



Magnetic.

The only **range of magnetic filters**
for all requirements

The challenge of magnetic filtration

It all stems from **needing to find an effective solution to eliminate impurities in heating systems.**

Besides sludge that forms naturally in the systems, the risk of clogging often derives from foreign particles from the oxidation of metal surfaces, residue of materials and lubricants used during installation or even fragments released by the system components themselves. These particles - often truly microscopic in size (down to 0.005 mm) - are not always visible.

Among the most common risks of these impurities is annoying intermittent noise as well as, often, strong vibrations, but also seizures, total or partial blockages in circulation, and a more general system malfunction.

The risks do not end here. Over time, encrusted deposits can indeed degenerate, causing corrosive effects that alter the geometry of the surfaces and compromise the operation of pumps and valves.

In the most severe forms, degeneration can even lead to metal components and pipes breaking. Do not forget that the accumulated dirt tends to adhere progressively

to the valve seats, causing imbalances as well as drastically reducing the exchange surface of the heat exchangers and significantly limiting the flow rate.

Faced with the constant risk of a compromised system, in which simple management and maintenance are hindered and climatic comfort and energy savings put at risk, **RBM has carried out real specialised research in the field of magnetic filtration.**

Objective: to solve the problem upstream, developing individual performing components, designed according to specific needs and **intended to restore and maintain the utmost effectiveness and efficiency of every system.**



Scan the qr code and **discover the magnetic filtration range**

Advantagest

of using an RBM magnetic filter



IT FIGHTS CORROSION
OF THE SYSTEM



REMOVES
ALL IMPURITIES



EXCELLENT HYDRAULIC
PROPERTIES



SIMPLE INSTALLATION
AND MAINTENANCE



MAINTAINS OPTIMUM
SYSTEM EFFICIENCY



EXTENDS THE LIFESPAN
OF THE HEAT GENERATOR



Magnetic filters **for heat pumps**

MP1

Magnetic sludge remover filter for heat pumps

MP1 is a magnetic sludge remover filter for heat pumps, **complete with an integrated shut-off device and a discharge ball cock.**

- High performance technopolymer body
- AISI 304 stainless steel reinforced filtering cartridge
- Elastomer hydraulic seals
- Union threaded connections MM UNI-EN-ISO 228
- Max operating pressure 6 bar
- TOperating temperature 0 to +90 °C
- Neodymium magnet B = 11000 gauss
- Filtering grade 800 µm

Features:

- **Very low pressure drops**
- Direct filtration with an **800 micron mesh** (other degrees of filtration available, up to 100 micron)
- **Extra connections** for temperature and/or pressure probes
- **Insulation** (optional)



Size	Kv (m³/h)
G 1"	17.3



View MP1
product data sheet



Discover MP1
with **augmented reality**



Removes all impurities

Self-cleaning

Excellent hydraulic properties

Extends the lifespan of heat pumps

Fights corrosion

Maintains optimum system efficiency

Complete with integrated shut-off device and discharge ball cock

MP2

Compact magnetic sludge remover filter for heat pumps

MP2 is a compact magnetic sludge remover filter for heat pumps, **complete with removable magnet and discharge ball cock**.

MP2 is **particularly suitable for protecting the heat pumps used in domestic systems**. The built-in total passage shut-off system makes the installation overall dimension very small.

- High performance technopolymer body
- AISI 304 stainless steel reinforced filtering cartridge
- Elastomer hydraulic seals
- Max operating pressure 6 bar
- Operating temperature 0 to +90 °C
- Neodymium magnet B = 11000 gauss
- Filtering grade 800 m

Features:

- **Very low pressure drops**
- Direct filtration with an **800 micron mesh** (other degrees of filtration available, up to 100 micron)
- **Extra connections** for temperature and/or pressure probes
- **Insulation** (optional)



View MP2
product data sheet



Discover MP2
with **augmented reality**



Size	Kv (m ³ /h)
G 1"	10.73



Removes all impurities

Self-cleaning

Excellent hydraulic properties

Extends the lifespan of heat pumps

Fights corrosion

Maintains optimum system efficiency

Complete with integrated shut-off device and discharge ball cock

Magnetic filters **for boilers**

MG1

Compact magnetic sludge remover filter

MG1 represents the best solution to solve plant problems due to particle pollution, especially rust and sand that are formed due to corrosion and scale during the normal operation of a system.

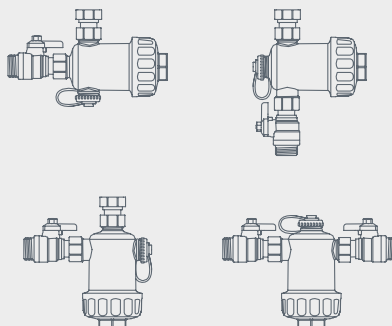
By going through a set course, the fluid is forced to cross the many areas that modify its motion and filter its content.

Thanks to its **compact dimensions**, MG1 is perfect when the boiler to be protected is installed in a kitchen cabinet or where installation spaces are very limited and there is no room for other dirt separators. Through its **effective and constant action**, this magnetic filter collects all the impurities present in the system, preventing them from circulating, **avoiding wear and damage of the circulator and the heat exchanger.**

It is advised to install MG1 on the return circuit, at the inlet of the boiler, in order to protect it from any impurities in the system, especially during the start-up phase.



4 POSSIBLE INSTALLATIONS



Size	Kv (m ³ /h)
G 3/4"	5.49



View MG1
product data sheet



Discover MG1
with **augmented reality**



Supercompact

Removes all impurities

Fights corrosion

Increases the lifespan of the boiler

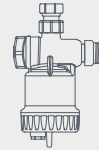
Maintains optimum system efficiency

MG2

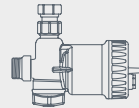
Compact magnetic sludge remover filter

Through its effective and constant action, the **MG2 magnetic filter collects all the impurities and prevents them from circulating, thus avoiding wear and damage of the rest of the components making up the system**, circulators and heat exchangers in particular. MG2 performs a continuous protective action on the boiler.

It is advised to install MG2 on the return circuit, at the inlet of the boiler, in order to protect it from any impurities in the system, especially during the start-up phase. Thanks to its **compact dimensions**, the MG2 magnetic filter finds application under boilers, in domestic installations, where installation space is very limited and prevents the installation of a conventional dirt separator.



VERTICAL ASSEMBLY



HORIZONTAL ASSEMBLY

Triple filtering action

Filtration occurs through three actions:

- 1 · The dirty water is conveyed around the central magnet which attracts the magnetic residues (**first magnetic filtration**)
- 2 · The water passes through the wire mesh (**mechanical filtration**)
- 3 · The water touches the external walls of the filter where it meets an 8-magnet crown (**second magnetic filtration**)



View MG2
product data sheet



Discover MG2
with **augmented reality**

Size	Kv (m ³ /h)
G 3/4"	4.65

+

Supercompact

Shut-off system included

Triple filtration: two magnetic filtrations and mechanical filtration

High efficiency

Removes all impurities

Fights corrosion

Increases the lifespan of the boiler

Maintains optimum system efficiency

SafeCleaner 2

Multifunction magnetic sludge remover filter for hydraulic circuits

SafeCleaner2 represents the best solution to solve plant problems due to particle pollution, especially rust and sand, that are formed due to corrosion and scale during the normal operation of a system.

Through its effective and constant action, the magnetic filter collects all the impurities present in the circuit and prevents them from circulating, avoiding wear and damage of all the components making up the system. The impurities caught by the filter build up on the bottom of it and are eliminated by simply opening the drain plug. This way, **all the magnetic** (ferrous residues) **and non-magnetic** (algae, sludge, sand) **contaminants** in the system **are removed**.

The large filtering chamber and large-mesh filter prevent clogging.

For more precise action, **the magnet holder cap can be removed completely, removing the filter mesh** to clean or replace it.



Size	Kv (m ³ /h)
G 3/4"	6.81
G 1"	7.51
G 1 1/4"	7.51



View SafeCleaner 2
product data sheet



Discover SafeCleaner 2
with **augmented reality**

Removes all impurities

Self-cleaning

Excellent hydraulic properties

Can be mounted on vertical, horizontal and diagonal piping

Increases the lifespan of the boiler

Fights corrosion

Maintains optimum system efficiency

Easy dosing of the treatment fluids with 0.5 l doses

Mag-nus 2

Self-cleaning magnetic sludge remover filter for hydraulic systems

Mag-nus 2 represents the best solution to solve plant problems due to particle pollution, especially rust and sand, that are formed due to corrosion and scale during the normal operation of a system.

The magnetic filter collects all the impurities present in the circuit and prevents them from circulating, avoiding wear and damage of all the components making up the system. The impurities caught by the filter build up on the bottom of it and can be eliminated by simply opening the drain valve. This way, **all the magnetic** (ferrous residues) **and non-magnetic** (algae, sludge, sand...) **contaminants** in the system **are removed**.

Thanks to the articulated part, Mag-nus2 can be installed on vertical, horizontal and diagonal pipes.



View Mag-nus 2
product data sheet



Discover Mag-nus 2
with **augmented reality**

Size	Kv (m ³ /h)
G 3/4"	9.50
G 1"	10.30

Removes all impurities

Self-cleaning

Excellent hydraulic properties

Can be mounted on vertical, horizontal and diagonal piping

Increases the lifespan of the boiler

Fights corrosion

Maintains optimum system efficiency

Limited overall dimensions



Dirterm Mag

Self-cleaning magnetic sludge remover filter

Dirterm Mag represents the best solution to solve plant problems due to particle pollution formed due to corrosion and scale during the normal operation of a system. Through its effective and constant action, it collects all the impurities present in the system (even very small which traditional purification filters are not able to eliminate), preventing them from circulating within it, avoiding wear and damage of all the components making up the system.

The impurities collected by the filter are accumulated at the bottom of the filter, and can be expelled through the opening of the drain valve.

RBM Dirterm Mag is also equipped with a powerful magnet capable of capturing ferrous particles formed by corrosion and fouling during normal system operation.

The **innovative cartridge** contributes to minimising the possibility of impurities running through and offers little resistance to the flow passage, characterised by very low head loss.



INNOVATIVE CARTRIDGE

Size	Kv (m ³ /h)
G 1/2"	7.40
G 3/4"	12.66
G 1"	20.44
G 1 1/4"	28.14
G 1 1/2"	44.45
G 2"	65.58



View Dirterm Mag product data sheet



Discover Dirterm Mag with augmented reality

Removes all impurities

Self-cleaning

Maintains optimum system efficiency

Magnetic

Bi-directional



MG Compact

Compact self-cleaning magnetic dirt separator-filter for boiler rooms

MG Compact solves plant problems caused by pollution from sand and rust particles formed by corrosion and scaling during the normal operation of a plant. Thanks to its powerful magnetic capacity, its size and the flanged connections, **MG Compact is used in industrial, commercial and medium and large-scale civil systems.** Through its effective and constant action, the filter collects all the impurities present in the circuit and prevents them from circulating, avoiding wear and damage of all the components making up the system. The impurities collected by the filter are accumulated inside of it.

By **opening the drain valve, an initial cleaning can be performed** by removing all magnetic (ferrous residue) and non-magnetic contaminants in the system.




Size	Kv (m ³ /h)
G 1/2"	5.50
G 3/4"	9.87
G 1"	16.59
G 1 1/4"	31.10
G 1 1/2"	50.60
G 2"	81.00



View MG Compact
product data sheet



Discover MG Compact
with **augmented reality**

Removes all impurities 

Self-cleaning

Maintains optimum system efficiency

Extends the lifespan of heat pumps

Application in industrial, commercial and medium and large-scale civil systems

Reinforced stainless steel filtering mesh with 100 micron filtering degree

Easily accessible dosing point

Limited overall dimensions

Reversible couplings

Option of in-line installation on a heating system

Reduced maintenance costs

Insulation casing available upon request

MG Plus

Compact self-cleaning magnetic dirt separator-filter for boiler rooms

MG Plus is the best solution for solving plant problems caused by sand particle pollution and rust, which forms as a result of corrosion and scaling, during the normal operation of a plant. Thanks to the **powerful magnetic capacity**, its **size** and the **flanged connections**, MG Plus is used in industrial, commercial and large-scale civil systems. Through its effective and constant action, the filter collects all the impurities present in the system, preventing them from circulating within it, thus avoiding wear and damage of all the components making up the system. The impurities collected by the filter are accumulated inside of it. By **opening the drain valve, an initial cleaning can be performed** by removing all magnetic (ferrous residue) and non-magnetic contaminants in the system.

Size	Kv (m ³ /h)
DN 50	14* - 23**
DN 65	35* - 46**
DN 80	42* - 57**
DN 100	55* - 73**
DN 125	100* - 131**
DN 150	141* - 173**

* Flow rate with 20 kPa pressure drop

** Flow rate with 30 kPa pressure drop



View MG Plus
product data sheet



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with **augmented reality**



Self-cleaning



Removes all impurities

Self-cleaning

Maintains optimum system efficiency

Extends the lifespan of heat pumps

Application in industrial, commercial and large-scale civil systems

Reinforced stainless steel filtering mesh with 100 micron filtering degree

Easily accessible dosing point

Limited overall dimensions

Reduced maintenance costs

Insulation casing available upon request

Discover the entire **RBM H2O LAB**
range for **water treatment**:



Anti **Limestone**

DP1
Polyphosphate Doser



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and **discover DP1**

Chemicals.



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RBM Chemicals range



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