HEIZERMAG BASIC 5/4”

Magnetic dirt separator for protecting heat pumps and heating/cooling systems

Installation, operation and maintenance instructions

Package contents: *filter tank, 2 shut-off valves, rubber seal set, 1 x 700 µm double stainless steel mesh filter, 1 x 100/600 µm replacement filter, magnet, universal plastic key, operating instructions.*

Thank you for choosing the **HeizerMag** magnetic dirt separator filter. Please read this user manual carefully before installation and follow it to ensure maximum efficiency, best cleaning results, and protection of your system. This manual contains information on operation, maintenance, and safety. We recommend that you keep it in a safe place after installation and commissioning.

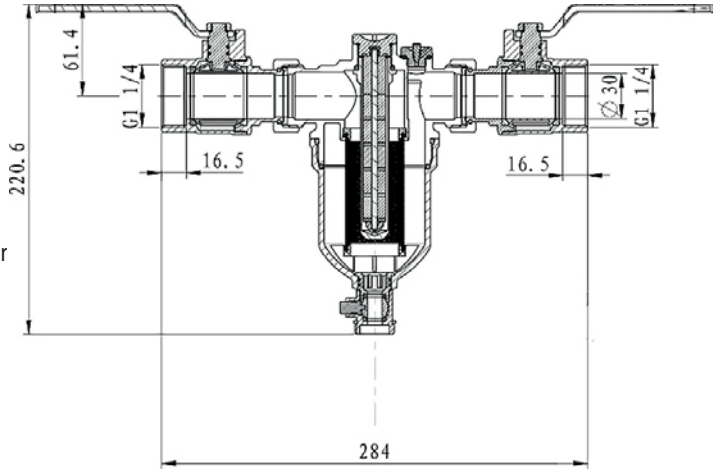
ATTENTION! This product contains a strong magnet with a strength of 12,000 Gauss, so do not place sensitive objects (e.g., mobile phones) near the magnetic field. Do not place the magnet on iron surfaces or objects. *If you have a pacemaker, please be careful, as the filter contains a very strong magnet!*

Functioning: In closed heating and cooling systems with heat pumps, contaminants in the circulating medium can cause wear or damage to system components such as pumps, valves, etc. These contaminants can also clog heat exchangers, radiator connections and pipes, reducing thermal efficiency and thus the overall performance of the system. The filter built into the magnetic dirt separator filters these particles out of the system, especially particles consisting of sand and rust (dissolved iron oxide). These contaminants collect at the bottom of the tank. The tank is easy to clean by opening the shut-off valve at the bottom. The dirt separator is made of technical plastic and is particularly suitable for heating and cooling systems. It can only be installed vertically in the pipe. The upper brass part of the filter ensures dimensional stability and a long service life even with high volume flows, e.g. in heat pumps.

Technical characteristics:

Material
Filter housing: PA66
Gasket: EPDM
Ball valves: CW617N
Filter screen: Stainless steel
Filter screen frame: CW617N

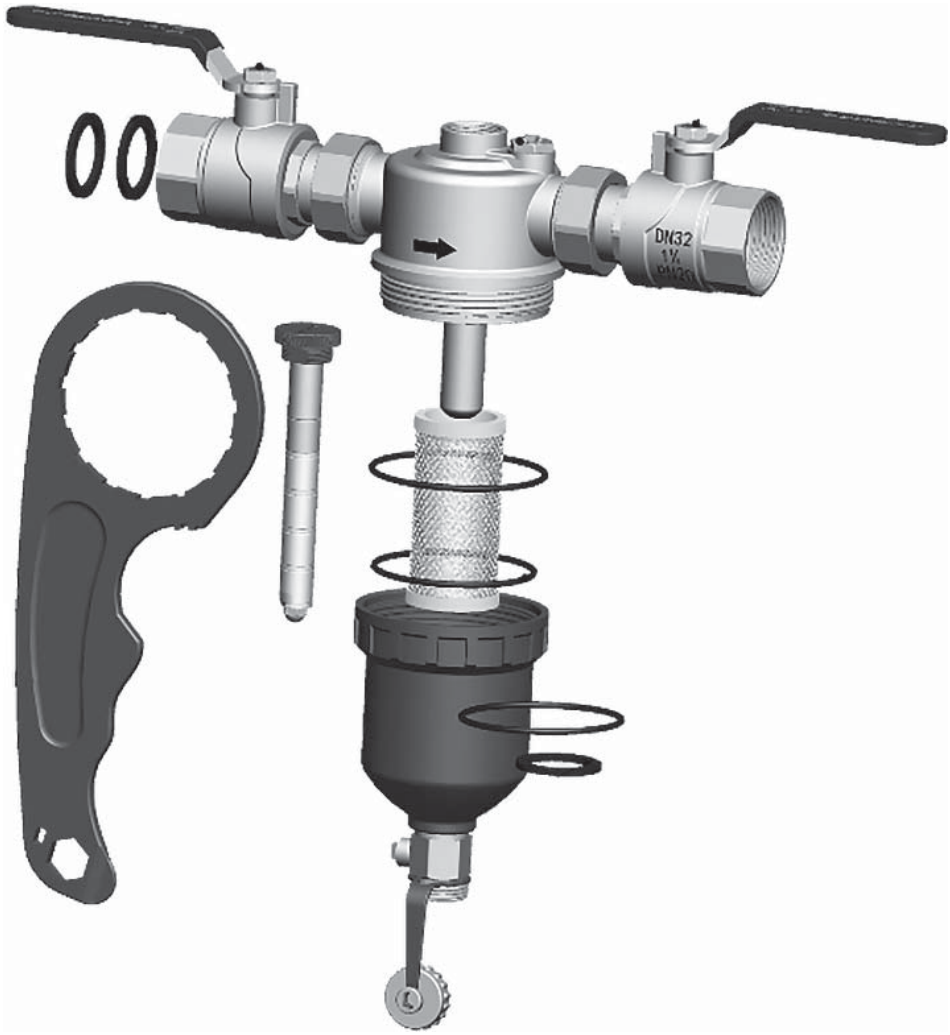
Operating characteristics
Medium: Water
Operating / max pressure: 4 bar / 10 bar
Operating temperature: 0°C – 120°C
Magnetic strength: 9000 Gauss
Max. flow rate: 16 m3/h
Filter hole size: 700 µm
Connection: 5/4“ (ISO228-1)
Weight: 3.10 kg



Operating principle:

- The two shut-off valves are designed to minimize pressure resistance when fluid enters and exits the filter tank. The large capacity of the chamber effectively retains the fluid so that it can be filtered as efficiently as possible, i.e., freed from magnetic and non-magnetic particles.
- The extra-long magnetic bar ensures that metal contaminants stick to the strong magnet when the liquid flows through the magnetic field. The efficiency of the capture is even more effective as the filter container is made of stainless steel throughout its entire depth and, thanks to its framed design, even non-magnetic particles are filtered out of the flowing liquid.
- The drain valve at the bottom of the container makes it easy to clean the container of debris.
- The manual vent valve at the top allows for safe venting or depressurization of the filter.

Filter parts:



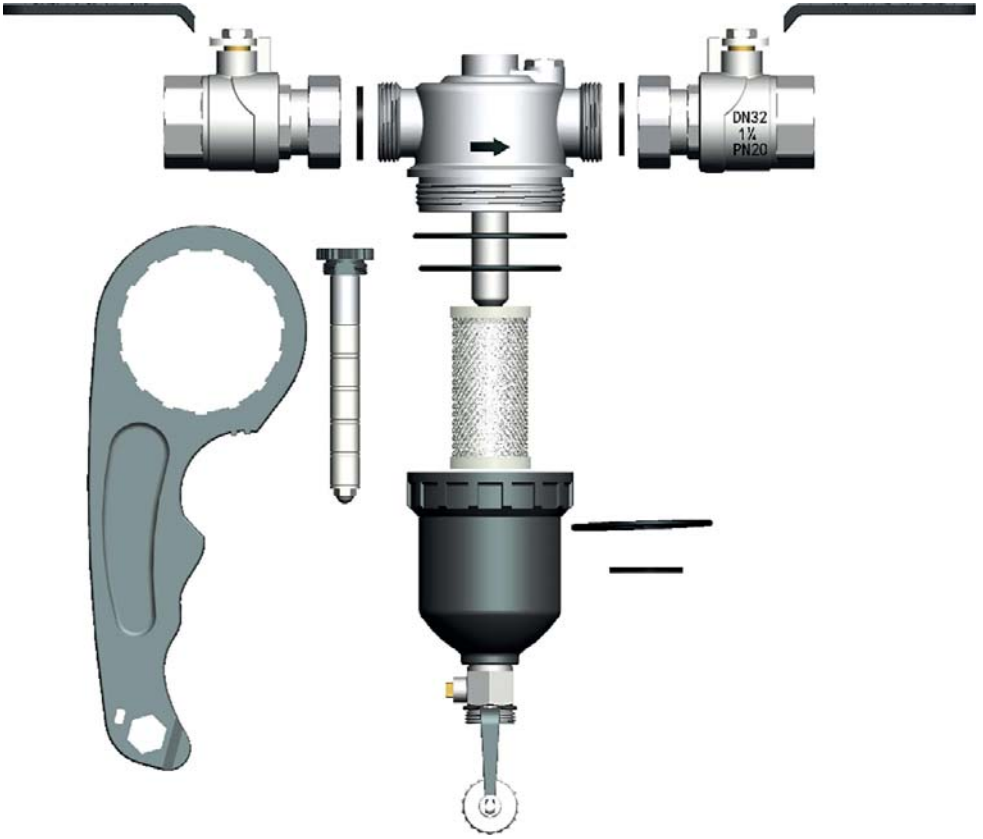
Installation instructions:

IMPORTANT INFORMATION: The product must be installed by a qualified person. Before installation, check that the product is complete. If any parts are missing, contact your dealer.

NOTE: Before installing the filter, check the operating conditions of the system, such as pressure and temperature, to ensure that they are within the operating range. The filter is equipped with magnets, and the magnetic field generated may damage nearby electronic devices (including pacemakers) and other precision instruments.

Install the filter vertically, preferably in front of the heat or cooling source and as close as possible to the return branch of the system. Make sure there's enough space above and below the filter for cleaning and maintenance. Don't install it in areas where the temperature drops below 0°C.

1. Switch off the heating (cooling) system and depressurize the entire system. Cut out a suitable piece for proper installation of the filter.
2. Install shut-off valves on both the inlet and outlet pipes.
3. Place the seal on the side of the valve connection nut and screw the filter into a vertical position. Tighten the connection nut by hand, taking care not to strip the thread. The filter must always remain in a vertical position; only the shut-off valves may be moved relative to the filter! During installation, observe the flow direction indicated by the arrow!
4. Open the inlet and outlet valves and pressurize the system.
5. Ventilate the filter using the vent valve.
6. Put the system back into operation.



Regular maintenance:

Option 1: Prepare an empty container of sufficient volume to place under the filter. Close the shut-off valves at the filter outlets. Remove the magnet. Open the drain valve with the supplied key and flush the filter. Then close the drain valve and replace the magnet. Pressurize the system.

Option 2: Prepare an empty container of sufficient volume to place under the filter. Switch off the system. Close the inlet and outlet valves. Remove the magnet. Open the air vent and drain valve. Drain the contaminated water into the prepared container. Unscrew the filter body, remove the filter separator and rinse it with clean water, then replace it and screw the clean filter body back on. Close the drain and vent valves, replace the magnet, and open the inlet and outlet valves. Vent the filter. After complete venting, start the system.

Solving possible problems:

1. Water is leaking from the filter: Switch off the system and close the valves. Check all seals and the tightness of all moving parts.
2. Low water flow: Clean the filter.

Warranty period:

The product is covered by a 24-month warranty from the date of purchase. If a defect occurs within this period, please contact the retailer from whom you purchased the product.

The warranty shall be void for the following reasons:

- mechanical damage to the product
- incorrect handling
- neglecting routine maintenance or inadequate maintenance
- failure to follow installation instructions
- use of the filter for purposes other than those for which it is intended

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