

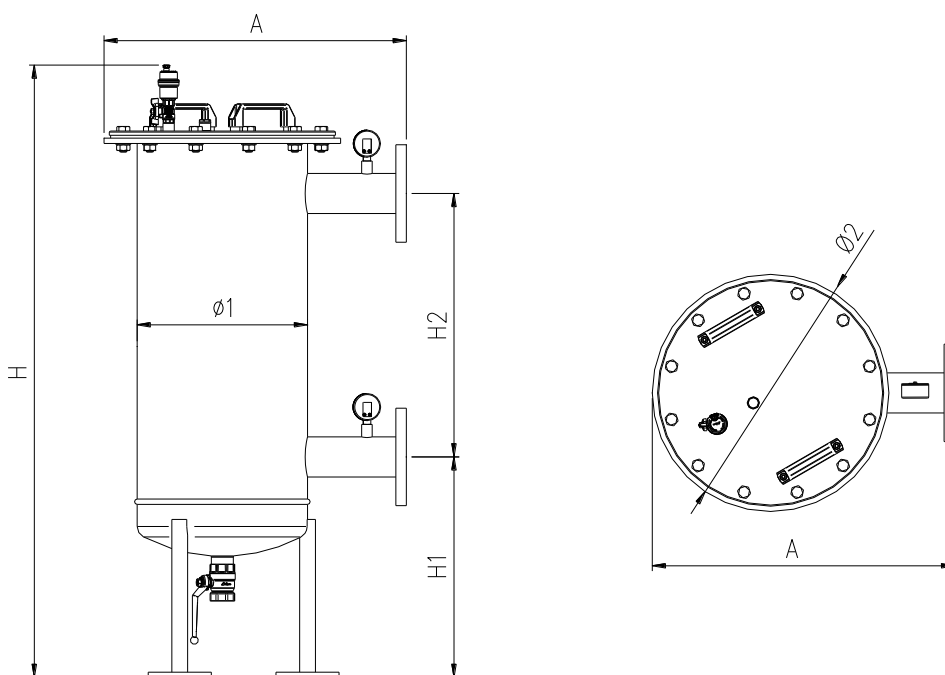
CONSTRUCTION FEATURES

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| <ul style="list-style-type: none"> • Main body and flanges: • Cover • Ball valve body and air vent valve • Seals: • Filtering basket: • Neodymium magnets: • Number of magnets: • Connections: • Pair of pressure gauges • Dosing point connection (to add treatment fluids) | <ul style="list-style-type: none"> Steel painted on the outside Stainless steel Brass EPDM PEROX AISI stainless steel B = 12,000 Gauss 4 Flanged PN16 Scale 0÷10 bar G 3/8" (plugged when supplied) |
|--|---|

TECHNICAL FEATURES

- | | |
|---|---|
| <ul style="list-style-type: none"> • Usable fluid: • Maximum fluid temperature: • Maximum operating pressure: • Degree of filtration: | <ul style="list-style-type: none"> Water
Water + Glycol 30% 95°C 10 bar (1000 kPa) 100 micron |
|---|---|

DIMENSIONAL FEATURES



Code	Size*	A [mm]	Ø 1 [mm]	Ø 2 [mm]	H1 ** [mm]	H2 [mm]	H ** [mm]
3541.09.10	DN50	473	220	346	385	450	1060
3541.10.10	DN65	575	324	450	419	500	1162
3541.11.10	DN80	575	324	450	419	500	1162
3541.13.10	DN100	575	324	450	419	500	1162
3541.14.10	DN125	656	406	532	435	550	1241
3541.15.10	DN150	656	406	532	450	550	1271

* Flanged connections - Flange suitable for coupling with counter-flange UNI EN 1092-1.

** Minimum value (adjustable by means of feet supplied with the filter, extendable to approximately 200 mm).

OPERATING PRINCIPLE

By going through a set course, the fluid is forced to enter the filtering chamber where, through the simultaneous action of:

- filtering cartridge
- magnet
- specific dimensioning of the filtering chamber section

the water full of debris is suitably filtered.

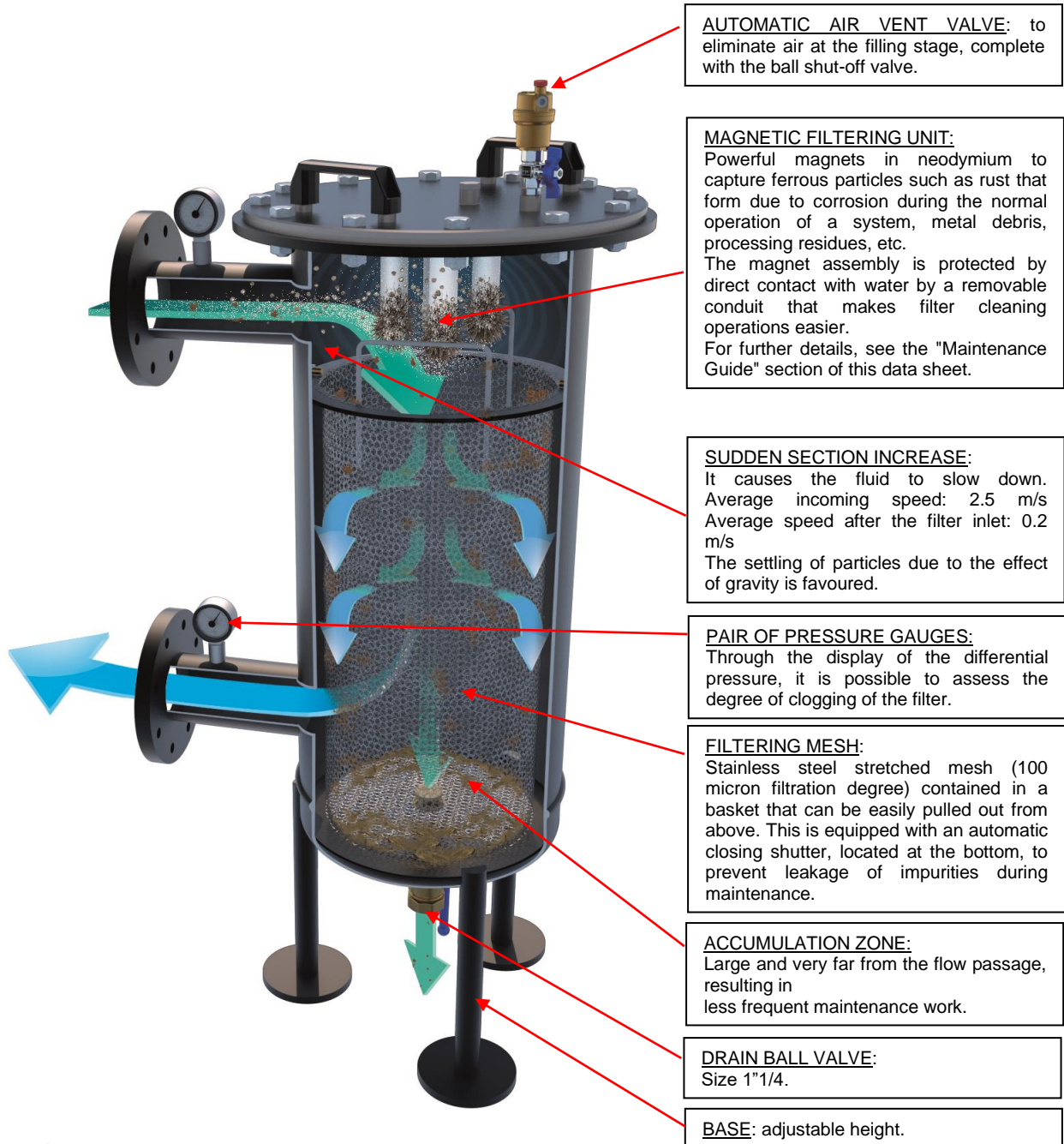
The first action that promotes correct filtration is the sudden cross-section variation (the filtering chamber has a much greater diameter than the conduit), which slows down the fluid motion and, consequently, the entrainment rate of the particles suspended in it.

The heavier particles fall downwards due to gravity, which prevails over the drag force, giving this filter the typical properties of common dirt separators.

However, lighter particles (larger than 100 microns) are retained inside the basket thanks to a direct filtration effect.

The magnets, positioned at the top end of the filter itself, block all impurities with magnetic characteristics (ferrous residues, metallic sludge).

This way, all the magnetic (ferrous residues) and non-magnetic (sludge, sand, etc.) contaminants in the system are removed.



MAINTENANCE GUIDE

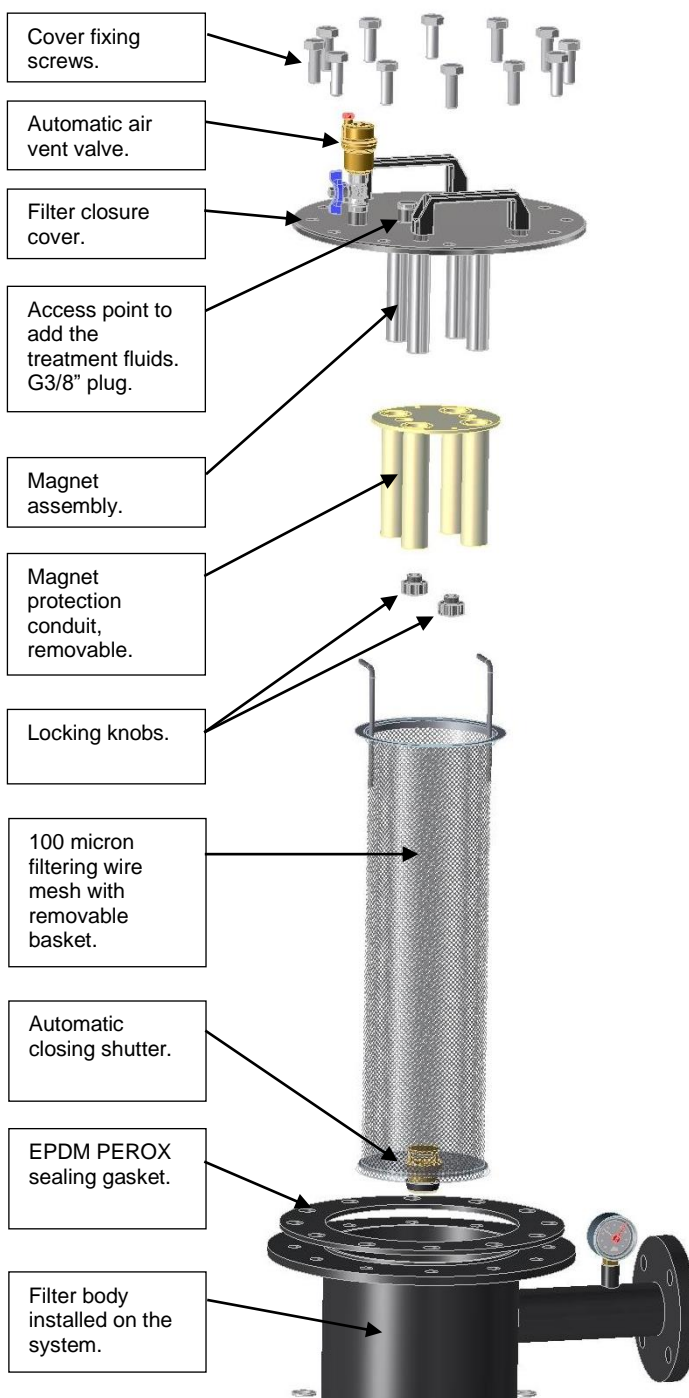
It is important to **perform the cleaning operation** at least **once a year**. In case of first application, perform the first inspection after a month.

Before cleaning *MG Plus*, ensure the working environment is safe.

If the filter has not been installed with a bypass, RBM recommends ensuring the generator is off and the system is allowed to cool at a room temperature before carrying out any maintenance intervention, in order to avoid damages and burns. In the case of a filter installed with a bypass, simply wait until the water contained in it has cooled down sufficiently.

To properly clean and service *MG Plus*, follow the steps described below:

- Intercept the filter through the valves located upstream and downstream of the filter itself;
- Drain a small amount of water in the filter via the lower drain valve to lower the pressure in the filter;
- Unscrew the nuts and remove the screws securing the upper filter cover to the body;
- Remove the closure cover from the filter by ensuring you do not damage the magnets attached to it;
- Unscrew the two locking knobs of the magnet protection conduit;
- Remove the magnet protection conduit to easily remove the ferrous impurities caught by magnets. Wash with water and thoroughly rinse to completely remove any impurities;
- Take out the filter wire mesh by using the designated basket and clean it or replace it. The automatic closing shutter on the bottom prevents impurities from entering inside the basket. Wash with water and thoroughly rinse to completely remove any impurities;
- Ensure the sealing gasket is not damaged; if necessary, replace it;
- Place back the filter wire mesh;
- Place back the magnet protection conduit and tighten the two fastening knobs. - Tighten by hand; during this operation, the use of tools is not required
- Place back the top cover of the filter, the screws and tighten the fastening nuts;
- Open the shut-off valves again to open the hydraulic system;
- Ensure there are no leaks prior to recommissioning;
- Restoring the correct amount of conditioning chemicals according to the amounts required by the design engineer



SPECIFICATION ITEMS

3541 SERIES

Magnetic self-cleaning multifunctional magnetic filter-dirt separator for boiler rooms, model *RBM MG Plus*, with magnetic and non-magnetic dirt separation function, air separation and activation point, as well as system conditioning dosage. Complete with automatic air vent valve with shut-off device, ball valve to discharge impurities and a pair of pressure gauges 0÷10 bar. Main body and flanges made of steel painted on the outside. Steel closure cover. EPDM PEROX hydraulic seals. Large-capacity filtration basket with filtering mesh with a 100 micron filtration degree extended across the whole surface with double stainless steel reinforcement mesh (external and internal). Automatic closing shutter at the bottom, to prevent leakage of dirt during maintenance. Permanent neodymium magnets, with dry assembly, externally protected by a removable conduit for easy maintenance and cleaning of the filter. Magnetic field B=12.000 gauss. Number of magnets: 4. PN16 flanged connections. The fluid can be used with water and water with glycol (30%). Maximum operating pressure 10 bar. Maximum fluid temperature 95°C. Degree of filtration 100 micron. Available sizes DN50÷DN150.



RBM spa reserves the right to improve and change the described products and related technical data at any moment and without prior notice: always refer to the instructions attached with the supplied components; this sheet is an aid, should the instructions be extremely schematic. Our technical department is always at your disposal for any doubt, problem or clarification.

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