

EN English

ULTRA TOP SAND FILTER



INSTALLATION & USER MANUAL

Please read carefully and keep for future reference

! PLEASE READ CAREFULLY!

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

If you lose the manual, please refer to the website: www.poolex.fr

The instructions 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 people 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 is compatible with the actual installation conditions and does not exceed the maximum authorised limits for the product in question.

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

Failure to comply with the above clauses 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 the technical documentation is passed on with the equipment to the new owner.

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

Any contractual or non-contractual liability of the manufacturer/distributor shall be deemed null and void for damage caused by errors in installation or operation, or by failure to comply with the instructions provided in this manual or with the installation standards in force for the equipment which is the subject of this document.

Table of contents

Packaging.....3
 Safety instructions4
 How it works5
 Installation.....6
 Commissioning.....8
 Reminder of the different functions of the 6-way valve9
 Practical advice10
 Cleaning the outside of the filter.....10
 Wintering.....10
 Troubleshooting and maintenance11
 Exploded views and spare parts lists12
 Guarantee.....14

Packing

Your ULTRA TOP filter is made up of 1 box containing the tank and its accessories as well as the 6-way valve, 2 bags containing the connection accessories for the multiway valve and various other components listed below:

	PF-ULT500T	PF-ULT600T
FILTER		
Tank	1	1
6-way valve body on tank	1	1
Multiway valve position label (English, French, German, Spanish)	1	1
Clamp kit	1	1
Strainers	1	1
SACHET 1		
Valve O-ring	1	1
Multilingual manual	1	1
Plastic centre tube plug	1	1
SACHET 2		
1"1/2 Threaded Union - D.50mm for gluing	3	3
Turbidity indicator	1	1
Pressure gauge	1	1

Safety instructions

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

Before any maintenance or operation, make sure that all the machines, in particular the circulation pump, are switched off 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 when the pump is running!

Clean the pump pre-filter regularly to ensure that the water circulates properly and without excess pressure.

In low-temperature conditions, particularly when active wintering 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 through the drain plug 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 be higher than the maximum working pressure of the filter.

Check that your equipment is compatible with each other, in particular the flow rates and working pressures, as well as the planned dimensions 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 threads of the pressure gauge.

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

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



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

CAUTION - To avoid any 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 (even 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 that your water is clean and clear, followed by the chemical treatment elements.

To achieve this, the filter must contain a filter media, which may be sand or glass. This filtering load mechanically eliminates 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 sucked through the pipe system and drawn to the top of the filter by 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 the flow rate and increases the 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 with 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 and restart the pump. The flow of water is then reversed in the filter so that it circulates through the filter medium from the lower part of the filter to the upper part, removing the build-up of waste from the filter medium and discharging it via the 6-way valve into the drain (**note: if present, the valve on the drain 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, the impurities have been removed from the filter.

Switch the pump off again, then move the 6-way valve to the **RINSE** position and restart the pump for 30s to 60s.

Then switch the pump off again, move the 6-way valve back to the **FILTRATION** position and restart the pump one last time to resume normal filtration.

To ensure optimum water quality, it is 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 required, until continuous filtration (24 hours a day) is achieved above 30°C.

Warning: 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

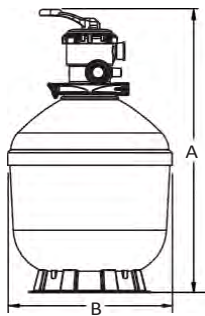
Before starting installation, check that your equipment is compatible with each other (flow rates and working pressure) and that it is sized for the volume of water to be treated.

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 swimming pool filtration. We recommend using a filter media 1/3 with a particle size of approximately 2mm to 4mm and 2/3 with a particle size of approximately 0.5mm to 0.7mm. This should preferably be renewed every 5 years.

Model	Height A (mm)	Diameter B (mm)	Fittings Valve	Sand required (kg)	Glass required (kg)	Maximum flow (m ³ /h)	Volume pool (m ³)*
PF-ULT500T	880	500	1"1/2	70	55	10	60
PF-ULT600T	980	600	1"1/2	125	100	14	80

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



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

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

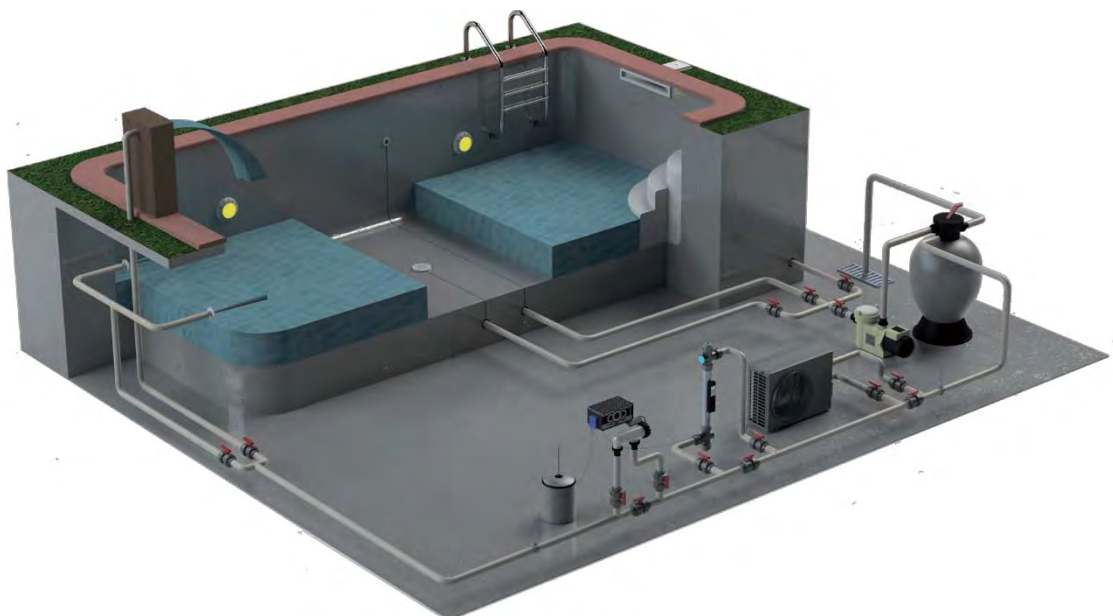
Position the filter so that the connections, multiway valve and drain are accessible for use and maintenance.



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 waste water drain pipe of the same dimensions as the other pipes used in the equipment room.

Always use PVC swimming pool pipes of the correct diameter.



Installation steps



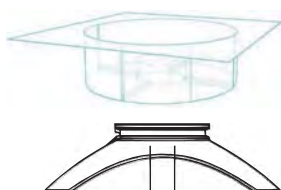
Filling the filter :

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

Should preferably be renewed every 5 years.

1. The filter media is loaded through the top opening of the filter:

- a) Loosen the flange collar and remove the 6-way valve (if already installed).
- b) Block the internal pipe with the plastic plug supplied by placing it on the flange of the sand filter.
- 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 should be approximately in the middle of the filter tank and, at the most, at the beginning of the narrowing towards the top of the tank, respecting the quantity of filter media as indicated in the table above.
- f) Remove the protection from the inner pipe.

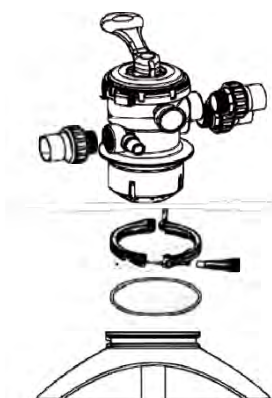


2. Check that there is no media residue on the cover.

Assembling the valve and fitting it to the filter :

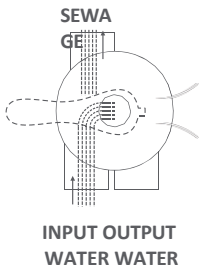
- 1. Grease the O-ring on the 6-way valve and place it on the underside of the valve so that it sits snugly underneath.
- 2. Insert the 6-way valve into the neck of the tank, making sure that the central pipe fits perfectly into the hole below the valve.
- 3. Make sure you align the valve carefully with the neck of the sand filter and then press the 6-way valve firmly against the filter flange.
- 4. Place the clamping kit around the valve and flange, gripping them in a "sand-wich" and tighten the fittings just enough to allow the valve to rotate on the tank to its final position.
- 5. Position the O-ring on the pressure gauge and screw it into the threaded hole in the valve body. Do not overtighten.
- 6. Place the O-ring in front of the "turbidity indicator" tube, then position the assembly in front of the hole and tighten (but do not overtighten) the valve.

O-rings are used for sealing. Do not use PTFE tape.



Commissioning

WASHING



1. Check that the filtration pump is not supplied with electricity. 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; open it if necessary.**

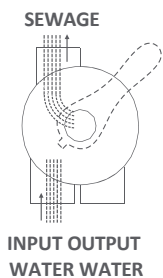
To avoid damaging the seal on the multi-way valve, always press down on the handle before turning it and always turn it clockwise.

3. Prime and start the pump in accordance with the manufacturer's instructions.

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

When the water runs out of the drain, leave the pump running for at least 60s. This initial wash is recommended to remove any impurities or fine particles from the filter media. Check the cleanliness of the water through the transparent tube in the drain.

RINSE

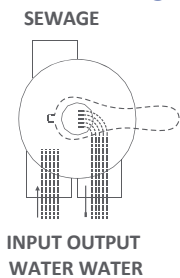


5. Switch off the pump and turn the valve to the **RINSE** position.

6. Start the pump again and run it for 30s to 60s or until the 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.

FILTRATION



8. Start the pump.

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

9. Adjust the pool's inlet and outlet valves to obtain the desired flow. Check the installation for leaks. Correct if necessary.

10. Note the initial value displayed on the pressure gauge when the filter is clean (it varies from one pool to another depending on the pump and the water circuit). The accumulation of waste in the filter leads to an increase in pressure and reduces the flow of water.

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

Reminder of the different functions of 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.

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
RINÇAGE	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
Backwashing 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 the flow to the sewer without passing through the filter

SEWA
GE

INPUT OUTPUT
WATER WATER

5. TRAFFIC
Backwashing the filter by reversing the flow

SEWA
GE

INPUT OUTPUT
WATER WATER

6. CLOSED
Prevents water movement

SEWA
GE

INPUT OUTPUT
WATER WATER

7. WINTERING
Valve position read between WASH and CLOSED

SEWAGE

INPUT OUTPUT
WATER WATER

Practical advice

Your pool filter is the main element in your pool house, ensuring that your water is clean and clear. Next come the chemical treatment elements.

To achieve this, the filter must contain a filter media, which may be sand or glass. This filter medium mechanically eliminates 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 required, until continuous filtration (24 hours a day) is achieved 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.

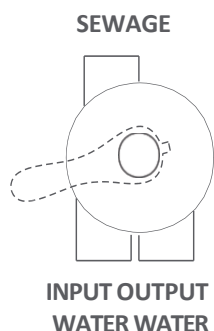
If any of these parameters - filtration time (too short), chemical treatment and/or pH - are not kept under control, the quality of your bathing water will deteriorate.

External cleaning of the filter

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

Wintering

If winter temperatures allow (water temperature >5°C), actively winterise your pool, leaving your pump and filter running during the cold 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 :

- Wash and rinse the filter media thoroughly
- Drain the water from the filter (drain screw at the bottom of the tank)
- Leave the cover open to ventilate the inside of the filter during the wintering period.
- Set the 6-way valve handle to WINTER, between the WASH and CLOSED positions.

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

Troubleshooting and maintenance



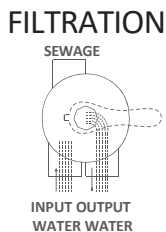
Before any work is carried out, to avoid any accidents, the circulation pump must be switched off and the filter pressure reduced using the air bleed screw.
To avoid damaging the seal on the multi-way valve, always press down on the handle before turning it and always turn it clockwise.

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 pre-filter basket and skimmers are not blocked 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 rotating backwards and, if necessary, change the direction.
- The pressure gauge oscillates violently.
 - Check that there are no air intakes at the pump and, if necessary, remove them.
 - Check that the suction valves (skimmers and bottom drain) are sufficiently open.
- There's sand in the pool.
 - Check the condition of the strainers

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 :

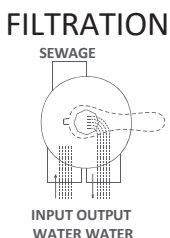


1. Switch off the circulation pump.
2. Close the suction and discharge valves
3. Turn the valve to the FILTRATION position
4. Remove the screws
5. Lift the cover and remove the handle. (Diagram)



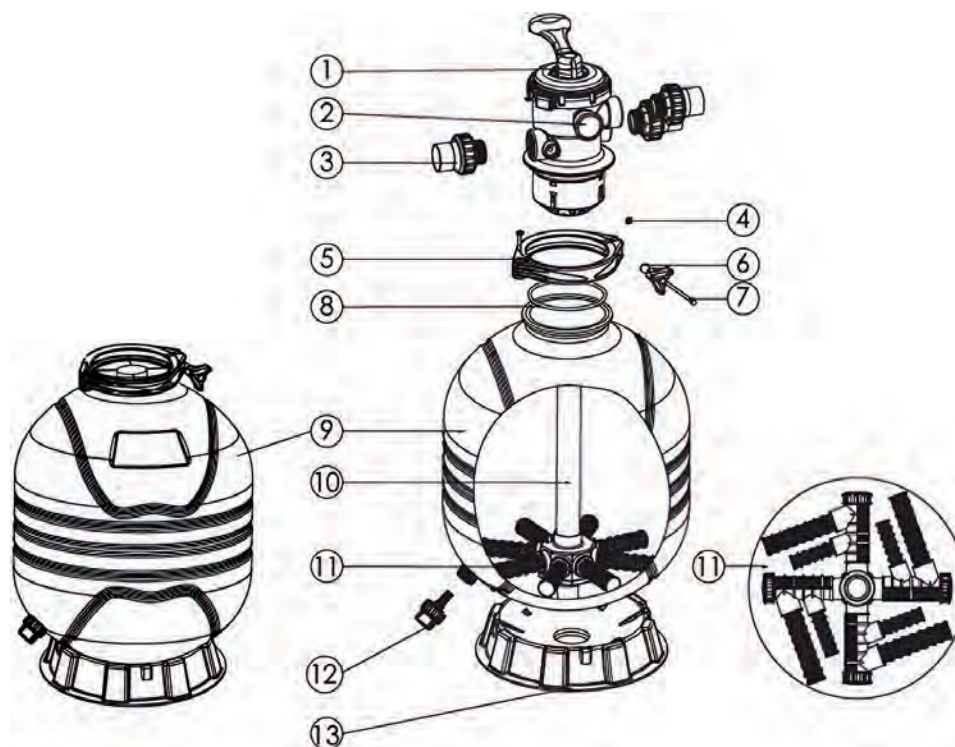
Check and clean the inside and grease the star seal of the 6-way valve at least once a year before each new season.

Valve assembly :



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

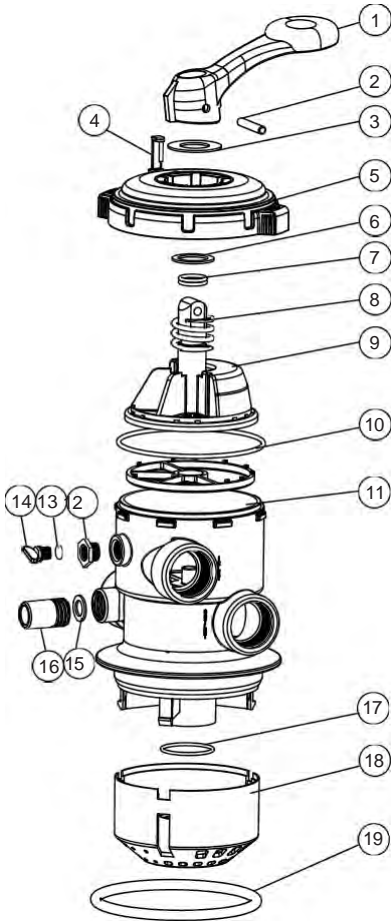
Exploded view and filter parts



NO.	Code	Description	Qty
1	88281505	Top 1"1/5 6-way valve body (valve only) (black)	1
1	88281550	Top 1"1/5 6-way valve with union connections (3) and pressure gauge (black)	1
2	06021013	Pressure gauge	1
2	E190109	Threaded/threaded adapter for pressure gauge/bleed screw	1
3	E190102	Union thread 1"1/5 (2 pieces) (black) (imperial and metric) with O-ring	3
4	03021035	M6 nut	1
5	89012512	Clamp kit	1
6	01111101	Star nut	1
7	112000017	M6 × 125 mm screw	1
8	02010007	O-ring seal	1
9	89012502	Filter pan with base for PF-ULT500T	1
9	89012503	Filter pan with base for PF-ULT600T	1
10	89012508	Diffuser + central tube for PF-ULT500T	1
10	89012509	Diffuser + central tube for PF-ULT600T	1
11	01172008	Strainers (126 mm)	8
12	89011601	Drain plug kit	1
13	01111059	Filter base for PF-ULT500T	1
13	01111062	Filter base for PF-ULT600T	1

Exploded views and valve spare parts

1"1/2 valve



NO.	Description	Qty
1	Handle	1
2	Handle insert	1
3	Handle washer	1
4	Locket locking 6-way valve cover	1
5	1"1/5 6-way valve cover	1
6	Handle washer	1
7	1.5" 6-way valve seal	2
8	Spring	1
9	1.5" valve ball	1
10	Cover O-ring	1
11	1.5" valve body	1
12	Pressure gauge/plug reducer connector	1
13	O-ring for drain plug	1
14	Drain screw	1
15	O-ring turbidity sight glass	1
16	Turbidity indicator	1
17	Diffuser O-ring	1
18	1.5" diffuser	1
19	O-ring seal	1

Guarantee

Poolstar guarantees the original owner against material and manufacturing defects in the Poollex ULTRA TOP filter for a period of **ten (10) years** for the tank and **three (3) years** for the other parts, **excluding wearing parts (seals and strainers)**.

The guarantee comes into effect on the date of the first invoice and on presentation of the purchase invoice.

The guarantee does not apply in the following cases:

- Malfunction or damage resulting from installation, use or repair that does not comply with the safety instructions.
- Malfunction or damage caused by an unsuitable chemical environment in the pool.
- Malfunctions or damage resulting from conditions that are unsuitable for the intended use of the appliance.
- Damage caused by negligence, accident or force majeure.
- Malfunctions or damage caused by the use of unauthorised accessories.

Repairs carried out during the warranty period must be approved before they are carried out and entrusted to an authorised technician. The warranty will lapse if the appliance is repaired by a person not authorised by Poolstar.

Warranty parts will be replaced or repaired at Poolstar's discretion. Defective parts must be returned to our factory within the warranty period to be covered. The warranty does not cover the cost of labour or unauthorised 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.