

SINGLE ELEMENT CARTRIDGE FILTER

Installation and Operation



USER MANUAL

Models: ICF100 / ICF150 / ICF200

Installation and Operation Manual

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IMPORTANT SAFETY INSTRUCTIONS 安全说明



THESE OPERATING INSTRUCTIONS CONTAIN IMPORTANT INFORMATION ON THE SAFE, PROPER, AND ECONOMICAL OPERATION OF THIS SWIMMING POOL APPLIANCE. STRICT OBSERVATION OF THE OPERATING INSTRUCTIONS WILL HELP TO AVOID DANGERS, REDUCE REPAIR COSTS, AND SHUTDOWN TIMES AND INCREASE THE RELIABILITY AND WORKING LIFE OF THE PRODUCT.

T此操作说明书包含有关这个游泳池设备的安全、正确和经济操作的重要信息。严格遵守操作说明书有助于避免 危险,降低维修成本,减少停机时间,提高产品的可靠性和使用寿命。

Failure to follow the instructions in this manual may result in serious adverse health effects or even serious or fatal injury. Failure to follow the instructions in this manual will in all cases invalidate all guarantees and liability on the part of the manufacturer.

不遵守本手册的指示,可能会对健康造成严重的不良影响,严重会有致命的伤害。不遵守本手册的指示,在任何情况下,制造商的所有担保和责任都 会失效。

Consumer Information and Safety 消费者信息和安全

These Cartridge Filters are designed and manufactured to provide years of safe and reliable operation. Operated and maintained according to the information in this manual and the installation codes referred to in later sections.

这些筒式过滤器的设计和制造可提供多年的安全可靠运行。根据本手册所载资料及以后各节所提述的安装守则操作及保养。

THIS FILTER OPERATES UNDER HIGH PRESSURE 该过滤器在高压下工作



When any part of the circulating system, (e.g., closure, pump, filter, valve(s), etc.), is serviced, air can enter the system and become pressurized. Pressurized air can cause the top closure to separate which can result in severe injury, death, or property damage. To avoid this potential hazard, follow these instructions:

当循环系统的任何部分(例如,关闭、泵、过滤器、阀门等)被喷射时,空气可以进入系统并变 得增压。压缩空气可能导致顶部关闭分离,这可能导致严重受伤,死亡,或财产损失。为了避 免这种潜在危险,请按照以下说明:

 If you are not familiar with your pool filtering system: 如果您不熟悉泳池过滤系统:

(1) Do NOT attempt to adjust or service without consulting your dealer, or a qualified pool technician.

在未咨询经销商或专业师傅的情况下,不要进行调整或维修

(2) Read the entire Installation & Operation Manual before attempting to use, service, or adjust the pool filtering system. 在尝试使用、维修或调整池过滤系统之前,请阅读整个安装和操作手册

- 2. Before repositioning valve(s) and before beginning the assembly, disassembly, or any other service of the circulating system: 重新定位阀门之前以及开始组装、拆卸或循环系统的任何其他服务之前
 - (1) Turn the pump OFF and shut OFF any automatic controls to ensure the system is NOT inadvertently started during the servicing; 关闭泵并关闭任何自动控制装置,以确保系统在维修期间不会意外启动
- (2) Open the air relief valve;

打开放气阀

(3) Wait until all pressure is relieved.

等待,直到所有压力都恢复

3. Whenever installing the filter closure follow the filter closure warnings exactly.

当安装过滤器关闭时 , 请严格遵循过滤器关闭警告

4. Once service on the circulating system is complete follow initial start-up instructions exactly.

- 一旦循环系统上的服务完成,严格按照初始启动指示操作
- 5. Maintain circulation system properly. Replace worn or damaged parts immediately, (e.g., closure, pressure gauge, valve(s), O-rings, etc.). 妥善维护循环系统。及时更换磨损或损坏的零件(例如, 阀盖、压力表、阀门、O形圈等)
- 6. Be sure that the filter is properly mounted and positioned according to the instructions provided. 按照提供的说明,正确安装摆放过滤器。



This filter must be installed by licensed or certified electrician or qualified pool serviceman in accordance with the Local Code and all applicable local codes and ordinances.

Improper installation could result in death or serious injury to pool users, installers, or others and may also cause damage to property.

WARNING: Always disconnect power to the pool circulating system at the circuit breaker before servicing the filter. Ensure that the disconnected circuit is locked out or properly tagged so that it cannot be switched on while you are working on

the filter. Failure to do so could result in serious injury or death to a serviceman, pool user, or others due to electric shock. 此过滤器必须由有执照或认证的电工或专业的水池服务员按照当地规范和所有适用的当地规范和条例安装。安装不当可能导致泳池用户、安装人员或 其他人员死亡或重伤,还可能导致财产损失。

维护过滤器之前,务必断开断路器处池循环系统的电源。确保断开的电路已锁定或正确标记,以便在操作过滤器时无法打开。否则可能导致军人、泳 池使用者或其他触电者严重受伤或死亡。



READ UNDERSTAND AND FOLLOW ALL SAFETY AND OPERATION:阅读、理解并遵守所有安全和操作:

Do not operate the filter until you have read and understand clearly all the operating instructions and warning messages for all equipment that is a part of the pool circulating system. The following instructions are intended as a guide for initially operating the filter in a general pool installation. Failure to follow all operating instructions and warning messages can result in property damage or severe personal injury or death.

在你没有阅读及清楚了解池水循环系统内所有设备的操作指引及警告信息之前,不要操作过滤器。下列说明可作为在一般池安装中初步操 作过滤器的指南。未能遵守所有操作指示和警告信息可能导致财产损失或严重的人身伤害或死亡。



To reduce the risk of injury, do not permit children to use this product. 为了降低受伤的风险,请不要允许儿童使用本产品。

ELECTROCUTION HAZARD 触电危险

Direct water discharge from air relief valve away from electrical service. Do not locate pump control over near the filter.

Compressed air.

servicing equipment.

Lock-out source and bleed off

pressure before

WARNING: Due to the potential risk that can be involved, it is recommended that the pressure test be kept to the minimum time required by the local code. Do not allow people to work around the

system when the circulation system is under the pressure test. Post appropriate warning signs and establish a barrier around the pressurized equipment. If the equipment is located in an equipment room, lock the door and post a warning sign.

将空气泄压阀中的水排放到远离电气设施的地方。不要将泵控制装置置于过滤器附近。

由于可能存在潜在风险,建议将压力试验保持在当地规范要求的最短时间内。循环系统进 行压力试验时,不允许人员在系统周围工作。张贴适当的警告标志,并在受压设备周围设 置屏障。如果设备位于机房内,请锁门并张贴警告标志。

Never attempt to adjust any closures or lids or attempt to remove or tighten bolts when the system is pressurized. These actions can cause the closure to separate and could cause severe personal injury or death if they were to strike a person.

系统加压时,切勿试图调整任何封盖或盖子,或试图拆卸或拧紧螺栓。这些行动可能会导致关闭分离,并且如果他们击中人身,可能会导 致严重的伤害或死亡。



ACAUTION Burn hazard. Hot surface. Do not touch.

Never exceed the maximum operating pressure of system components. Exceeding these limits could result in a component failing under pressure. This instantaneous release of energy can cause the closure to separate and could cause severe personal injury or death if they were to strike a person.

切勿超过系统部件的最大工作压力。超过这些限制可能导致部件在压力下发生故障。这 种瞬间释放的能量可能会导致封口分离,如果它们击中人身,可能会导致严重的人身伤 害或死亡。

HYPERTHERMIA 热疗

SPA water temperature excess of 38°C (104°F) may be injurious to health. Measure water temperature before entering SPA to strike a person.

温泉水温超过38°C (104°F)可能对健康有害。在进入水疗中心之前测量水温以免对人造 成伤害。

Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6 °F (37 °C). The symptoms of hyperthermia include drowsiness, lethargy, and an increase in the internal temperature of the body

当体内温度达到比正常体温98.6°f(37°c)高几度时,就会中暑。中暑的症状包括嗜睡,以及体内温度升高。

1. OVERVIEW 概述

ICF series cartridge filter combines superior water filtration with ease of operation and corrosion-free construction. With filtration ratings of 6,000~7,200 gallons (22,710 ~ 27,250 liters) per hour, they are designed for continuous or intermittent operation, for installation above or below the pool waterline, for fresh or saltwater swimming pools or spas. ICF series filters utilize multiple reusable, reinforced polyester filter cartridge elements to provide a high degree of water clarity and long filter cycles with minimum care.

ICF系列筒式过滤器将优越的水过滤功能与易于操作和无腐蚀的结构相结合。过滤等级为每小时5100~8910加仑(19305~33700升), 设计用于连续或间歇运行,安装在泳池水位线上方或下方,用于淡水或咸水游泳池或温泉。ICF系列过滤器采用多个可重复使用的增强型 聚酯滤芯,以提供高度的水透明度和长时间的过滤周期,并尽可能少地维护。

1.1 PRODUCT INFORMATION 产品信息

代码	型号	有效装修面积		设计 	·流量 商业
CODE	Model	EFFECTIVE FITRATION AREA		DESIGN FLOW RATE Residential Commercial	
		FT ²	M ²	GPM	LPM
9140401	ICF100	100	9.29	100	379
9140402	ICF150	150	13.94	120	455
9140403	ICF200	200	18.58	120	455

[Filter rate for residential use based on 1GPM/ft². Recommend Flow Rate for 2ⁿ piping is 90 ≤ x ≤150 GPM] [以每分钟1gpm/ft2计算的住宅用过滤率。2寸管道的推荐流量为90≤ x ≤150gpm]

1.2 DIMENSIONS 尺寸

型号		4		В	(C		D
Model	IN	СМ	IN	СМ	IN	СМ	IN	СМ
ICF100	20.9	53.05	9.05	23.00	18.30	46.40	3.20	8.20
ICF150	20.9	53.05	12.40	31.50	18.30	46.40	3.20	8.20
ICF200	20.9	53.05	17.24	43.80	18.30	46.40	3.20	8.20



2. INSTALLATION 安装

This product should be installed and serviced only by qualified pool professional. 本产品只能由合格的泳池专业人员安装和使用

1. The filter system should be installed on a level concrete slab or another rigid base. Select a well-drained and vented area, that does not flood when it rains. Position the filter so that the piping connections and winter drain are convenient and accessible for operation, service, maintenance, and winterizing.

过滤系统应安装在水平混凝土板或其他刚性基础上。选择一个排水良好,通风良好的地区,下雨时不会发生洪水。定位过滤器,使管道连接和冬季排水管便于操作、使用、维护和防冻

- 2. Position filter body such that all operation and safety labels are visible. 将过滤器放置在允许操作和安全标签可见的位置
- 3. Position the filter so the filter will drain by gravity. 放置过滤器,使过滤器在重力作用下排水
- 4. If practical, place the pump and filter in the shade to shield it from direct sunlight. 如果可行,将泵和过滤器放置在阴凉处,以防阳光直射
- 5. Connect the pool suction plumbing between the skimmer, the pool outlet (from the pool), and the pump. 在撇渣器、水池出口(从水池)和泵之间连接水池吸入管道
- 6. Install the plumbing from the filter to the pool (return to the pool) 安装过滤器至水池的管道(返回水池)
- 7. Do not locate pump controls over or near the filter. 不要将泵控制装置置于过滤器上方或附近
- 8. Verify water discharge from the manual air Relief valve is directed away from electrical devices. 检查手动空气安全阀的排水是否远离电气设备

		A	REQUIRED CLEARANCE 所需间隙			
MODEL 型号	~		"B" side		"C" above	
	IN	СМ	IN	СМ	IN	СМ
ICF 100	32.6	82.7	18.3	46.4	18	45
ICF 150	36	91.2	18.3	46.4	18	45
ICF 200	40.7	103.4	18.3	46.4	18	45



INSTALLATION P4

3. STARTING THE PUMP AND FILTER SYSTEM 启动泵和过滤系统

3.1 BEFORE STARTING THE PUMP 启动泵前

1. Use ONLY ICF system components: Lock Ring unit doing assembly, metal-reinforced seal. Non-tighten lock ring component may fail in use and cause explosive component separation. Verify that upper and lower filter bodies are properly secured with the filter body locking ring unit. Make sure tightening enough the Lock Ring to the filter's upper and bottom body. Verify that the filter manual air relief valve is in the LOCK position, and no filter components are missing, damaged, or not genuine ICF filter components.

仅使用ICF系统组件;夹紧装置进行装配,金属加强密封。未拧紧的锁环部件可能会在使用中出现故障,并导致爆炸性部件分离。验证上部和下部过滤器体是否用夹紧装置正确固定。确保用锁环将滤清器上下壳体拧紧到足够的程度。确认滤清器空气安全阀处于锁定位置,没有滤清器部件丢失、损坏或不是原装ICF过滤器部件。



2. Close filter drain. Note: Drain plug requires an O ring seal. 关闭过滤器排水口。注:排放塞需要O形密封圈



- 3. Open all system valves to allow water from the pool to the filtration system and from the filter to return to the pool. 打开所有系统阀门,使水从水池流入过滤系统,并从过滤器返回水池
- 4. Place the air relief valve in an OPEN position. 将手动逆止阀放回原位



3.2 STARTING PUMP 启动泵

Stand clear of pump during start-up 启动时远离泵



Pool and spa circulation systems operate under high pressure. When any part of the circulating system (i.e. lock ring, pump, filter, valves, etc.) is serviced, air can enter the system and become pressurized. Filter tank Lid and pre-filter cover must be secured to prevent violent separation. Place the pre-filter / filter air relief valve in an open position and wait for all pressure in the system to be relieved before removing the lib from access to the basket for cleaning.

泳池和水疗循环系统在高压下运行。当循环系统的任何部分(即锁环、泵、过滤器、阀门等)被 密封时,空气可以进入系统并加压。必须固定过滤器箱盖和预过滤器盖,以防止剧烈分离。将预 过滤器/过滤器空气安全阀打开,等待释放系统中的所有压力,然后将lib从篮子通道中取出进行清洁。

When starting the system pump, do not stand over or near the filter. If water leakage appears at the lock ring. Turn off all system circulation pumps and all electrical power immediately. Do not return to the filter until all water leakage has stopped.

Only return to filter to close air relief valve when water came out.

启动系统泵时,不要站在过滤器上方或附近。锁环如果漏水请立即关闭所有水泵循环系统和所有电源,在漏水停止之前,不要返回过滤器。 只有当水流完全出时,才能返回过滤器以关闭空气安全阀。

P5 STARTING THE PUMP AND FILTER SYSTEM

3.3 OPERATION 操作

Filtration starts as soon as the flow is steady through the filter. As the filter removes dirt from the pool water, the accumulated dirt causes a resistance to flow. As a result, the pressure will rise and the flow will decrease. 流经过滤器的水流量稳定时,过滤就会开始。当过滤器清除池水中的污垢时,积聚的污垢会导致流动阻力。因此,压力将升高,流量将降低。

- Record the initial starting pressure which is the initial pressure reading when a new filter element is working under filtration conditions.
 记录初始启动压力,即新滤芯在过滤条件下工作时的初始压力读数
- Every time after reinstalling "new filter element" or "after cleaned filter cartridge element", make sure the system is under filtration condition, then turn the START arrow to the pressure gauge pointer position to indicate the Start pressure.
 每次重新安装 "新滤芯" 或 "滤芯清洗后",确保系统处于过滤状态,然后将启动箭 头转到压力表指针位置,指示启动压力。
- 3. Monitor the pressure from time to time, when the pressure reading is over the Clean Filter arrow, follow step 4.2 to clean filter cartridge elements. 时常监测压力,当压力读数超过清洁过滤器箭头时,按照步骤4.2清洁滤芯。

Replace a new filter cartridge element.滤芯的更换

You should replace a new filter cartridge element:

更换滤芯的注意事项

- 1. After cleaning the filter element, if the pressure is: 清洗滤芯后,如果压力为
- a.25 psi higher than the initial start ready, or 比初始启动就绪压力高25 psi , 或
- b.the pressure reading is over 40 psi. 压力读数超过40 psi
- 2. When the filter element is broken, or the layer peers off. 滤芯破损或脱落时
- 3. When the pressure or flow rate is below the desired rate of the system. 当压力或流量低于系统所需的流量时



Figure 4

4. MAINTAINING YOUR FILTER 维护过滤器

4.1 FILTER DISASSEMBLY INSTRUCTION 过滤器拆卸说明

- 1. Turn off all system circulation pumps and all electrical power on the equipment pad. 关闭所有水泵循环系统和设备上的所有电源
- 2. Set all system valves in a position to prevent water from flowing to the filter. 将所有系统阀门设置在防止水流入过滤器的位置
- 3. Turn the air relief valve OPEN.打开空气安全阀
- 4. Remove the filter drain plug, and water flows out from the filter. 取下底排水塞头,让水从过滤器中流出
- 5. Depress the latch and unscrew the lock ring (counterclockwise). 按下锁销并拧下锁环(逆时针)
- 6. Liftoff filter upper body with the attached lock ring. Do not hold the pressure gauge to lift the upper body. 固定锁环拉到过滤器上部。不要握住压力表来向上拉
- 7. Lift out the cartridge element. 取出滤芯

4.2 REMOVING CARTRIDGE 卸下墨盒

1. Remove the filter cartridge element by using a slight rocking motion and lifting. 轻轻摇动并提起滤芯,取下滤芯

2. Clean filter cartridge element. 清洁滤芯

4.3 CLEANING CARTRIDGE 清洁墨盒

The cartridge filter element can be washed inside and outside by a garden hose. After hosing the cartridge, for best results, carefully brush the pleated surface to remove fine particles. Do not use high-pressure water to wash as it can damage the filter element. You may find some debris on the cartridge pleats, which may not have been removed with hosing.

可使用花园软管清洗滤芯内外。用软管冲洗滤芯后,小心地刷打褶的表面,以去除细小颗粒。不要进行压力清洗,否则会损坏过滤器滤芯。 您可能会在滤芯褶皱上发现一些碎屑,这些碎屑可能没有用软管清除。

4.4 FILTER REASSEMBLY INSTRUCTION 过滤器重新组装说明

4.4.1 RE-INSTALLING CARTRIDGE 重新安装墨盒

1. Flush and drain any dirt or debris from the bottom of the lower filter body. 冲洗过滤器体底部的所有污垢或碎屑 2. Flush any dirt or debris from the upper filter body and from around the air release area. 冲洗上部过滤器体和空气释放区域周围的所有污垢或碎屑 3. Carefully replace the cartridge over the hubs on the bottom manifold. 小心地更换底部歧管轮毂上的阀芯 4. Place the upper body securely on top of the cartridge. 将上半身放在墨盒顶部并固定

4.4.2 CLEAN SEAL RING AND SEAL SURFACE 清洁密封圈和密封表面

1. Remove filter tank sealing O-ring. 去除滤池密封 O 形环

- 2. With a clean cloth, wipe the lower filter body seal surface and clean seal of all dirt and debris. Do not use any solvent. 用干净的抹布,擦拭下部过滤体的密封面,并清洁密封面上的所有污垢和杂物。不要使用任何溶剂
- 3. With a clean cloth wipe the upper body seal surface. 用干净的布擦拭上身密封面



Figure 5

4.4.3 BODY AND LOCK RING RE-ASSEMBLY 阀体和锁环重新组装

- 1. Place the sealing O-ring on the bottom body. Place the upper body on the O-ring and the bottom body. 将O形密封圈放在底部阀体上。将上阀体放在O形圈和底部阀体上
- 2. Use the EMAUX lock ring system only, tighten the lock ring (clockwise) until the latch is locked on position. 仅使用EMAUX锁环系统,拧紧锁环(顺时针),直到锁销锁定到位
- 3. Ensure that upper and bottom bodies are properly secured with the lock ring. 确保上部和底部阀体用锁环正确固定

NOTE: DO NOT HIT OR STRIKE THE CLAMP WITH A HAMMER OR METAL TOOLS.

注意:不要用锤子或金属工具敲击工具

- 4. Ensure that the air relief valve assembly is in an OPEN position and no components are damaged or missing. 确保空气安全阀处于打开位置,并且没有部件损坏或丢失
- 5. Ensure the drain plug is closed.
- 确保底排水塞头关闭
- 6. Open all system valves to allow water from the pool to the filtration system and from the filter to the pool. 打开所有系统阀门,使水从水池流入过滤系统,并从过滤器流入水池
- 7. Wait for the water to come out from the air relief valve then turn the air relief valve to fully CLOSE . 等待水从空气安全阀中流出,然后将空气安全阀完全关闭



4.4.4 VACUUMING POOL 吸尘池

Vacuuming can be performed directly into the filter whenever needed. 必要时,可直接在过滤器中进行抽真空 Clean cartridge after vacuuming if required. 如有必要,在抽真空后清洁滤芯

4.5 REMOVING THE AIR RELIEF VALVE 拆卸空气安全阀

The filter comes with a preinstalled manual air relief valve. Ser vicing the Air Relief Valve should be carried out by pool professionals only, follow instructions carefully:

该过滤器配有一个预装的手动安全阀。只能由泳池专业人员维修空气安全阀,请仔细遵守说明

- 1. Turn off all system circulation pumps and all-electric power on the equipment pad.
- 关闭所有水泵循环系统和设备垫上的所有电源
- 2. Set all system valves in a position to prevent water from flowing to the filter.
- 将所有系统阀门设置在防止水流入过滤器的位置 3. The air relief valve must be placed in the OPEN position.
- 必须将空气安全阀置于打开位置
- 4. Wait until all water leakage has stopped. 等待所有漏水停止
- 5. Grasp the Relief valve Nut at the release position, and turn the Nut counterclockwise until the Air gauge indicator is on the "0" position on the upper filter body.
- 在释放位置抓住安全阀螺母,并逆时针转动螺母,直到空气表指示器位于上部过滤器体上的"O"位置
- 6. Keep on turning the Nut of the release valve until it leaves the Upper filter body.
- 继续转动释放阀的螺母,直到它离开上部过滤器体

4.5.1 RE-INSTALLATION OF THE AIR RELIEF VALVE 重新安装空气安全阀 1. Check the condition of the O-ring, replace it as necessary

- Check the condition of the O-ring, replace it as necessary
 With a clean cloth, wipe the upper filter body and O-ring groove. Remove all dirt and debris.
- With a clean cloth, whe the upper lifer body and O-ring groove. Remove an unit and debits.
 Twist the air relief valve with the tool until it's tightened on top of the upper filter body.
- 4. Make sure the nut of the Release valve is tight.
- 5. Verify the air relief valve discharge points away from all electrical connections.
- 1.检查O形圈的状况,必要时予以更换
- 2.用干净的布擦拭上部过滤器体和O型圈槽。清除所有污垢和碎屑。
- 3.用工具扭转空气安全阀,直至其在上部过滤器体顶部拧紧。
- 4.确保释放阀的螺母紧固。
- 5.验证安全阀排放点是否远离所有电气连接。

5. WINTERIZING FILTER 过滤器防冻

In areas where sub-freezing temperatures can be expected, the filter should be drained to protect the filter from damage.

- 在可能出现亚冰点温度的区域,应排空过滤器,以保护过滤器免受损坏
- 1. Follow the steps in "Filter disassemble instruction" to remove and clean the cartridge.
- 按照"过滤器拆卸说明"中的步骤拆卸和清洁滤芯 2. Reinstall the cartridge in the filter.
- 将滤芯重新安装到过滤器中
- 3. Fully tighten the lock ring while storing. 拧紧锁环
- 4. Reassemble per FILTER REASSEMBLY INSTRUCTION. 按照过滤器重新组装说明重新组装
- 5. Be sure to leave the drain plug unattached during the winter season to avoid cracking the filter body. 在冬季,确保排放塞未连接,以避免过滤器体破裂

6. TROUBLE SHOOTING 故障排除

	Low water Flow	SHORT FILTER CYCLES	POOL WATER REMAINS CLOUDY
REMEDY	 Check skimmer and pump strainer baskets for debris. 检查撇道器和泵滤网篮是否有灰尘 Check for restrictions in intake and discharge lines. 检查进气和排气是否受限 Check for air leak in intake line indicated by bubbles returning to pool. 检查返回池中的气泡指示的进气管是否漏气 Clean Filter Cartridges 清洁滤芯 	 Check for algae in the pool and super-chlorinate as required. 检查池中是否有藻类,并按要求进行超 氯化处理 Be sure chlorine and pH levels are in a proper range (adjust as required). 确保氯和pH值在适当范围内(根据需要 进行调整) 	 Check chlorine, pH, and total alkalinity levels and adjust as required. 检查氯、pH和总碱度水平,并根据需要进行调整 Be sure the flow rate through the filter is sufficient. 确保通过过滤器的流量足够 Operate filter for longer periods. 长时间运行过滤器

6.1 WATER CHEMISTRY 水化学

SUGGESTED POOL CHEMISTRY LEVELS 建议的水池化学水平					
PH值水平	PH LEVEL	7.2 to 7.8			
总碱度	TOTAL ALKALINITY	80 to 120 ppm			
钙硬度	CALCIUM HARDNESS	200 to 400 ppm			
组合氯	COMBINED CHLORINE	0.2 ppm Maximum			
氯(稳定)	CHLORINE (STABILIZED)	1.0 to 3.0 ppm			
氯稳定剂(三聚氰酸)	CHLORINE STABILIZER (Cyanuric Acid)	60 to 80 ppm			

7. SPARE PART LIST 配件清单



序号	编号	英文描述	中文描述	数量
Key No.	Part No.	Description	Chinese	QTY
1	117068519	Pressure gauge 60psi, plastic casing	压力表(60psi)塑料外壳	1
2	550188198	Upper Body ICF100	上半身ICF100	1
2	550188199	Upper Body ICF150	上半身ICF150	1
2	550188200	Upper Body ICF200	上半身ICF200	1
3	570818164	Nut D22X15	螺母D22X15	1
4	550058153	Lock Ring	锁环	1
5	550058196	Latch	锁销	1
6	11000036	O-ring D306Xd7.5	O形圈D306Xd7.5	1
7	430178159	Union nut 2"	联管螺母2"	2
8	430308158	Union 2inch/2.5inch ANSI	接头2英寸/2.5英寸ANSI	2
9	111040071	O-ring D77Xd62X8	O形圈D77Xd62X8	2
10	E140401	ICF100-200 Bottom Body	ICF100-200底部阀体	1
11	E160553	End cap with O-ring	带O形圈的端盖	1
12	E010201	Air Relief Valve with O-ring	带O形圈的空气安全阀	1
13	570818165	Nut D31X20 14G	螺母D31X20 14G	1
14	914100004	ICF100 Element	ICF100元件	1
14	914100005	ICF150 Element	ICF150元件	1
14	914100006	ICF200 Element	ICF200元件	1
15	107048520	PVC Pipe 2.5inch for ICF100, 387 mm	ICF100用PVC管2.5in,387 mm	1
15	107048520	PVC Pipe 2.5inch for ICF150, 440mm	PVC管2.5in, 用于ICF150, 440mm	1
15	107048520	PVC Pipe 2.5inch for ICF200, 517mm	ICF200用PVC管2.5in,517mm	1
16	550128166	ICF100-200 Center Drain connection	ICF100-200中央排水管接头	1

8. TERMS OF THE WARRANTY 保修条款

As original purchaser of this equipment have purchased from Emaux Water Technology Co Ltd, through Authorized International Distributor or Dealer, warrants its products free from defects in materials and workmanship under normal use during warranty period. The warranty period begins on the day of purchase and extends only to the original purchaser. It is not transferable to anyone who subsequently purchases the product from you. It excludes all expendable parts.

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