

FILTER MAX

PF-FILMAX04 — PF-FILMAX06

Ball filter unit with circulation pump



INSTALLATION AND OPERATING INSTRUCTIONS

ACKNOWLEDGEMENTS

Dear valued customer,

Thank you for your purchase and your confidence in our products.

Our products are the result of years of research into the design and manufacture of swimming pool equipment. Our aim is to provide you with a quality product of outstanding performance.

We've taken great care in compiling this manual to help you get the most out of your Poolex filtration system.



Non-contractual image

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WARNING - SECURITY



BEFORE INSTALLING THIS PRODUCT, READ AND FOLLOW ALL WARNINGS AND INSTRUCTIONS ACCOMPANYING THIS PRODUCT.

FAILURE TO FOLLOW SAFETY WARNINGS AND INSTRUCTIONS MAY RESULT IN INJURY, DEATH OR PROPERTY DAMAGE.

READ CAREFULLY AND RETAIN FOR FUTURE REFERENCE.

CAUTION: THIS FILTER MUST ONLY BE USED WITH THE FILTER BALLS SUPPLIED OR EQUIVALENT. NO OTHER FILTER MEDIA MAY BE USED. THIS WOULD RENDER THE FILTER PERMANENTLY INOPERABLE.

THE PUMP MUST NOT BE OPERATED WITHOUT WATER.

- To avoid endangering you, follow the instructions precisely.
- Always switch off the pump before opening the tank.
- Children should not play with the product.
- This product is intended for private use only.
- Running the pump dry can damage the seals and lead to leaks and flooding.
- To avoid damage, regularly clean the pump prefilter basket, the filter media and the skimmer basket of the pool.
- Installation must be carried out in accordance with the pool safety instructions and specific local regulations.
- The electrical connection must be at least 3.5m from the bathing area. Moisture can deteriorate metal parts and the pump motor.
- The user must ensure that maintenance operations are carried out by authorized and qualified persons and that these persons have carefully read the installation and operating instructions beforehand.
- Make sure you choose the right filter unit for the size of your pond.
- The assembly instructions provided were accurate during production. However, the accompanying photos and diagrams serve to illustrate the assembly process and are not contractually binding regarding shape, color, or appearance. We reserve the right to make improvements to our products without prior notice, provided these modifications do not affect the product's functionality.
- During operation, some parts of the pump are under electrical voltage. Any operation on the pump or connected equipment must be carried out after switching off the power or disconnecting the starting devices.
- If the power cord is damaged, it must be replaced by a qualified electrician and must comply with local regulations to avoid any hazards from occurring.
- The filter unit operates under pressure. If used incorrectly, air can enter the system and become pressurized. Pressurized air can cause the cover to be thrown off, resulting in serious injury, death or damage to property.
- Unplug the pump before opening the transparent filter cover.
- There are risks associated with the hydraulic and electrical nature of the product. These risks are represented by the pictograms opposite. Please take all necessary measures to limit these risks as much as possible.
- Safe operation of the pump is only guaranteed if the installation and operating instructions have been followed correctly.



Electrical risks



Risk of falls



Be careful not to slip

CARACTERISTICS

Description

Filtermax uses a filter medium made up of balls with a filtration fineness of up to 3 microns. It has a reinforced tank treated to resist UV rays and external elements, an intuitive pressure gauge, a circulation pump and a T-purge system for easy pump priming. Filtermax has been designed to make it as easy as possible for you to maintain your pool and reduce your water and electricity consumption.

Technical specifications

POOL FILTER	Ref. PF-FILMAX04	Ref. PF-FILMAX06
Pool filter flow rate	4.8 m ³ /h	6.8 m ³ /h
Pump potency	80 W	140 W
Power supply	230 V - 50 Hz	
Ø Tank and capacity	250mm / 12L	
Filter media quantity	250g	
Working pressure	from 0.2 to 0.5 bar (max. 1 bar)	
Operating range	5°C - 35°C	
Pool volume	< 25m ³	< 40 m ³
Net weight	6 kg	
Unit dimensions	33 x 39.5 x 38 cm	
Max. Height	6 m	7,5 m
Intensity	0.5 A	0.75 A
Max. filtered quantity	166 L/min	266 L/min
Degree of protection	IPX8	

We reserve the right to change all or part of the features of the articles or contents of this document, without prior notice.

Package contents

On receipt, please check that your parcel contains:

- 1 Pump with pre-filter assembly and power cord (5m)
- 2 The pump base
- 3 The reinforced 250 mm (12L) tank and its lid
- 4 The pump-tank elbow fitting
- 5 A reusable bag containing 250g filter balls
- 6 The filter basket and bale-holding grid
- 7 In a separate bag:
 - ♦ 2 connections 1"1/4 to connections 32mm
 - ♦ 2 1"1/5 connections to 38mm fittings
 - ♦ 2 stainless steel hose clamps Ø32 mm
 - ♦ 2 stainless steel hose clamps Ø38 mm with 2 clamp spanners
 - ♦ 2 clamping rings
 - ♦ the pressure gauge in packaging
 - ♦ T-plugs and drain plugs
 - ♦ 5 O-rings
- 8 This installation and user manual

Dimensions



CHARACTERISTICS

Why did you do the right thing by adopting FilterMax?

CONGRATULATIONS! YOU HAVE CHOSEN A PRODUCT THAT IS ECONOMICAL, ENVIRONMENTALLY FRIENDLY, COMPACT, LIGHTWEIGHT, QUIET, EFFICIENT, DURABLE AND PRACTICAL. FILTERMAX HAS BEEN DESIGNED WITH YOU IN MIND, TO MAKE YOUR LIFE EASIER. IT HAS BEEN DESIGNED TO BE EASY TO INSTALL, AUTONOMOUS IN ITS OPERATION AND COMPATIBLE WITH THE REST OF YOUR INSTALLATION, WHATEVER ITS ORIGIN.

How did we achieve this?

The Poolex FilterMax filter unit and its new filter ball technology reduce the electrical consumption of water. The pre-filter, filter pump and filter tank form a single, ultra-practical unit for pool maintenance. The robust connection reduces the risk of leaks. Thanks to the low-pressure operation, the water is better filtered, the acoustic pressure is considerably reduced and there is no pressure drop. Each ball has a filtration fineness of up to 3 microns. They are lighter and easier to transport: 250 g of filter balls are equivalent to using 9 kg of sand.

FilterMax features a new patented technology that uses an ultra-light basket of ultra-filtering balls. With this filtration unit, backwashing becomes obsolete. Simply remove the basket of filter balls and clean it with a hose or a washing machine. Pool water is no longer wasted down the drain with every wash.

With its universal threaded connectors of Ø32 mm, Ø38 mm and Ø50 mm, FilterMax is compatible with the main brands of above-ground and semi-inground pools, even those that require their own connection system. Thanks to its low-pressure operation, which prevents any loss of pressure, the filter pump retains its full power and can operate a hydraulic robot. Your pool water is filtered and the pool is cleaned.

The FilterMax filter unit is quickly assembled thanks to an intuitive and well-designed assembly system that requires no tools. All installation components are supplied with the unit, right down to the O-rings, which eliminate the need for Teflon. The filter balls are supplied with a reusable net that is placed in the basket space for easy removal and cleaning.

Filtration quality is optimised by the basket and grid that hold the filter balls in place. The tank is treated to resist UV rays and external elements. When winter arrives, the one-piece design and light weight of this filter unit makes it easy to disassemble and store.

Additional FilterMax equipment

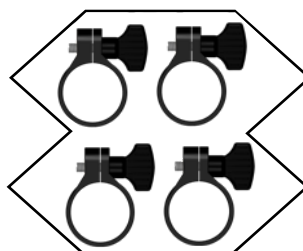
- ◆ [PF-FILTREVANNE3] 3-Way Screw-In Shut-off Valves
- ◆ [PF-FILTRETUYAU8] Universal sectionable replacement hose, 8m
- ◆ [PF-FILTRECOLLIER32] Set of 2 universal clamps Ø 32 mm
- ◆ [PF-FILTRECOLLIER38] Set of 2 universal pliers Ø38 mm
- ◆ [PF-OPTIMAXC] 100 g bale cartridge with reusable bag
- ◆ [PF-OPTIBALL700C] Optimum Balls: 700 g balls in a box



PF-FILTREVANNE3



PF-FILTRETUYAU8



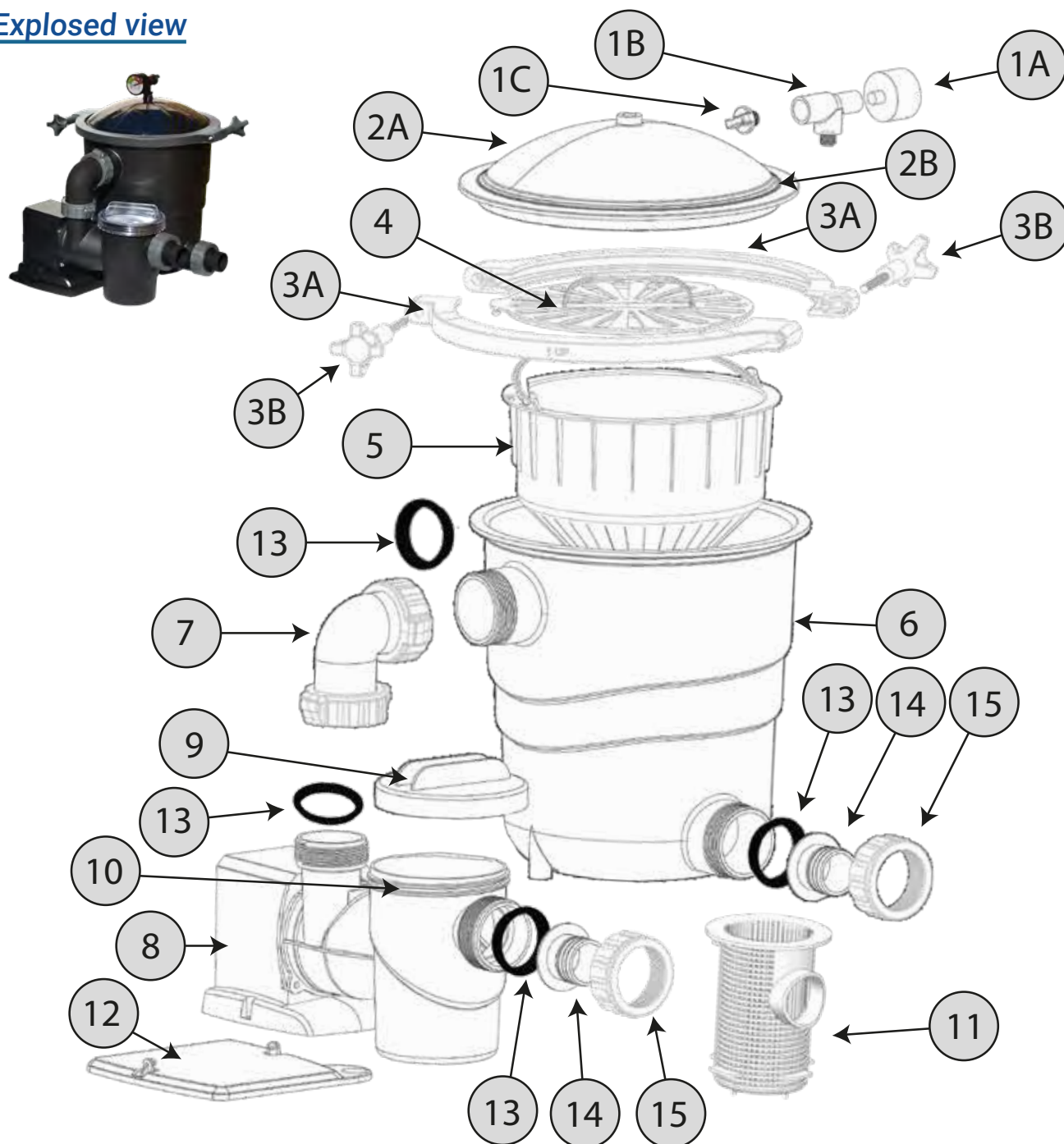
PF-FILTRECOLLIER32
PF-FILTRECOLLIER38



PF-OPTIMAXC

CARACTERISTICS

Exploded view





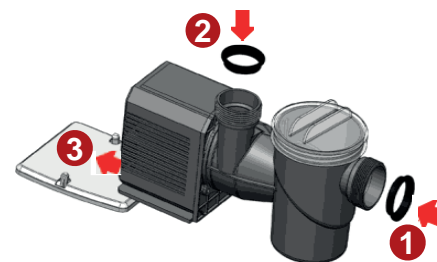
N°	Part name
1A	Pressure gauge
1B	T-gauge assembly
1C	T-plug
2A	Clear lid
2B	O-ring seal
3A	Stainless steel hose clamp
3B	Fixing screw
4	Ball retention grid
5	Removable filter basket
6	Reinforced tank

N°	Part name
7	Elbow connection pump/canister
8	Pump body
9	Pre-filter pump cover
10	Pre-filter pump
11	Pre-filter pump basket
12	Pump support
13	O-ring seal
14	32 or 38 mm fittings
15	Clamping ring

ASSEMBLY

Preparing the tank

- 1 Place first O-ring on the pump inlet.
 - 2 Place second O-ring on the pump outlet.
 - 3 Gently clip the pump onto its base.  *The pump is heavy.*
 - 4 Place the third O-ring over the inlet at the top of the tank.
 - 5 Place the tank next to the pump on the base, in the place provided for this purpose.
 - 6 Locate the UP and DOWN markings on the elbow fitting
-  *The mark **UP** on the upper part of the elbow indicates the clamp to be fixed to the tank.*
*The **DOWN** marking on the bottom of the elbow indicates the clamp to be attached to the pump.*
- 7 Screw on the pump/tank connection elbow. Tighten as much as possible by hand without using tools.
 - 8 Place the fourth sealing gasket on the outlet at the bottom of the tank.



Preparing the basket


- 1 Place the bag of balls supplied in the filter basket.

Notes:

- The bag makes maintenance easier.
- The balls can also be placed in the basket without the bag.
- For older models with several bags, do not leave any space between the 2 bags, to ensure maximum filtration.



- 2 a. Place the grid in the basket.
 b. Engage the 3 attachment points of the grid in the 3 notches of the basket.
 c. Turn the grid slightly to the left to secure it completely
 TIP : slide your fingers under the hooks to turn the grid

 *The basket should not be picked up by the handle of the grid, but by the handle!*



NOTE: The grid keeps the filter balls in the correct position. Without the grid, the balls will float and spread out, reducing the quality of filtration. For this reason, it is also important to have a sufficient quantity of filter media in the basket: 250g (dry weight).

- 3 Insert the basket (once closed and with the filter balls) into the tank.
 Make sure that the basket is well positioned at the bottom of the tank.



ASSEMBLY

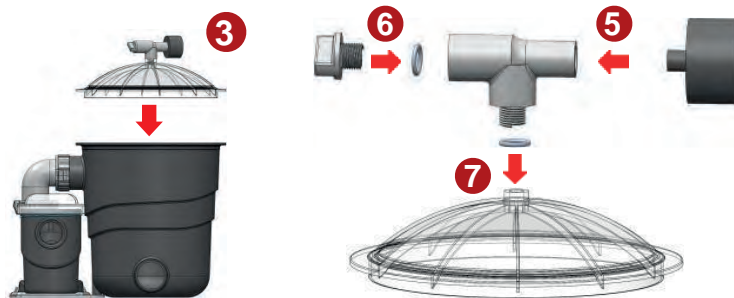
Installing the lid

- 1 Carefully turn the tank lid.
- 2 Place the large tank gasket on the edge provided for it.

TIP: Place the lid upside down on the bowl to install the seal more easily.

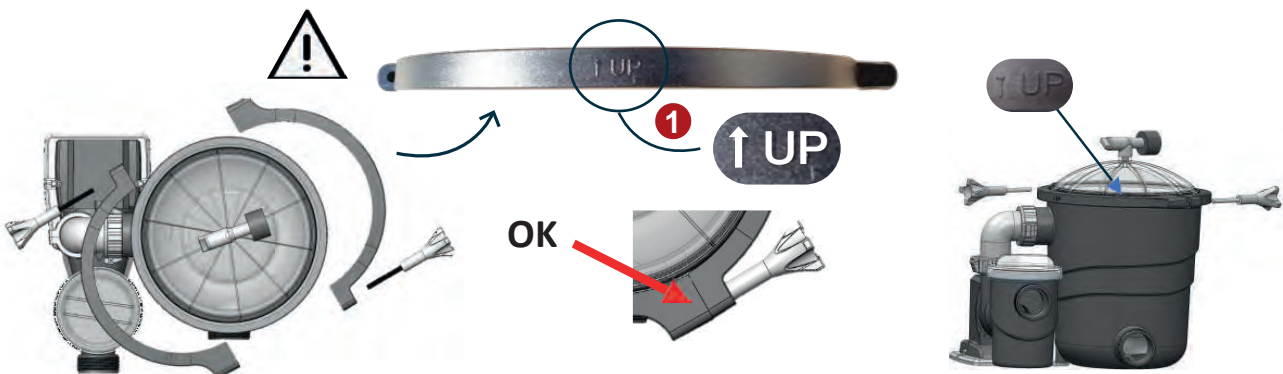


- 3 Place the lid on the tank, making sure that the gasket remains in place.
- 4 Press lightly around the lid to ensure that the lid and gasket are correctly positioned.
- 5 Screw the pressure gauge into the white PVC tee (small Ø side).
- 6 Screw the black plug and its O-ring on the other side of the white tee (large Ø side).
- 7 Screw the whole tee with its O-ring into the transparent tank cap.



Final assembly

- 1 Now place the 2 clamps of the cover (3A, p.25) on the tank.
*Be careful to respect the direction of the clamp by putting the "UP" upwards (arrow towards the sky).
Press the two clamps together with your hands before step 2.*
- 2 Fasten the 2 clamps as tight as possible with the 2 clamping wheels by hand and without using tools.
- 3 Check that all screwed parts are tight (without tools) to complete the filter assembly.



CONGRATULATIONS! YOUR FILTERMAX IS READY FOR INSTALLATION.

INSTALLATION

Location

Please follow the instructions below to install the filtration system.

- ◆ Install your filter unit on a solid, flat, horizontal base.



The electrical connection must be located outside the bathing area.

- ◆ The filtration system must be installed at a distance of more than 3.50 m from the pool (NF C 15-100).



- ◆ To avoid pump breakdown, install the filtration system at a level less than 0.50 m below the surface of the pool water.
- ◆ The filtration pump should preferably be placed away from splashing water, flooding and humidity, if possible in a dry, well-ventilated room. Otherwise, if the pump is installed outdoors at temperatures below 5°C, consider either active or passive wintering. In this case, drain the tank, pump and pipes thoroughly.
- ◆ The pump must be installed horizontally by fixing it to the bracket.
- ◆ The suction piping should have as few bends or kinks as possible. No air should be trapped in the suction pipe.

Installation must be carried out in accordance with the pool safety instructions and specific local regulations.

Suitable hoses (not included)

(Hoses not included)

FilterMax is suitable for:

- ✓ FilterMax screw-in hose



- ✓ Universal hoses Ø 32mm and Ø 38mm



- ✓ 3-way screw-in valves



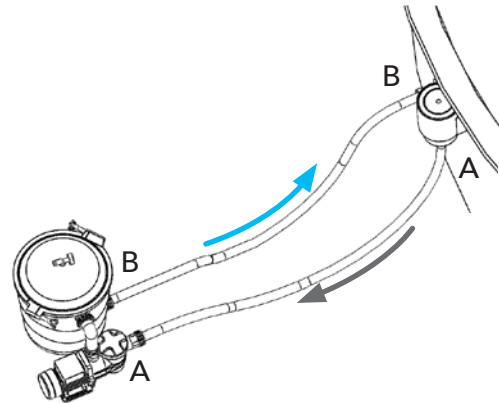
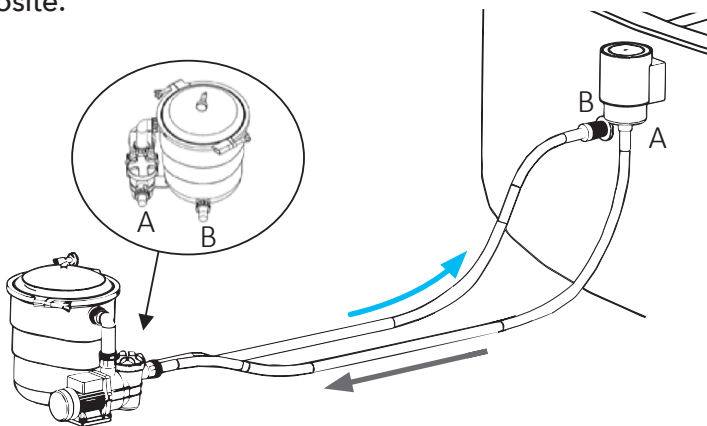
- ✓ Intex® and Bestway® thread screw-in hoses, Ø32,38 mm



INSTALLATION

Hydraulic connection

Connect the inlet pipe A to the pump inlet and the water outlet B to the tank outlet as shown in the diagram opposite.



Does your hose have a threaded connection?

✓ If yes, screw the hose directly onto the pump.

✗ If not:

- 1 Choose the connections and clamp appropriate for your water inlet hose (skimmer): Ø32 mm or Ø38 mm.
 - if Ø38 mm, the clamps and keys are already assembled
 - if Ø32 mm, remove the spanners from the Ø38 mm clamps and screw them onto the Ø32 mm clamps.
- 2 Assemble the fittings you need and use a clamp to secure each connection



- 3 Position the hose on the connector.
- 4 Fit and tighten the clamp supplied.

Electrical connection



PLEASE REFER TO THE SECTION «START-UP», PAGE 30, BEFORE SWITCHING ON THE FILTERMAX FILTER UNIT! FILTERMAX MUST NEVER BE OPERATED WITHOUT WATER.

The electrical connection of the FilterMax filter unit includes a 10mA differential circuit breaker. Test it regularly to ensure it is working properly. Before plugging in your FilterMax, make sure that the electrical socket is well protected, earthed and protected from rain and splashing water.

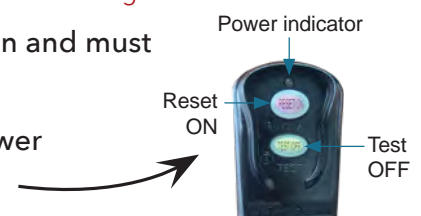


Electrical connection equipment supplied: 5 meter power cord.

During operation, some parts of the pump are under electrical voltage. Any operation on the pump or connected equipment must be carried out after switching off the power or disconnecting the starting devices.

If the power cord is damaged, it must be replaced by a qualified electrician and must comply with local regulations to avoid any hazards from occurring.

10mA earth leakage circuit breaker: Press RESET to switch it on. The power LED lights up red: the heat pump is switched on.



START-UP

Priming principle

There is no ON/OFF button on the FilterMax. It will be in operation as soon as it is connected to the power supply. However, the pump must NEVER run without water. Running the pump dry can damage the seals and lead to leaks and flooding. **It is therefore essential to prime the pump before starting it.**

Priming consists of bleeding the air out of the filter and pipes to fill them with water, so as to create a continuous flow between your pool and the filtration system. This stage is essential to ensure that the hydraulic circulation works properly.

Prepriming the pump

Case 1: The pump is below the water level (as recommended)

If the pump is placed below the water level of the pool, the pump will start automatically when the pool suction and discharge valves are open. The pipework and pump are filled with water naturally by gravity.

To make it easier to fill the entire filtration circuit with water, FilterMax is equipped with a drain integrated in the T of the pressure gauge. The drain plug is drilled in the middle of the thread to allow air to escape without having to unscrew it completely. Slightly unscrew the T-cap to release the air through the bleed and create a draught that will make it easier for water to flow into the tank and fill it completely.

Case 2: The pump is above the water level (not recommended)

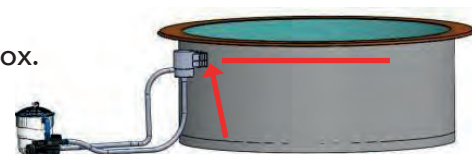
If the pump is not below the water level of the pool, you must prime the entire circuit. To do this, fill the pipework, the reservoir and the pump's pre-filter as completely as possible with water. Then unscrew the pre-filter cover to prime the pump when it is stopped.

Depending on the distance between the pool and the filtration system, it may be necessary to repeat this operation several times to ensure that the filtration system is fully primed. Then wait until all air has been evacuated from the pipework and pump.

Preliminary operations

Before starting the filtration, make sure that:

- The pool is sufficiently filled (at least up to the level of the skimmer).
- That the valves are all open.
- That the water can circulate freely throughout the circuit.
- That the correct amount of filter balls have been placed in the sandbox.
- That all connections have been made and are not leaking.



Start up

On start-up, the pump will prime gradually. The priming time will depend on the suction lift and the length of the filter piping.

MAINTENANCE

Any operation on the pump or connected equipment must be carried out after switching off the power or disconnecting the starting devices.

The user must ensure that maintenance operations are carried out by authorized and qualified persons and that these persons have carefully read the installation and operating instructions beforehand.

To avoid damage, regularly clean the pump prefilter basket, the filter media and the skimmer basket of the pool.

Prefilter basket cleaning

When to clean the prefilter basket?

The pre-filter basket should be washed regularly.

The frequency depends on your installation: cover, surrounding trees, use of a landing net, etc. Depending on the situation, you may need to clean your prefilter basket once a season or once a month.

How to clean the prefilter basket?

- ➊ Switch off the filtration pump: unplug FilterMax from the wall socket.
- ➋ Isolate the hydraulic circuit: close the water inlet and discharge valves.
- ➌ Remove the lid and remove the prefilter basket.
- ➍ Remove debris. If necessary, clean the basket with a garden hose.
- ➎ Inspect the O-ring seal.
 1. If damaged, replace it.
 2. If necessary, lubricating it with silicone.
- ➏ Replace the basket. Replace the O-ring correctly.
- ➐ Replace the cover, hand-tightening it only.
- ➑ Start the pump.



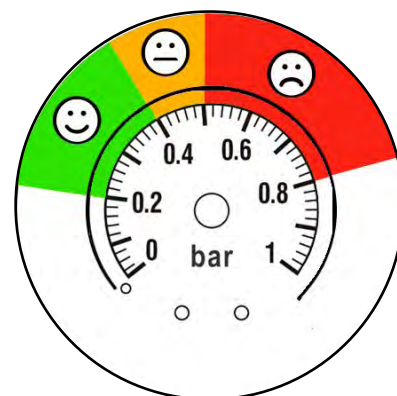
Cleaning of filter balls

When to wash balls?

The filter balls and their basket must be cleaned when one or more of the following conditions apply:

- Whenever the pressure on the pressure gauge is in the red zone (between 0.8 bar and 1 bar), the filter balls and their basket should be cleaned.
- If you observe an abnormally high contamination of the balls through the transparent cover, the filter balls should be cleaned.
- Every 30 days during the bathing season.

Remember to turn off the water before opening the lid! You can use a shut-off valve or a wintering plug to isolate FilterMax.



MAINTENANCE

How to wash balls?

Remove the bales from the tank

1. Stop the pump.
2. Turn off the water supply.
3. Remove the transparent cover.

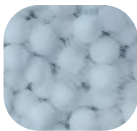
It is normal for the water in the pump to run out when you take the bales out.

4. Take the basket out of the tank and remove the grille to remove the bales.



With machine wash

Use a maximum 30° wash setting with no detergent and no spin cycle. **Do not add detergent!** Put the bag of balls directly into the washing machine or, failing that, another textile mesh bag. Do not put the balls in the washing machine without a bag: they could pass through the pipes.



Using the bag makes maintenance easier:

- ✓ Place the bag directly in the washing machine or under the water jet,
- ✓ Replace the balls easily.

With a jet of clear water

- 1 Rinse balls generously with a jet of clear water.
- 2 Make sure to turn the balls over to clean the entire surface of the balls.
- 3 Drain the balls several times to rinse and clean them thoroughly.
- 4 Replace the clean bales in the filter basket.
- 5 Restart the filter as described in " Start-up ", page 30.



Wintering

When to winterize the pump?

In environments where the pump may be exposed to frost or ice, care should be taken to protect the pump. If the pump is not used during the winter, it is recommended to store it in a dry place.

How to winterize the pump?

- 1 Empty the pool hydraulics.
- 2 Empty the tank completely.
Do not replace the drain plug and store it in a safe place, e.g. in the filter basket.
- 3 Clean the balls and let them dry in a warm and dry place.
- 4 Drain the pump.
- 5 Make sure that the pump is not subjected to moisture during the idle period.
Moisture can deteriorate metal parts and the pump motor.

And after wintering?

When putting the pump back into service, make sure that all seals are in good condition. Lubricate them if necessary or replace them if they are no longer in good condition.

TROUBLESHOOTING

This section will help you solve any problems you may encounter.

For each of the most common problems, you will find below a table explaining the possible causes of the malfunction and the solutions to resolve it.

1. Pump does not start.

Possible causes	Solutions
Air inlet	1 / Make sure that the water level is correct at the suction point. 2 / Fasten all clamps and fittings on the suction side of the pump.
No water in the pump	Fill the pump prefilter with water then slightly unscrew the T-plug on the pressure gauge to release air.
Valves closed	Open all system valves.
Hydraulic system blocked	Check that nothing is blocking the pump impeller. Clean the skimmer and prefilter baskets.
Reverse the input/output connection	Check that the water inlet hose (skimmer) is connected to the pump (and the return connected to the tank).

2. The flow rate is low.

Possible causes	Solutions
Dirty filter	Clean the filter balls. See "Cleaning of filter balls", page 31.
Skimmer and/or pump pre-filter blocked	Check that nothing is blocking the pump impeller. Clean the skimmer and pump baskets.
Air inlet	Make sure that the water level is correct at the suction point.
Valves closed or hydraulic system blocked	Open all system valves. Clean the skimmer and pre-filter baskets.

3. Engine gets hot.

It is normal for the motor to get hot as long as it can be touched. Thermal protection will activate stopping the pump if the temperature is excessive.

Possible causes	Solutions
Very low or incorrect voltage	The power supply must be corrected by an electrician.
Installation in full sunlight	Protection from the sun.

4. Motor does not work.

Possible causes	Solutions
No power supply	1 / Check that all electrical connectors are connected. 2 / Check that the socket to switch the pump is connected has a good power supply. 3 / Make sure that the circuit breakers are correctly installed.

5. Pump is noisy.

Possible causes	Solutions
Defective parts	Replace the entire pump.
Suction lock	Check that nothing is blocking the turbine (gravel, sand, leaves, etc.). Locate and remove the blockage.
Cavitation	1 / Improve suction. 2 / Reduce the height of the water column in the suction. 3 / Reduce the number of connections. 4 / Increase the diameter of the pipelines.

WARRANTY

General terms of guarantee

Poolstar guarantees the original owner against material defects and manufacturing defects of FilterMax for a period of **two (2) years**, excluding wear parts (filter balls, O-rings, prefilter basket).

The warranty enters into force on the first billing date.

This warranty does not apply to the following situations:

- Malfunction or damage resulting from installation, use or repair that does not comply with the safety instructions.
- Malfunction or damage deriving from an unsuitable chemical environment of the swimming pool.
- Malfunction or damage resulting from conditions unsuitable for the intended use of the device.
- Damage resulting from negligence, accident, or force majeure.
- Malfunction or damage deriving from the use of unauthorized accessories.

Repairs undertaken during the warranty period must be approved before being carried out by a qualified technician. This warranty is void in the event of repairs to the device made by individuals which have not been authorised by Poolstar.

The parts under warranty shall be replaced or repaired at the discretion of Poolstar. Faulty parts must be returned to us during the warranty period in order to be covered. The warranty does not cover unauthorized labor or replacement costs. Delivery costs for returning the faulty part are not covered by the warranty.

European Directive WEEE

Respect the European Union regulations and contribute to the protection of the environment.

Return defective electrical appliances to the recycling center assigned by your municipality.

Electrical and electronic equipment is subject to separate collection. You cannot throw them in the household waste bin, but must collect them separately.



Points de collecte sur www.quefairedemesdechets.fr
Privilégiez la réparation ou le don de votre appareil !

Dear customer,

A question? A problem? Or simply register your warranty, find us on our website:

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

Thank you for your trust and support. Happy bathing!

Your personal information is processed in accordance with the French Data Protection Act of 06 January 1978 and will not be shared with 3rd parties.



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POOLEX

SUIVEZ L'EXPERT

FILTER MAX

ASSISTANCE TECHNIQUE

www.poolex.fr



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