

# Mag - Filter

Brass Hydro-Cyclonic  
Magnetic Filter



25 YEARS  
GUARANTEE



**POWERFUL  
NEODYMIUM  
MAGNET**  
10.500+ Gauss

**360° ROTATING  
TEE FITTING**  
Vertical and Horizontal  
Connection Pipework  
3/4", 1" and 1 1/4"

**STAINLESS STEEL**  
Filtering Cartridge  
AISI 304



**TRANSPARENT  
POLYSULFONE**  
Cover for visual  
control

**BF Brass Form**

PRODUCTION OF HEATING AND PLUMBING VALVES

## SPECIAL FEATURES

Operating Temperature	0 - 95°C
Maximum Operating pressure	10 bar (code. 2421) 6 bar (code. 421)
Compatible Fluid	water, water & glycol
Magnets	x3 - 10.500+Gauss
Filter Cartridge	400 µm
Chamber capacity	380 ml
Connections	ISO 228



### BRASS

CODE	DN	CONNECTIONS	GUARANTEE
2421	20	3/4" - fem.	25 years
2423	20	3/4" - male	25 years
2432	25	1" - fem.	25 years
2433	25	1" - male	25 years
2411	32	1 1/4" - male	25 years



### TRANSPARENT

CODE	DN	CONNECTIONS	GUARANTEE
421	20	3/4" - fem.	10 years
423	20	3/4" - male	10 years
432	25	1" - fem.	10 years
433	25	1" - male	10 years

Air vent

Neodymium  
Magnet  
10.500+  
Gauss

Effective Dirt  
Collection

Stainless  
Steel Filter

Visual  
Control

Fast & effective  
dirt drain

# Mag - Filter

Brass Form Mag Filter is the ideal solution for Gas installations for wall mounted natural gas or liquefied petroleum gas boilers (with a cluster of propane cylinders or tanks in areas where is no natural gas network), and for heating installations. It provides complete

**(1) With the action of a powerful neodymium magnet**

**(2) and stainless-steel filter**

protection by effectively combining two stages of cleaning with the action of a powerful neodymium magnet and stainless-steel filter to trap and remove both the metallic particles circulating in the water of the closed system before damaging the boiler.



**ATTENTION:** The symbol reference to present of powerful magnetic field. This equipment can produce pulsed magnetic fields and at close proximity which may affect implanted medical devices.

## Powerful Neodymium magnet

The circulating impurities such as rust and sand that are formed due to corrosion are effectively collected especially during start up phase preventing wear and damage of the boiler and the heat exchanger.

It can be installed in horizontal or vertical pipelines thanks to the 360° rotation of the T-fitting with various connection modes. The detachable magnet located inside the hydro-cyclonic flow chamber holds effectively all the metal particles.

The liquid then passes through the stainless filter, which traps all the non-metallic impurities remaining and retained in the bottom of the chamber and are ready to be removed by the opening of discharge tap at the bottom of the filter.

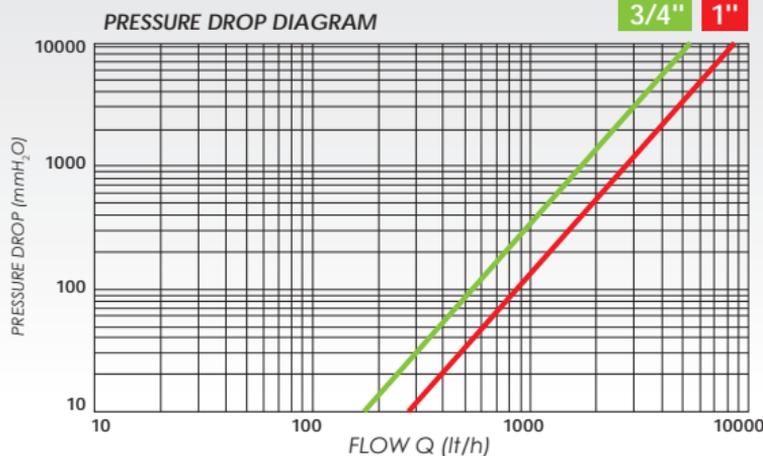
## Stainless Steel Filter

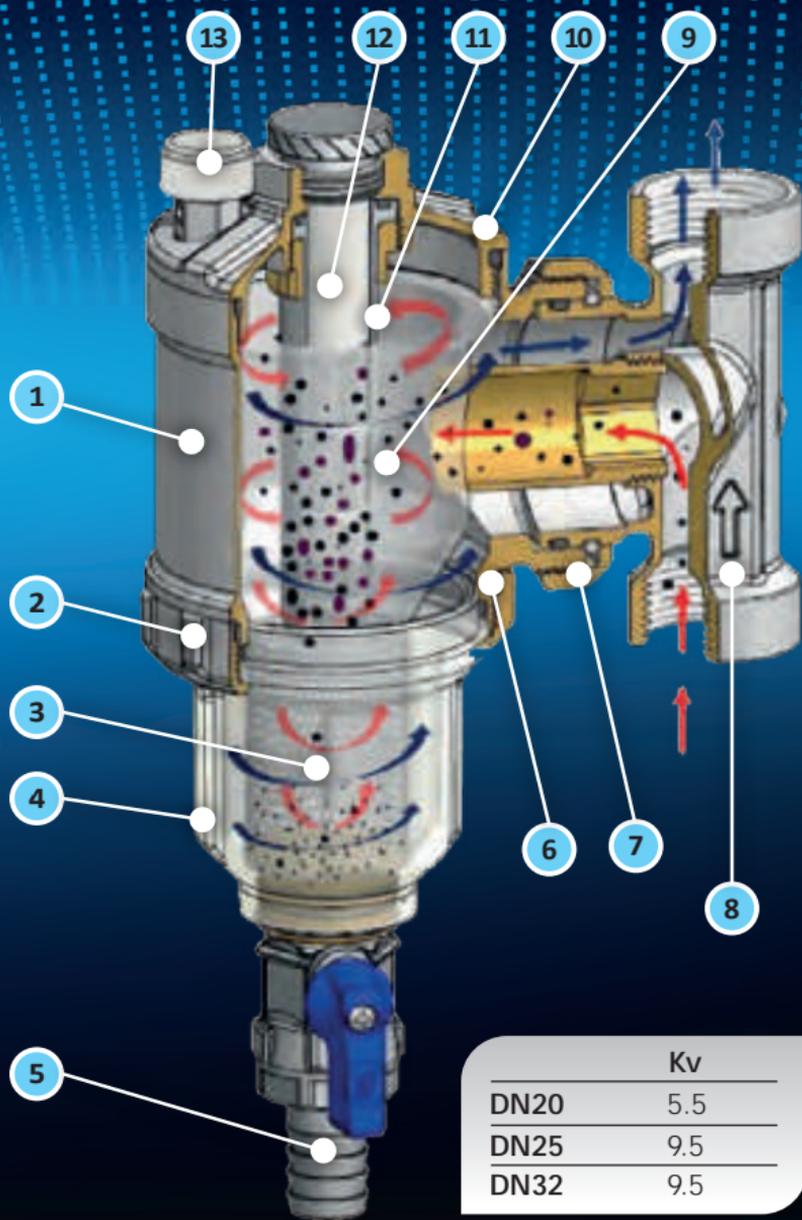
The ideal design of the filter does not prevent the flow of the system (low pressure loss) and through the cyclonic action and the large volume of the chamber, the cleaning frequency decreases as the particles slow down when entering the filter chamber and are easier to attach to the magnet.

At the same time, the built in vent on the top of the magnetic filter provides the possibility of venting the air (microbubbles) trapped in the installation.

## TECHNICAL FEATURERS

- 1 **Main Body** Brass (cw617N)
- 2 **Locking nut for dirt separator cover** Brass (cw617N)
- 3 **Filter Cartridge** Inox AISI304
- 4 **Clean Cover** Polysulfone (PSU)
- 5 **Drain Ball Valve with hose connection**  
Brass (cw617N)
- 6 **Orings** x 6 NBR
- 7 **Swivel connection for T-Fitting** Brass (cw617N)
- 8 **360° Rotating Tee Fitting** Vertical and Horizontal  
Connection Pipework 3/4", 1" and 1 1/4"
- 9 **Hydro-Cyclonic chamber** PPR
- 10 **Top plug** Brass (cw617N)
- 11 **Magnet Housing** Polymer PPR
- 12 **Magnets** 3 x Neodymium N48, 10.500+ Gauss
- 13 **Air Vent** Brass (cw614N)





	Kv
DN20	5.5
DN25	9.5
DN32	9.5

MIRTEC's Electrotechnical Products Testing Laboratories

## CERTIFICATE OF MAGNETIC FIELDS MEASUREMENTS

CERTIFICATE NUMBER : MIR-HOUS-C-312-2018

DATE OF ISSUE : SEPTEMBER 18, 2018

ISSUED TO : BRASS FORM SA

TEST ITEM : MAGNETIC ARRAY FOR MAGNETIC DIRT SEPERATION

TYPE/MODEL : THREE PART MAGNETS ARRAY

MANUFACTURER : BRASS FORM SA

EQUIPMENT USED : Hall Effect Gaussmeter SYPRIS 6010

STATEMENT : BASED ON LAB MEASUREMENTS PERFORMED IN OUR LABORATORY FROM 14 UP TO 17 OF SEPTEMBER 2018, THE MAGNETIC FIELDS MEASUREMENTS OF THE TESTED ITEMS HAVE AS FOLLOWS:

A. - MAXIMUM POSITIVE MAGNETIC FIELD 10.71 kG

B. - MAXIMUM NEGATIVE MAGNETIC FIELD -10.53 kG

**GENERAL REEMARKS:**

- The test results apply only to the particular samples for which the test Report, S/N 100312 dated September 17, 2018 was issued.
- This certificate applies up to September 17, 2021.



KONSTANTINOS KARINIOTAKIS  
 ELECTRICAL ENGINEER MSc, EE  
 DIRECTOR

Signed: \_\_\_\_\_



MIRTEC ATHENS LABORATORIES  
 K. KARINIOTAKIS  
 ELECTRICAL ENGINEER MSc, EE  
 CERTIFICATION MANAGER

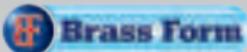
Date of issue: September 18, 2018

**MIRTEC's Electrotechnical Products Testing Laboratories**  
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 TEL.: +30-210-228.37.57 – FAX: +30-210-577.05.56  
 e-mail: [electrotechnical.labs@mirtec.gr](mailto:electrotechnical.labs@mirtec.gr), website: [www.mirtec.gr](http://www.mirtec.gr)

SERIAL NUMBER:

100312

18. SERIAL NUMBER REPORT.....:



19. NUMBER OF SAMPLES.....: One (1)

20. DELIVERY DATE.....: 20/07/2018

21. TESTING PERIOD.....: From 14/09/2018 until 17/09/2018

22. PURPOSE OF MEASUREMENT.....: MAGNETIC FIELD MEASUREMENT IN THE MAGNET ARRAY  
TO THE POLLS AT THE NEAREST POINT OF THE MAGNET  
(SEE PARAGRAPH 28)

23. EQUIPMENT USED.....: Hall Effect Gaussmeter SYPRIS 6010 EBE-4067  
Range Of Measurement: 1 mG (0,1  $\mu$ T) - 30 kG (3 T).  
Precision: DC 0,25% AC 1% .

24. MEASUREMENT UNIT.....: Gauss.

25. ATTACHMENTS:

EBEA CERTIFICATE WITH PROTOCOL NUMBER 312 DATED 30-8-2018 PAGES: 2  
TOTAL PAGES ATTACHED: 2

26. RESULTS AND FINDINGS:

See measurement table paragraph 28

27. NOTES:

Based on lab measurement performed in our laboratory from 14 up to 17 of September 2018,  
the magnetic fields measurement of the tested items are as follows.

- A. Maximum positive magnetic field 10.71 kg
- B. Maximum negative magnetic field -10.53 kg



## ANNEX EBE-200-3

Page: 3/6

SERIAL NUMBER:

100312

## 28. MEASUREMENT TABLES:

MAGNETIC FIELD MEASUREMENT	Max Positive Magnetic Field kG	Max Negative Magnetic Field kG
MAGNETIC FIELD A!	--	-10,71
MAGNETIC FIELD B!	10,53	--



FIELD A!



FIELD B!



SERIAL NUMBER:

100312



29. TEST PHOTOS



Image No.1

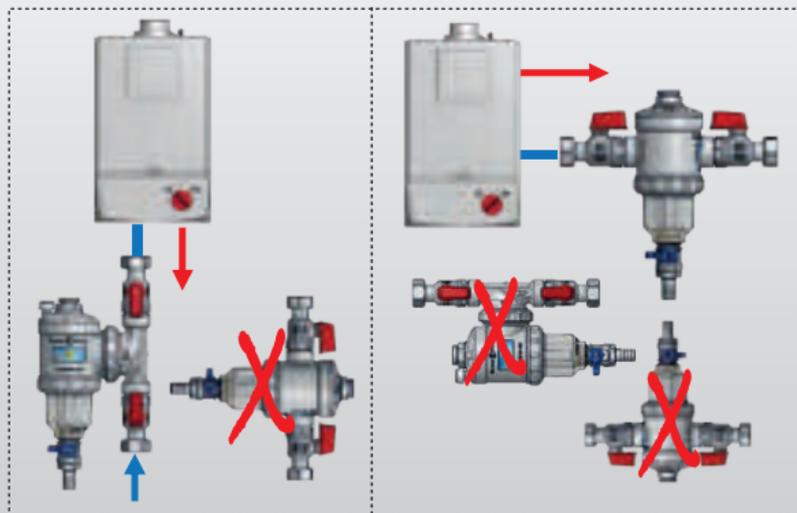


Image No.2



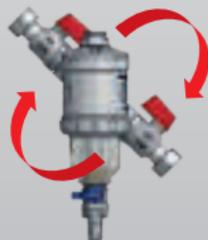
## INSTALLATION

The filter must be installed in the circuit according to the flow direction of the arrow on the brass body of the T-fitting. It is recommended to be placed in the return of the heating network, before the boiler or the heat pump, in order to protect it from residues. It should always be placed in a vertical position with the discharge tap looking downwards.



360°

Optional  
Rotation



## OPTIONAL EQUIPMENT

with other **Brass Form** products

### DN15 3/4" non fixed fitting



x 3/4" female

CODE **133**

x 3/4" male

CODE **143**

x 24x19

CODE **153**

x press16/18/20

CODE **462/  
482/420**



DN20 3/4"

fast connection

CODE

DN25 1"

fast connection

**112/1112**



Connections 3/4"  
(fem. & male.)

CODE

**301/302**

x Ø22x3 PEX

Connections 3/4"  
(fem. & male.)

CODE

**352/351**

x Ø22 brass

## MAINTENANCE

Particle concentration on the filter reduces water supply to the plant while cleaning serves for proper circuit operations as well as a longer service life of the installation and the boiler. The design of the Magnetic filter makes maintenance and cleaning extremely fast and accessible from two points. Disassembly the brass or transparent collection container at the bottom and to clean the stainless filter and the residual compartment and disassembly the top cap for a complete cleaning of the cyclonic flow chamber. Moreover, through the ventilators position on the top of the product it is possible to infiltrate liquid chemical cleaners for the complete cleaning and protection of the circuit. Before unscrewing the ventilator, make sure to isolate the magnetic filter from the circuit by closing the shut-down switches (1&2) and to unfold the magnetic filter from the drain.

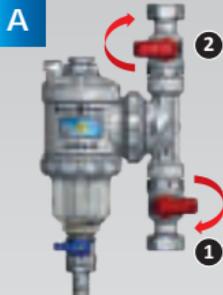
### ATTENTION:

*To avoid any leakage, it is recommended that maintenance and cleaning works should be carried out by an authorized plumber.*

*The boiler should be out turned off and the fluid inside the circuitry must reach room temperature to avoid burns.*

**OFF**

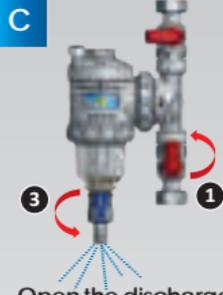
## Deactivate the Boiler



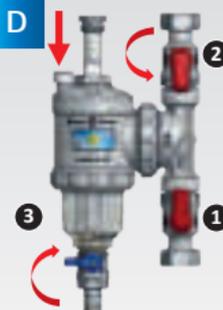
A Turn off switches (1) and (2).



Unscrew and remove the magnet to demagnetize the particles.



Open the discharge tap (3) and the intake switch (1) for complete cleaning.



Close the discharge tap (3), replace the magnet and then open the switches (1 and 2) to restart.



When you initiate the circuit, open the exhaust air vent (4) to release the air



Remove the collection container and clean it.

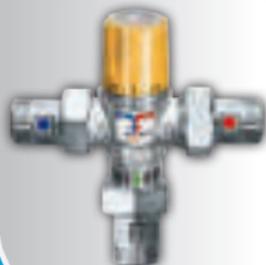
## Activate the Boiler

**ON**

1662



6012



690



716



900



3920

714



211



816



811

2252

