATION OF THE SYSTEM, CLEAN PUMP STRAINER AND SKIMMER BASKETS REGULARLY.

UNDER LOW TEMPERATURE SHUT OFF CONDITION, IT IS STRONGLY RECOMMEND TO TURN TO WINTERISE POSITION AND DISCHARGE ALL THE WATER INSIDE FILTER THROUGH THE BOTTOM DRAIN.

- * 沙缸操作时会在高压下运作。当其中一部份打开(接合, 水泵, 沙缸, 阀门等等)需要修理, 空气便能进入系统内而改变大气压力, 使而气压导致外壳或阀门等爆炸, 造成受伤或环境破坏, 因此沙缸运行时请勿扭动缸头上的螺丝。
- * 转换阀门功能制时, 先停止水泵的运作。
- * 防止水泵受损, 要定期清理水泵内的隔发器和池面撇渣器内的垃圾。
- * 气温较低, 产品停业运行时, 建议缸头手柄拨到结霜档位, 同时打开底排水, 排空缸内过滤水。

**Models(型号): P350 / P400 / P450
P500 / P650 / P700**

(Link by Clamp type Valves 行夹缸头)



FUNCTION 功能简介

The filter uses special filter sand to remove dirt particles from pool water. The filter sand is loaded into the filter tank and functions as a permanent dirt removing media. When the control valve is in the FILTER position, the pool water which contains suspended dirt particles, is pumped through your piping system and is automatically directed by the patented filter control valve to the top of the filter tank. As the pool water is pumped through the filter, dirt particles are trapped by the sand bed, and filtered out. The cleaned Pool water is returned from the bottom of the filter tank, through the control valve and back to the pool through the piping system. This entire sequence is continuous and automatic. It provides for total recirculation of pool water through your filter and piping System.

After a period of time, the accumulated dirt in the filter causes a resistance to flow, and the flow diminishes. This means it is the time to clean your filter. With the control valve in the BACKWASH position, the water flow is automatically reversed through the filter so that it is directed to the bottom of the tank, up through the sand, flushing the previously trapped dirt and debris out the waste line. Once the filter is back-washed of dirt, set control valve to RINSE position and run pump for about 1/2 to 1 minute, and then set the control valve in the FILTER position, to resume normal filtering.

NOTE: Turn pump off before changing valve position.

沙缸功能是把泳池水中的污物经过沙层的过滤后, 使干净水重新回到泳池内, 过滤用的沙是石英沙。而过滤程序是: 首先是缸头控制器上把手柄推向(FILTER)正常过滤, 然后启动水泵, 泳池水便透过水泵引入沙缸进水口, 之后由进水中流到分水器, 再流入沙缸内, 水经过沙的过滤流进缸的底部, 再经过滤管进入过滤主管, 水在管道中向上流往出水口, 之后由管道系统注入泳池中。

经过一段时间后累积的污物, 会影响水的流量。这个时候便需要进行清洗沙缸。把缸头控制器上的手柄推向(BACKWASH)倒冲洗, 水流便由过滤主管进入, 经缸底的过滤管排出, 水流从底部向上升, 把沙层内的污物排出。之后把控制器推向(RINSE)清洗管内之污物从沙缸排出。大约半分钟或1分钟后, 把手柄推向(FILTER)正常过滤。

注意: 转换阀门位置时要先关掉水泵电源。

INSTALLATION 安装说明

Only simple tools (screwdriver and wrenches), plus pipe sealant for plastic adapters, are required to install and service the filter.

- 1) The filter should be placed on a level concrete slab, very firm ground, or equivalent. Position the filter so that the piping connections, control valve are convenient and accessible for operation and service.
- 2) Loading the sand media. Filter sand media is loaded through the top opening of the filter.
 - a) Loosen flange clamp and remove filter control valve (if previously installed).
 - 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.
- 3) 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 flange 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. After connections are made, tighten valve flange clamps with screwdriver, tapping around clamp with screwdriver handle to help seat valve flange clamp.

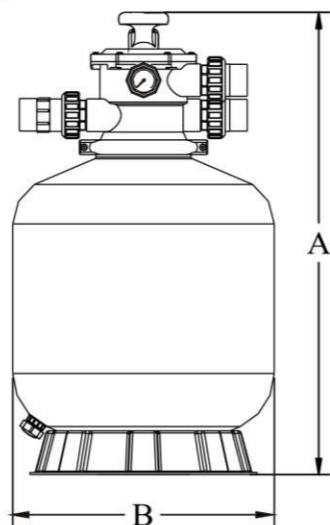
- 4) Make return to pool pipe connection to control valve opening marked RETURN and complete other necessary plumbing connections, suction lines to pump, waste, etc.
- 5) Make electrical connections to pump per pump instructions.
- 6) To prevent water leakage, be sure all pipe connections are tight.

- 安装或修理沙缸只需简单工具（螺丝刀、活动扳手等），喉管接驳到胶接头上。
- 1) 沙缸要放置在平坦和坚硬的地上，要有足够的位置给与管道系统和缸头的安装，预留通道以便操作和修理。
 - 2) 沙缸是装沙的器皿，沙是由沙缸顶部倒入。
 - a) 拧开颈夹上的螺丝，然后打开缸头（之前已装过）。
 - b) 过滤主管有密封盖，防止污物流到管道中。
 - c) 我们建议：在沙缸内注入适当份量沙后，再加入半缸水作为缓冲效用。这样便可保护到缸底的过滤管过度的冲击而做成损坏。
 - d) 小心加入正确数量的沙（保持过滤主管正中位置）沙的表面要铺平，大约加到沙缸的一半时，过滤主管上的盖便可打开。
 - 3) 装配沙缸头
 - a) 插入沙缸头（附有胶垫圈）进入缸颈位，要小心过滤主管接合缸头底部的孔。
 - b) 放置2个颈环夹围绕着沙缸头法兰和沙缸顶法兰，同时把它适当地扭紧，以便使沙缸头在缸上操作。
 - c) 小心把压力表（附有密封圈）装上缸头上，但不要扭太紧。
 - d) 水泵初步接到缸头，之后管道安妥，扭紧缸头夹。
 - 4) 接驳管道由出水口到泳池过滤回水口，同时各管道安装要求平行或垂直，另外要由进水口连接到水泵的出水口等等。
 - 5) 接驳好电源后给水泵运作。
 - 6) 为了防止漏水，使用前检查所有管道是否接合妥当。

MAIN DIMENSION 沙缸尺寸图

DIMENSION TABLE 尺寸表

| Model 型号 | Height 高 mm A | Diameter 直径 mm B | Valve Port Size 多向阀管径 Inch | Sand 沙重 kg |
|-------------|------------------------|---------------------------|-------------------------------------|------------------|
| P350 | 726 | 350 | 1.5" | 20 |
| P400 | 757 | 400 | 1.5" | 35 |
| P450 | 814 | 449 | 1.5" | 45 |
| P500 | 845 | 527 | 1.5" | 85 |
| P650 | 950 | 635 | 1.5" | 145 |
| P700 | 1020 | 703 | 1.5" | 210 |



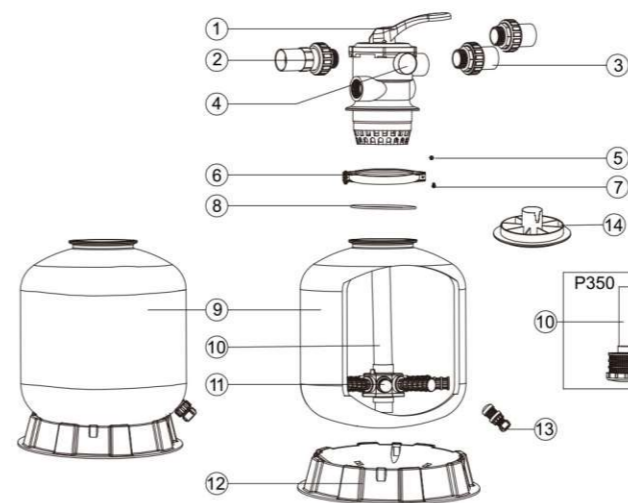
INSTALL/START-UP OF FILTER 调试说明

- 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 according to pump instructions (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) 确定沙缸内的沙数量正确，同时所有管道系统连接妥当。
 - 2) 将阀门控制手柄压下再转向倒冲洗位置，为了防止阀门控制密封装置不受损坏，用阀门控制前一定要先压下手柄才转动。
 - 3) 按照水泵程序启动（确定所有进水和出水管道是开启）给水进入沙缸。作为首次启动系统，水泵最少也运行一分钟，另外建议最初先使用反冲洗功能，因为可以除去系统内的污垢或过滤沙中较细的粒子。
 - 4) 停水泵，同时沙缸头转向清洗及排出污物的位置。之后开水泵，直至清水镜的水清澈，大约半至一分钟，便停泵。这时沙缸便进入正常过滤模式，把泳池水的污物过滤。
 - 5) 调节过滤系统适合的水流。然后再检查系统，沙缸和接合位置是否漏水，螺栓或螺母等是否妥当。
 - 6) 当沙缸清洁时便摘录下压力表的读数。（读数的变化将会受泳池水泵和水管系统影响）。如沙缸过滤池水把污物留下，而累积污物会造成压力上升和水流减慢。当压力表读数是1.5巴，相对比当初（清洁）记录要高，这时要使用反冲洗沙缸。（参考反冲洗功能简介）。
- 注意：在过滤系统启动初期，将要多次使用反冲洗功能，因为初期的泳池水一定有污垢，流入沙缸便会积聚较多污垢和微粒。

REPLACEMENT PARTS OF FILTER 沙缸组件位置图

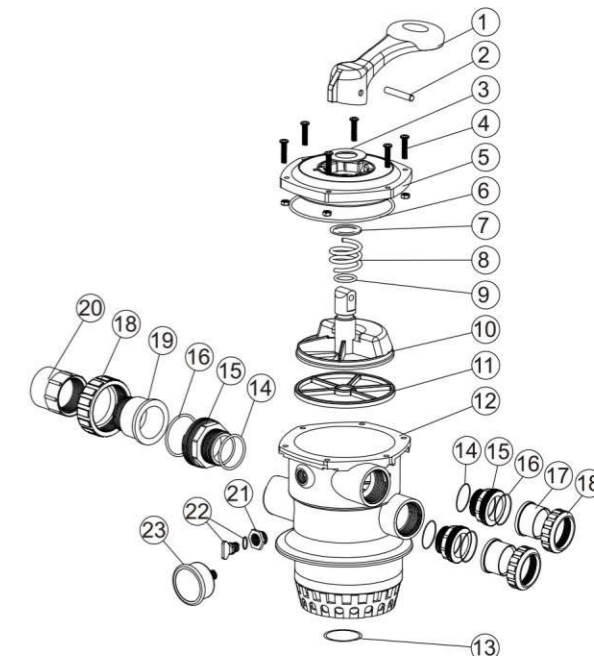


- Notes: 1* 89280105B is 1.5" Top Mount Valve in Black Colour
 1* 89280105W is 1.5" Top Mount Valve in White Colour
 2* 89280101B is 1.5" Union with Slight Glass, O-Ring in Black Colour
 2* 89280101W is 1.5" Union with Slight Glass, O-Ring in White Colour
 3* 89280102B is 1.5" Union Set (2 Pieces) with O-Ring in Black Colour
 3* 89280102W is 1.5" Union Set (2 Pieces) with O-Ring in White Colour

| 项目 Key No. | 部件编号 Part No. | 中文 Chinese | 产品资料/说明 Product Description | 数量 Qty |
|---------------|------------------|---------------------|--|-----------|
| 1 | 88280105 | 1.5"标准顶出缸头 | 1.5" Top Mount Valve | 1 |
| 2 | 89280101 | 1.5"排污口(公英制共用) | 1.5" Union With Sight Glass, O-Ring | 1 |
| 3 | 89280102 | 1.5"进出水口(活接)(公英制共用) | 1.5" Union Set (2 Pieces) With O-Ring | 2 |
| 4 | 06021013 | 底出胶表(40psi) | Plastic Pressure Gauge With O-Ring (40psi) | 1 |
| | 01111048 | 压力表牙套 | Connector for Pressure Gauge/Stopper | 1 |
| 5 | 03021035 | M6螺母 | M6 Nut | 2 |
| 6 | 89010101 | M6*50圆头机丝连螺母 | Clamp Lock | 2 |
| 7 | 03011095 | 螺丝钉 | Screw | 2 |
| 8 | 02011134 | 颈环胶圈 | O-Ring for Filter Neck | 1 |
| | 89014021 | P350胶缸缸身 | Filter Tank for P350 | 1 |
| | 89014022 | P400胶缸缸身 | Filter Tank for P400 | 1 |
| | 89014023 | P450胶缸缸身 | Filter Tank for P450 | 1 |
| | 89014024 | P500胶缸缸身 | Filter Tank for P500 | 1 |
| | 89014025 | P650胶缸缸身 | Filter Tank for P650 | 1 |
| | 89014026 | P700胶缸缸身 | Filter Tank for P700 | 1 |
| | 89011602 | P350中心管连过滤芯 | P350 Lateral Assembly with Center Pipe | 1 |
| | 89011603 | P400中心管连过滤芯 | P400 Lateral Assembly with Center Pipe | 1 |
| | 89011604 | P450中心管连过滤芯 | P450 Lateral Assembly with Center Pipe | 1 |
| | 89011605 | P500中心管连过滤芯 | P500 Lateral Assembly with Center Pipe | 1 |
| | 89011606 | P650中心管连过滤芯 | P650 Lateral Assembly with Center Pipe | 1 |
| | 89011607 | P700中心管连过滤芯 | P700 Lateral Assembly with Center Pipe | 1 |
| | 01172007 | 底管(115mm) | Laterals (115mm) | 8 |
| | 01172008 | 底管(126mm) | Laterals (126mm) | 8 |
| | 01111052 | P350 沙缸底座 | P350 Filter Base | 1 |
| | 01111059 | 16-18寸 沙缸底座 | 16-18inch Filter Base | 1 |
| | 01111062 | 21-28寸 沙缸底座 | 21-28inch Filter Base | 1 |
| 13 | 89011601 | 胶缸底排水 | Water Drain Set | 1 |
| 14 | 01015006 | 1.5"砂质分流器 | Sand Diverter (Black) for 1.5" | 1 |

REPLACEMENT PARTS OF MULTIPORT VALVE 多向阀组件位置图

| 项目 Item | 部件编号 Part No. | 中文 Chinese | 产品资料/说明 Product Description | 数量 Qty |
|------------|------------------|-----------------|--|-----------|
| 1 | 01013003 | 大手柄 | Handle (Big) | 1 |
| 2 | 03018008 | 手柄固定销 | Pin for Handle | 1 |
| 3 | 01181001 | 大介子 | Washer for Handle | 1 |
| 4 | 89280107 | M6*30 B头机丝连螺母 | M6*30 Screw with Nut for Standard Lid | 6 |
| 5 | 01013004 | 1.5"缸头标准面盖(黑色) | 1.5" Top Mount Valve Standard Lid (Black) | 1 |
| 6 | 02011002 | 面盖胶圈(A) | O-Ring for 1.5" Valve Lid | 1 |
| 7 | 01181002 | 小介子 | Washer for Spring | 1 |
| 8 | 03014001 | 弹簧 | Spring for 1.5" Top Mount Valve | 1 |
| 9 | 02011022 | 分水胶圈 | O-Ring for 1.5" Valve Rotor | 2 |
| 10 | 01021001 | 1.5"分水器连胶圈 | 1.5" Valve Rotor with O-Ring | 1 |
| 11 | 02311002 | 止水胶圈 | Spider Gasket | 1 |
| 12 | E190147 | 1.5"缸头身(行夹)(黑色) | 1.5" Body with Diffuser (Black) | 1 |
| 13 | 02011001 | 胶圈 | O-Ring for Diffuser | 1 |
| 14 | 02020013 | 胶圈 | O-Ring for 1.5" Connector | 3 |
| 15 | 01013015 | 1.5"外牙头(黑色) | 1.5" Connector (black) | 3 |
| 16 | 02011003 | 胶圈 | O-Ring for 1.5" Union | 3 |
| 17 | 01171153 | 1.5"公英制管接头 | 1.5" Union (A/E) | 2 |
| 18 | 01013017 | 1.5"螺母(黑色) | 1.5" Union Nut (black) | 3 |
| 19 | 01041002 | 透明管(短) | 1.5" Union With Sight Glass (short) | 1 |
| 20 | 01172026 | 1.5"公英制刁套 | 1.5" Union With Sight Glass Holder | 1 |
| 21 | 89280120 | 扭制附件连胶圈 | Drain Plug Fitting with O-ring | 1 |
| 22 | 89021307 | 扭制连胶圈 | Drain Plug with O-ring | 1 |
| 23 | 06021013 | 底出胶表连胶圈(40psi) | Plastic Pressure Gauge With O-Ring (40psi) | 1 |

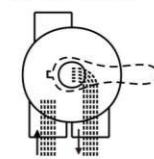


FUNCTIONS OF VALVE POSITIONS 阀门功能

| 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 当倒冲洗后剩余在管内之渍物排出 |
| 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) |

FILTER 正常过滤

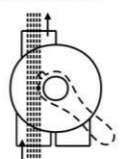
WASTE 排水口



IN FLOW OUT FLOW
进水口 出水口

WASTE 不经过滤直接排水

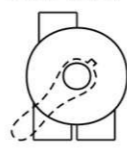
WASTE 排水口



IN FLOW OUT FLOW
进水口 出水口

CLOSED 关闭过滤功能

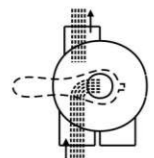
WASTE 排水口



IN FLOW OUT FLOW
进水口 出水口

BACKWASH 倒冲洗

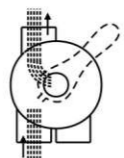
WASTE 排水口



IN FLOW OUT FLOW
进水口 出水口

RINSE 倒冲洗后冲洗管道

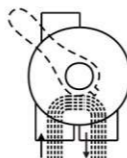
WASTE 排水口



IN FLOW OUT FLOW
进水口 出水口

RECIRCULATE 不经过滤器循环

WASTE 排水口



IN FLOW OUT FLOW
进水口 出水口

GENERAL

- 1) Pipe tap boss provided for optional influent pressure gauge.
- 2) SERVICING VALVE (Stop pump, close gate valve in suction & discharge before proceeding):
 - a) Set handle in filter position.
 - b) Remove cover screws.
 - c) Lift cover and key assembly out.

TO ASSEMBLE:

- 1) Place valve key so that wedge opening is at TOP port (handle in Filter psn.). Flat edge of cover screw lug should align with flat edge of body screw lug.
- 2) Position cover O'Ring.
- 3) Secure assembly to body with cover screws. Tighten cover screws evenly and alternately. Do not over-tighten.

综合简介:

- 1) 喉管上的水龙头能控制水流, 而能随意影响到压力表。
- 2) 维修缸头 (维修缸头前, 请先关闭水泵及管道阀制)。
- 3) 手柄应设定在正常过滤位置。 B) 扭开沙缸头面盖上的螺丝。 C) 抬起手柄, 将面盖连分水器取出。

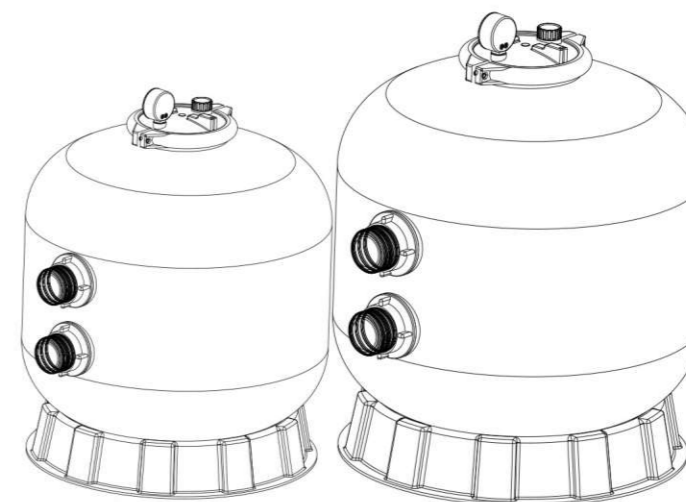
装配简介:

- 1) 面盖胶圈放于面盖正确位置。
- 2) 握住手柄, 将面盖连分水器放入缸头身, 面盖上定位钉插入缸头身上小孔, 手柄对着压力表孔 (手柄在正常过滤位置), 将螺丝孔及边对齐。
- 3) 对称上好螺丝, 均匀用力, 将螺丝拧紧, 但不能拧得过紧。

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. DO NOT UNSCREW SCREWS OF FLANGE CLAMP WHILE FILTER OPERATING.
- ⚠ 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.
- ⚠ UNDER LOW TEMPERATURE SHUT OFF CONDITION, IT IS STRONGLY RECOMMEND TO TURN TO WINTERISE POSITION AND DISCHARGE ALL THE WATER INSIDE FILTER THROUGH THE BOTTOM DRAIN.
- ⚠ 沙缸操作时会在高压下运作。当其中一部份打开 (接合, 水泵, 沙缸, 阀门等等) 需要修理, 空气便能进入系统内而改变大气压力, 使而气压导致外壳或阀门等爆炸, 造成伤害或环境破坏, 因此沙缸运行时请勿扭动缸头上的螺丝。
- ⚠ 转换阀门功能制时, 先停止水泵的运作。
- ⚠ 防止水泵受损, 要定期清理水泵内的隔离器和池面撇渣器内的垃圾。
- ⚠ 气温较低, 产品停业运行时, 建议缸头手柄拨到结霜档位, 同时打开底排水, 排空缸内过滤水。

Models(型号): SP450 / SP500 / SP650 / SP700



FUNCTION 功能简介

The filter uses special filter sand to remove dirt particles from pool water. The filter sand is loaded into the filter tank and functions as the permanent dirt removing media. When the control valve is in the FILTER position, the pool water which contains suspended dirt particles, is pumped through your piping system and is automatically directed by the patented filter control valve to the top of the filter tank. As the pool water is pumped through the filter, dirt particles are trapped by the sand bed, and filtered out. The cleaned Pool water is returned from the bottom of the filter tank, through the control valve and back to the pool through the piping system. This entire sequence is continuous and automatic and provides for total recirculation of pool water through your filter and piping system.

After a period of time the accumulated dirt in the filter causes a resistance to flow, and the flow diminishes. This means it is time to clean your filter. With the control valve in the BACKWASH position, the water flow is automatically reversed through the filter so that it is directed to the bottom of the tank, up through the sand, flushing the previously trapped dirt and debris out the waste line. Once the filter is back-washed of dirt, set control valve to RINSE position and run pump for about 1/2 to 1 minute, and then to filter, to resume normal filtering.

NOTE: Turn pump off before changing valve position.

沙缸功能是把泳池水中的污物经过沙层的过滤后, 使干净水重新回到泳池内, 过滤用的沙是石英沙。过滤程序是: 首先是缸头控制器上把手柄推向 (FILTER) 正常过滤然后启动水泵, 泳池水便透过水泵引入沙缸进水口, 之后由进水中流到分水器, 再流入沙缸内, 水经过沙的过滤流进缸的底部, 再经过滤管进入过滤主管, 水在管道中向上流往出水口, 之后由管道系统注入泳池中。

经过一段时间后累积的污物, 会影响水的流量。这个时候便需要进行清洗沙缸。把缸头控制器上的手柄推向 (BACKWASH) 倒冲洗, 水流便由过滤主管进入, 经缸底的过滤管排出, 水流从底部向上升, 把沙层内的污物排出。之后把控制器推向 (RINSE) 清洗管内之污物从沙缸排出。大约一至半分钟后, 把手柄推向 (FILTER) 正常过滤。

注意: 转换阀门位置时要先关掉水泵电源。

INSTALLATION 安装说明

Pipe sealant for plastic adapters are required to install and service the filter.

- 1) The filter should be placed on a level concrete slab, very firm ground, or equivalent. Position the filter so that the piping connections, control valve are convenient and accessible for operation and service.
- 2) Loading the sand media. Filter sand media is loaded through the top opening of the filter
 - a) Place tow O'ring on the side of the filter tank and Connect control valve to the filter using pipes with unions and glues. (see the fig on page 4).
 - b) Loosen the Ring lock Nut by 2 handles and remove the valve.
 - c) We recommend filling tank approximately 1/3 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. Sand surface should be leveled and should come to about the middle of the filter tank.

安装和维修过滤器时, 只需要简单的工具 (螺丝刀和扳手), 再加上用于塑料接头的管子密封胶。

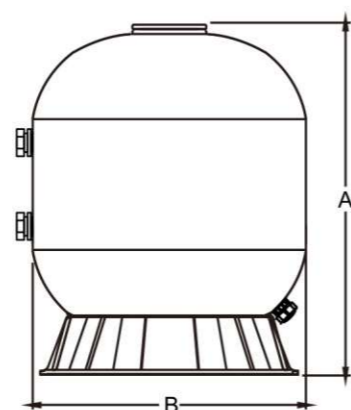
- 1) 过滤器应该放置在平坦的水泥板上、很坚硬的地面或有相当条件的地方。为过滤器定位时要考虑到操作和维修时能易于接近和到达连接管道和控制阀。
- 2) 填充沙子媒质。过滤沙是通过过滤器口放入的。
 - a) 在滤缸的侧面放上2个密封圈, 并用带接头和粘合剂的管子把控制阀连接到过滤器上。(参见第4页的图)。
 - b) 松开并移开过滤器顶盖。
 - c) 我们建议在过滤缸内充入1/3量的水, 以便当过滤沙被倒入时起到缓冲作用。这样有助于保护下排水底管不会遭受到过度的振动。
 - d) 小心地倒入正确数量和等级的过滤沙。沙子的表面要抹平, 沙子应该聚集在滤缸的中间位置。

- 3) Replace filter coping (with O'ring in place).
 - a) Carefully screw pressure gauge (with O'ring in place) into tapped hole in the filter coping. Do not over-tighten.
 - b) Ensure air relief valve (with O'ring in place) is tight fit to filter coping and turn it easily.
 - 4) Connect pump to control valve opening marked PUMP.
 - 5) Make return to pool pipe connection to control valve opening marked RETURN and complete other necessary plumbing connections, suction lines to pump, waste, etc.
 - 6) Make electrical connections to pump per pump instructions.
 - 7) To prevent water leakage, be sure all pipe connections are tight.
- 3) 把过滤器顶盖（密封圈已放到位）重新放回。
 - a) 小心地把压力表（密封圈已放到位）旋入过滤器顶盖的螺纹孔里。不要拧得过紧。
 - b) 确保排气阀（密封圈已放到位）与过滤器顶盖紧密配合并开关自如。
 - 4) 把水泵连接到控制阀上标有PUMP字样的接口上。
 - 5) 把回到泳池的回水管连接到控制阀上标有RETURN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。
 - 6) 按照水泵使用说明书完成水泵的电气连接。
 - 7) 为了防止漏水，确保所有的管道连接紧密。

MAIN DIMENSION 基本尺寸

DIMENSION TABLE
尺寸表

| Model 型号 | Height 高 mm A | Diameter 直径 mm B | Valve 阀门 inch | Sand 沙量 kg |
|-------------|------------------------|---------------------------|---------------------|------------------|
| SP450 | 730 | 455 | 1.5" | 45 |
| SP500 | 770 | 535 | 1.5" | 85 |
| SP650 | 850 | 635 | 1.5" | 145 |
| SP700 | 960 | 710 | 1.5" | 210 |



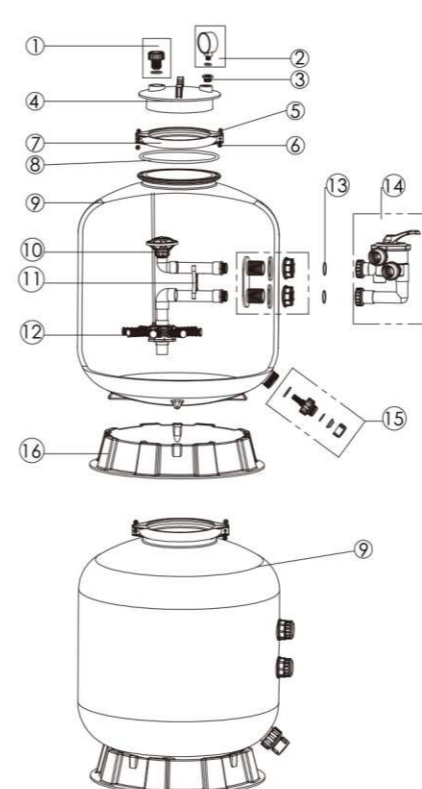
INSTALL/START-UP OF FILTER 过滤器的安装 / 启动

- 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 according to pump instructions (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) 确定沙缸内的沙数量正确，同时所有管道系统连接妥当。
 - 2) 将阀门控制手柄压下再转向倒冲洗位置，为了防止阀门控制密封装置不受损坏，用阀门控制前一定要先压下手柄才转动。
 - 3) 按照水泵程序启动（确定所有进水和出水管道是开启）给水进入沙缸。作为首次启动系统，水泵最少也运行一分钟，另外建议最初先使用反冲洗功能，因为可以除去系统内的污垢或过滤沙中较细的粒子。
 - 4) 停水泵，同时沙缸头转向清洗及排出污物的位置。之后开水泵，直至清水镜的水清澈，大约半至一分钟，便停泵。这时沙缸便进入正常过滤模式，把泳池水的污物过滤。
 - 5) 调节过滤系统适合的水流。然后再检查系统，沙缸和接合位置是否漏水，螺栓或螺母等是否妥当。
 - 6) 当沙缸清洁时便摘录下压力表的读数。（读数的变化将会受泳池水泵和水管系统影响）。如沙缸过滤池水把污物留下，而累积污物会造成压力上升和水流减慢。当压力表读数是1.5巴，相对比当初（清洁）记录要高，这时要使用反冲洗沙缸。（参考反冲洗功能简介）。
- 注意：在过滤系统启动初期，将要多次使用反冲洗功能，因为初期的泳池水一定有污垢，流入沙缸便会积聚较多污垢和微粒。

REPLACEMENT PARTS OF FILTER 沙缸组件图



| Item 编号 | Part No. 产品编号 | Description 产品名称 | Qty 数量 |
|------------|------------------|------------------------------------|------------------|
| 1 | 89010701 | Air Release Valve with O-ring | 排气阀连胶圈 |
| 2 | 06021002 | Plastic Pressure Gauge With O-Ring | 塑料压力表连胶圈 (40psi) |
| 3 | 89280120 | Drain Plug Fitting with O-ring | 压力表牙套连胶圈 |
| 4 | 01201022 | Lid (Transparent) | 盖子 (透明) |
| 5 | 03021035 | M6 Nut | M6螺母 |
| 6 | 03011095 | Screw | 螺丝 |
| 7 | 01271010 | Clamp Lock | 夹式锁制 |
| 8 | 02011134 | O-Ring for Filter Neck | 颈环胶圈 |
| 9 | 89010712 | SP450 Filter tank with base | SP450缸身连底座 |
| 9 | 89010713 | SP500 Filter tank with base | SP500缸身连底座 |
| 9 | 89010714 | SP650 Filter tank with base | SP650缸身连底座 |
| 9 | 89010715 | SP700 Filter tank with base | SP700缸身连底座 |
| 10 | 89010708 | S/SP450 the inner tank system | S/SP450缸内系统 |
| 10 | 89010709 | S/SP500 the inner tank system | S/SP500缸内系统 |
| 10 | 89010710 | S/SP650 the inner tank system | S/SP650缸内系统 |
| 10 | 89010711 | S/SP700 the inner tank system | S/SP700缸内系统 |
| 11 | 411000636 | 1.5" Tank System Support | 1.5寸缸系统支架 |
| 12 | 01172007 | Laterals (115mm) | 底管 (115mm) |
| 12 | 01172008 | Laterals (126mm) | 底管 (126mm) |
| 13 | 02011003 | O-Ring for inlet & outlet | 进出水口胶圈 |
| 14 | 88280805 | 1.5" Side Mount Valve (Black) | 1.5寸侧装阀门 |
| 15 | 89011601 | Water Drain Set | 排水套件 |
| 16 | 01111059 | 16-18inch Filter Base | 16-18寸沙缸底座 |
| 16 | 01111062 | 21-28inch Filter Base | 21-28寸沙缸底座 |

PARTS OF VALVE 缸头组件图

| Item 编号 | Part No. 产品编号 | Description 产品名称 | Qty 数量 |
|------------|------------------|---|-------------------|
| 1 | 01013002 | Handle (Small) | 手柄 (小) |
| 2 | 03018008 | Pin for Handle | 手柄销子 |
| 3 | 01181001 | Washer for Handle | 手柄垫圈 |
| 4 | 89280107 | M6 x 30 Screw with Nut for Standard Lid | M6*30带螺母的螺钉 |
| 5 | 01013154 | 1.5" Top/Side Mount Valve Standard Lid | 1.5寸侧装阀门标准盖 |
| 6 | 02011022 | O-Ring for Valve Rotor | 1.5寸阀芯密封胶圈 |
| 7 | 01181002 | Washer for Spring | 弹簧垫圈 |
| 8 | 02011002 | O-Ring for 1.5" Valve Lid | 1.5寸阀门盖密封胶圈 |
| 9 | 03014001 | Spring | 弹簧 |
| 10 | 01021001 | 1.5" Valve Rotor | 1.5寸阀芯 |
| 11 | 02311002 | Spider Gasket | 星形垫片 |
| 12 | 430129058 | Bottom Body (Black) | 阀门体 (黑色) |
| 13 | 06021002 | Plastic Pressure Gauge with O-ring | 塑料压力表连胶圈 (40psi) |
| 14 | 02020013 | O-Ring | 密封胶圈 |
| 15 | 01013018 | 1.5" Union Tale (Black) | 1.5寸带牙接头 (黑色) |
| 16 | 01013017 | 1.5" Union Nut (Black) | 1.5寸螺母 (黑色) |
| 17 | 01013116 | 1.5" Elbow Tube (Black) 125mm | 1.5寸弯管 (黑色) 125mm |
| 18 | 01171002 | 1.5" Union Adaptor (Metric) | 1.5寸接头 (公制) |
| 19 | 01013015 | 1.5" Connector (Black) | 1.5寸外牙接头 |
| 20 | 02011003 | O-Ring for 1.5" adaptor | 1.5寸接头密封胶圈 |
| 21 | 01171153 | 1.5" Union (A/E) | 1.5寸管接头 |
| 22 | 01041002 | 1.5" Union with Sight Glass (Short) | 1.5寸透明管 |
| 23 | 01172026 | 1.5" Union with Sight Glass Holder | 1.5寸刁套 |
| 24 | 919305061 | MPV01/MPV03 Upper part | MPV01/MPV03缸头上部 |

