



## Magnetic filter / Pollution separator **BF-12**

**CAUTION!** Read the instruction manual before use. For safety reasons only persons knowing precisely the instruction manual may operate the equipment.

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**Any use of the device, other than the intended use, is a foreseeable misuse of the device.**

# Information / symbols used in the manual

## Warning!



"Danger" symbol used for notes whose non-observance may result in danger to life or health caused by the electrical installation. The power cord of the pump must be disconnected from the power supply before carrying out the operations marked with this symbol.

## Warning!



"Danger" symbol used for notes whose non-observance may result in danger to life or health.



Failure to follow the rules contained in this manual will result in the risk of explosion or ignition.

## Note!



Symbol used for notes whose non-observance may result in a risk of damage to the equipment and danger to life or health.



Please read this installation and operating manual carefully before installing and operating the product to avoid unnecessary losses.

## Attention!



The operating manual is an essential part of the contract of sale. Failure by the user to observe the instructions in the operating manual constitutes non-compliance with the contract and excludes any claims arising from a possible failure of the equipment resulting from use contrary to the instructions.

The manufacturer shall not be liable for malfunctions if the equipment was incorrectly connected, damaged, modified and/or used for a purpose outside the scope of the recommended work or contrary to the guidelines included in this manual. The manufacturer shall also not be liable for possible errors in the operating manual caused by misprints or copying errors. The manufacturer reserves the right to make any modifications to the product which it may deem necessary and useful and which do not affect its essential characteristics.

**DAMBAT shall not be liable for damage to the equipment, property or personal injuries as a result of failure to adhere to the instructions in the manual, including incorrect selection of the equipment, assembly not complying with the manual, applicable standards and national regulations, incorrect maintenance of the equipment and the entire system.**

**This equipment is not intended for use by persons (including children) whose physical, sensory or mental abilities or lack of experience and knowledge prevent them from using it safely without supervision or instructions.**



# Safety of use

This device must be installed in accordance with the technical guidelines.



The operator bears full responsibility for:

- Proper installation – the filter must be installed by qualified technicians in accordance with the installation instructions preventing hazards caused by improper handling.



- Plumbing connections should be made by a competent, trained and qualified specialist.
- Please ensure that the filter specifications are compatible with the installation parameters.



- This filter contains a strong magnet and magnetic fields exist inside it. We recommend that people with pacemakers remain at a safe distance from the filter. Care should be taken to use electronic devices near the filter so as not to interfere with their operation.

## Description

The Magnetic Filter has been designed to trap contaminants in central heating systems. Modern systems equipped with highly efficient systems fed with boilers are exposed to failure and reduced efficiency and effectiveness of work due to contamination with iron oxides, i.e. the main component of rust, which is formed as a result of corrosion and is deposited in the form of sediment. Iron oxide particles circulate throughout the heating circuit, accumulating in critical points of the installation, exposing the entire system to failure of e.g. pumps, valves or heat exchangers, and the heating efficiency of the boiler itself decreases, which translates into increased heating costs. The use of magnetic filters / dirt separators allows to increase the protection of the entire heating system by removing most of the solid impurities, which include iron or iron oxides suspended in the heating system fluid, allowing the protection of most of the components of the entire system. Filters can be used in installations where there is a constant circulation of the heating medium. The heating medium may consist of water and glycol solutions, where the glycol content does not exceed 50%. Filters can also be used in solar and cooling systems, additionally retaining such contaminants as sand. with continuous circulation of the heating medium. The heating medium may consist of water and glycol solutions, where the glycol content does not exceed 50%. Filters can also be used in solar and cooling systems, additionally retaining such contaminants as sand. with continuous circulation of the heating medium. The heating medium may consist of water and glycol solutions, where the glycol content does not exceed 50%. Filters can also be used in solar and cooling systems, additionally retaining such contaminants as sand.

# Principle worksdoe

Magnetic filters have a dual function of retaining both ferromagnetic and non-magnetic impurities thanks to the use of double filtration. The liquid flowing in the system must flow through the filter to complete the circuit. Flowing through the filter, thanks to its special design, sediments are retained on two filtering components. The first element that allows filtering ferromagnetic impurities (separating magnetite) is a magnet with a force of 9000 Gauss installed inside the body. The next element that allows for the separation of solid non-magnetic impurities is a filter mesh/sleeve inside the body, surrounding the magnet. The filter chamber has a larger diameter than the connections, which allows for local slowing down of the liquid flow rate inside the filter, and thus slowing down the impurities contained in the liquid. Thanks to this design, the magnet can attract most ferromagnetic impurities, while larger particles, both ferromagnetic and non-magnetic, are retained by the filter mesh/sleeve. The accumulated contaminants can then be removed via the drain valve.

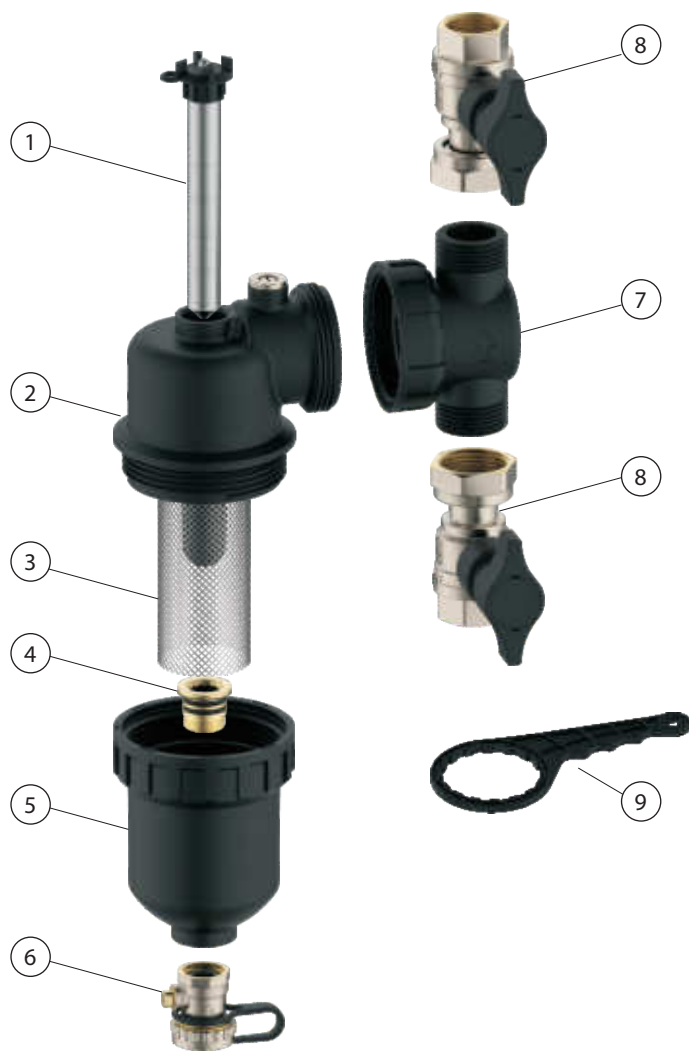
## Technical date

### Basic technical data

Model	IBF-12- $\frac{3}{4}$ "	IBF-12-1"
Dimensions	288 × 203 mm	288 × 203 mm
Maximum working pressure	8 bar / 0,8 Mpa	8 bar / 0,8 Mpa
Maximum liquid temperature	100°C	100°C
Filtering	≥ 500 µm	≥ 500 µm
Maximum flow	80 l/min	90 l/min
The strength of the magnet	9000 Gauss	9000 Gauss
Connections	$\frac{3}{4}$ "	$\frac{3}{4}$ " lub 1"
Material	PA66 (I-002) + włókno szklane / miedź / stal nierdzewna	PA66 + włókno szklane / miedź
Weight	–	–

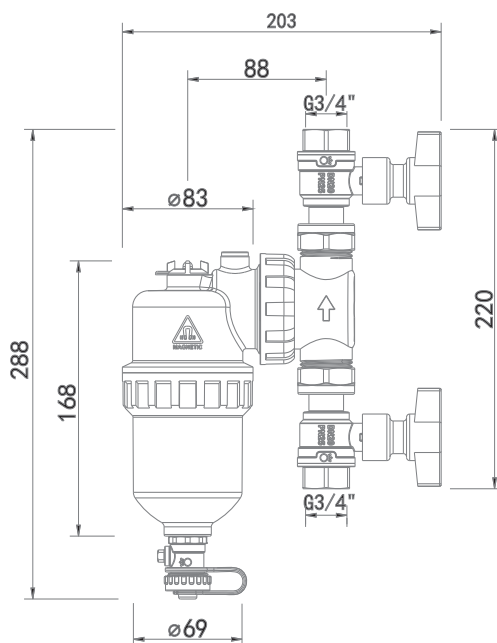


# Technical data



1	Magnet bar
2	Filter body cover
3	Filter mesh
4	Valve
5	Filter body cover
6	Drain plug
7	Connection body
8	Check valve
9	Cover wrench

IBF-12-3/4"



# Installation / Assembly

## Installation

The device may only be installed by qualified personnel, e.g. fitter or installation mechanic.

### Attention:

- The magnet may interfere with the operation of electronic devices such as pace-makers, computers, and electronic devices. These devices should not be placed closer than 35 cm.
- Do not close connection valves and do not unscrew the covers while the boiler is in operation.
- The filter should be installed at a distance of not less than 1 meter from the boiler
- In the case of mounting to metal elements, the device should be grounded, and all connections should be easily accessible and appropriately marked.

IBF-3 magnetic filters can be installed in both horizontal and vertical systems thanks to the 360° adjustable body, facilitating installation in various places.

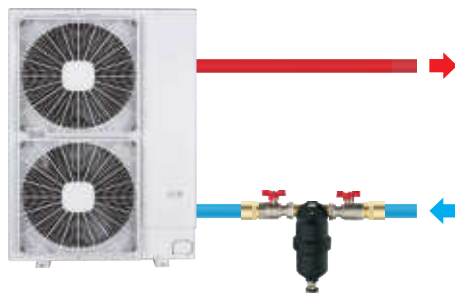
The IBF-3 model must work in a vertical position, while all models have magnetic filters should be installed in the return of the heating system after the last radiator before it entrance to the boiler, protecting it against contamination, especially during the warm-up phase.

Fig. 1.



G ¾ – gas boiler connection

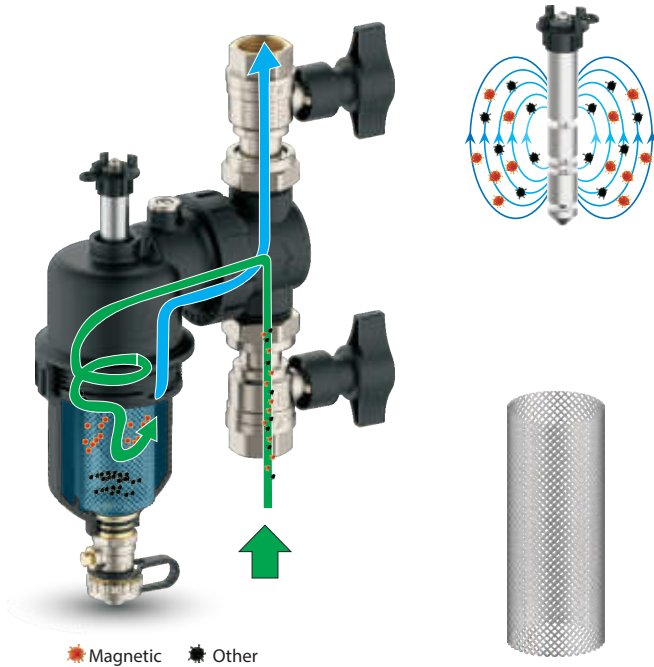
Fig. 2.



G 1" – heat pump connection



# Installation / Assembly



When determining the location of the filter installation, a sufficiently large maintenance space should be provided. To facilitate maintenance, it is recommended to install an additional shut-off valve on the section from the evaporator to the heat source.

Install in accordance with the flow arrows located on the filter body.



# Assembly



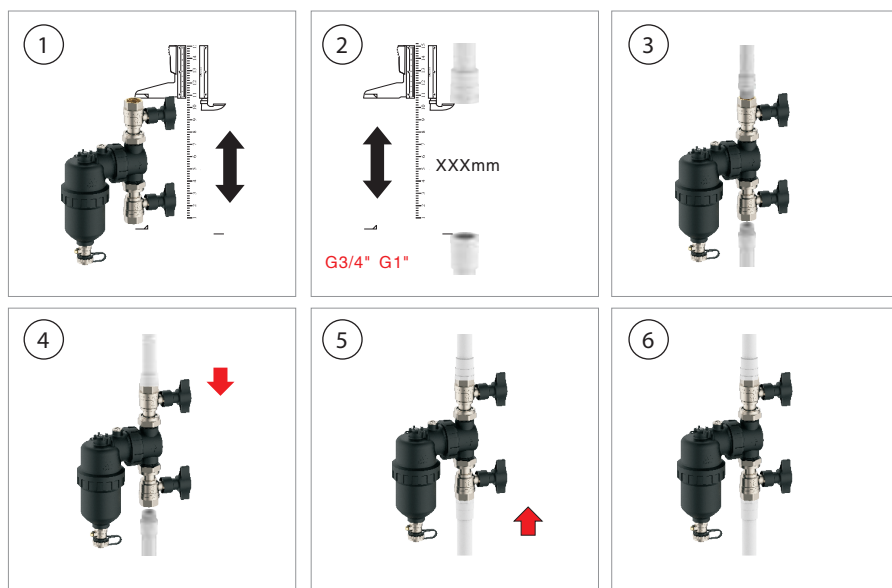
**ATTENTION:** To avoid burns, it is recommended to do this before performing any maintenance work turning off the boiler and cooling the system to room temperature.



The device may only be installed by qualified personnel, e.g. fitter or installation mechanic.

Sample installation procedure:

1. Determine the place of installation in accordance with the characteristics and specification of the installation, taking into account easy access to maintenance. It is recommended to install the return system upstream of the boiler. Filters should not be installed in open systems between the boiler and the overflow vessel.
2. After shutting down the system and cooling it down, close the circuit, reduce the pressure in the system and drain the water from the pipe on which the filter will be installed.
3. Prepare a suitable section of the installation for installing the filter.
4. Install shut-off valves with gaskets supplied with the filter.
5. Install filter connections with gaskets in such a way that the direction of the arrow on the body / connection is consistent with the direction of liquid flow in the system.
6. Attach the filter body to the connection by tightening both elements thoroughly. The filter housing must be mounted vertically, the body is adjustable.
7. After making sure that all connections are tight, open the valves and start the system.
8. If necessary, vent the filter by means of the drain / vent valve.



## Maintenance



- Clean the filter 1 to 2 months after first use. When still using it, remember to clean it at least once a year, unless the filter is used. Indicates severe contamination, then more frequent maintenance will be required.
- The maintenance work does not have to be identical for the same device, and the extent to which it is decided by the maintenance operator.



**ATTENTION:** To avoid burns, it is recommended to do this before performing any maintenance work turning off the boiler and cooling the system to room temperature.

1. Check if the boiler is turned off and its power supply is disconnected. Make sure the installation has cooled down to room temperature to avoid burns.
2. Prepare a vessel into which the water from the system will be drained.
3. Close the valve (s) / shut-off valves and carefully and slowly unscrew the drain valve, allowing the water to flow into the vessel.
4. After draining the water and closing the drain valve, further maintenance of the filter is possible, unscrew the housing cover using the wrench provided with the set and then remove the filter cover.
5. After removing the cover, pull out the magnet for cleaning as well as the filter mesh. Use warm water for cleaning and remove sediment from the elements. Then you should clean the filter body and cover.
6. After cleaning all elements, install them inside the body.
7. Check the condition of the gaskets and threads before reassembling, if the gaskets are worn out, replace them with new ones.
8. Install all disassembled gaskets, if any.
9. Before starting the installation, check all connections and the filter assembly for tightness.
10. Gently open the inlet valve and the bleed screw until all air flows out.
11. Close the vent valve and open the shut-off / shut-off valve (s)
12. Run the installation.
13. Check for any leaks.



# Let's take care of our environment

Each user can contribute to the protection of the environment. It is neither difficult nor Expensive. For this purpose, a cardboard box for waste paper, bags should be provided of plastics in the plastic container. Used device should be returned to an appropriate storage point.

## Disposal Information

The packaging of this product can be recycled. Contact the local authorities for information on the correct method of disposal.

## Disposal of the used product




The used product is subject to disposal as waste only in selective waste collection organized by the Network of Communal Electric and Electronic Waste Collection Points. The consumer has the right to return the used equipment to the electrical equipment distributor's network, at least free of charge and directly, as long as the returned device is of the correct type and performs the same function as the newly purchased device. It is forbidden to throw away the used device together with other household waste.

# Declaration of conformity

The product is subject to the pressure directive 2014/68 /EU and according to Art. 4.3 (recognized engineering practice) is not CE marked.

The scope of application of the magnetic filters IBF-12:

- Water
- Maximum working pressure 8 bar (0.8 MPa)
- Maximum working temperature 90°C

  
Adam Jastrzębski  
30.07.2024

# WARRANTY CARD

The following warranty card is valid only with the original purchase document, i.e. invoice or receipt.

In addition, it must be certified by the seller with a signature and stamp.

The warranty card without the original purchase document attached is invalid.

1. The guarantor of the device is DAMBAT Jastrzębski S.K.A.; service address: Adamów 50, 05-825 Grodzisk Mazowiecki, Poland, Panattoni complex.
2. For customers with original proof of purchase in the form of a fiscal receipt, or original invoice, the warranty period is 36 months.
3. The warranty does not include, limit, or suspend the buyer's rights under the warranty provisions for defects in the goods sold.
4. The warranty includes free repair of defects in the device caused by a manufacturing error.
5. A condition of the warranty is that the instructions in the instruction manual are followed.
6. The warranty does not cover:
  - Damage resulting from improper handling or operation not in accordance with the intended use and operating instructions
  - Damage caused by external forces, the cause of which lies outside the device to which the warranty applies (e.g. frost damage, transport damage, fire, flood, etc.).
  - Damage caused by interference in the construction of the device by persons not authorized by the guarantor.
7. The warranty is void in the event of:
  - Determination at the authorized service center of design changes made by a person not authorized by the guarantor;
  - Finding at an authorized service center attempts to disassemble the device by a person not authorized by the guarantor, beyond the activities allowed by the operating instructions
  - Finding at the authorized service center any corrections in the warranty card, made by persons not authorized by the guarantor
  - Finding at the authorized service center any discrepancies between the entries on the warranty card and the purchase document.
8. The warranty covers only devices operated in the territory of the Republic of Poland.
9. In the case of shipping the device for repair by the user, when shipping equipment - among other things, weighing more than 20 kg - the guarantor covers the cost of transportation to the service. Before shipping, please contact the guarantor for information on which courier company to send the device (phone 22 632 86 09). The guarantor accepts only shipments sent in the standard service. Shipments sent at the expense of the guarantor using other than standard service will not be received. The guarantor does not accept COD shipments. The user should prepare (protect) the device for transport so that it is not damaged. Any damage caused by the customer is not subject to warranty repair.
10. Apart from the terms of the warranty, the buyer is not entitled to any compensation.
11. If you send a working device to the service center, not subject to warranty repair, you may be asked to reimburse the cost of inspecting the device, and reimburse the cost of returning the device from the service center to you.
12. In the event that the warranty provider does not consider the damage to be the fault of the manufacturer, the user may be asked to refund the cost of transportation to the service center and refund the cost of returning the device to the user.
13. Warranty repair will be carried out within 14 working days from the date of delivery of the device to the service, except for the following, including special cases when the defect is not permanent and longer diagnostics of the device are necessary.
14. The guarantor does not provide information about the status of the repair, as well as the course of the repair itself of the device sent for service.
15. If you have an email address, please provide it below:

User email address: \_\_\_\_\_

16. Providing the address by the user will facilitate communication with the service and may speed up repairs.
17. Contact to nationwide service: tel/fax 22 632 86 09, e-mail: [serwis@dambat.pl](mailto:serwis@dambat.pl) Business hours: Monday-Friday 8.00-16.00

DEVICE TYPE: \_\_\_\_\_

NO. PRODUCTION : \_\_\_\_\_

DATE OF SALE (month in words)SELLER'S \_\_\_\_\_

SEAL AND SIGNATURE \_\_\_\_\_



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