



# INSTRUCTION MANUAL FOR START UP AND MAINTENANCE

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## MODELS

BILBAO SIDE MOUNTED

BILBAO TOP MOUNTED

**BILBAO  
SIDE MOUNTED**



**BILBAO  
TOP MOUNTED**





## MODELS:

BILBAO SIDE  
MOUNTED

BILBAO TOP  
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### GENERAL CONTENTS

Page 4- Parts and codes

Page 5- Operation

Page 6- Installation

Page 7- Sand loading

Page 8, 9- Functions

Page 10- Set up

Page 10- Maintenance

Page 10- Winterising

Page 11- Troubleshooting

Page 11- Safety warnings

MODEL	Ø	CONNECTION	FILTERING SURFACE	FLOW	DIMENSIONES (mm) DIMENSIONS (mm) DIMENSIONS (mm)				AFM /SAND	WEIGHT
					A	B	C	D		
BILBAO SIDE VALVE	mm		m²	V=50m³/h					(Kg)	(Kg)
	400	1,5"	0,13	7	565	400	250	375	42/50	12
	510	1,5"	0,20	10	790	510	350	475	84/100	18
	620	1,5"	0,30	15	860	620	400	525	126/150	23,5
	680	2"	0,36	18	915	680	420	545	147/175	27
	750	2"	0,44	22	1020	750	455	595	189/225	33
	900	2"	0,64	32	1020	900	455	595	315/325	42

#### TECHNICAL DATA

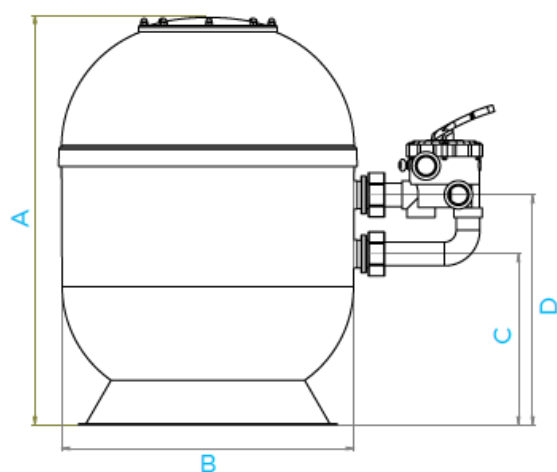
WORKING PRESSURE 1,5 kg/cm²

MAXIMUM PRESSURE 2,5 kg/cm²

TESTING PRESSURE 3,75 kg/cm²

OPERATING TEMP 1° - 40°C

GLASS GRADING Grade 1: 0,7 - 1,3 mm  
Grade 2: 1 - 3 mm



MODEL	Ø	CONNECTION	FILTERING SURFACE	FLOW	DIMENSIONS (mm)			AFM /SAND	WEIGHT
					A	B	C		
BILBAO TOP VALVE	mm		m²	V=50m³/h				(Kg)	(Kg)
	400	1,5"	0,13	7	795	400	535	42/50	12
	510	1,5"	0,20	10	1020	510	760	84/100	18
	620	1,5"	0,30	15	1090	620	830	126/150	23,5
	680	2"	0,36	18	1155	680	890	147/175	27

#### TECHNICAL DATA

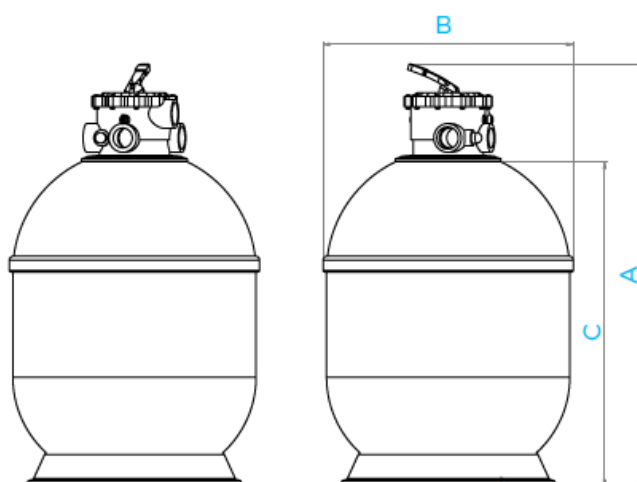
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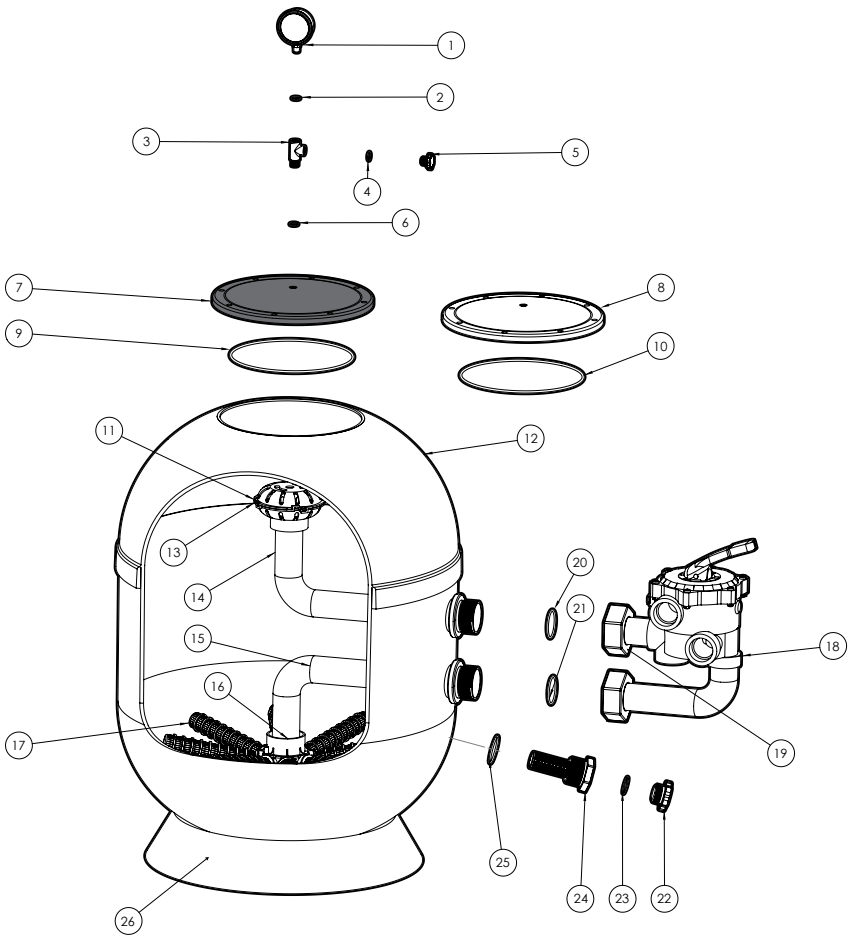
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GLASS GRADING Grade 1: 0,7 - 1,3 mm  
Grade 2: 1 - 3 mm



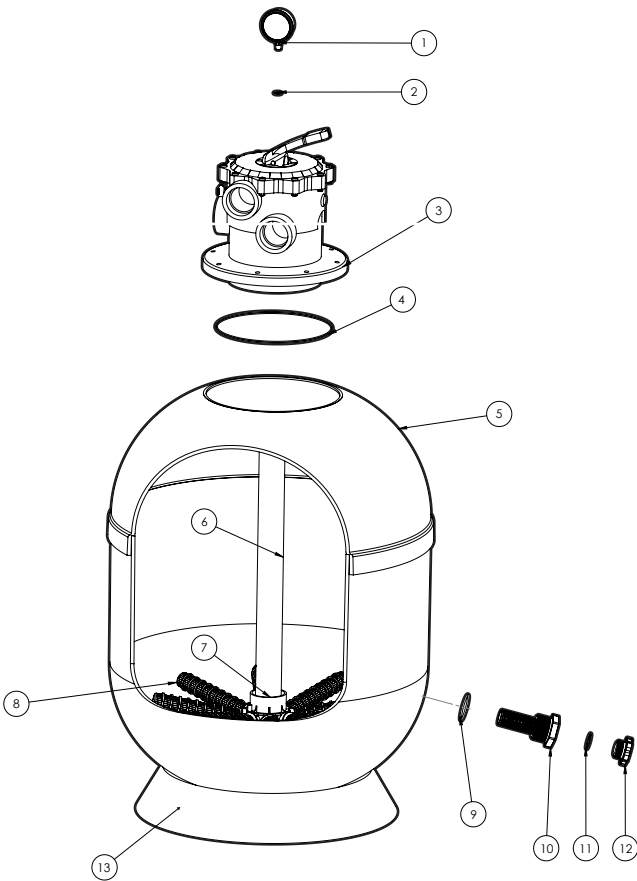
# PARTS FOR SIDEMOUNTED

- 1- Glycerine gauge
- 2- Gauge o-ring seal
- 3- “T” gauge
- 4- Cap o-ring seal
- 5- Cap
- 6- “T” o-ring
- 7- Black lid with screws
- 8- Transparent lid with screws
- 9- Cap with screws o-ring seal
- 10- Cap with screws o-ring seal
- 11- Diffuser
- 12- Filter body
- 13- Bleed valve
- 14- Adjustable PVC pipe
- 15- Collector pipe
- 16- Collector
- 17- Collector arm
- 18- Valve body
- 19- Set of joints
- 20- Joints o-ring seal
- 21- Joints o-ring seal
- 22- Drain plug
- 23- Drain plug o-ring seal
- 24- Drain set
- 25- Drain o-ring seal
- 26- Base



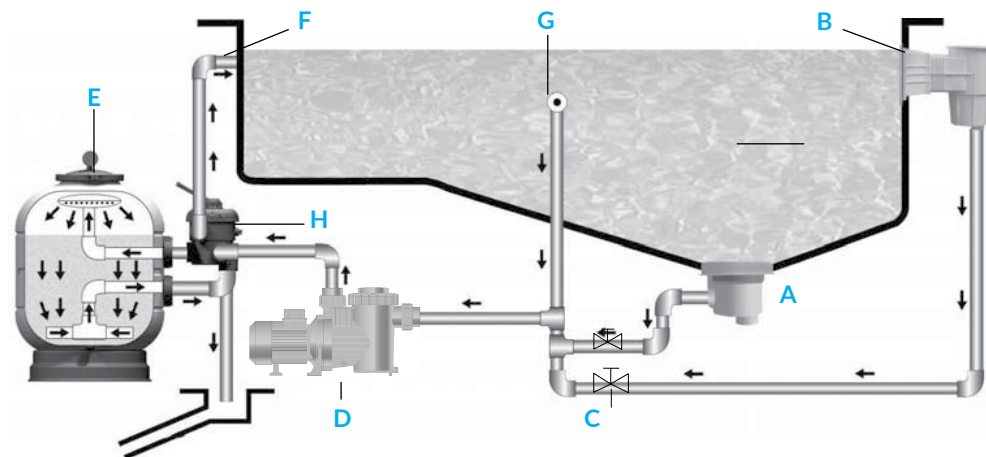
# PARTS FOR TOPMOUNTED

- 1- Glycerine gauge
- 2- Gauge o-ring seal
- 3- Valve Top
- 4- Valve seal
- 5- Filter body
- 6- PVC tube
- 7- Collector
- 8- Collector arm
- 9- Drain o-ring seal
- 10- Drain
- 11- Cap o-ring seal
- 12- Drain cap
- 13- Polyester base



## OPERATION

- |                     |                            |
|---------------------|----------------------------|
| <b>A</b> Main drain | <b>E</b> Filter            |
| <b>B</b> Skimmer    | <b>F</b> Return            |
| <b>C</b> Valves     | <b>G</b> Pool cleaner port |
| <b>D</b> Pump       | <b>H</b> Selector valve    |

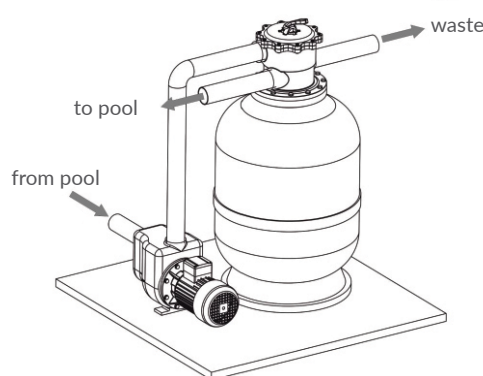
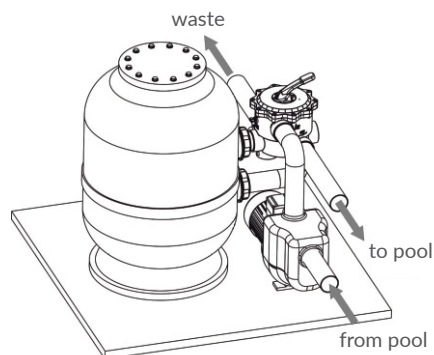


The water is sucked from the bottom of the pool via the main drain (A) and from the surface via the skimmers (B), passing through the pump (D) to reach the filter (E) through separate lines with their own valves (C) and is then returned to the pool by distributors (F, jet nozzles). The jet nozzles are installed on the opposite side from the main drain and skimmers, thus ensuring that the water in the pool is fully renewed. The filter itself contains a sand load, through which the water passes down; the sand thereby traps any organic material suspended in the water.

Once the filter cycle has begun, after a certain amount of time it will be necessary to clean the filter, since the sand will become blocked with dirt, preventing the water from passing through. When the pressure in the filter rises above 1.3 kg/cm<sup>2</sup>, it is time to clean it.

Backwashing reverses the direction of the water in the filter, which expels the filtered materials into the drain.

If this important information is taken into consideration, the operation instructions given below should not be difficult to follow.



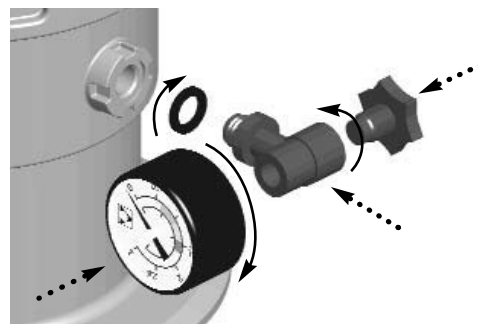
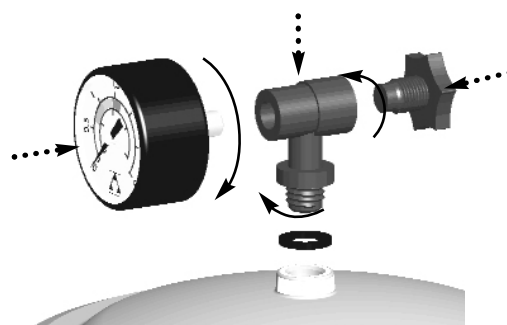
The filter should be set up as close as possible to the pool, and preferably at a height of 0.50m below the surface of the water. Check that there is a drain for the equipment room or shed where the filter is located.

Always use plastic accessories, preferably PVC or polyethylene.

## INSTALLATION

In order to correctly install the filter, please proceed as follows:

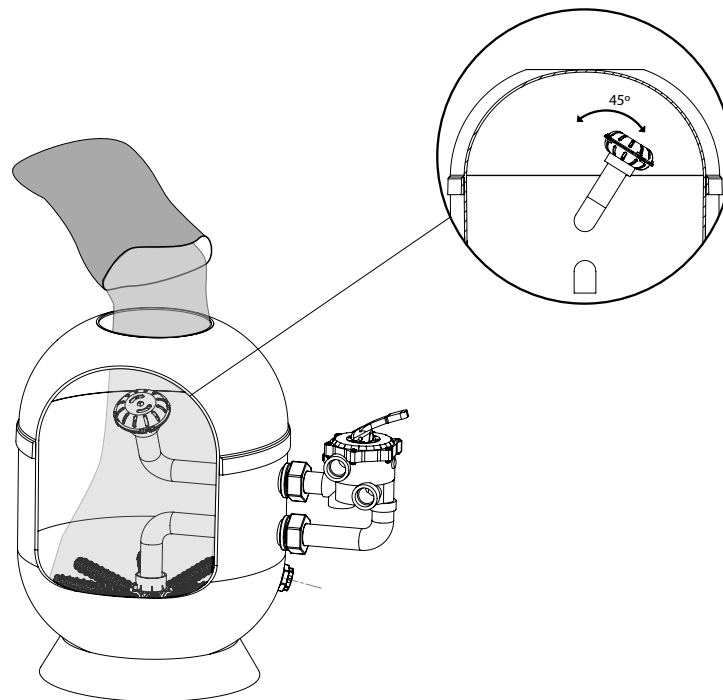
1. The filter must be installed on a clean horizontal surface.
2. Place the filter in its final position.
3. For a filter with a side mount valve, install the selector valve in the filter, trying to ensure the joints between the valve and filter are correctly positioned. Important: the selector valve must be placed in a position that allows access for handling and, if necessary, replacement.
4. Install the selector valve in the filter. Correctly connect the tubes to the pump and pool. On the selector valve it is clearly indicated where each tube should be connected.
5. Place the T-gauge, the seal ring, the gauge and the air vent cap (see parts list). It is not necessary to use thread seal tape, since the watertightness at this point is achieved with the seal ring. Simply screw the gauge on by hand.



## AFM OR SAND LOADING

AFM or Silica sand must be used, with a grain size of 0.4 to 0.8mm. Using the quantity indicated on the specifications label on the filter, proceed as follows:

1. Load the sand once the filter is in place and the tubes have been connected.
2. Remove the cap and seal ring.
3. Move the diffuser to one side to facilitate loading and prevent the sand from getting into the diffuser.
4. Fill the filter halfway with water.
5. Tip the recommended amount of sand into the filter.
6. Clean the housing of the cap seal.
7. Replace the filter cap and screw it on.
8. It is very important for the threads on both the cap and the filter to be completely free of sand, which could damage both threads and cause them to become less watertight.



## FUNCTIONS

The selector valve has a handle with 6 positions that allow you to select any of the operations necessary for correct functioning of the filter.

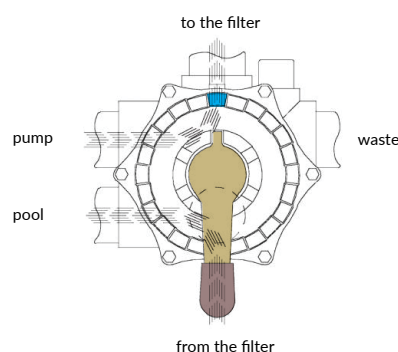


### IMPORTANT

Always ensure the pump is switched off before changing the position of the selector valve.

#### Filter

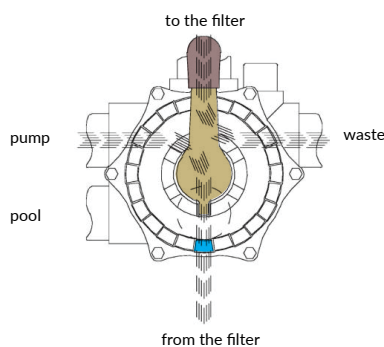
1



With the pump switched off, move the valve handle to the Filter position. Switch the pump on.

#### Backwash

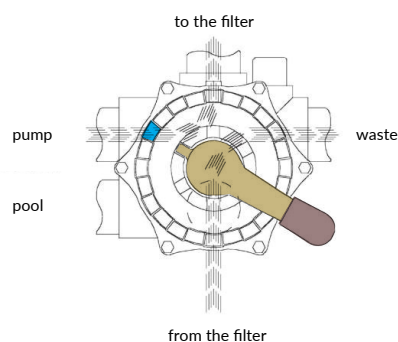
2



When the dirt starts building up in Filter mode, the pressure on the gauge will rise up to 1.3 bar. Switch off the pump. Put the handle into the Clean position. Valve, Main drain, Skimmer, open. Drain valve, open. Switch the pump on for 2 minutes.

#### Rinse

3

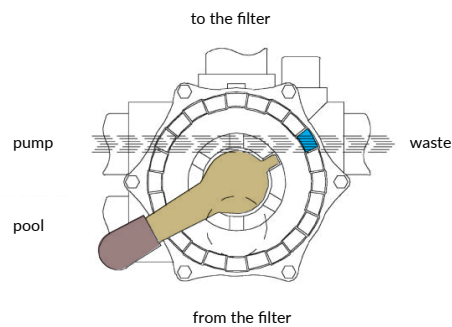


After cleaning, place the valve handle into the Rinse position, connect the pump for 1 minute, and then place the handle into the Filter position.



## Empty Drain

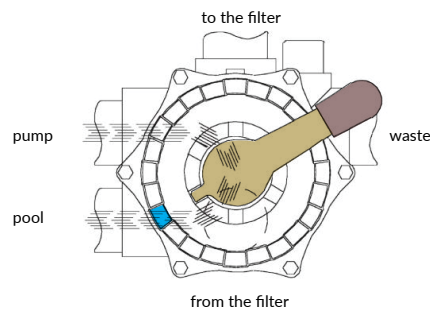
# 4



Put the handle into the Empty position. Main drain valve open. Do not stop the pump until the pool is fully empty, and ensure that the Skimmer and pool cleaner valves are closed.

## Recirculation

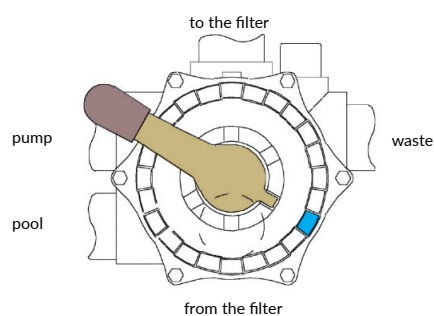
# 5



In this position, the pool water will return to the pool without passing through the filter.

## Closed

# 6



This position stops water flowing between the filter and the pump. This is used when opening the cap of the pump and cleaning its basket (pre-filter).

# 7

## Winter position

Keep the handle up.



## START UP

It is recommended to switch on the installation without loading the sand, to check that the filter and the installation are fully watertight.

Once the sand is loaded into the filter, select the cleaning setting to clean the sand before use. Do this as follows:

1. Place the selector valve in the "BACKWASH" position.
2. Open the valves that control the pool vacuum hoses and connect the pump for 4 minutes.
3. Switch off the pump, put the valve into the "RINSE" position and rinse for 1 minute. Afterwards, switch off the pump and place the handle of the selector valve into the "FILTER" position.



### IMPORTANT

Ensure the pump is disconnected before changing the position of the selector valve.

## MAINTENANCE

1. Clean the filter with water and soap, do not use abrasive substances.
2. Replace worn parts and seals whenever necessary.
3. Clean and rinse as necessary, according to the operating instructions.

## WINTERISING

1. Empty the water out of the filter.
2. Remove the filter cap to keep it ventilated during the period of inactivity.
3. When you need to start operating the filter again, follow the instructions for START UP.

## TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
The filter has a low water flow.  The pool cleaner vacuum hose does not suck up much water.	Hair filter blocked.	Clean hair filter.
	Motor rotating in the wrong direction.	Check the direction of the motor rotation from the arrow on the cover of the filter fan. If it is not correct, reverse the connection of the motor*.
	Vacuum or jet hoses blocked.	Clear them.
	Dirty filter.	Run the cleaning procedure.
Pressure rises quickly during filter cycle.	High pH level in water (cloudy water).	Reduce the pH with pH reducing products (-)
	Lack of chlorine (green-tinged water).	Add chlorine.
Pressure gauge goes up and down violently.	Air is getting into the pump.	Check for water leaks in the hair filters and vacuum hoses.
	Vacuum semi-closed.	Check that the vacuum valves are fully open.

\*If there is no indicator arrow, you can also check the direction of rotation in the following way: Stand in front of the pump, i.e. the same part where the inlet pipes are (the motor at the back). Ensure that the motor is turning in an anti-clockwise direction.

## SAFETY WARNINGS

- Do not operate the equipment without water.
- Whenever you need to handle the filter or valve, unplug them from the power source.
- Do not allow adults or children to sit on the equipment.
- Do not connect the filter directly to the water supply, since the pressure can be very high and may exceed the maximum pressure for the filter to operate.
- Do not clean the cap assembly with any type of solvent, since it could lose some of its properties (shine, transparency, etc.).
- Given that all of the connections use seals, it is not necessary to tighten the screws too much, as this could break some of the various plastic parts.