

EN English

ULTRA SIDE SAND FILTER



INSTALLATION & OPERATION MANUAL

Please read carefully and retain for future reference

! PLEASE READ CAREFULLY!

**These installation instructions are an integral part of the product.
They must be given to the installer and retained by the user.**

If you lose your manual, please refer to www.poolex.fr

The indications and warnings contained in this manual must be read carefully and understood, as they provide important information on the safe handling and operation of the filter.

Keep this manual in an accessible place for future reference.

Installation must be carried out by a qualified professional in accordance with current regulations and the manufacturer's instructions. Incorrect installation may result in physical injury to persons or animals, as well as mechanical damage for which the manufacturer cannot be held responsible under any circumstances.

After unpacking the filter, please check the contents for any damage.

Before connecting the filter, check that the data given in this manual are compatible with actual installation conditions and do not exceed the maximum permissible limits for the product in question.

In the event of a fault and/or malfunction, the power supply to your machine room must be cut off, and no attempt must be made to repair faults on the tank. Repair work may only be carried out by an authorized service center using original spare parts.

Failure to comply with the above may adversely affect the safe operation of the filter.

To ensure that the filter remains efficient and in good working order, it is important to ensure that it is regularly maintained in accordance with the instructions supplied.

If the filter is sold or transferred, always ensure that all technical documentation is passed on to the new owner.

This filter is designed exclusively to treat swimming pools. All other uses must be considered inappropriate, incorrect or even dangerous.

All contractual or extra-contractual liability of the manufacturer/distributor shall be considered null and void for damage caused by installation or operating errors, or by failure to comply with the instructions in this manual or with the installation standards in force for the equipment described in this document.

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Packaging

Your ULTRA SIDE filter is made up of 2 boxes, 1 for the tank and its accessories and 1 for the valve and its accessories, the components of which are listed below:

Carton contains :

ULTRA FILTER	PF-ULT500S	PF-ULT600	PF-ULT675S	PF-ULT775S	PF-ULT875S
Tank	1	1	1	1	1
Lid	1	1	1	1	1
Cover O-ring	1	1	1	1	1
Clamp kit, with screws and	1	1	1	1	1
Strainers	1	1	1	1	1
Drain plug	1	1	1	1	1
6-way valve nut	2	2	2	2	2
Multilingual manual	1	1	1	1	1
+ 1 multiway valve box	1"1/2	1"1/2	2"	2"	2"

The vanity box contains :

Valve for ULTRA FILTER	PF-ULT500S	PF-ULT600S	PF-ULT675S	PF-ULT775S	PF-ULT875S
Multiway valve body	1	1	1	1	1
Pressure gauge, vertical outlet	1	1	1	1	1
O-ring seal	2	2	2	2	2
Union Threaded 1"1/2 - D.50mm for gluing	2	2	3	3	3
Union Threaded 1"1/2 - D.50mm to glue, outlet "EGOUT "with transparent tube	1	1	-	-	-
Angled tube	1	1	1	1	1
Vessel fitting with glue end for elbow pipe	1	1	1	1	
Tank connection with threaded end for valve	1	1	1	1	1
Turbidity indicator	-	-	1	1	1
Bleed screw and seal, on valve	-	-	1	1	1
Multiway valve position label (English, French, German, Spanish)	1	1	1	1	1

Safety instructions

Installation and maintenance of upstream electrical parts must be carried out by a professional electrician. Otherwise, there is a risk of electrocution, serious injury, property damage and even life-threatening consequences.

Before any maintenance or operation, make sure that all machines, especially the circulation pump, are de-energized so that the filter is no longer under pressure:



**Never operate the 6-way valve while the pump is running.
Never unscrew the cover collar while the pump is running.**

Clean the pump pre-filter regularly to ensure that the water circulates smoothly and without overpressure.

In low-temperature conditions, particularly when active winterization is no longer possible (ask your dealer for advice), we strongly recommend that you set the 6-way valve to **WINTER** position and drain the water contained in the filter via the drain screw at the bottom of the tank.

Do not operate without water, and do not connect the filter directly to the water supply network, as the pressure of some distribution networks may exceed the maximum working pressure of the filter.

Check that your equipment is compatible with each other, in particular with regard to flow rates and working pressures, as well as sizing for the volume of water to be treated.

To ensure the transparency and integrity of the plastics, do not clean the filter, and in particular the transparent cover, with products that degrade plastics (detergents, solvents, etc.).

Be careful not to break any of the plastic parts, it is not necessary to overtighten the screws/nuts, do not use PTFE or Teflon tape on the manometer threads.

Always maintain the right level of disinfectant and a pH of around 7.2.

The person responsible for installation must read this manual carefully. If any incorrect or erroneous operation occurs, please contact your nearest authorized dealer or technical support service.

In the event of a damaged part, please give priority to the purchase of a replacement part from the manufacturer or an authorized dealer.



FAILURE TO HEED THESE WARNINGS MAY RESULT IN PROPERTY DAMAGE, ELECTRIC SHOCK, COMPLICATIONS, OTHER SERIOUS INJURY OR DEATH.

WARNING - To avoid risk of injury, do not allow children to use this appliance.

WARNING - Intensive use of the pool and high temperatures may require long filtration times (up to 24 hours a day) to maintain a satisfactory level of cleanliness and water quality.

Operating principle

Your pool filter is the main component of your technical room, ensuring clean, clear water, followed by the chemical treatment elements.

To achieve this, the filter must contain a filter media, which may be sand or glass. This filter media enables the mechanical elimination of all waste, larger than the filtration fineness of the media used, suspended in the water and introduced by nature or by swimmers.

When the 6-way valve is in the **FILTRATION** position, the pool water is drawn through the pipe system to the top of the filter via the 6-way valve. The water passes through the filter, and suspended impurities are mechanically blocked by the filter media. The filtered water then leaves the lower part of the filter via the strainers and the 6-way valve, and is returned to the pool via the pipe system.

The accumulation of waste retained in the filter alters flow and increases pressure. It is then necessary to clean the filter.

Wash the filter at least once a week or when the pressure has increased by 30% compared to the initial pressure when the filter is clean, i.e. generally when the pressure gauge indicates a pressure of over 1.3 bar.

To do this, switch off the circulation pump, set the 6-way valve to the **WASH** position, restart the pump, and the water flow is reversed in the filter to circulate through the filter medium from the lower part of the filter to the upper part, in order to loosen the build-up of waste from the filter medium and discharge it via the 6-way valve into the discharge pipe (**note: if present, the valve on the discharge pipe must be open**).

Check the cleanliness of the water through the transparent tube located on the 6-way valve, in the direction of the drain. When the tube becomes transparent again, impurities have been removed from the filter.

Switch the pump off again, then set the 6-way valve to the **RINSE** position and restart the pump for 30s to 60s. Then switch the pump off again, set the 6-way valve back to **FILTRATION** position and restart the pump one last time to resume normal filtration.

For optimum water quality, it is important that the filtration time is sufficiently long, a good estimate is :

$$\text{Filtration time} = \text{Water T}^\circ / 2$$

But if the water temperature exceeds 26°C, additional filtration time may be necessary, until continuous filtration (24/24) is achieved above 30°C.

Caution: Always switch off the pump before handling the 6-way valve. To avoid damaging the seal on the multi-way valve, always press down on the handle before turning it, and always turn it clockwise.

Installation

Preamble

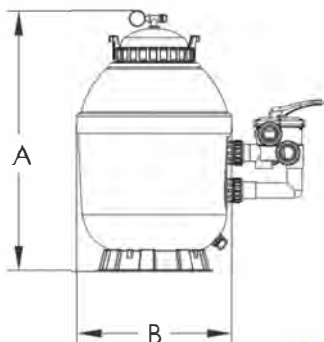
Before starting installation, be sure to check that your equipment is compatible with each other (flow rates and working pressure), and that it is sized correctly for the volume of water to be treated.

These filters are designed for use up to 2.8 bar.

Filter media (sand or glass) is not supplied. Ask your dealer for advice. Use sand or glass dedicated to pool filtration. We recommend using filter media 1/3 with a particle size of approx. 2mm to 4mm and 2/3 with a particle size of approx. 0.5mm to 0.7mm. Renew every 5 years.

Model	Height A (mm)	Diameter B (mm)	Valve fittings	Sand required (kg)	Glass required (kg)	Max. flow (m ³ /h)	Volume swimming pool (m ³)*
PF-ULT500S	396	549	1"1/2	70	55	10	60
PF-ULT600S	430	493	1"1/2	125	100	14	80
PF-ULT675S	460	546	2"	185	150	18	100
PF-ULT775S	508	594	2"	250	200	23,5	140
PF-ULT875S	564	650	2"	325	260	30,5	180

* Approximation based on a filtration time of approximately 6 hours.



Only simple tools (screwdrivers and wrenches) and PVC pipe adhesive are required to install and maintain the filter.

The filter must be installed on a flat concrete surface or equivalent very firm ground.

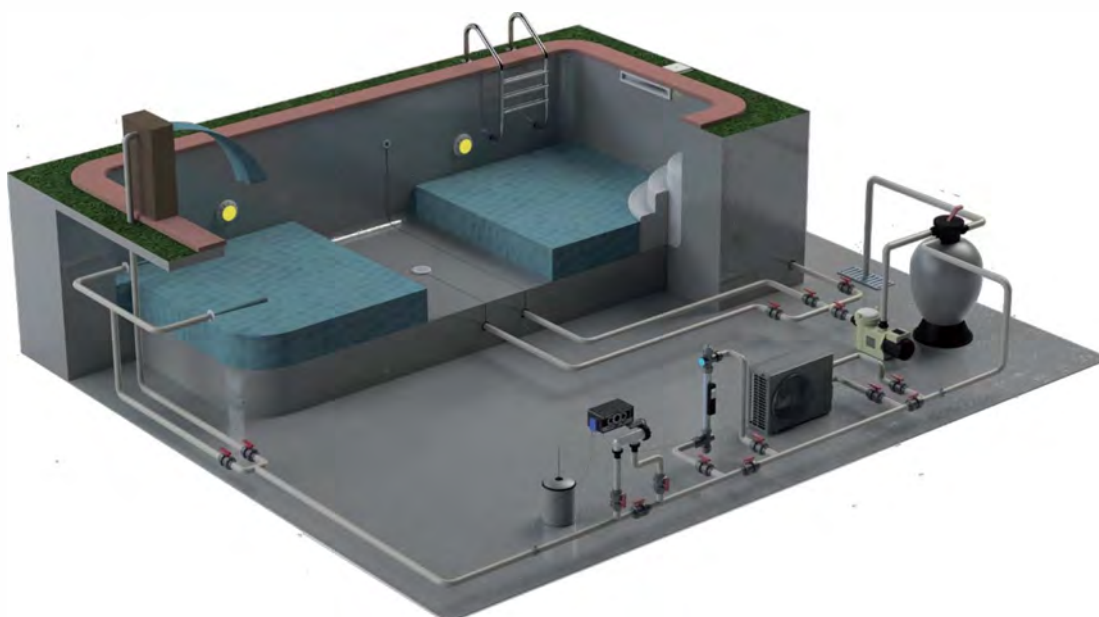
Position the filter so that the connections, multiway valve and drain are accessible for operation and maintenance.

Ideally, the filter should be installed as close as possible to the pool in the equipment room, preferably 50cm below the water level.

Provide a wastewater pipe of the same dimensions as the other pipes used in the equipment room.



Always use PVC swimming pool pipes with the correct diameter.



Installation steps

Valve assembly Filter

assembly



Assembling the filter and its components :



1. Use PVC fitting adhesive to glue the union to the end of the 6-way valve's lower elbow tube.
 2. Place the union nut on the elbow tube before gluing.
 3. Place and grease the O-ring on the bottom wall feed-through of the filter and fit the elbow tube. Tighten the union nut by hand.
 4. Place the union fittings on the inlet, outlet and drain ports of the multiway valve.
- O-rings are used for sealing. Do not use PTFE tape.**
5. Place the O-ring on the upper filter wall feed-through. Glue the elbow tube to the lower port of the 6-way valve, positioning it on the filter. Hand-tighten the union nut on the top wall bushing.
 6. Glue the inlet, outlet and drain pipes to the union fittings on the 6-way valve.

Filling the filter :

Filter media (sand or glass) is not supplied. Ask your dealer for advice. Use sand or glass dedicated to pool filtration. We recommend using filter media 1/3 with a particle size of approx. 2mm to 4mm and 2/3 with a particle size of approx. 0.5mm to 0.7mm. Renew every 5 years.

1. Filter media is loaded through the upper filter opening :



- a) Loosen the collar on the cover and remove it.
- b) Check the integrity, positioning and tightness of the strainers at the bottom of the filter.
- c) Cover the diffuser.
- d) Fill the filter tank with one-third water to protect the collector and strainers during filling.
- e) Carefully pour in the correct quantity and quality of filter media. The surface of the media should be level and approximately in the middle of the filter bowl.
- f) Remove the diffuser cover.

2. Check that there is no media residue on the cover. Place the O-ring on the cover, then position the cover on the filter. Tighten the cover collar. Screw the purge tee onto the cover and the pressure gauge onto the purge tee.

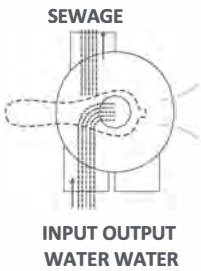


Purge tee and pressure gauge are fitted with O-rings. **Do not use PTFE (TEFLON) tape.**

3. Before commissioning, check that all screw connections are tight.

Go to service

WASHING



1. Check that the filter pump is not powered. If necessary, switch it off at the control panel.

2. Press the handle on the 6-way valve and turn it to the **WASH** position. **If necessary, check that the valve installed on the drain pipe is in the open position, and open it if necessary.**

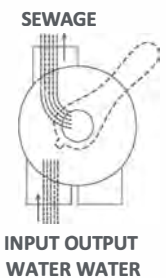
To avoid damaging the multiway valve seal, always press the handle before turning it, and always turn it clockwise.

3. Prime and start the pump according to the manufacturer's instructions.

4. Allow filter tank to fill with water. Leave the air vent screw partially open. When water flows through the air vent, close it again.

When the water flows out of the drain, let the pump run for at least 60s. This initial washing is recommended to remove impurities or fine particles from the filter media. Check the cleanliness of the water through the transparent tube at the drain.

RINSE



5. Switch off the pump and turn the valve to the **RINSE** position.

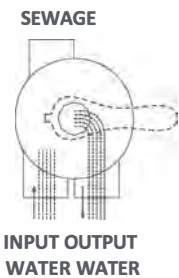
6. Start the pump again and run for 30s to 60s, or until all impurities have been removed. **Check that the water in the transparent tube is clean.**

7. Switch off the pump and turn the valve to the **FILTRATION** position.

8. Start the pump.

The filter now operates in normal filtration mode, filtering the pool water.

FILTRATION



9. Adjust the pool's suction and discharge valves to obtain the desired flow. Check the system for leaks. Correct if necessary.

10. Note the initial value displayed on the pressure gauge when the filter is clean (it varies from pool to pool, depending on the pump and the water circuit). Accumulation of waste in the filter increases pressure and reduces water flow.

When the pressure gauge indicates a 30% increase in initial pressure, perform a filter flush. To do this, follow the same procedure as above.

Reminder of the different functions of the 6-way valve



To avoid damaging the multiway valve seal, always press the handle before turning it, and always turn it clockwise.

POSITIONS	FONCTIONS
FILTRATION	Permet de filtrer l'eau de la piscine (position normale)
LAVAGE	Permet de nettoyer le filtre en inversant le flux dans le filtre
RINCAGE	Permet d'évacuer les dernières impuretés après le lavage
EGOUT	Permet d'évacuer directement l'eau pour, par exemple, baisser le niveau d'eau
CIRCULATION	Permet de faire circuler l'eau directement sans passer par le filtre (BY PASS)
FERMÉ	Permet de fermer tous les flux depuis et vers la piscine
HIVERNAGE	Permet à l'air de rentrer dans le filtre, vanne relevée entre la position LAVAGE et FERMÉ

1. FILTRATION
Normal filtration

SEWAGE

INPUT OUTPUT
WATER WATER

2. WASHING
Backwash the filter by reversing the flow

SEWAGE

INPUT OUTPUT
WATER WATER

3. RINSE
After washing to remove dirt

SEWAGE

INPUT OUTPUT
WATER WATER

4. SEWER
Diverts flow to the sewer without passing through the filter

SEWAGE

INPUT OUTPUT
WATER WATER

5. TRAFFIC
Backwash the filter by reversing the flow

SEWAGE

INPUT OUTPUT
WATER WATER

6. CLOSED
Prevents water movement

SEWAGE

INPUT OUTPUT
WATER WATER

7. WINTERING
Valve position read between WASH and CLOSED

SEWAGE

INPUT OUTPUT
WATER WATER

Practical tips

Your pool filter is the main component of your equipment room, ensuring clean, clear water. Next come the chemical treatment elements.

To achieve this, the filter must contain a filter media, which may be sand or glass. This filter media enables the mechanical elimination of all waste, larger than the filtration fineness of the media used, suspended in the water and introduced by nature or man.

And to ensure optimum water quality, it's important that the filtration time is long enough. A good estimate is :

$$\text{Filtration time} = \text{Water T}^\circ / 2$$

But if the water temperature is above 26°C, additional filtration time may be necessary, up to continuous filtration (24/24) above 30°C.

Remember to wash your filter media regularly (see section on commissioning).

Remember to maintain your pH at around 7.2.

Remember to disinfect your pool properly.

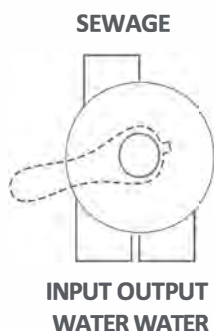
If any of these parameters - filtration time (too short), chemical treatment and/or pH - are not controlled, the quality of your bathing water will deteriorate.

External cleaning of filter

The filter's outer casing should be regularly cleaned of any dust that may have settled on it, particularly the transparent cover which allows you to see that it is working properly. Do not use solvents or detergents that could damage the appearance of plastics (gloss, opacity, etc.).

Wintering

If winter temperatures allow (water temperature >5°C), actively winterize your pool, leaving your pump and filter running during the coldest hours.



On the other hand, when active wintering is no longer possible (during very cold weather, water temperature < 5°C, ask your dealer for advice) then :

- Thoroughly wash and rinse the filter media
- Drain water from filter (drain screw on bottom of tank)
- Leave the lid open to ventilate the inside of the filter during the wintering period.
- Set 6-way valve handle to WINTER position, between WASH and CLOSED.

To restart, repeat the commissioning operations described above in the "Commissioning" paragraph.

Troubleshooting and maintenance



To avoid any accidents, it is essential to de-energize the circulation pump and reduce the filter pressure using the air bleed screw.

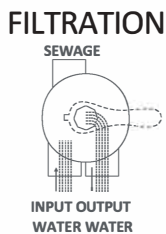
To avoid damaging the multiway valve seal, always press down on the handle before turning it, and always turn it clockwise.

Most frequent faults :

- The filter has a low flow rate.
- There's a lack of aspiration.
- The pressure on the gauge is high.
 - Check that the pump and skimmer pre-filter baskets are not clogged and clean them.
 - Check that the pipes are not blocked and clean them.
 - In the case of a three-phase pump, check that the pump is not running backwards and, if necessary, change the direction.
- The pressure gauge oscillates violently.
 - Check the pump for air intakes and remove them if necessary.
 - Check that the suction valves (skimmers and bottom drain) are sufficiently open.
- There's sand in the pool.
 - Check strainer condition

During these operations, you may need to check and clean the inside and grease the star seal of the 6-way valve. To do this, you need to dismantle, clean and reassemble it.

Dismantling the valve :

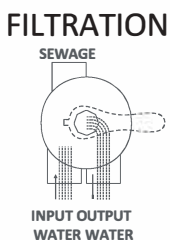


1. Switch off circulation pump.
2. Close suction and discharge valves
3. Turn valve to **FILTRATION** position
4. Remove screws
5. Lift the cover and remove the handle. (Diagram)



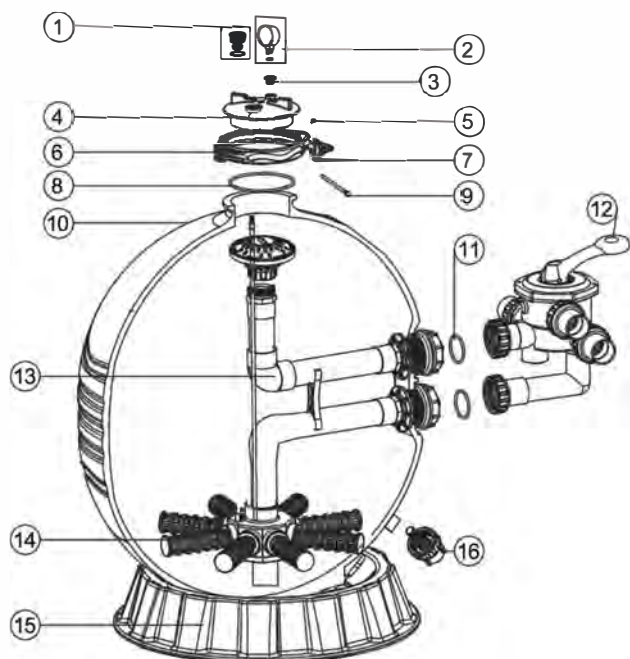
Check and clean the inside and grease the star seal of the 6-way valve at least once a year before each new season.

Valve assembly :



1. Position handle (Diagram) in FILTRATION position
2. Align the cover with the valve body
3. Position and grease the gasket
4. Re-tighten the cover screws in a staggered pattern. Do not overtighten.

Exploded view and filter parts

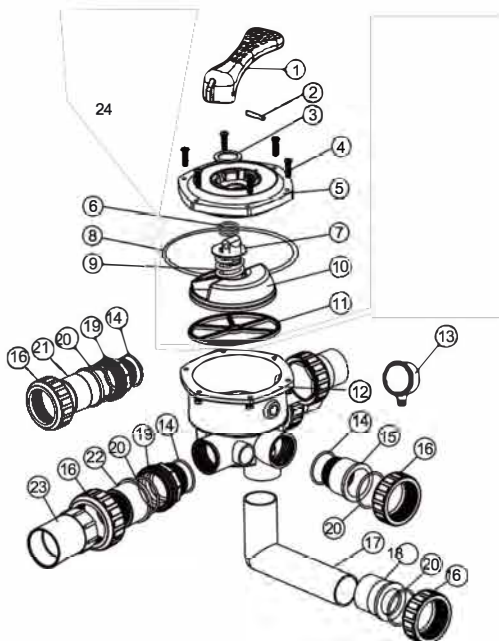


Notes: 14* PF-ULT500S with 8 strainers (115mm)
 14* PF-ULT600S/ PF-ULT675S/ PF-ULT775S
 with 8 strainers (126mm)
 14* PF-ULT675S/ PF-ULT775S/ PF-ULT875S
 with 4 strainers (115mm)
 and 4 strainers (185mm)

NO.	Code	Description	Qty
1	89010701	Drain plug with O-ring	1
2	06011032	Stainless steel pressure gauge, vertical outlet, 40psi/2.7bars	1
3	E190109	Threaded/threaded adapter for pressure gauge/purge screw	1
4	01201022	Lid (transparent)	1
5	03021035	Nut M6	1
6	89012512	Clamp kit	1
7	01111101	Star nut	1
8	02010007	O-ring seal	1
9	112000017	M6 x 125 mm screw	1
10	89012607	Filter pan with base for PF-ULT500S	1
10	89012608	Filter pan with base for PF-ULT600S	1
10	89012620	Filter pan with base for PF-ULT675S	1
10	89012621	Filter pan with base for PF-ULT775S	1
10	89012622	Filter pan with base for PF-ULT875S	1
11	111002364	O-ring for 1"1/5 adapter (d53x3)	2
11	111202472	O-ring D70xd60x6	2
12*	88280805	1"1/5 6-way valve body (valve only) (black)	1
12*	88280811	6-way 1"1/5 valve with pipe kit, union fittings (3) and pressure gauge (black)	1
12*	88280806	2" 6-way valve body (valve only) (black)	1
12*	88280812	2" 6-way valve with pipe kit, union fittings (3) and pressure gauge (black)	1
13	89012602	Upper diffuser elbow for PF-ULT500S	1
13	89012603	Upper diffuser elbow for PF-ULT600S	1
13	89012617	Upper diffuser elbow for PF-ULT675S	1
13	89012618	Upper diffuser elbow for PF-ULT775S	1
13	89012619	Upper diffuser elbow for PF-ULT875S	1
14	01172007	Strainers (115 mm)	*
14	01172008	Strainers (126 mm)	*
14	01172010	Strainers (185 mm)	*
15	01111059	Filter base 40-45cm	1
15	01111062	Filter base 53-71cm	1
15	01112037	Filter base 78-89cm	1
16	89011601	Drain plug kit	1

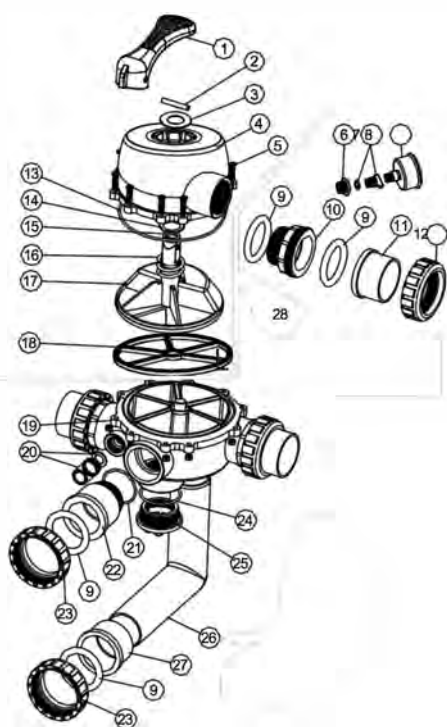
Exploded views and spare parts for valves

1"1/2 valve



Nº	Description	Qté
1	Poignée de vanne	1
2	Insert poignée	1
3	Rondelle poignée	1
4	Vis et écrou M6x30	6
5	Couvercle vanne 6 voies 1"1/2 (Noir)	1
6	Joint boisseau de vanne	2
7	Rondelle boisseau	1
8	Joint torique de couvercle	1
9	Ressort	1
10	Boisseau de vanne 1"1/2	1
11	Joint étoile	1
12	Corps de vanne inférieur (Noir)	1
13	Manomètre avec joint	1
14	Joint torique	4
15	Embout fileté union pour vanne 1"1/2 (Noir)	1
16	Ecrou union 1"1/2 (Noir)	5
17	Tube coudé noir 1"1/2	1
18	Adaptateur union 1"1/5	1
19	Raccord union 1"1/5 (Noir)	3
20	Joint union 1"1/5	5
21	Raccord à coller union 1"1/5	3
22	Union 1"1/5 avec voyant (court)	1
23	Union 1"1/5 avec support de voyant	1

2" valve



NO.	Description	Qty
1	Valve handle	1
2	Handle insert	1
3	Handle washer	1
4	6-way valve cover (Black)	1
5	Screw and nut M6x30	10
6	Drain plug connector with O-ring seal	1
7	Drain plug with O-ring	1
8	Pressure gauge	1
9	O-ring seal	8
10	2" union (Black)	3
11	2" union bonding fitting	3
12	2" union nut (Black)	3
13	Cover O-ring	1
14	Washer	1
15	Valve ball seal	2
16	Valve spring	1
17	2" valve ball	1
18	Star seal	1
19	Lower valve body (Black)	1
20	Turbidity indicator with O-ring	1
21	1"1/5 union joint	1
22	2" union glue fitting (Black)	1
23	2" valve union nut (Black)	2
24	O-ring valve cap	1
25	Threaded valve plug (Black)	2
26	2" black elbow tube	1
27	2" union bonding fitting	1

Warranty

Poolstar warrants to the original owner that the Poolex ULTRA SIDE Filter will be free from defects in materials and workmanship for a period of **ten (10) years** for the tank and **three (3) years** for all other parts **except wear parts (gaskets and strainers)**.

The warranty takes effect on the date of first invoicing and on presentation of the purchase invoice.

The warranty does not apply in the following cases:

- Malfunctions or damage resulting from improper installation, operation or repair.
- Malfunction or damage caused by an unsuitable chemical environment in the pool.
- Malfunctions or damage resulting from conditions unsuitable for the intended use of the device.
- Damage caused by negligence, accident or force majeure.
- Malfunctions or damage caused by the use of unauthorized accessories.

Repairs carried out during the warranty period must be approved by an authorized technician before they are carried out. The warranty is void if the unit is repaired by a person not authorized by Poolstar.

Warranty parts will be replaced or repaired at Poolstar's discretion. Defective parts must be returned to our workshop within the warranty period to be covered. The warranty does not cover the cost of labor or unauthorized replacement. The return of the defective part is not covered by the warranty.

Madame, Monsieur,

Une question ? Un problème ? Ou simplement enregistrer votre garantie, retrouvez-nous sur notre site internet :

<https://assistance.poolstar.fr/>

Nous vous remercions de votre confiance
et vous souhaitons une excellente baignade.

Vos coordonnées pourront être traitées conformément à la Loi Informatique et Liberté du 6 janvier 1978 et ne seront divulguées à quiconque.