GEMAŞ

"Pool Technology"

BOBIN WOUNDED FILTERS INSTALLATION MANUAL

FIBERGLASS REINFORCED PLASTIC BOBBIN WOUND SAND FILTERS FOR COMMERCIAL POOL APPLICATION

IMPORTANANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

Declaration of Conformity
We declare, under our sole responibility, that the product identified, and to which this declaration relates, are in conformity with the protection requirements of Council Directive 2006/42/EG.

The manufacturer, Gemas has the right to modify the products without previous notice for as far as their characteristics are not really changed by this.

Warranty conditions: 2 years limited warranty

IMPORTANT SAFETY INSTRUCTIONS

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

BOBBIN WOUND
SAND FILTERS

1- GENERAL INFORMATION

1.1- INSTRUCTION

This manual provides the necessary instructions to install, use and maintain bobbin wound filters. In order to obtain the benefits that are indicated in the characteristics, all the instructions that appear in this manual must be followed. This will offer a safe and long-lasting installation.

The equipment's supplier will provide further information to the user whenever it is needed.

2- DESCRIPTION

2.1 Description

These filters have been designed to provide water in pools and aquatic parks, also for all water treatments that require the elimination of suspended matter using the proper reduction of filtration element.

Apart from the filter itself, filtration and purification process include some points that must be taken into consideration as they can influence the correct filter operation. These would be chemical water treatment, pump equipment, pipe segments and general hydraulic design.

When public pools are concerned, the current rules in each country should be observed, as the installation must follow them.

The filtration quality depends on different parameters as depth of filtration bed, characteristics, quality and grade of filtration media, etc., as well as filtration rate.

2.2 Filter's Characteristics.

The tank is made of plastic, resin of polyester and fiberglass, totally anticorrosive. Inside, it contains collectors and diffusers made of unalterable plastic material (PVC and ABS), tested against salt-water. They are supplied for a working pressure of 2.5 kg/cm^2, 4 kg/cm^2, or 6 kg/cm^2 and a maximum temperature of 50ºC. Other specifications can be supplied upon request.

Filtration rates may be 20, 30, 40 and 50 m3/h/m2, depending on the application and the kind of filtration elements that have been selected. Rate 50 is not recommended in public pools.

3. INSTALLATION

3.1 Fİlter Installatıon

Filters are delivered properly packed and ready in order to facilitate unloading and transport using forklift truck, crane etc. It is very important to make sure that the filters have not suffered bumps during transport.

To obtain a correct filter installation, the following stages must be observed:

-Install filters on their final location.

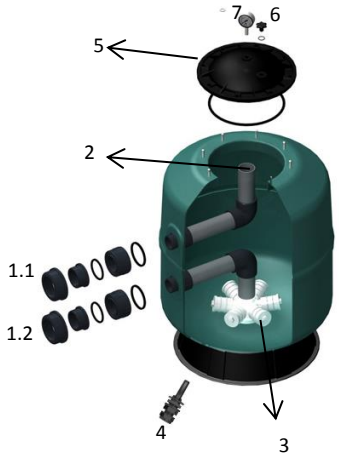
-Install correctly the multiport valve in the filters.

-Connect multiport valve with the delivery pipe of the pumps, returns pipes and drain.

-Check the inner parts of each filter (nozzles, collectors, top, diffusers).

-Fill the filters with water.

-Empty half the water and add the filtration element (gravel, sand and/or anthracite), etc.

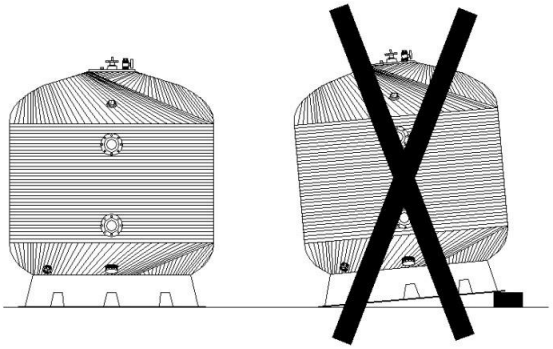


NO	DESCRIPTION
1.1	Water inlet for filtration
1.2	Filtrated water outlet
2	Diffuser
3	Collector
4	Water Drain
5	Fİlter Lid
6	Air Purge
7	Manometer

3.1.1-Filters location.

Filters must be placed under the water level. However if vacuum occurs in the installation, suction cups must be installed in the lids to avoid that depression could collapse the filter's tanks.

Filters must be situated so that their bases are perfectly level and completely supported by the floor.



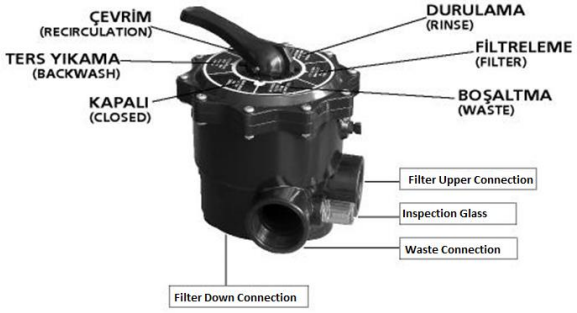
The location must have the appropriated size to allow maintenance periodic overhauls and any other work. Additionally the room must provide a drain to allow, in case of accident, evacuation of water flowing from any tube, filter, pump, etc. this will avoid risk of damages in the electrical installations (pump, electric panels, etc.)

3.1.2 Setting up the valve battery.

Multiport valve is delivered with pipe part to connect filter water inlet (up connection) and L shaped elbow (down connection), (depending on your order).

Check the filters if they are situated in the suitable distance from multiport valve and that they are lined-up.

You can start placing the multiport valve avoiding forcing the connections. Check also that outlets have not been damaged and that they are completely clean and empty.



4- STARTING

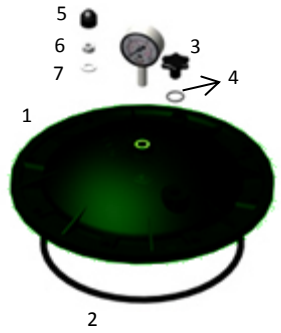
Before filling filters sand or other filtration elements, it is advisable to check the internal collectors to make sure that they have not been damaged during transport or installation. Afterwards, fill the filters and the water installation and make an hydraulic test. Thus, you will make sure that there is no leak and that equipment works properly.

Then stop the pumps, open each filter's lid (the filter must not be emptied without opening the lid, as it could collapse) and empty half the water that each filters contains.

Then, start filling the filter with sand or other filtration elements, taking into account that first of all you must put gravel up to the collector arms (10 cm. approx).

This must be done very carefully in order to avoid any damage in the lower components of the filter. When the filter is being filled with sand, this must be carefully spread over the surface.

Once the filter is full with the filtration elements clean the lid and the inner part of the manhole. This will prevent any debris and particles of sand affecting the seal of the joint.



No	Description
1	Filter lid
2	Filter lid o-ring
3	Air purge
4	Air purge o-ring
5	Screw cap
6	Inox Nut M8
7	Washer Inox M8

Put the seal in the lid; then introduce the lid in the manhole, screws must be possitioned according to screw gaps on the lid to fix with nuts, leaving it leveled and centered.

Washers and nuts must be put on screws and tightened.