

# STATIONARY WATER FILTER

# GEYSER- CLASSIC

## Operational and installation MANUAL



### MODEL TYPES

- for soft water
- for water with high iron content
- for hard water
- for complex water treatment

### HOUSING COLOUR

- white



**Thank you for choosing Geysler water filter!**

Our technologies and developments provide water of perfect quality in your house. This manual describes all Geysler filter functional capabilities and filter set-up. Read carefully and keep to refer it in future. Everything for filter usage just after its set-up is packed.

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## GEYSER TECHNOLOGIES

**Aragon** is revolutionary new, unique filtering polymer combining three filtration methods: sediment, sorptive and ion-exchange.

The main peculiarity of Aragon is its complex purification efficiency. It removes all harmful impurities and also hepatitis A viruses, noroviruses, rotaviruses from water entirely.

### Advantages of Aragon:

**Home-made regeneration** (recovering) enhances its capacity and service life significantly

**Complete safety** - filtering material's complex labyrinth structure detains all impurities (anti-discharge)

**Self-indication** - reduction of water flow in a tap shows that cartridge capacity comes to the end.

Indelible **active silver** is baked in a cartridge and causes safe bacteriostatic effect.

**Aragonite** – during filtration through Aragon cartridge, water is filled with healthy calcium Aragoite (heart disease prevention).

**BAF** cartridge is a universal cartridge having 12 000 liter capacity. Multi-component media contains Catalon (Patent №253829) - fibrous ion-exchange new-generation sorbent.

**Guarantee against leakages** is a monoblock unit having double sealing.

**Enhanced capacity of BAF** cartridge is up to 12 000 l.

**Comfortable set-up** - water flow direction can be changed easily by means of the patented system of a cartridge mounting (Patent №2014135903).

**Safety** – all the materials used in Geysler systems are certificated to contact with drinking water and products.

## APPLICATION

Stationary water filters Geysler-Classic are used for municipal water purification from harmful impurities (chlorine, heavy metals, nitrates, pesticides, etc.), suspended solids, hardness salts surplus and also for correcting of water mineral composition.

## SPECIFICATIONS

Water filter housing sizes assembled, max	390x295x110 mm
Recommended filtration rate, max	3 l/min
Maximum working pressure	7 bar
BS cartridge regeneration frequency (in case hardness is 6-4 mg-equiv./l)	200-400 l
Temperature of water purified	+4...+40 °C
Weight w/o package, max.	6,5 kg

## MODEL TYPES OF GEYSER-CLASSIC AND ITS COMPLEMENT WITH CARTRIDGES

Appliance	First stage	Second stage	Third stage
for soft water	PP, PPY, PFM	Aragon S+B(Ca)	BAF
for hard water	PP, PPY, PFM	Aragon 2	BAF
for water with high iron content	BA	Aragon	BAF
Super hard water	Aragon 2	BS	BAF

## FILTERING MATERIALS AND CARTRIDGES

**Sediment cartridge** is made of polypropylene (PFM, PP, PPY). It removes dirt, suspended solids and insoluble impurities >5 µm from water

Aragon is micro-porous ion-exchange polymer. It removes a wide range of harmful impurities from water: hardness salts, iron, manganese, heavy metals, chlorine, solids and organic compounds.

Aragon is recommended for areas having water with high iron content. It contains special material for iron removal and pH correction.

**Aragon S** is a cartridge for soft water. It removes harmful impurities fully and in addition it saves healthy calcium salts. Moreover, a micro-element batcher B(Ca) can be mounted into Aragon S.

**Aragon 2** is a cartridge for hard and ferruginous water. This compound Aragon- and ion-exchange-based cartridge increases the capacity for removal of hardness salts, manganese, iron (saluted and colloidal), heavy metals (cadmium, lead, etc.) significantly.

**BAF cartridge** contains multi-component media on the basis of sorbents and ion-exchange materials. It removes chlorine and organic impurities from water, reduces heavy metals content.

**BS cartridge** is for hard water. It contains ion-exchange resin of drinking class to soften water (to remove hardness salts). This cartridge is movable and can be re-used after regeneration (recovery of filtering properties) many a time.

**BA cartridge** is for water with high iron content (ferruginous). Into a cartridge there is catalytic media (calcspar) for saluted and suspended iron removal from water. It reduces water pH, hastens oxidation process of saluted iron and other metal compounds. So that, appeared residual matter is kept inside a cartridge.

## MAJOR CONTAMINANTS PURIFICATION EFFICIENCY

Suspended solids > 0.4 µm (rust, sand, algae, other insoluble particles )	100%
Heavy and radioactive metals (lead, cadmium, copper, strontium-90, cesium)	up to 99%
Chlorine	up to 99%
Organic	up to 92%
Hardness salt	up to 85%
Microorganisms and E.coli	99%

## CARTRIDGES AVERAGE LIFETIME AND CAPACITY

Cartridge	Lifetime*, months	Capacity*, l
PP, PPY, PFM	12	up to 7000
Aragon-S	12	up to 7000
Aragon 2	12	up to 7000**
Aragon	12	up to 7000**
BS	12	up to 4000**
BAF	18	up to 12000**
BA	6-8	up to 2000**

\* depends on the level of source water contamination

\*\* in case the hardness is up to 3 mg-eq/l, iron content is up to 1 mg/l in water

## SCOPE OF SUPPLY\*

- Assembled filter
- Wrench for a housing
- Wrench for a bottom valve
- Pure water tap with everything for connection
- Connection pipe 1/4"
- Triple adaptor
- Manual
- Package

\*The manufacturer reserves the right to make design and packaging of a minor improve without showing in this manual.

## CONNECTION

### GUIDELINES FOR CONNECTION AND USE

- The connection should be fulfilled by a qualified specialist or a manufacturer's representative!
- If you connect a filter independently, follow the prompts accurately
- All filter housing underwent tightness and hydro shock tests, so that there is could be water inside filter housings
- It's not recommended to disassemble factory connections if not urgent

### PREPARATION TO CONNECTION

1. Before set-up, keep the filter for min.3 hours at room temperature
2. Before the works start, shut off the water feed to the place of connection (fig.1) and depressurize, having opened a faucet.
3. Before the installation, make sure that housings are safely tighten up\*. In case needed tight them up.
4. Check that inlet and outlet fittings are set correctly (facet for a wrench is vertical). If necessary, turn fittings to fix them into the housing.

\* Check reliability of housings tightness periodically. In case needed they should be tighten.

**Warning!** The position of a vertical label in the center of a filter face surface doesn't guarantee the leak-tightness of the connection. The label position may change when the threaded connection of the housing is tightened.



## HOW TO CONNECT

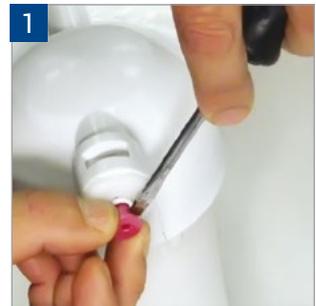
The system is connected to a cold water main line.

1. Extract the filter from the packing case.
2. Remove shipping plugs. Press the plastic ring at the connector with a screw-driver end and easily extract the plug (Fig. 1).
3. Cut a connection pipe from a complement in two and connect each half to a filter inlet and outlet.

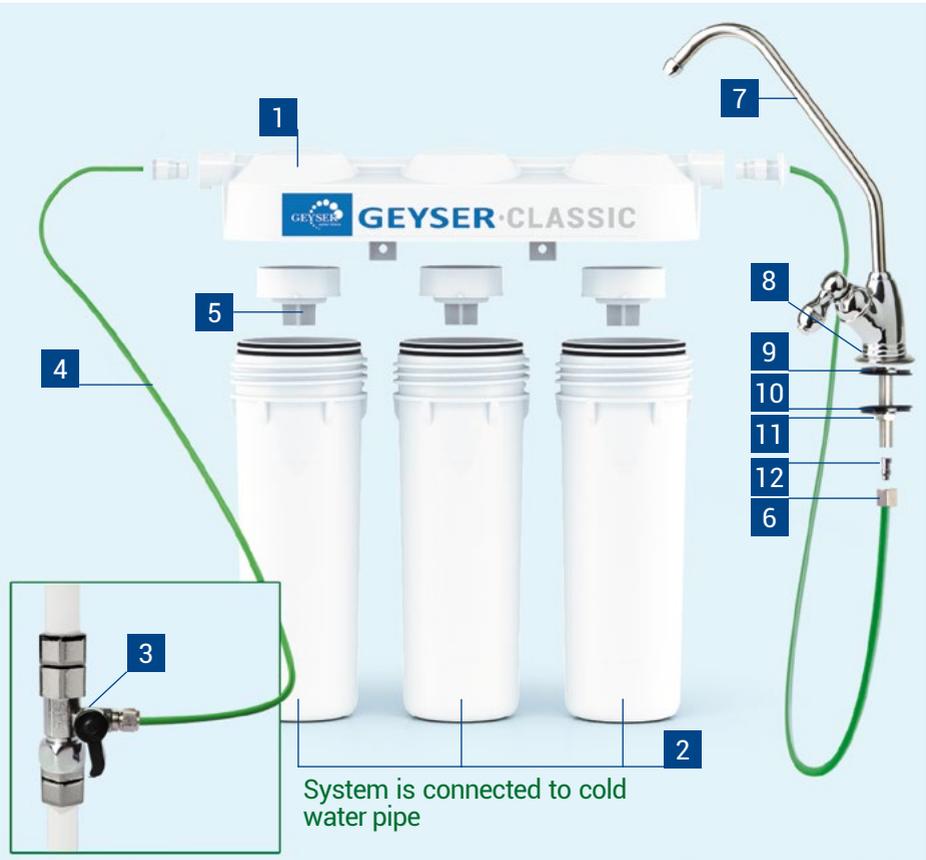
**Warning! Inlet is the first stage (Table, page 3).**

**Outlet is the third stage (Table, page 3).**

4. Fix a filter to a place convenient for usage. It is recommended to fix a filter on vertical surface at a height of min. 15 cm from a floor to replace cartridges easily.



## CONNECTION DIAGRAM



- 1 Cover (monoblock)
- 2 Housings with cartridges
- 3 Triple adapter with a tap
- 4 Connection pipe 1/4"
- 5 Insert to fix a cartridge
- 6 Collet clamp screw 1/4"

- 7 Tap
- 8 Decorative bowl
- 9 Rubber gasket
- 10 Plastic washery kit
- 11 Fastening nut with a washery kit
- 12 Grommet

## CONNECTION TO WATER PIPE

Make sure that water feed to a place of connection is shut off!

1. Fix a triple adapter (A) to the cold water main line, making the connections tight (Fig. 1).



2. Insert a plastic pipe (Fig. 2) into a screw (B). Insert a pipe into a fitting of a ball valve until it stops and tighten a screw (рис. 3).

## PURE WATER TAP CONNECTION

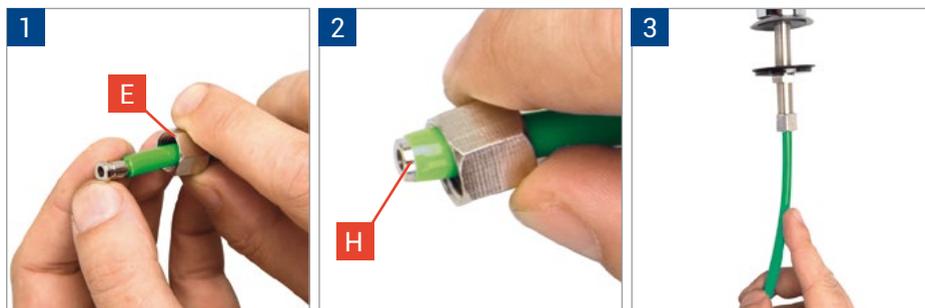
1. Drill the hole of 12 mm in a kitchen sink.

2. Assemble the tap as follows (ref. Connection diagram on page 5):

- tap
- decorative washer kit
- rubber gasket
- plastic washer kit
- metal washer kit
- screw

3. Secure a tap on a kitchen sink:

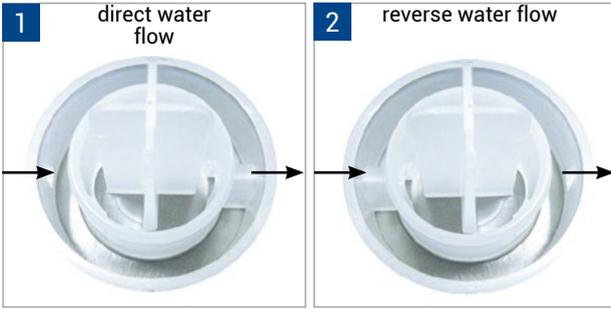
- Thread a plastic pipe (Fig.1) into a screw (E)
- Put the grommet (H) inside a pipe until it stops (Fig.2)
- Spin a screw over a threaded rod of the tap (Fig.3)



## DETAILS OF CONSTRUCTION

The patented (Patent №2014135903) cartridge mounting system provides easy change of water flow direction.

Undo a housing and take an insert out (item 5 page 5), flip it through 180° and fix it



into a cap at this level (Fig. 2). For convenient filter set-up (right or left water supply), all three inserts can be flipped through 180° simultaneously, first and the last cartridges can be exchanged. So that water flow will be changed (inlet and outlet will be exchanged).

### START UP

Before usage, rinse a filter with water during 2-5 minutes.

Filter is also should be washed after its cartridges replacement and after long (more than 5 days) break in operation.

**Air remains in the system after a new filter set-up or its cartridges replacement. It can lead to excess aeration of water (water is likely to have milky colour). As soon as air goes away during filter working, purified water will become transparent.**

### FILTER MAINTENANCE

Indications for maintenance	Cartridge	Type of maintenance
Noticeable reduction of filtration rate	Aragon-M, Aragon, Aragon-2	Mechanical cleaning, regeneration
Scale and foggy film formation on water during its boiling	Aragon-2 BS	Regeneration (removal of hardness salts)
Water quality reducing	PP, PPY, PFM, BAF, BA	Replacement

Cartridges should be replaced upon the expiration of their capacity or service life.

#### WARNING!

Only Geyser cartridges are recommended to use in replacement of the used ones. Failure to comply with this instruction may change a filter functions and specifications.

### REPLACEMENT OF I, II, III-STAGE CARTRIDGES

Turn water off at the inlet (Fig. 1). Open pure water tap to release the pressure inside the system (Fig. 2). Remove the housing with the help of the wrench (Fig. 3), check and replace





(if necessary) the sealing ring; then replace the corresponding cartridge (Fig. 4).

Sealing ring is recommended to be greased with food silicon or Vaseline (do not use sealant!) prior to reassembly.

Return the housing to its position and tight with the wrench. Open water at the inlet and check the leak-tightness of the system (Fig. 5).

## ARAGON CARTRIDGE CLEANING AND REGENERATION

### Mechanical cleaning and replacement of a insert (if it is in standard equipment or it was mounted additionally)

Using the wrench, unscrew the housing with Aragon cartridge (from standard equipment) and get the cartridge out. Pour water from it, clean its external surface with a soft brush (e.g. clothes one) under water stream.

Using the wrench for the bottom valve, unscrew the bottom valve out the cartridge (Fig.1) and extract the used insert (Fig.2).

Take a cap off from a new insert and place it with its open side up. Screw the bottom valve. Assemble the filter in reversed order and wash it for 1-2 minutes.

**When the Aragon cartridge is replaced the insert "B" should be extracted from the used cartridge, it should be inserted into the new cartridge (Fig.3)**



### Hardness salts removal from Aragon 2 cartridge (after its mechanical cleaning)

Pour 40 gr of citric acid, 30 gr (2 tea spoons) of baking soda and 1 l of water into a 1.5 – 2 l holding capacity. Water should be poured slowly to prevent foaming (carbon dioxide emission).

Install a cartridge into a housing and fill the housing with the salt solution till its top (ca. 0.6 l). Let it stay for 8-10 hours. Afterwards, extract the cartridge from the housing cautiously and let the salt solution pour out. Place it into the wash-bowl and pour 3.0 l of solution through its threaded throat, then let it drain completely.

Wash the solution residue out of the cartridge in two steps. Firstly, pour 3 l water

to the top of the cartridge through its threaded throat portionwise. Then wrap its throat with overwrap and fix it with an elastic or a string. Turn the cartridge upside down and unscrew a bottom valve with the corresponding wrench. Put it into a kitchen sink in the same bind vertically and pour 3 more liter water through it, as aforesaid. Take the overwrap off and return the bottom valve to its place. Assemble the filter in reversed order, open a pure water tap and wash the filter with the 1-1.5 l/min.rate for 3 minutes.



### **Iron and heavy metals removal from Aragon S and Aragon cartridges (after their mechanical cleaning)**

Make 3 liters of 3% citric acid (30 gr or 2 tea spoons in 1 liter if water) solution in enameled or glass ware.

Put the Aragon cartridge into a kitchen sink or a holding capacity and pour this solution through the cartridge throat portionwise until the outlet solution becomes transparent. Upon that, fill the cartridge with pure water and then let it drain.

Make 0.6 liters of 2% soda solution (1 tea spoon in 0.6 liter of water). Install the cartridge into the housing and fill the housing with the solution till the top. In an hour, pour the solution out and assemble the filter in reversed order, open a pure water tap and wash the filter for 5 minutes. The filter is ready to work.

### **HARDNESS SALTS REMOVAL FROM BS CARTRIDGE (REGENERATION)**

Turn water off near a filter and open a pure water tap to release the pressure inside the system. Remove the housing with the help of the wrench from the filter complement. Get a BS cartridge out of the housing. Turn a cartridge cap off and pour its media into a glass or plastic container with minimum volume of 2 liters.

Make 1 liter of uniodized kitchen salt saturated solution (300 gr of salt per liter of water) and pour it over the cartridge media.

**Warning!** It is normal for the liquid to have bubbles when the salt solution is poured through; air is coming from the layer of resin

Mix the media with the solution and remain it for 1-2 hours with stirring it occasionally. Pour the salt solution out accurately. Pour cold water over the resin, stir it and pour water out. Repeat this operation twice more. Pour the resin into the cartridge housing and screw it with the cap. Insert the cartridge into the filter housing. If necessary, replace the sealing ring. Sealing ring is recommended to be greased with food silicon or Vaseline (do not use sealant!) prior to reassembly.

Place the filter housing back and screw it with the wrench. Open water at the inlet and check the leak-tightness of the system. Wash the filter for 2-5 minutes and then it is ready for use.

**Warning!** During the regeneration avoid eyes contact with the solution because it may cause painful sensations.

In case of eyes contact, wash them carefully with water!

## WARRANTY LIABILITIES

Guaranteed use period of filter operation is 3 years from the sale date. In case the date and the seal of trading organization are missing the warranty dates from the filter release day. The warranty does not apply to the cartridge, its capacity is indicated on page 4. Cartridge replacement in case they have manufacturing defects is fulfilled only after service representatives execute its examination.

The producer disclaims responsibility for the operation of the filter and possible implications in case if:

- The filter and its components have mechanical damages.
- The requirements of the given instruction were not followed during the connection and operation
- Cartridges worked out their capacity
- The filter was not used to design purpose (for filtering aggressive liquids).

Average use period of the filter is 10 years. Technical maintenance and post warranty repairs are done by the manufacturer or its local representatives.

Within 6 months, the service department guarantees to eliminate all faults in filter connections and fastenings, caused by representative-manufacturer during the works on filter installation free of charge.

## PRECAUTIONARY MEASURES, STORAGE AND TRANSPORT

The system should be protected against shocks, falls, direct sunlight and freezing temperatures. The transportation of the filter is allowed in any covered transports (except unheated plane sections) according to the rules and norms of transportation by every type of transport.

The filter is stored inside the package at the distance at least 1 meter from the heating devices under the temperature +4°C - +40 °C.

Aerosols, aggressive and smelly materials impact is prohibited.

**REGARDING WARRANTY HANDLING, PLEASE CONTACT:**

## WARRANTY CERTIFICATE

Release date

**Filled by a trading organization**

Date of sale \_\_\_\_\_

Shop stamp \_\_\_\_\_

# AQUACHIEF

## Water treatment system for cottages

- **UNIQUE SOLUTION:**  
Iron and hardness salts (scale) removal by single filtering Ecotar media.
- **PROFITABLE AND SIMPLE USAGE**  
To recover media, expensive chemical agents are not required. Regeneration is made just by sodium chloride. Drainage waters are safe for septic tanks.

### HOUSE SPACE SAVING

- Geyser AquaChief occupies two times less space than system working with standard whelmed media.

### INDIVIDUAL ATTENTION

- It is very easy to tune up Geyser AquaChief to purify water in different regions with the variety of Ecotar media types.

Detailed information on [www.geizer.com](http://www.geizer.com)



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