TECHNICAL CATALOGUE

# MAGNETIC DIRT SEPARATORS



# ITAP AT A GLANCE

## THE COMPANY

ITAP SpA, founded in Lumezzane (Brescia) in 1972, is currently one of the leading production companies in Italy of **valves, fittings and distribution manifolds** for plumbing and heating systems.

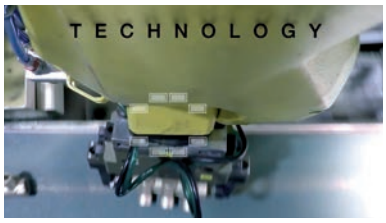
Thanks to a fully automated production process, with 85 transfer machines and 55 assembly lines, it is capable of producing 400,000 pieces per day.

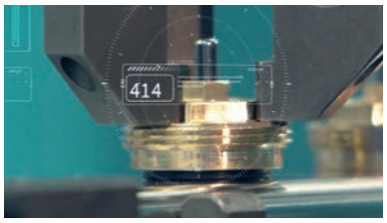
Our innate pursuit for innovation and observance of technical regulations is supported by the company certification ISO 9001. The company has always considered its focus on quality as the main tool to obtain significant business results: today ITAP SpA is proud to offer products bearing the approval of numerous international certifying bodies.

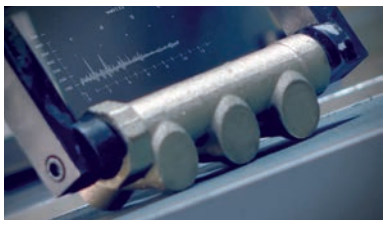








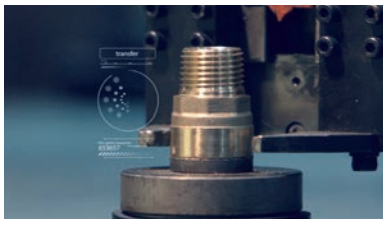



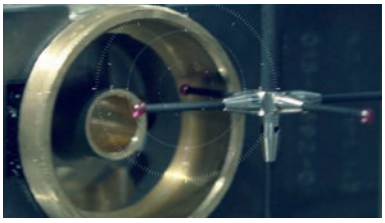


















## ITAP products have obtained approvals by more than 30 certification bodies from all over the world.

## 188 Magnetic compact dirt separator I-Mag

MAGNETIC COMPACT DIRT SEPARATOR
Dirt separators are by now common components in Euroapen installations; ITAP introduces today iMAG, after accurate market studies and projects that guarantee the best features:
• right dimension for installations in small spaces, perfect for under-boiler;
• stainless steel strainer (800µm), perfect to stop the larger impurities;
• suitable for vertical and horizontale installations, with the best filtration guaranteed;
• strong magnet (12.000G) with large contact surface to stop every iron particle and easy-to remove to avoid disassembling before cleaning;
• large debris collection capacity to guarantee the water slowing in order to stop all impurities.

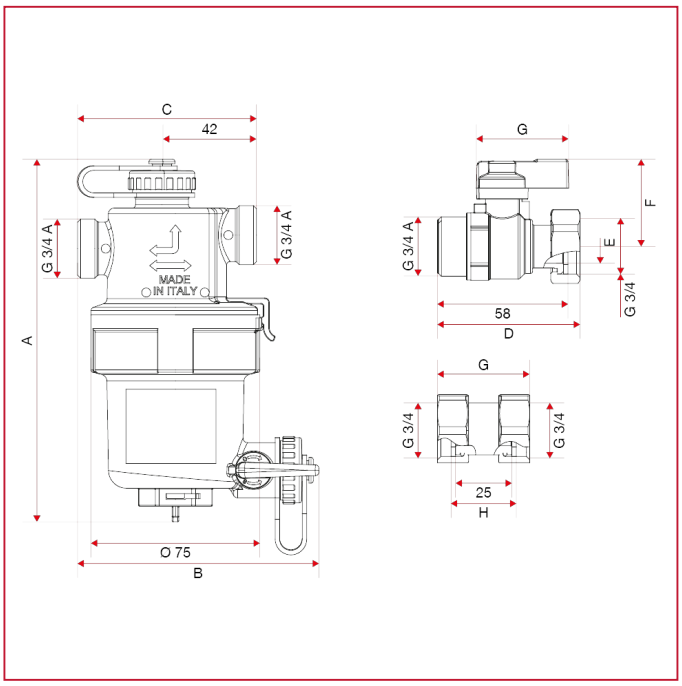


| MEASURE | PRESSURE | CODE | PACKING |
|---|---|---|---|
| 3/4" | 3bar/43,5psi | 1880034 | 1/11 |

**TECHNICAL SPECIFICATIONS**
Polymer body.
Stainless steel AISI 304 cartridge
Neodymium magnet: 12000 G.
Maximum working pressure: 3 bar.
Maximum working temperature: 90°C.
Equipped with adjusting female fitting and ball valve with swiveling nut.
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).

# MAGNETIC DIRT SEPARATORS

## OVERALL DIMENSIONS




| | 3/4" |
|---|---|
| A | 161 |
| B | 107,2 |
| C | 79,5 |
| D | 63,3 |
| E | 15 |
| F | 38,75 |
| G | 41 |
| CH | 29 |
| Kg/cm2 bar | 3 |
| LBS - psi | 43,5 |

# MAGNETIC DIRT SEPARATORS

## INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE



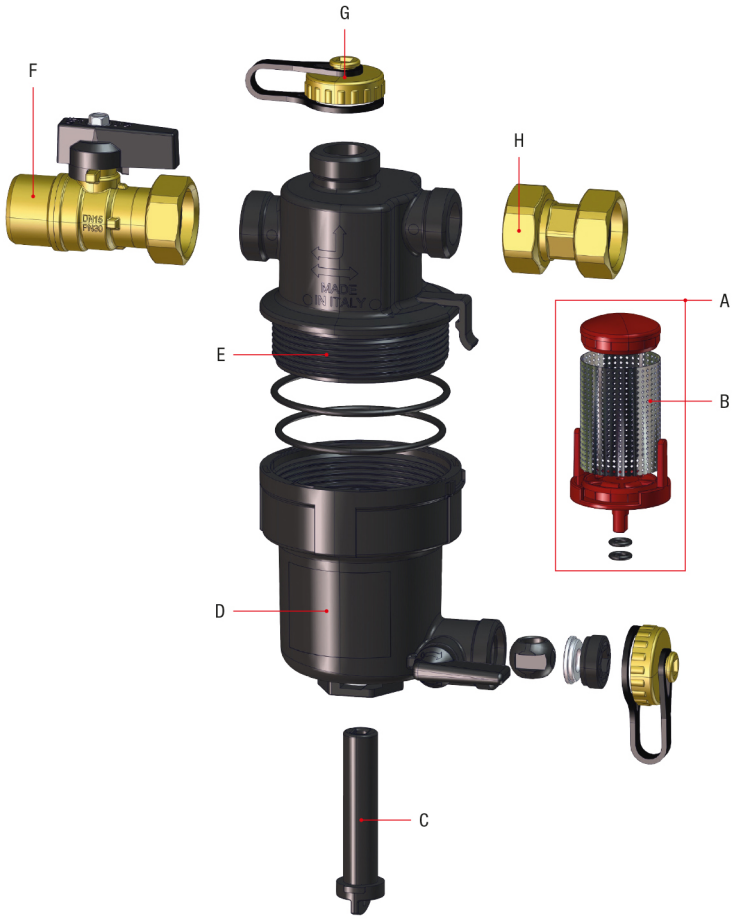
IMPORTANT. MAGNETIC FIELD
Keep the magnet away from pacemakers, electromedical equipment, electronic equipment in general, magnetic cards, etc. since it could damage them or interfere with their operation.



IMPORTANT. HIGH TEMPERATURE FLUID
Burn hazard. Before proceeding with installation and maintenance, make sure that the water in the system is at room temperature.

TECHNICAL DATA
Magnet: neodymium (12000G)
Stainless steel cartridge filtration rating: 800 µm
Compatible fluids: water; water + glycol 50% max
Max pressure: 3 bar
Max flow rate: 1.5 m3/h
Temperature: 0 - 90°C
Connections: 3/4” M x 3/4” F

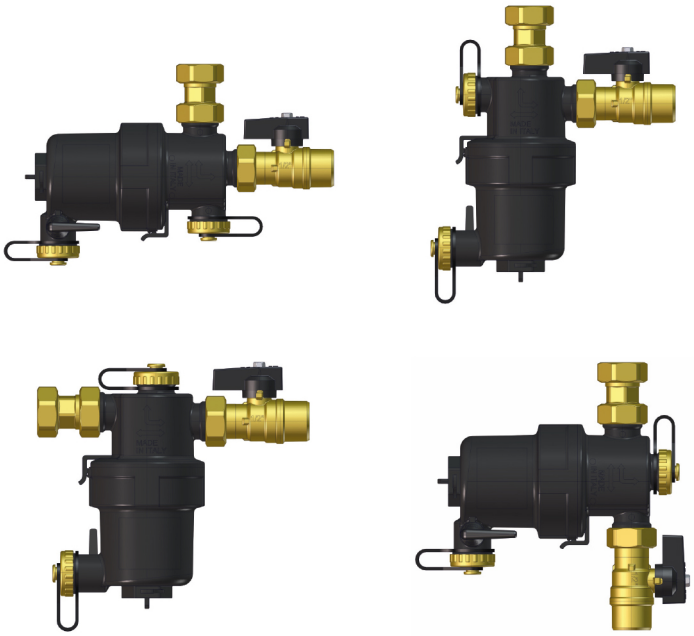
DESCRIPTION



# MAGNETIC DIRT SEPARATORS

A - Filter insert
B - Steel mesh
C - Magnet
D - Cup
E - Body with threaded fittings with double o-rings
F - Shut-off valve (heating system side)
G - Cap
H - Swivel fitting (boiler side)

MOUNTING POSITIONS



The I-MAG can be installed horizontally or vertically, due to its T fitting and special design. It is the only desludger allowing perfect filtration and cleaning in all positions and it is particularly easy to use.

INSTALLATION INSTRUCTIONS
- The dirtseparator should be installed on the generator's return line.
- Use a 29 mm wrench to loosen the cup when required for extraordinary maintenance.
- Perform routine cleaning one month after initial installation. Perform routine cleaning operations twice thereafter during the season when the heating system is in use. In order to do so, remove the magnet by turning it 90° towards the opening as shown by the arrow (clockwise), open the integrated drain valve for a few seconds so that any impurities in the large sludge chamber will drain out.

INSPECTION, CLEANING AND MAINTENANCE



IMPORTANT. Before you inspect, clean or service the device, shut the generator off, close the shut-off valves upline of the desludger and wait for all parts to cool down.

Clean the device as follows:
1. Close the shut-off valve upline of the desludger.
2. Extract the magnet by turning it 90° clockwise, allowing any debris to detach and deposit on the floor of the chamber.

3. Undo the cap covering the drain valve.
4. Connect a drain hose to the drain valve or place a container under it.
5. Open the drain valve by turning its lever.
6. Wait a few seconds, then slightly open the shut-off valve upline of the device to allow the washing water to flow through it and drive out the debris.
7. Once you have purged the device, close the upline shut-off valve and the drain valve, remove the hose or container, and restore the bottom cap.
8. Restore the magnetic insert to its seat by turning it 90° counter clockwise and re-open the shut-off valve.

The device should be cleaned at the following intervals:
- 1 month after initial installation;
- twice a year thereafter during the winter.

However, the cleaning interval must be suited to the characteristics of the system.




Closing the shut-off valve.



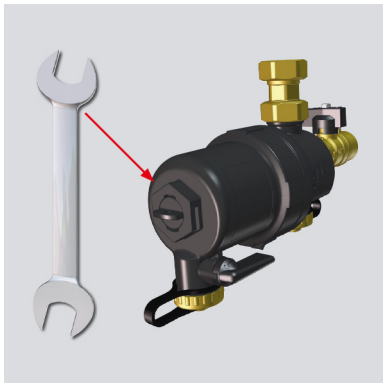

Removing the magnet (turn it 90° clockwise)




Opening the drain valve




After a few seconds, open the upline shut-off valve slightly to wash out the interior of the unit.



To inspect the desludger completely or clean/replace the filter cartridge, you can remove the cup completely with a normal CH 29 wrench. Lubricate the o-rings with EPDM compatible grease.

N.B.: ALWAYS REMOVE THE MAGNET BEFORE YOU REMOVE OR RESTORE THE COMPONENTS

## 188SR Magnetic dirt separator Imag-XL

MULTIFUNCTION MAGNETIC DIRT SEPARATOR
• VORTEX ACTION
• MAGNETIC ACTION
• STRAINER ACTION

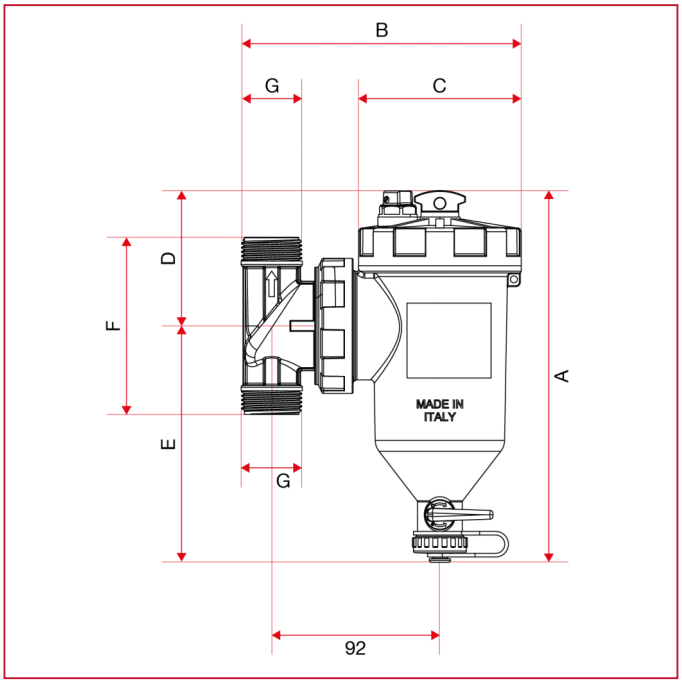



| MEASURE | PRESSURE | CODE | PACKING |
|---|---|---|---|
| 1" | 3bar/43,5psi | 1880100SR | 1/3 |

### TECHNICAL SPECIFICATIONS

Polymer body.
Stainless steel AISI 304 cartridge
Neodymium magnet: 14000 G.
Maximum working pressure: 3 bar.
Maximum working temperature: 90°C.
Threads body: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228);

### OVERALL DIMENSIONS



# MAGNETIC DIRT SEPARATORS

| | 1" |
|---|---|
| A | 203,5 |
| B | 153,3 |
| C | 89 |
| D | 74,1 |
| E | 129,4 |
| F | 97 |
| G | 1" |
| Kg/cm2 bar | 3 |
| LBS - psi | 43,5 |

**INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE**



IMPORTANT. MAGNETIC FIELD
Keep the magnet away from pacemakers, electromedical equipment, electronic equipment in general, magnetic cards, etc. since it could damage them or interfere with their operation.

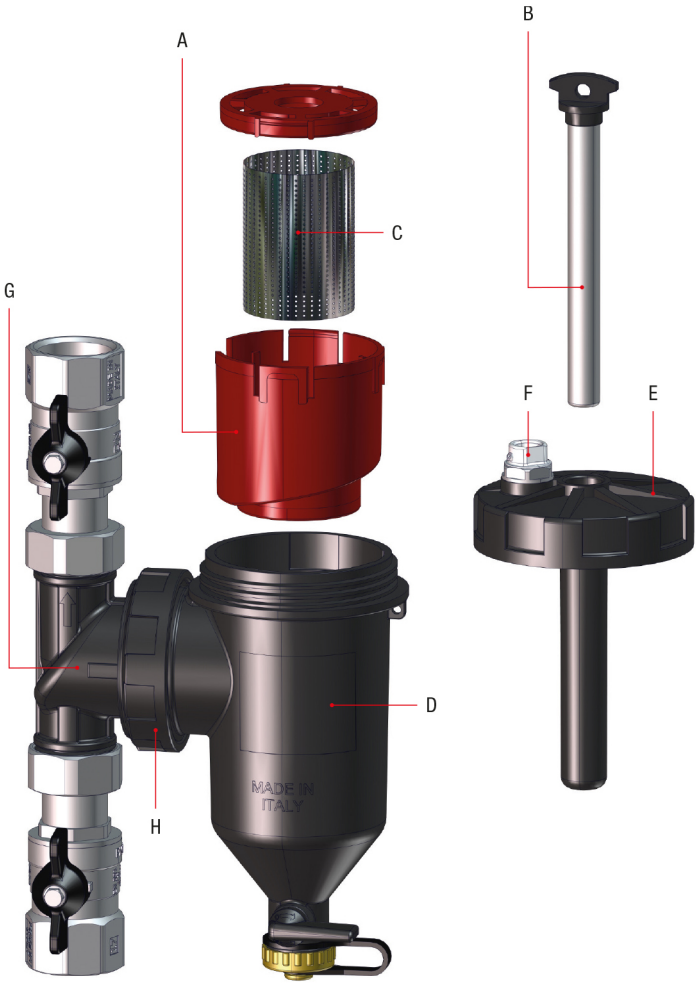


IMPORTANT. HIGH TEMPERATURE FLUID
Burn hazard. Before proceeding with installation and maintenance, make sure that the water in the system is at room temperature.

TECHNICAL DATA
Magnet: neodymium (14000G)
Stainless steel cartridge filtration rating: 500 µm (pre-installed) - 800 µm (supplied in package)
Compatible fluids: water; water + glycol 50% max
Max pressure: 3 bar
KV: 6,3 m3/h
Temperature: 0 - 90°C
Body connections: ISO 228 1” M

DESCRIPTION

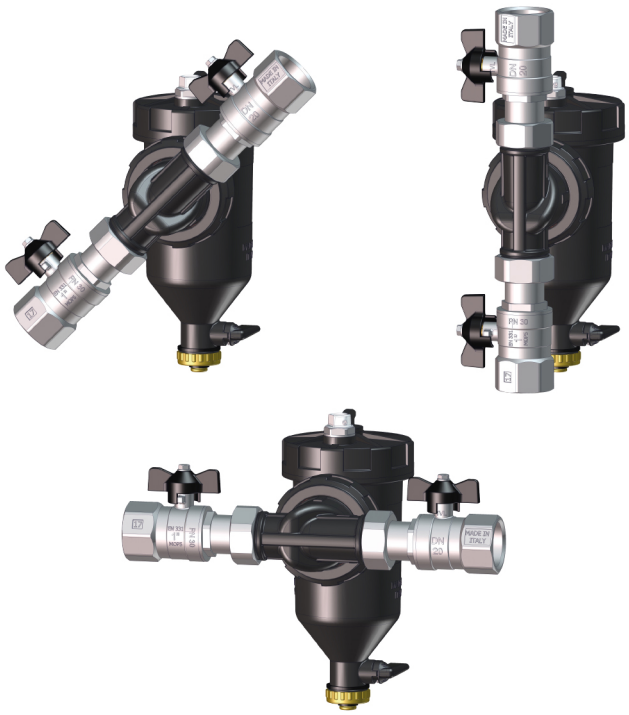
# MAGNETIC DIRT SEPARATORS




A - Cyclonic insert
B - Magnet
C - Filter cartridge
D - Body
E - Top cap
F - Manual air bleed valve
G - T-junction
H - Locking collar

MOUNTING POSITIONS

# MAGNETIC DIRT SEPARATORS



The IMAG-XL can be installed horizontally, vertically or at an angle, due to its swivel fitting and locking collar connecting it to the line.

INSTALLATION INSTRUCTIONS
- The dirtseparator should be installed on the generator's return line.
- Always use the provided wrench to loosen or tighten down the locking collar and the cap.
IF THE FLUID IS HEAVILY SOILED, WE RECOMMEND USING THE 500 µm FINE MESH FILTER TO WASH THE SYSTEM. ONCE THIS HAS BEEN DONE, YOU CAN REPLACE IT WITH THE STANDARD 800 µm CARTRIDGE.
- Any air which accumulates in the device can be bled out using the bleed valve on the top cap.

INSPECTION, CLEANING AND MAINTENANCE



IMPORTANT. Before you inspect, clean or service the device, shut the generator off, close the shut-off valves upline of the desludger and wait for all parts to cool down.

Clean the device as follows:
1. Close the shut-off valves upline of the desludger.
2. Extract the magnet, allowing any debris to detach and deposit on the floor of the chamber.
3. Undo the cap covering the drain valve at the bottom of the device.
4. Connect a drain hose to the drain valve or place a container under it.
5. Open the drain valve by turning its lever.
6. Slightly open the shut-off valve upline of the device to allow the washing water to flow through it and drive out the debris.
7. Once you have purged the device, close the upline shut-off valve and the drain valve, remove the hose or container, and restore the bottom cap.
8. Restore the magnetic insert to its seat and re-open the upline shut-off valves.
The device should be cleaned at the following intervals:
- 1 month after initial installation;
- once a year thereafter
However, the cleaning interval must be suited to the characteristics of the system.

# MAGNETIC DIRT SEPARATORS




Closing the shut-off valve.




Removing the magnet.



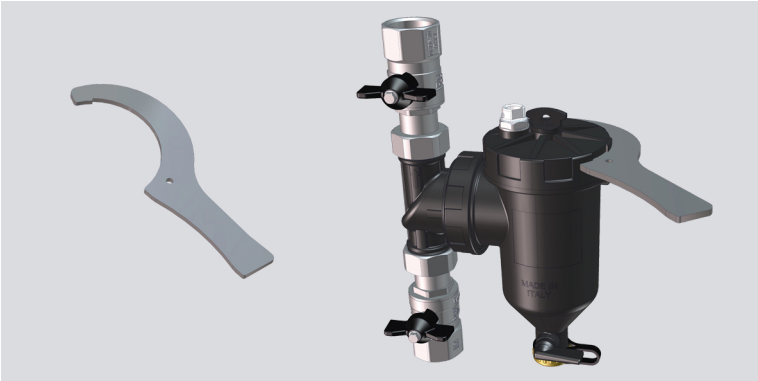

Opening the drain valve.




Opening the upline shut-off valve and washing the internal components.



You can protect the magnet from accidental removal by fitting the provided seal into the slot in the end that can be accessed through the top cap. The seal is provided with a tab indicating the last date of cleaning.



To inspect the desludger completely or clean/replace the filter cartridge, you can remove the top cap completely with the provided wrench.

# MAGNETIC DIRT SEPARATORS

## 188S Magnetic dirt separator Imag-XL

MULTIFUNCTION MAGNETIC DIRT SEPARATOR
• VORTEX ACTION
• MAGNETIC ACTION
• STRAINER ACTION

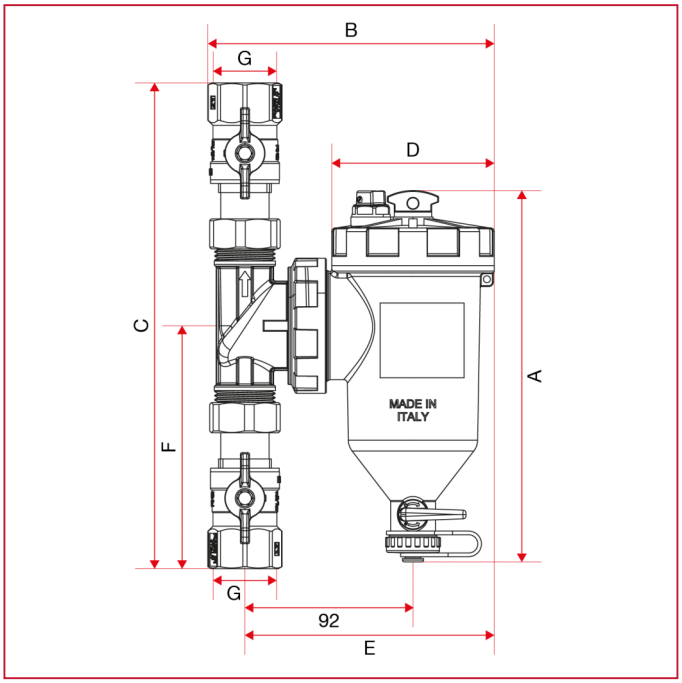



| MEASURE | PRESSURE | CODE | PACKING |
|---|---|---|---|
| 3/4" | 3bar/43,5psi | 1880034S | 1/3 |
| 1" | 3bar/43,5psi | 1880100S | 1/3 |

### TECHNICAL SPECIFICATIONS

Polymer body.
Stainless steel AISI 304 cartridge
Neodymium magnet: 14000 G.
Maximum working pressure: 3 bar.
Maximum working temperature: 90°C.
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).

### OVERALL DIMENSIONS



# MAGNETIC DIRT SEPARATORS

| | 3/4" | 1" |
|---|---|---|
| A | 203,5 | 203,5 |
| B | 155 | 157 |
| C | 242,5 | 266 |
| D | 89 | 89 |
| E | 136,5 | 136,5 |
| F | 121 | 133 |
| G | 3/4" | 1" |
| Kg/cm2 bar | 3 | 3 |
| LBS - psi | 43,5 | 43,5 |

# MAGNETIC DIRT SEPARATORS

**INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE**



IMPORTANT. MAGNETIC FIELD
Keep the magnet away from pacemakers, electromedical equipment, electronic equipment in general, magnetic cards, etc. since it could damage them or interfere with their operation.

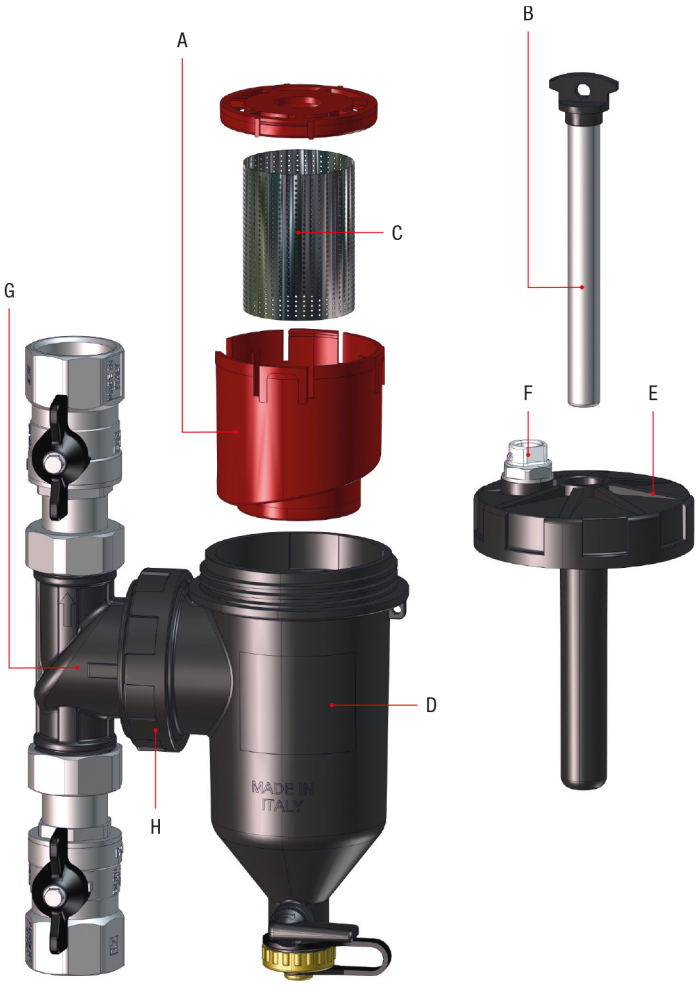


IMPORTANT. HIGH TEMPERATURE FLUID
Burn hazard. Before proceeding with installation and maintenance, make sure that the water in the system is at room temperature.

TECHNICAL DATA
Magnet: neodymium (14000G)
Stainless steel cartridge filtration rating: 500 µm (pre-installed) - 800 µm (supplied in package)
Compatible fluids: water; water + glycol 50% max
Max pressure: 3 bar
KV: 6,3 m3/h
Temperature: 0 - 90°C
Body connections: ISO 228 1” M
Ball valve connections:
ISO 228 1” F (swivel)
F-connection (line connection) 3/4" and 1" ISO 228

DESCRIPTION

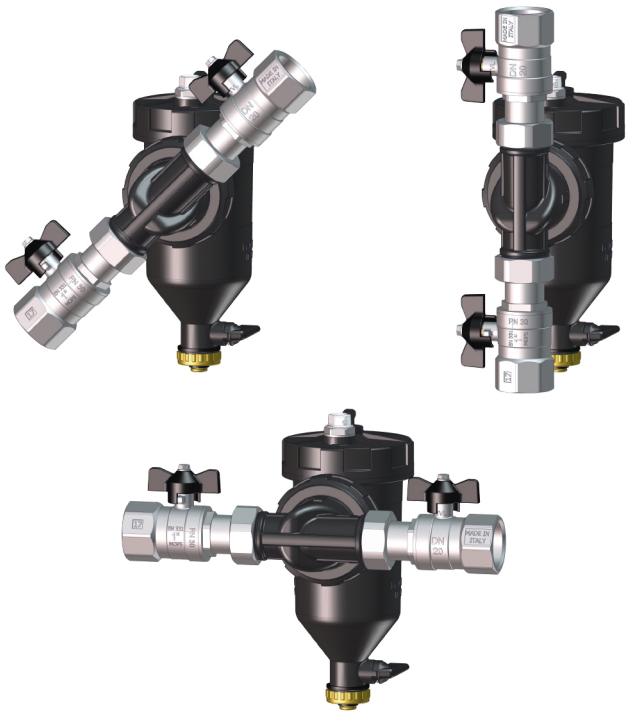
# MAGNETIC DIRT SEPARATORS




A - Cyclonic insert
B - Magnet
C - Filter cartridge
D - Body
E - Top cap
F - Manual air bleed valve
G - T-junction
H - Locking collar

MOUNTING POSITIONS

# MAGNETIC DIRT SEPARATORS



The IMAG-XL can be installed horizontally, vertically or at an angle, due to its swivel fitting and locking collar connecting it to the line.

INSTALLATION INSTRUCTIONS
- The dirtseparator should be installed on the generator's return line.
- Always use the provided wrench to loosen or tighten down the locking collar and the cap.
IF THE FLUID IS HEAVILY SOILED, WE RECOMMEND USING THE 500 µm FINE MESH FILTER TO WASH THE SYSTEM. ONCE THIS HAS BEEN DONE, YOU CAN REPLACE IT WITH THE STANDARD 800 µm CARTRIDGE.
- Any air which accumulates in the device can be bled out using the bleed valve on the top cap.

INSPECTION, CLEANING AND MAINTENANCE



IMPORTANT. Before you inspect, clean or service the device, shut the generator off, close the shut-off valves upline of the desludger and wait for all parts to cool down.

Clean the device as follows:
1. Close the shut-off valves upline of the desludger.
2. Extract the magnet, allowing any debris to detach and deposit on the floor of the chamber.
3. Undo the cap covering the drain valve at the bottom of the device.
4. Connect a drain hose to the drain valve or place a container under it.
5. Open the drain valve by turning its lever.
6. Slightly open the shut-off valve upline of the device to allow the washing water to flow through it and drive out the debris.
7. Once you have purged the device, close the upline shut-off valve and the drain valve, remove the hose or container, and restore the bottom cap.
8. Restore the magnetic insert to its seat and re-open the upline shut-off valves.
The device should be cleaned at the following intervals:
- 1 month after initial installation;
- once a year thereafter
However, the cleaning interval must be suited to the characteristics of the system.

# MAGNETIC DIRT SEPARATORS




Closing the shut-off valve.




Removing the magnet.



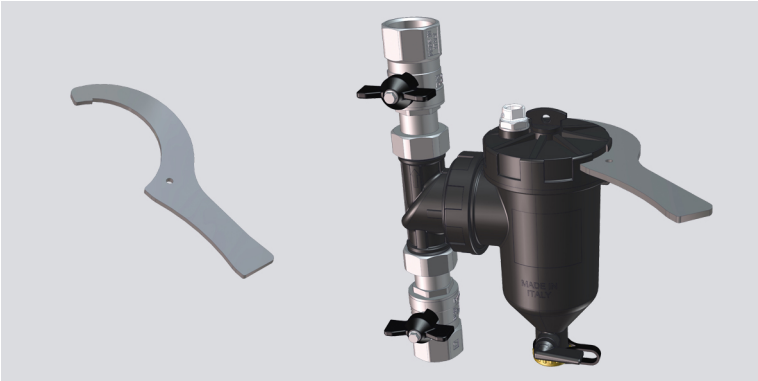

Opening the drain valve.




Opening the upline shut-off valve and washing the internal components.



You can protect the magnet from accidental removal by fitting the provided seal into the slot in the end that can be accessed through the top cap. The seal is provided with a tab indicating the last date of cleaning.



To inspect the desludger completely or clean/replace the filter cartridge, you can remove the top cap completely with the provided wrench.

## COP188S Insulation shells for magnetic dirt separator Imag-XL

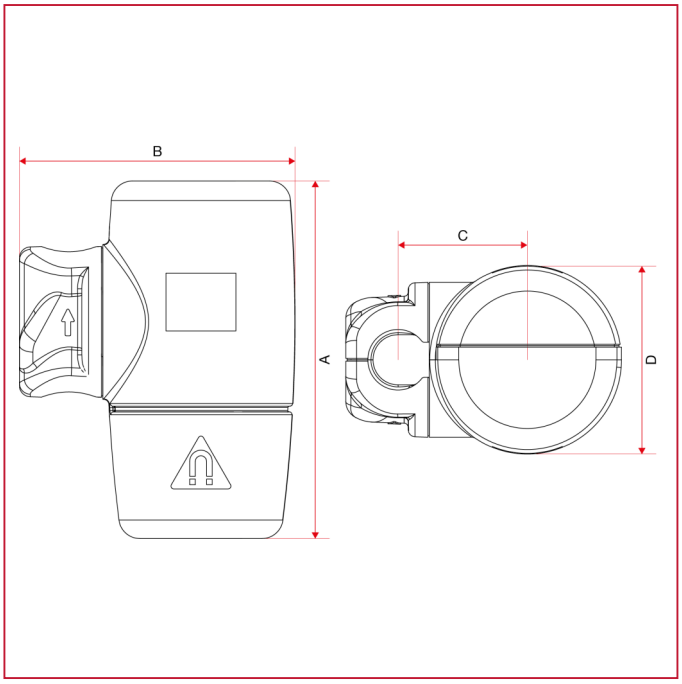


| CODE | PACKING |
|---|---|
| COP188S | 1/3 |

### TECHNICAL SPECIFICATIONS

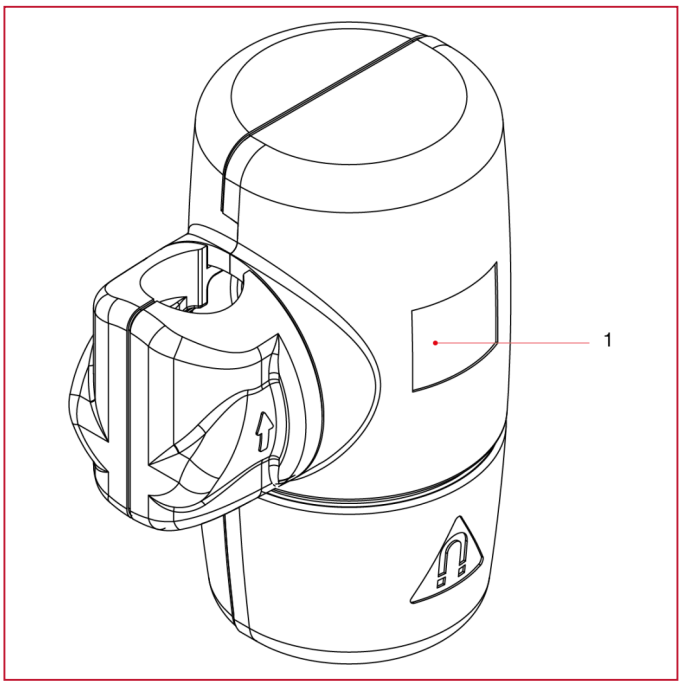
Insulation shells made of polymer.

### OVERALL DIMENSIONS




| | |
|---|---|
| A | 254 |
| B | 196,2 |
| C | 92 |
| D | 134 |

## MATERIALS




| POS. | DESCRIPTION | N. | MATERIAL |
|---|---|---|---|
| 1 | Insulation shell | 1 | Polymer |

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