

DIRTMAGIQ™

dirt separator



PTC
International
Application
Pending

installation guide

altecnic

These installation instructions are for the Altecnic 5453 technopolymer dirt separator with magnet and compression ends

Introduction

The DirtmagIQ™ dirt separator chamber is manufactured from glass fibre reinforced polyamide 66 with a high density polyethylene internal filter element and external magnet.

The magnet is positioned around the body below the flow line for improved collection of ferrous particles.

The conventional method is to position the magnet inside the collection chamber but the DirtmagIQ™ has the magnet positioned around it, helping to maintain a low pressure loss.

The union joint between the brass body and separator body makes the DirtmagIQ™ suitable for installation in horizontal, vertical or inclined pipes.

Supplied with compression ends complying with BS EN 1252-2 for use with R250 (half hard) copper tube.

Supplied hose union ball blow down valve and manual air vent.

Product Code	Size	Connections
545302	22 mm	comp. x comp.
545303	28 mm	comp. x comp.

Warning



The following instructions must be read and understood before installing and maintaining the product.

The symbol means:

CAUTION! Failure to follow these instructions could result in a safety hazard!

Safety



The safety instructions provided in the specific document supplied must be observed.

The symbol on the removable ring indicates that magnets are present, generating a strong magnetic field which could damage any electronic appliances in the vicinity.

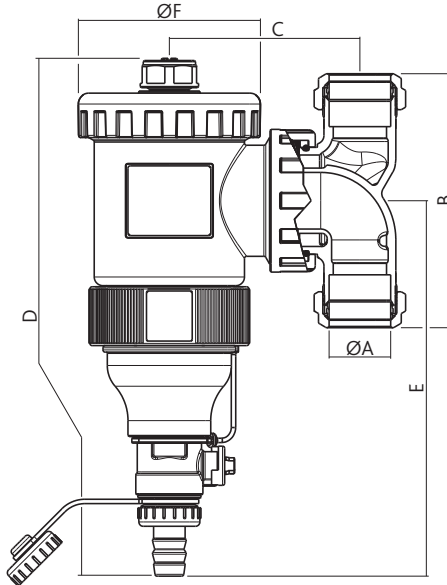
Construction Details

Component	Material	Grade
Body Tee	Brass	BS EN 1982 CB753S
Dirt Collection Chamber	Polyamide 66	PA 66 GF 30
Dirt Chamber Cover	Polyamide 66	PA 66 GF 30
Internal Element	Polyethylene	HDPE
Seals	EPDM	
Union Nut	Brass	BS EN 12420 CW617N
Air vent	Brass	BS EN 12164 CW614N
Blowdown Valve	Brass	BS EN 12165 CW614N
Magnet	2600 G	

Technical Data

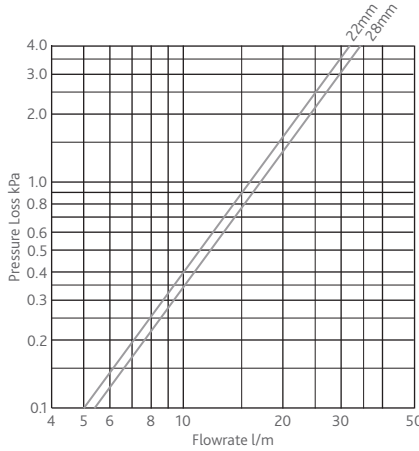
Medium:	water glycol solution
Max. percentage of glycol:	30%
Max. working pressure:	3 bar
Temperature range:	0 to 90°C
Minimum particle size:	5 µm

Dimensions



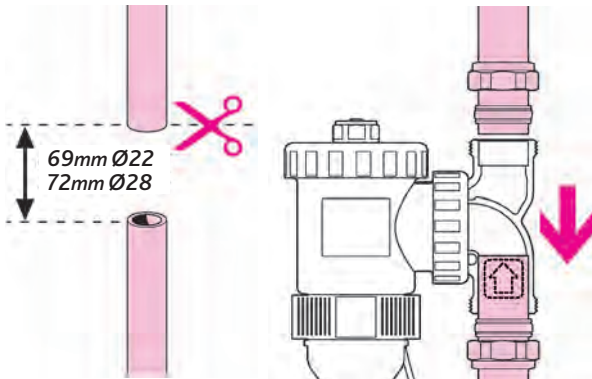
Prod Code	A	B	C	D	E	F	kg
545302	22	115	87.5	238	173	84	2.15
545303	28	117	87.5	238	173	84	2.15

Flowrates



Installation

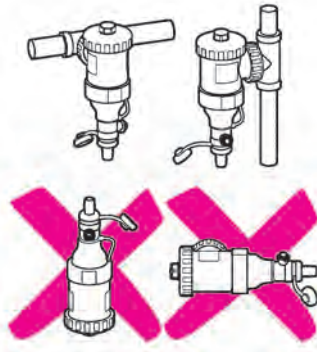
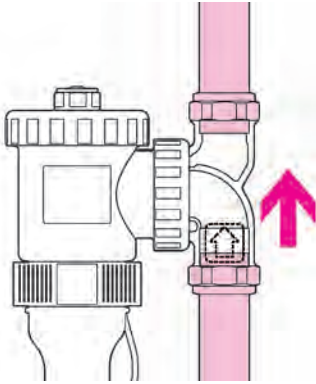
Please read these instruction before commencing installation to ensure the correct fitting position is selected and sufficient space and access is available for flushing and any future maintenance.



If fitting into existing pipework cut out a section of pipe as shown, 69mm for the 22mm size and 72mm for the 28mm size DirtmagIQ™.

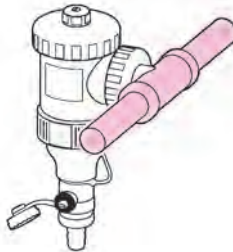
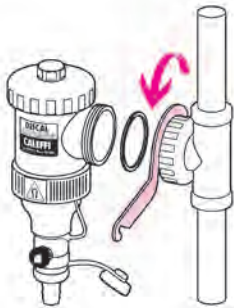
Using the compression nuts and olives provide install the DirtmagIQ™ into the pipework and make two water tight joints.

Installation



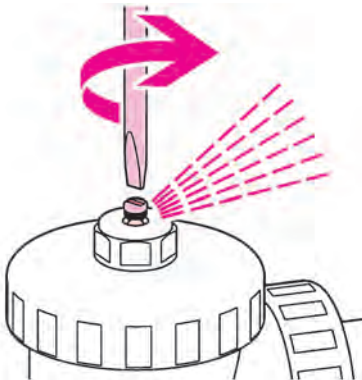
Ensure the direction of flow is in the same direction as the direction arrow on the brass body.

The blow down valve must be vertically below the body as shown



For horizontal or inclined pipework, loosen the union nut using the tool provided and rotate the dirt collection chamber until it is vertical.

Re-tighten the joint to make a water tight seal, do not over tighten the union nut.

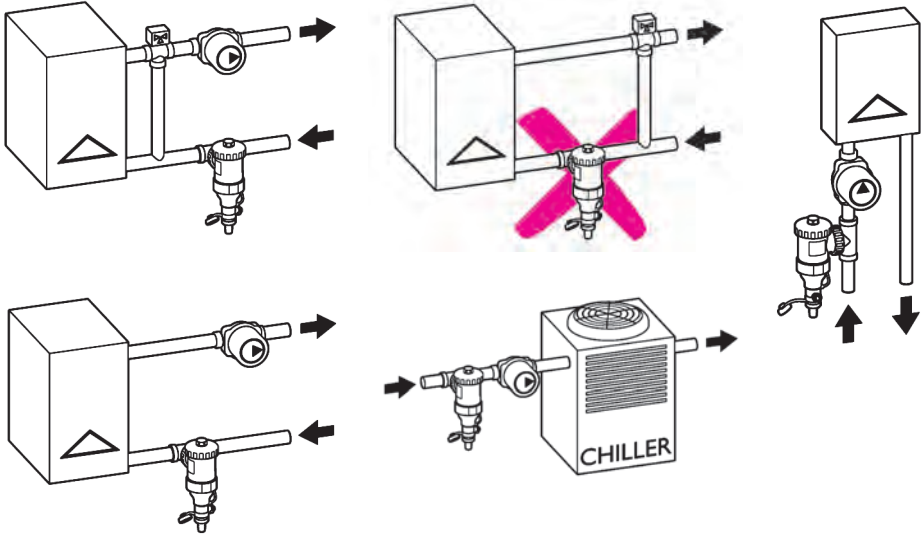


Open the air release valve using a suitably sized screw driver and fill the system with water. Once water starts to escapes close the air release valve.

After the system has been running for several hours release any trapped air which may have collected using the air release valve.

Position and Orientation

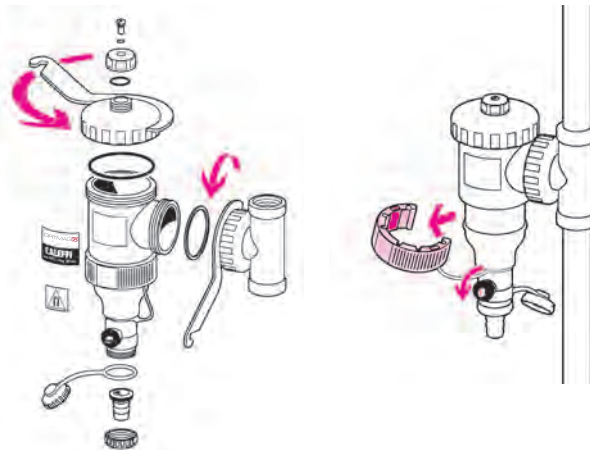
The diagrams show where the DirtmagIQ™ should be installed which is on the return to the boiler or chiller



Planned Maintenance

As part of a planned maintenance programme the following procedure needs to be conducted to ensure that the DirtmagIQ™ dirt separator continues to operate efficiently.

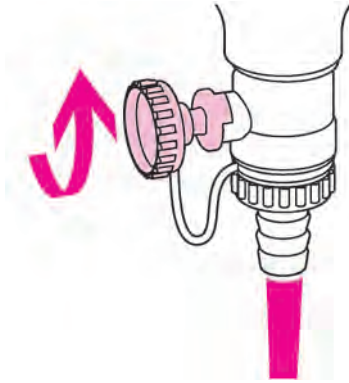
Maintenance should only be carried out with the system COLD.



Debris which has been collected by the DirtmagIQ™ needs to be removed using the blow down valve.

Unclip the magnet and completely remove it from the collection chamber

Planned Maintenance

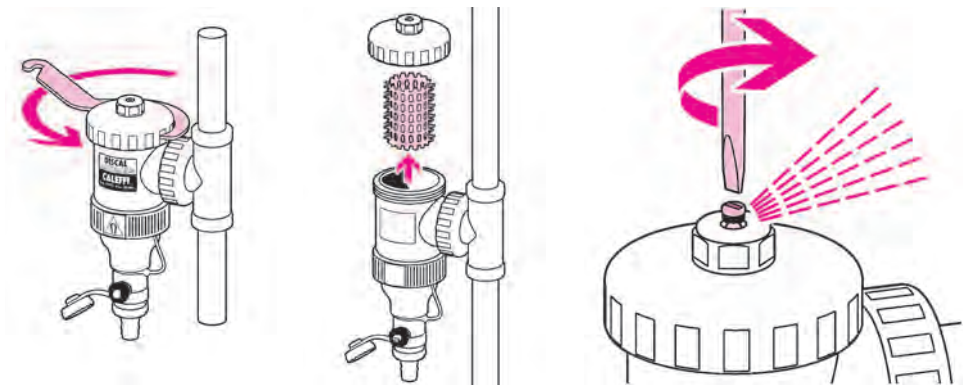


Unscrew the blank cap and fit the hose outlet which is provided.

The liquid removed from the system during flushing should be collected in a suitable container to prevent water damage or using a hose directed to a suitable drain.

Using the operating key which is part of the blank cap, open the blow down valve and run off water until it looks clean.

Close the blow down valve and refit the blank cap.



After the initial flushing of the system or if the performance of the DirtmagIQ™ has deteriorated, the cap on top of the collection chamber should be removed using the tool for the union joint and the element removed.

Isolate the DirtmagIQ™ before commencing.

Flush the element thoroughly with clean water, if any damage is visible replace the element with a new one.

Inspect inside the collection chamber for debris and flush away.

Inspect the cap 'O' ring for signs of damage can replace if necessary.

Re-assemble, open isolation valves to allow the DirtmagIQ™ to fill with water and finally release any trapped air using the air release valve.



Please leave this Manual for the User

In this procedure document we have endeavoured to make the information as accurate as possible. We cannot accept any responsibility should it be found that in any respect the information is inaccurate or incomplete or becomes so as a result of further developments or otherwise.

E & O.E

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