

AQUAPHOR[®]

water filters

DRINKING WATER FOUNTAIN



CRYSTAL MODEL EKO-80-2

CRYSTAL MODEL H-80-2

The Aquaphor drinking water fountain (further referred to as the water fountain), is manufactured by AQUABOSS Ltd. (Russia, Saint Petersburg) for AQUAPHOR Ltd (Russia, Saint Petersburg).

The water fountain provides access to pure and fresh water. It can be utilized in various types of industrial facilities, residential and administrative buildings, schools, educational institutions, as well as in public areas where there is a need for the highest quality drinking water.

The device is made of safe, environmentally friendly materials which do not contain substances hazardous to health and the environment. The distributor is certified by the Polish National Institute of Hygiene (PZH).

| Water fountain model Technical parameters | CRYSTAL H-80-2 | CRYSTAL EKO-80-2 |
|--|-------------------|---------------------|
| Replaceable filter cartridges | K3, KH, K7 | K3, K7F, K7 |
| Delivers | 6000 | 8000 |
| Dimensions (mm) | 330 × 300 × 840 | |
| Weight without water, not more than (kg) | 12,5 | |
| Working water pressure MPa (atmosphere) | 0,65 (6,3) | |
| Water temperature (°C) | 5 - 38 | |
| Recommended filtration rate (l/min) | 2,0 | 2,5 |

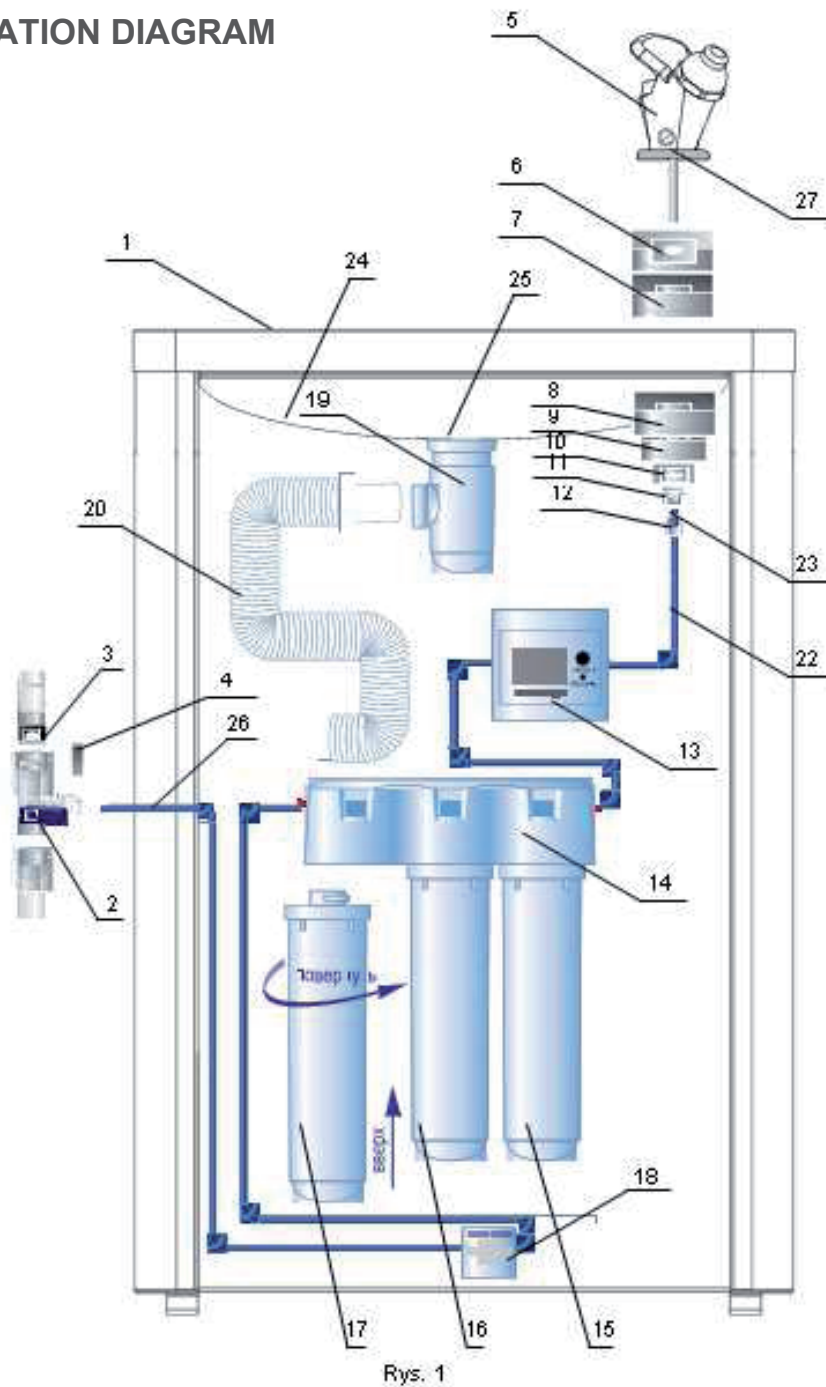
| | |
|--|--------|
| Complete fountain distributor cabinet (with connection hoses) | 1 szt. |
| Water connection (tee with a ball valve) (2) | 1 szt. |
| Clean water faucet (5) with a set of washers (6-11) 1 pc. | 1 szt. |
| Plug (installed in the filter block/filter head) (Aquaphor Crystall H-80-2 water fountain only) | 1 szt. |
| KH cartridge regeneration adapter (Aquaphor Crystall H-80-2 water fountain only) | 1 szt. |
| Door key | 1 szt. |
| Plug | 1 szt. |
| Corrugated PVC pipe (20) | 1 szt. |
| Screw | 2 szt. |
| Pin | 2 szt. |
| User manual | 1 szt. |
| Packaging | 1 szt. |

The installation diagram of the water fountain is presented in Fig. 1.

From the outside, in the upper part of the distributor cabinet **(1)**, there is a metal sink **(24)** with a drain strainer **(25)** and a water dispenser spout **(5)**. There is a lock on the cabinet door. Inside the stainless steel cabinet, there is an Aquaphor three-stage water purification system (on the back wall), consisting of a filter head **(14)** and three replaceable filter cartridges **(15, 16, 17)**. The cabinet is equipped with a valve to protect against flooding, and an electronic Aquaphor cartridge wear counter. The water flowing in from the water mains is filtered, and then, on pressing a button, is available to the user in the spout **(5)**.

Excess water is drained from the sink **(24)** through the openings in the drain strainer **(25)** to the sewage system through a siphon **(19)** and a corrugated PVC pipe **(20)**.

INSTALLATION DIAGRAM



Please note: Before installing the water fountain, you need to measure the pressure in the water supply system. If the pressure exceeds 6.3 atmospheres, an additional pressure regulator should be installed. (not included in the unit).

Choosing a suitable location to install the water fountain

- The water fountain should be placed on an even, horizontal surface. If the surface is uneven, the water fountain should be levelled – use the adjustable feet. If necessary, the water fountain can be attached to the wall with screws. There are fixing holes (Ø6.5 mm) in the rear (2 holes) panel of the cabinet.

- Position the dispenser in such a way that it is protected from direct sunlight. Make sure there are no heating devices around. The distance between the water fountain and any household appliance should not be less than 20 cm. The water fountain must be protected against freezing.
- Choose a suitable location for the water connection (2) to the water mains (see Fig. 1 - Installation diagram). Make sure that the connection hoses pass freely, and are not bent. Loose hoses must be secured so that they cannot be pulled out.

Water connection fittings and installation



Fig. 2

A - tap in open position
B - water supply

Please note: When connecting water, be careful not to damage the fittings (2). In the event of any mechanical damage to the fittings (2) due to improper installation and use, no claims can be considered.

- shut off the cold water supply and reduce pressure in the system;
- check whether the seals on the nut (4) is there;
- connect the cabinet to the water mains. If it is necessary to seal the thread on the connection, use Teflon tape;

- close the connection (the handle should be in the "tap turned" position) then make sure that all connections are tight (no leaks);
- remove the clip (4) from the plastic sleeve of the ball valve (2);
- insert the water-soaked hose (26) into the ball valve sleeve (2), pressing it all the way down about 15 mm;
- replace the clip (4) under the plastic sleeve of the ball valve on the connection (2);

Faucet/spout installation (Fig. 3)

Please Note: it is recommended to use the clean water faucet/spout (5) included in the set. The manufacturer is not responsible for the consequences of using other faucets or taps.

- unscrew the cap nut (12) from the threaded stub of the tap (5);
- place the decorative support (6) on the threaded faucet stub (5), a large rubber gasket (7), then insert the spout (5) in the opening of the upper cabinet panel (1);
- place rubber (8), plastic (9), and metal (10) washers on the threaded tap, located under the panel, and then screw on the nut (11);
- place the plastic disc on the end of the hose, and then the plastic sleeve. Tighten the nut (12) on the tap connector (5) as far as it will go;
- check the tightness of the hose fitting (22). Using a tension force of 8-9 kg, (22) you should not be able to pull the hose out.
- After connecting the water fountain, adjust the pout using the screw located at its base, then adjust the height of the water jet.

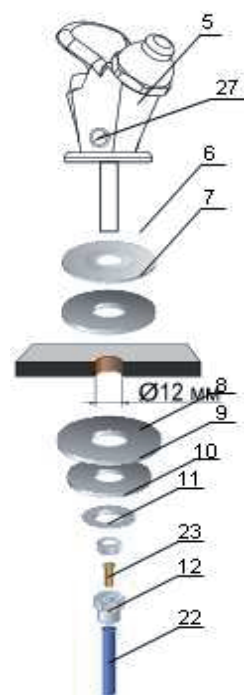
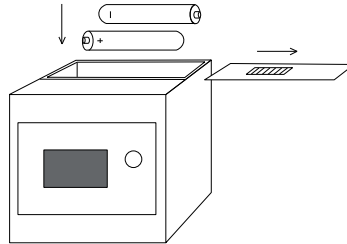


Fig. 3

Please Note: following the applicable sanitary requirements, when using the water fountain in various types of educational institutions, the height of the vertical jet should not be less than 10 cm.

Preparation of the AQUAPHOR electronic cartridge wear meter for use (13) (Fig. 4)

The electronic cartridge wear counter allows you to control the wear of cartridges in the water fountain and prompts timely replacement. The counter is fitted on the dispenser and shows the rate of water filtration and the remaining time of the cartridge use (in litres and days).



Before using the meter, insert the batteries (2AA batteries are not included and must be bought separately). To insert the batteries, remove the cover and put in the batteries observing the polarity. The display should show "0l/m". If not, adjust the position of the batteries. Then put the lid back on.

Setting the cartridge wear indicators in litres and days.

Holding the **"SET"** button down, press the **"RESET"** button, and then release both buttons.

The **«OFF»** signal will flash on the display.

Setting the cartridge wear indicators in litres

Pressing the **"SET"** button, select the appropriate value (500 l, 1000 l, 1500 l ... 99000 l, 99500 l, OFF l, 500 l, 1000 l ...) shown on the meter display (See the Manufacturer's Warranties for performance information). Then, press the **"RESET"** button, saving the selected value. The litre consumption indicator can be turned off by selecting **"OFF"**.

Setting the cartridge wear indicators in days

Pressing the **"SET"** button, select the appropriate value (30 day, 60 day, 90 day ... 690 day, 720 day, OFF day, 30 day, 60 day ...) shown on the meter display (See the Manufacturer's Warranties for performance information). Then, press the **"RESET"** button, saving the selected value.

The litre consumption indicator can be turned off by selecting **"OFF"**.

Connection to the water/sewage network

- Insert the corrugated PCV hose (**20**) into the siphon located under the sink (**19**);
- Connect the loose end of the hose to the sewage system. The diameter of the sewage outlet should be 30 mm (in the case of other dimensions, use an adapter (**2**));
- Check the tightness of connections;

In the case of the Crystal EKO-80-2 water fountain:

- open the cold water supply, check the tightness of the device;
- open the clean water tap **(5)**;
- using the water connection **(2)** (set the handle to the "open tap" position), adjust the water flow in accordance with the recommended filtration rate of the device;
- let the water run for 10 minutes;
- turn off to clean water tap **(5)** and wait 10 minutes;
- then run the water again for 50 minutes;
- turn off the tap to clean water **(5)**;
- check the tightness of the connections;
- the fountain is ready for use;

In the case of the Crystal H-80-2 water fountain:

- instead of the KH insert, install a plug (included in the set or may be purchased separately);
- open the cold water supply, check the tightness of the device;
- open the clean water tap **(5)**;
- using the water connection **(2)** (set the handle to the "open tap" position), adjust the water flow in accordance with the recommended filtration rate of the device;
- let the water run for 10 minutes;
- turn off the tap to clean water **(5)**, wait 10 minutes;
- then run the water again for 40 minutes;

Please Note: When draining the water with the cap fitted, check for accidental leaks.

- put the KH cartridge in the right place and let the water run for another 10 minutes;
- turn the clean water off **(5)**;
- check the tightness of the connections;
- the water fountain is ready for use;

Filter cartridges replacement:

The replaceable filter cartridges originally installed in the dispenser are right for the model. It is recommended to replace the filter cartridges in a timely manner.

REMEMBER that a dispenser with used cartridges is unusable.

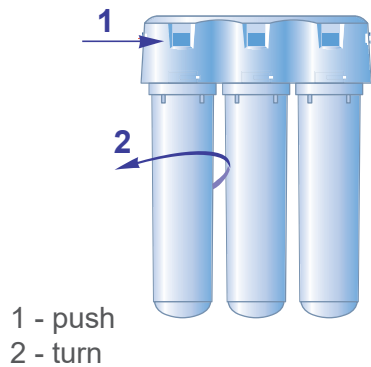


Fig. 5

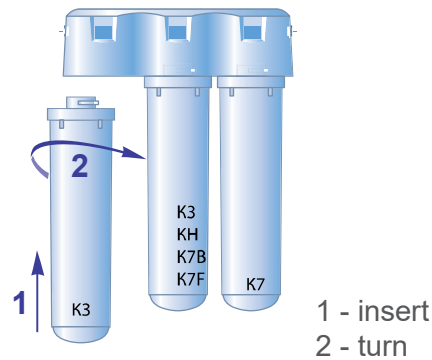


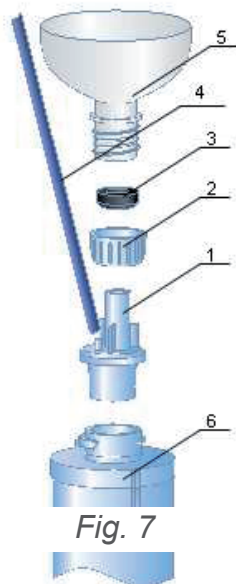
Fig. 6

- turn off the water at the connection and open the tap **(5)** for fresh water in order to relieve the pressure.
- pressing it hard and holding the safety button **(14)**, turn the used filter cartridge counter clockwise (fig. 5);
- remove the protective foil from the new cartridge;
- insert the new cartridge into the cabinet **(14)**, pressing it carefully, and gently turn it clockwise (fig. 6).

Follow the correct sequence when replacing cartridges as shown in Fig. 6.

- then follow the steps in the chapter "Following the water fountain installation and connection".

KH cartridge regeneration

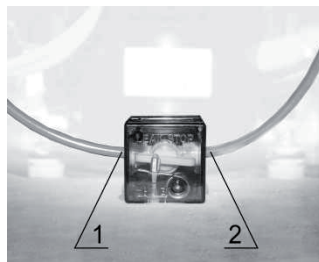


- perform the first two steps in the "Filter cartridges replacement" section;
- then assemble the regeneration adapter **(1)** and connect it to the KH insert (included in the set or purchased separately) (fig. 6):
- place the washer **(3)** on the nut **(2)**;
- put the nut **(2)** with the washer **(3)** on the adapter **(1)**, pressing it as far as it will go;
- put the plastic hose **(4)** on the stump on the adapter **(1)**;
- firmly insert the adapter **(1)** in the insert **(6)**;
- screw an ordinary clean plastic bottle **(5)** with a cut-off bottom (funnel-shaped) onto the nut **(2)**;

- using boiled water, prepare 2 - 2.5 litres of solution (e.g. 300 g/l) with table salt (do not use iodized salt);
- place the cartridge with the attached plastic bottle in an upright position (e.g. into a jar). Direct the plastic tube towards the sink;
- pour the salt solution through the filter, taking care not to let the sediment that remained during the dissolving of the salt enter the cartridge;
- after the salt solution, pour 2.5 litres of boiled water through the cartridge;
- The cartridge is now ready for use.

Replacing the shut-off valve (18)

If the shut-off valve has signalled a leak and closed the water supply, it should be replaced in accordance with the following procedure (failure to do so prevents further use of the water fountain):



- Open the water fountain cabinet door.
- Remove the used shut-off valve.
- Place the valve inside the fountain cabinet in such a way that the safety spring with litmus paper touches the special gasket at the bottom of the fountain cabinet (Fig. 8).
- Connect the hose (1) at the valve inlet (marked blue).
- Connect the hose (2) to the valve outlet (marked white).

The inlet/outlet is marked with an arrow on the plastic part of the valve screen (It is important that the valve handle is in a horizontal position).

AQUAPHOR cartridge wear electronic counter

The timer turns on automatically when water starts flowing through it and turns off 10 seconds after the water stops flowing. By pressing the "SET" button, you can check the status of the three modes of the counter: the amount remaining until the end of the cartridge use in litres (litre), water filtration rate (l/m) and the number of days until the end of the cartridge use in days (day) (Fig. 9).



Fig. 9.

Signals

The end of filter service life signal

When 30 litres or 7 days of filter service life is left, A SINGLE beep will sound, and the display will flash the values to indicate the need to replace the filter cartridge soon. The sound signal will stop when the meter is turned on using the "SET" button or when water begins to flow through the meter.

The end of service life signal

When the filter is used up completely (0 litres or 0 days), TWO beeps will sound to inform you that the cartridge needs to be replaced. The sound signal will stop when the meter is turned on using the "SET" button or when water begins to flow through the meter.

The flat battery signal

When the battery voltage drops below the normal level (the battery is flat), TWO beeps will sound to inform you that the battery needs to be replaced. The sound signal will stop when the meter is turned on using the "SET" button or when water begins to flow through the meter.

PLEASE NOTE:

If the water fountain is not used for a day or more (e.g. if you are away or during a holiday break), access to cold water should be blocked (the inlet tap should be turned off).

If the water fountain has not been used for more than a week, first let the water run for 5 minutes.

During transport, storage, and use of the water filter, the water fountain should be protected against impacts or falls. Also, protect the device against freezing of the water inside. If the water has a higher degree of hardness at 500 mg CaCO₃/l, after softening it may have a slightly salty taste. This is due to the exchange of calcium ions with sodium ions. However, this is not a malfunction and is completely safe for your health.

If the ambient temperature during the water fountain operation reaches 38°C or more (more than its maximum operating temperature), the device should be disconnected from the cold water supply until the temperature drops.

Warranty period* of operation of the water fountain (excluding the replaceable filter cartridges and the cut-off valve) is 2 years from the date of sale.

Service life** of the fountain (excluding replaceable filter cartridges and cut-off valve) is 5 years from the date of sale. At the end of its service life, the fountain should be replaced with a new one. Using the water fountain past its service life may lead to the loss of airtightness.

Expiry date (service life) of the replaceable filter cartridges in combination with:

K3, K7F, K7 - 8,000 litres, but not more than 12 months***

K3, KH, K7 - 6,000 litres, but not more than 6 months***

The service life of variable filter cartridges is calculated from the date the fountain is sold to the user at the point of sale. The date of sale of the fountain (with replaceable filter cartridges) is listed by the seller in the water fountain's manual. If the date of sale is missing from the instruction manual or the instruction manual has been lost by the user, the expiry date is calculated from the production date of the replaceable filter cartridges (the production date on the body of the replaceable filter cartridge).

*** The position of the Aquaphor company - consumer safety.

The water fountain should solve two of the most important tasks for the user:

- 1) remove small amounts of harmful substances from the water throughout the entire period of use.
- 2) in exceptional circumstances, protect the health of the user by reducing the amount of harmful substances significantly exceeding the permissible levels, bringing them down to a level acceptable by with the applicable sanitary requirements.

The electronic counter of the consumption of cartridges which calculates both the time and the water volume influences user safety.

The cartridge wear indicator in litres is intended for a group of users who use water fountains all the time (bars and restaurants, schools, health care facilities, etc.).

Efficiency (service life) counted over time is designed to ensure the safety of individual users (families), and is directly related to the capability to perform task no. 2.

The water fountain is a device ensuring constant access to freshly filtered water in virtually unlimited amounts. The water from the fountain is intended for direct consumption. It does not require the use of disposable cups. It is perfect for quenching thirst after a class or at work.

The AQUAPHOR water pre-filter (at the water connection to the building) helps the filter to operate more efficiently, especially if the water contains large amounts of undissolved pollutants.

| | Cause | Remedy |
|---------------------------|---|---|
| No water | <ol style="list-style-type: none"> 1. The ball valve is closed (water connection)? 2. Bent hoses? 3. Has the shut-off valve cut off the water supply? 4. Cartridges are blocked (cartridge life span is expired)? | <ol style="list-style-type: none"> 1. Open the water connection. 2. Straighten the hoses. 3. Replace the shut-off valve. 4. Replace the filter cartridges. |
| Very little water | <ol style="list-style-type: none"> 1. Cartridges are blocked (cartridge life span is expired)? 2. Low pressure in the water supply system? 3. The pout is not properly adjusted? 4. Bent hoses? 5. The ball valve tap is not properly adjusted (water connection)? | <ol style="list-style-type: none"> 1. Replace filter cartridges. 2. Contact the service centre for assistance. 3. Adjust the pout jet (page 7). 4. Straighten the hose. 5. Adjust the ball valve tap (water connection). |
| Loud noise is to be heard | <ol style="list-style-type: none"> 1. The water fountain is positioned on an uneven or unstable surface? 2. The fountain is against the wall? 3. Are there any items behind the fountain? | <ol style="list-style-type: none"> 1. Provide a hard, stable base for the fountain, level the fountain using adjustable feet. 2. Move the dispenser 10 cm away from the wall. 3. Remove the items behind the fountain. |