



MAGNETIC FILTER SPECIFICATION



Registered office:

Highbourne Group Limited,
Highbourne House,
Eldon Way,
Crick,
Northants,
England.
NN6 7SL



Product Code (SKU)	Size	Barcode	Product Description
450981	22mm	5059491713055	22mm Magnetic Filter
256913	28mm	5059491712089	28mm Magnetic Filter

Instructions before use

Dear users, thank you very much for choosing PlumbRight magnetic filter.

Manual

This manual describes the product features, functions and installation operations in detail. Please read all parts of this manual carefully before using. The company reserves the right to modify the existing version without prior notice.

Preliminary inspection



After receiving the product, open the package and check whether the appearance of the package is damaged. The information on the product identification label should match the model you selected. If there is any inconsistency or uncertainty in the appearance, specifications, etc., please contact the supplier immediately to explain the cause of the defect. Do not use if there is any doubt about the installation of the product.

Warning - people with pacemakers and defibrillators should not handle this product.

The magnetic filter is equipped with a strong magnet rod which has a strong magnetic field effect. Always pay attention during installation and maintenance. Do not place the magnetic rod next to any electronic equipment to avoid damage to the electronic equipment.



How it works

The PlumbRight Magnetic Filter is installed in heating systems to permanently separate dirt and magnetic impurities from the system. To eliminate system noise, reduce heat loss on the heating surface, and avoid other system damage, the PlumbRight Filter is designed to separate loose particulate matter from the system water and remove it from the system in a controlled manner.

Inspect and clean at least annually.

Preferably install this product just before the Boiler or Heat Pump unit for maximum protection.

Cleaning

1. Turn off and isolate the Boiler and Pump.
2. Close the isolation valves and open the air vent to relieve system pressure.
3. Remove the magnet rod from the magnet sheath and withdraw it completely (keeping it away from other magnets or ferrous parts).
4. Unscrew and remove the drain port cover. Open the drain valve at the bottom of the filter and drain fluid into an appropriate container.
5. Slowly open the lower isolation valve to allow fluid into the port block to flush the sheath and main body clean. Then re-close the isolation valve.
6. Re-insert the magnet rod, replace drain port cover and close drain valve.
7. Open the lower isolation valves and open the air vent until water flows from it to allow any air to escape. Then close the air vent.
8. Open the upper isolation valve and fill the remaining system volume.
9. Open the air vent to ensure any remaining air has been removed from the filter. Bleed any air from other system parts such as radiators.

Note that, during cleaning, you may want to top up any inhibitor and add biocide.

Extra details

Can you retrofit the PlumbRight Magnetic Filter?

Yes - the PlumbRight Magnetic Filter can be retrofitted. It has a simple design allowing quick installation. It is ideal for tackling contaminant problems in existing systems (consider a system clean first though) as well as adding to new installations.

What direction should the main body of the filter be fitted in?

Although the isolation valves and connector block of the PlumbRight Magnetic Filter can be fitted in any orientation, the main body of the filter must be installed vertically so the air vent is at the top and the drain is at the bottom.

How often should I service the PlumbRight Magnetic Filter?

It is recommended that the PlumbRight Magnetic Filter is serviced in line with the annual service schedule of the boiler; ideally once every twelve months. Should you forget, please service as soon as possible. The filter has a diversion cup within it so, even if the unit becomes full of debris and magnetite, the flow of water will never be blocked, keeping the system flowing until you do get to clean it.

Can I add dosing chemicals into the filter?

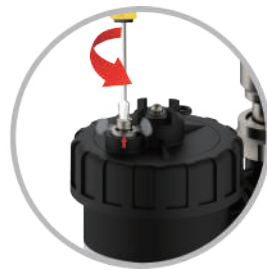
Yes- dosing chemicals (Inhibitor, Biocide, etc) can be added to the system by draining the filter, removing the collar and magnet sheath and then pouring dosing chemicals directly into the main body.

Installation & Commissioning

1. Turn off and isolate the Boiler and Pump. Drain the system and relieve any system pressure.
2. Remove the required length of pipework to fit the PlumbRight filter. For maximum performance and best practice, it should be placed between the last radiator and the boiler.
3. Fit the isolation valves but do not fully tighten.
4. Place the filter, including the washers provided, between the isolation valves and hand tighten.
5. Fully tighten all the connections to the pipework.
6. Open the lower isolation valve, leaving the upper isolation valve closed.
7. Add inhibitor and (if required) biocide to the required amount for the system volume.
8. Open the air vent until water flows, then close it.
9. Open the upper isolation valve and fill the remaining system volume.
10. Bleed any air from other components such as radiators.
11. Turn the Boiler and Pump back on.



Turn screw anti-clockwise to open the air vent

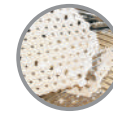


Turn screw clockwise to close the air vent

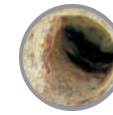
Guarantee

This product is guaranteed for two years from the date of purchase against any manufacturing defect.

Diagram of the working principle



Scaling in radiators



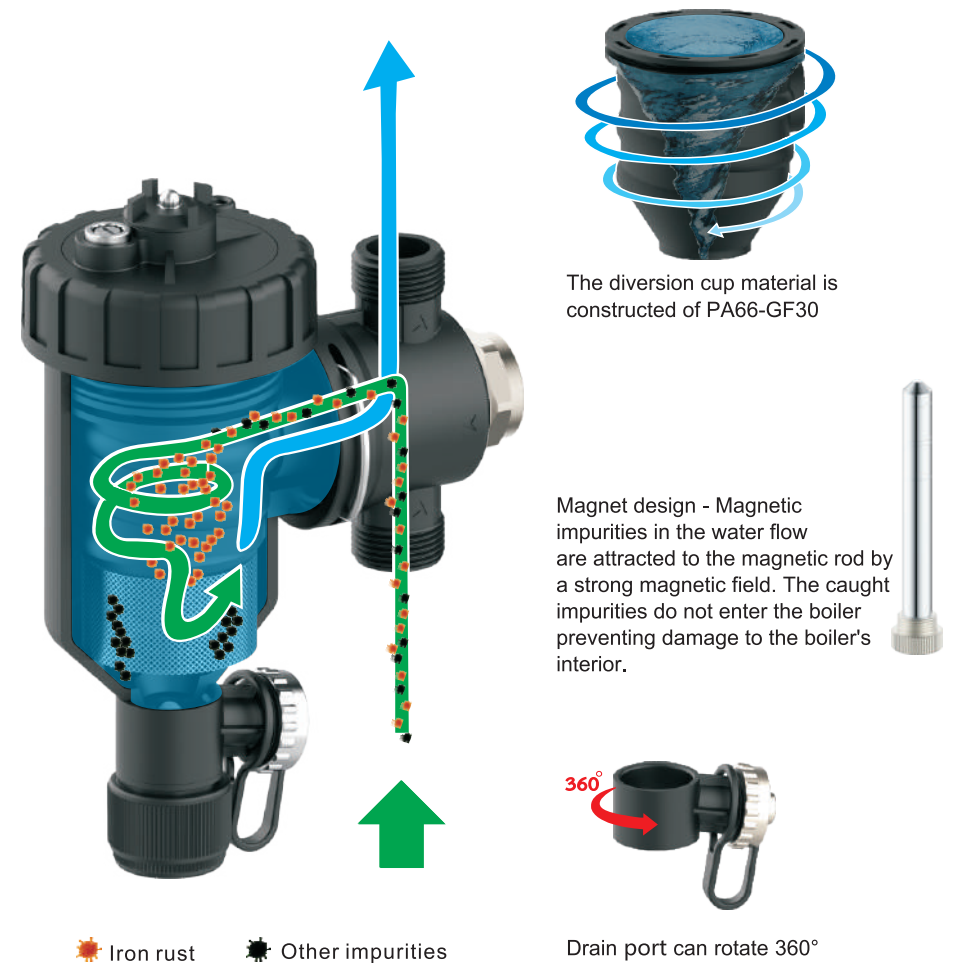
Scaling in pipeline



Magnetic impurity

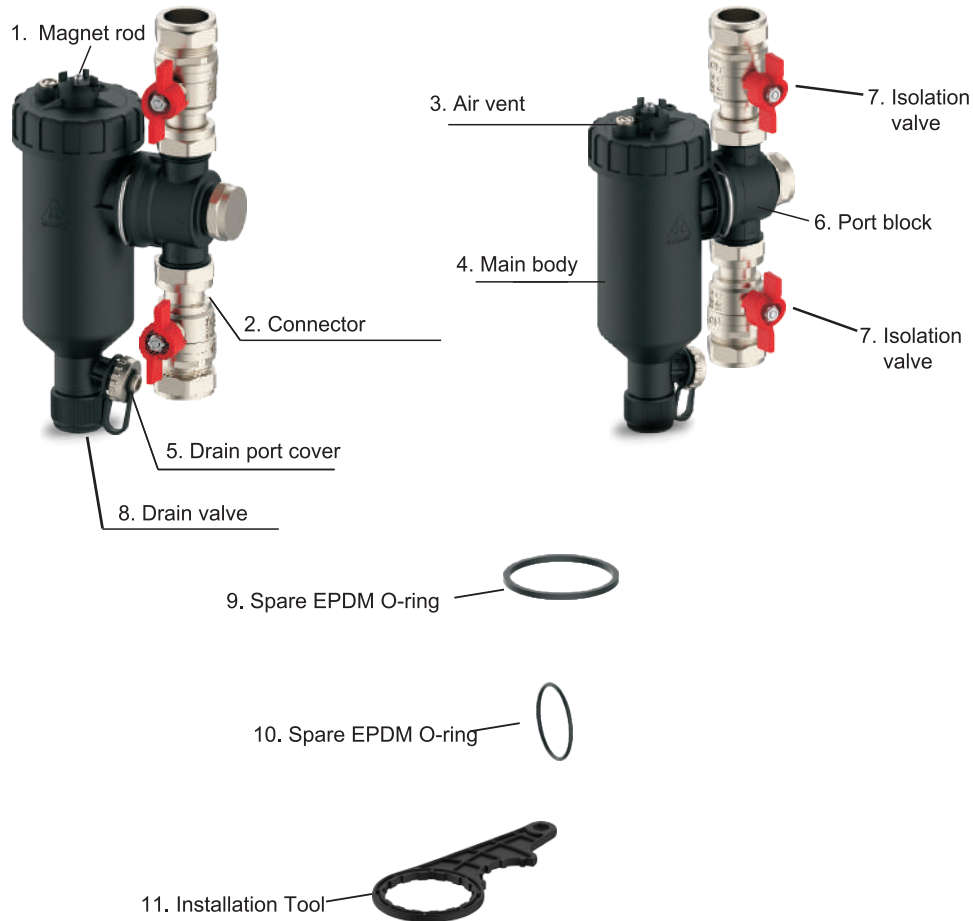


Scaling in boiler

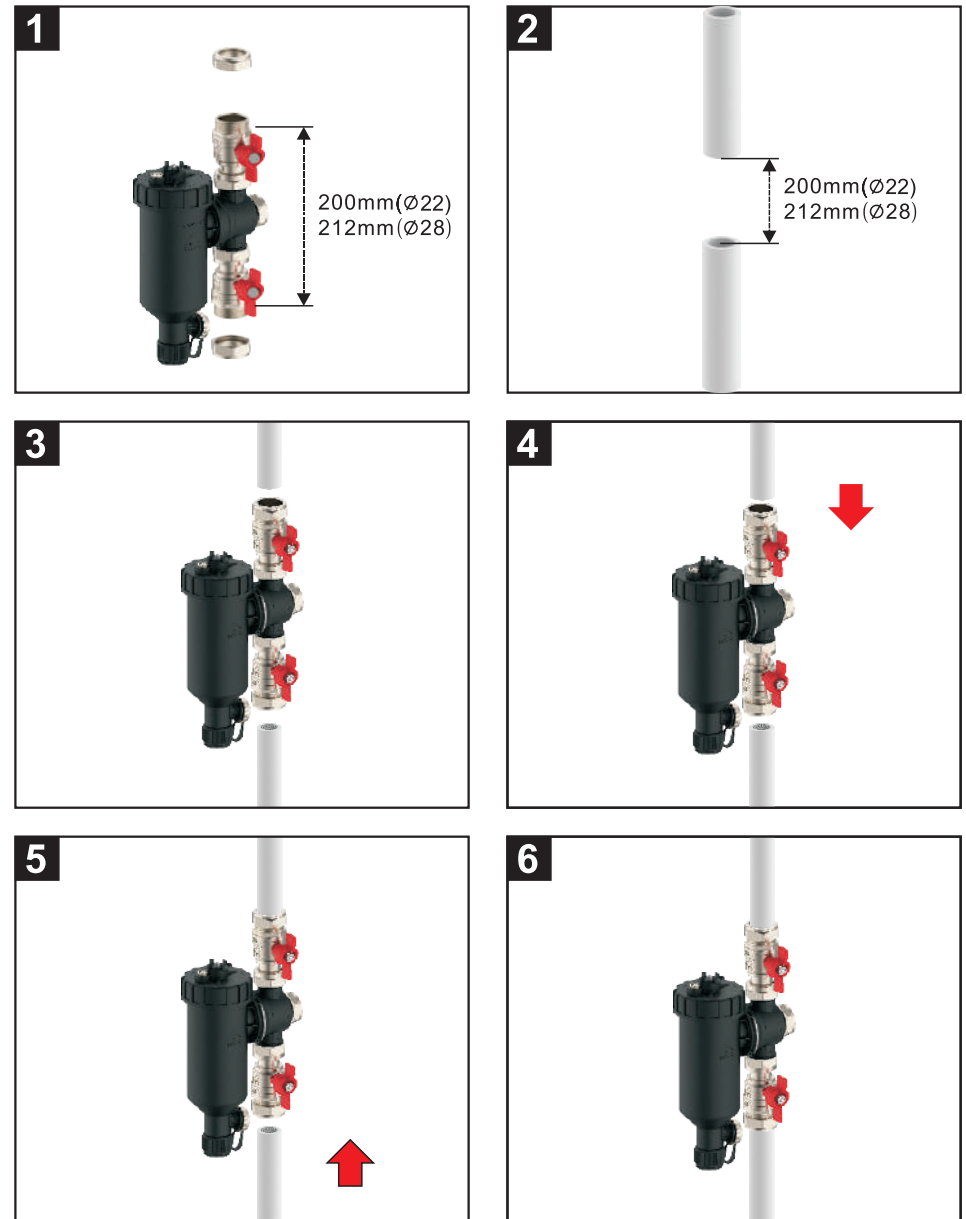


Product List

After opening the package, check all parts according to the following list.

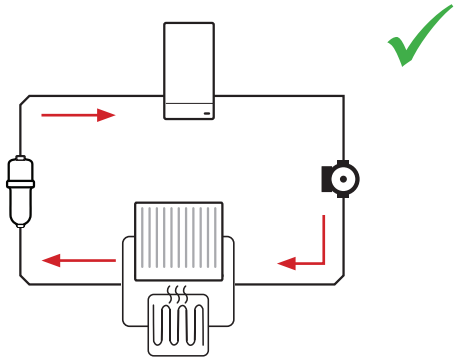


Installation

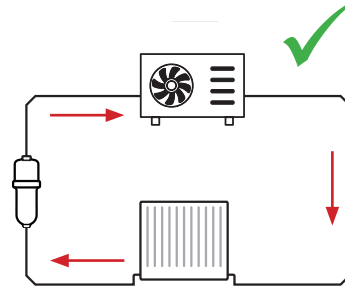


Best location

Boilers



Heat Pump Systems



The best location for a magnetic filter is between the Boiler or Heat Pump and the last radiator.

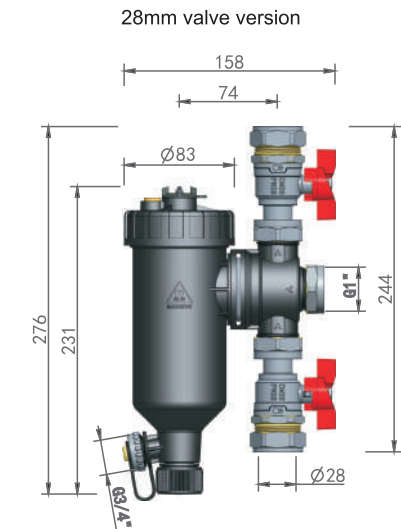
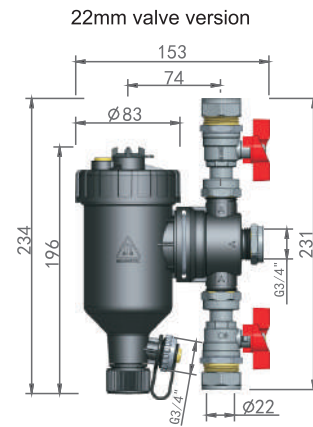
You can additionally install before any other pump.

The pipe can be at any angle but the air vent must be pointing upwards.

Note the arrows on the port block as these arrows show the required direction of fluid flow.

Standard installation is in a straight line but a 90 degree installation is also possible without detriment to the product performance.

Dimensions



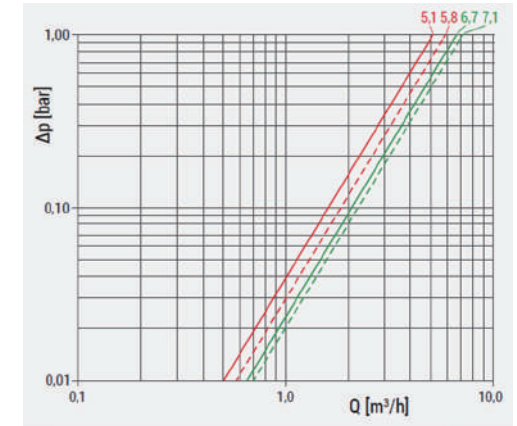
Technical

Maximum flow rate:
up to 60litres/minute (22mm valve).
up to 75litres/minute (28mm valve).

Temperature rating (both):
Min operating temp 0 deg C.
Max operating temp 90 deg C.

Fluid dosing ability:
Main body volume capacity-
up to 370ml (22mm valve).
up to 480ml (28mm valve).

Pressure drop curve (both):
Shown in graph for both versions with
straight or 90 degree connections.



Size	Kv Angle (m ³ /h)	Kv Straight (m ³ /h)
22mm	5.8	5.1
28mm	7.1	6.7

BOM



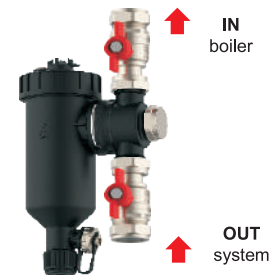
No	Name
1	Collar
2	Magnet rod
3-1	Air vent
3-2	O-ring
3-3	Brass insert
3-4	O-ring
4-1	Magnet sheath
4-2	EPDM O-ring
5	Spring
6	Diversion cup
7	Mesh
8-1	Main body
8-2	O-ring
9	Drain valve
10	Drain port cover
11	EPDM O-ring
12	Port block
13	Locking clip
14	Port block blanking end
15	Installation tool
16	Isolation valve

360° rotation operation



Installation location

Installation method 1 (straight)



Installation method 2 (90 degree)

