



PTC
International
Application
Pending

installation guide

altecnic

These installation instructions are for the Altecnic DirtmagPrime™ technopolymer dirt separator with magnet and isolation valves with compression ends.

Introduction

The DirtmagPrime™ 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 DirtmagPrime™ 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 DirtmagPrime™ suitable for installation in horizontal or vertical pipes.

Supplied complete with brass ball valves, incorporating a swivel connector and compression end 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
545342 LTC	22 mm	comp. x comp.
545343 LTC	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.

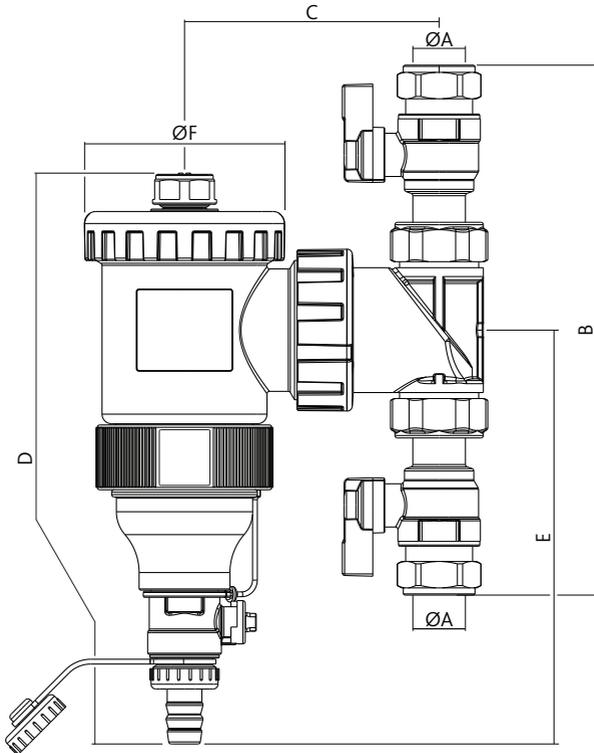
Construction Details

Component	Material	Grade
Body Tee	Polyamide 66	PA 66 GF 30
Union Nut	Polyethylene	PPS GF40
Dirt Collection Chamber	Polyamide 66	PA 66 GF 30
Dirt Chamber Cover	Polyamide 66	PA 66 GF 30
Internal Element	Polyethylene	HDPE
Air vent	Brass	BS EN 12164 CW614N
Blowdown Valve	Brass	BS EN 12165 CW614N
Magnet	2600 G	
Ball Valve	Brass	BS EN 1982 CB753S
Seals	EPDM	
Swivel Joint Seal	Compressed fibre	

Technical Data

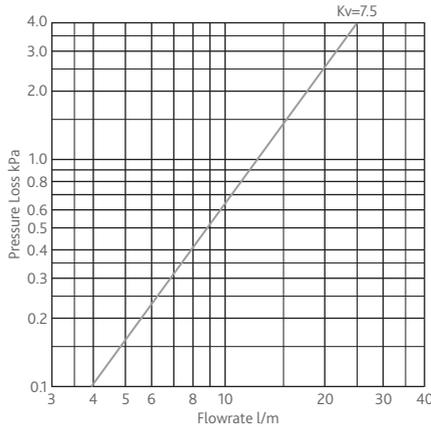
Medium:	water glycol solution
Max. percentage of glycol:	30%
Max. working pressure:	3 bar
Temperature range:	0 to 90°C
Minimum particle size:	5 µm

Dimensions



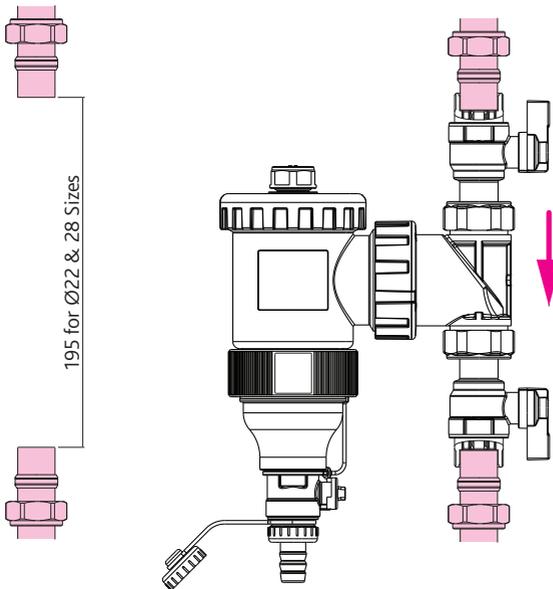
Prod Code	A	B	C	D	E	F	kg
545342 LTC	22	231	106.5	238	173	84	2.15
545343 LTC	28	237	106.5	238	173	84	2.15

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.



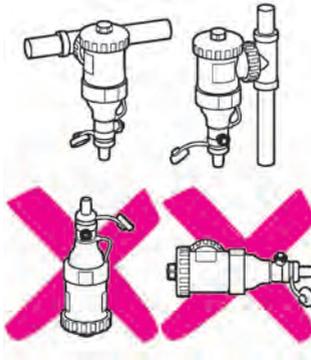
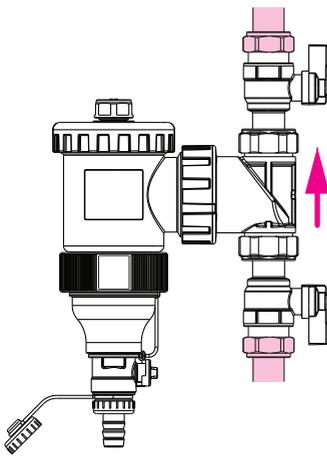
If fitting into existing pipework cut out a section of pipe as shown, 195mm for both the 22mm and 28mm size DIRTmagPrime™.

Fit the two ball valves to the copper pipe and hand tighten the two compression nuts.

Slide the DIRTmagPrime™ between the two ball valves ensuring that the flat sealing washers are fitted, see the components illustration on page 5.

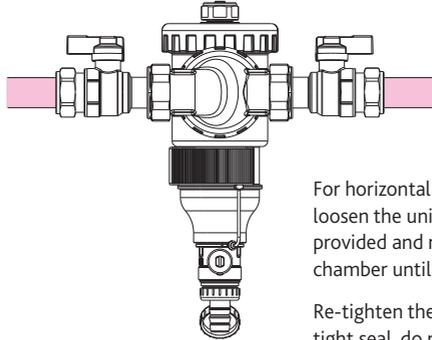
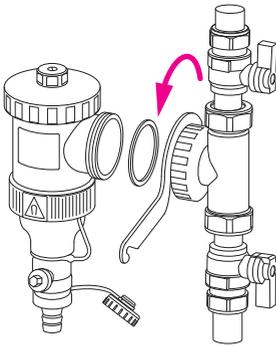
Tighten the two swivel nuts and the two compression nuts to make water tight joints, do not over tighten.

Installation



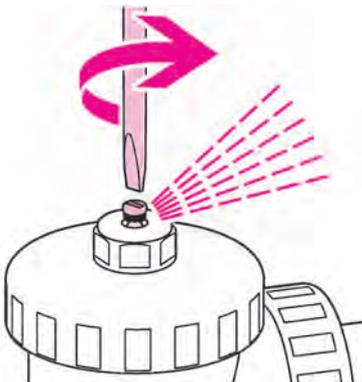
Ensure the direction of flow is in the same direction as the direction arrow on the brass body.

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.

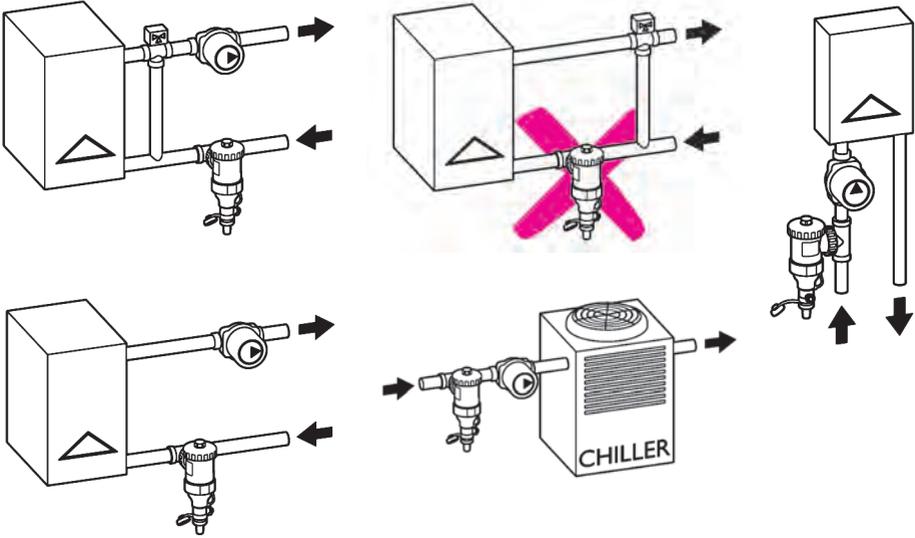


Open the air release valve using a suitably sized screw driver and fill the system with water. Once water starts to escape close the air release valve.

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

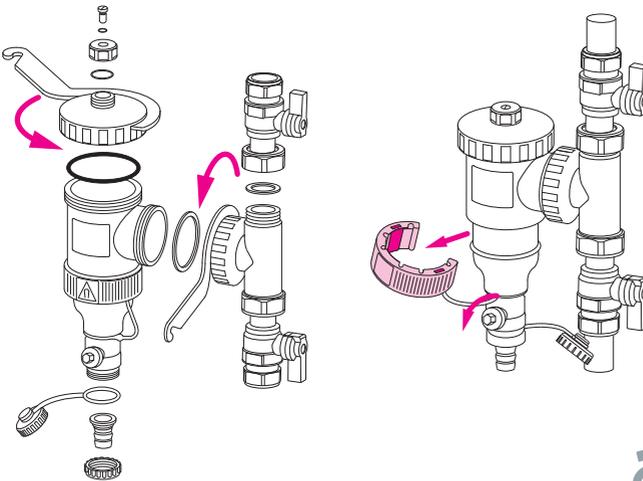
The diagrams show where the DirtmagPrime™ should be installed which is on the return to the boiler or chiller



Planned Maintenance

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

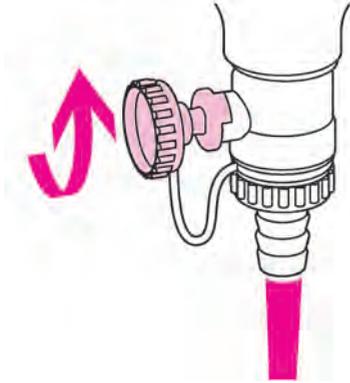
Maintenance should only be carried out with the system COLD.



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

Unclip the magnet and completely remove it from the collection chamber

Planned Maintenance

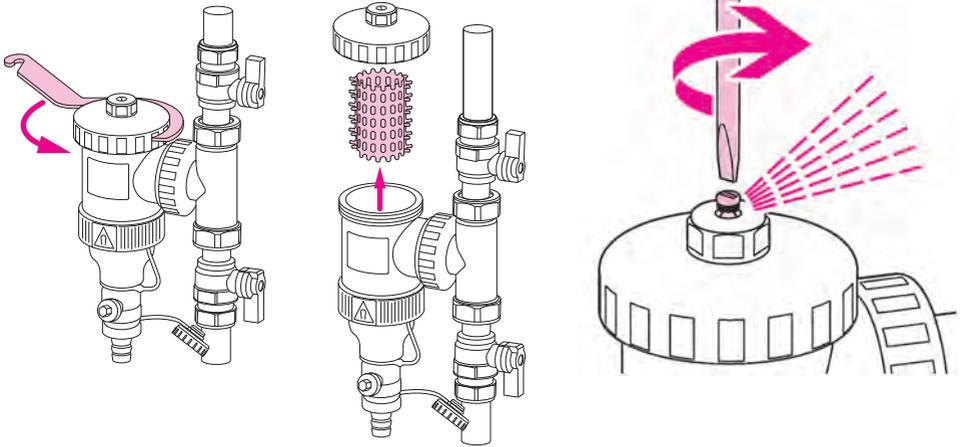


Unscrew the blank cap and fit the hose outlet which is provided.

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 DirtmagPrime™ 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 DirtmagPrime™ using the two ball valves 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 the two ball valves to allow the DirtmagPrime™ to fill with water and finally release any trapped air using the air release valve.



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

Altecnic Ltd Mustang Drive, Stafford, Staffordshire ST16 1GW
T: +44 (0)1785 218200 E: sales@altecnic.co.uk
Registered in England No: 2095101

altecnic.co.uk

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altecnic