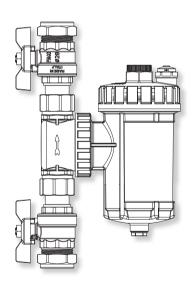


# MULTI-LAYERED MAGNETIC FILTER

**DESIGNED FOR HEAT PUMPS** 

# **UKX070**

## **INSTALLATION & MAINTENANCE INSTRUCTIONS**



#### **UK CYLINDERS LTD**

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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.



#### Introduction

This installation guide has been produced for the UK Cylinders multi-layered magnetic filter designed for heat pumps.

These instructions cover the installation, operation and maintenance. Please read the enclosed instructions before commencing the installation of this product, please note;

# We recommend that the installation of any product is carried out by an approved installer.

It is recommended, especially in hard water areas, that a water softener such as the ActivFlo or ActivFlo lite be fitted to reduce the risk of calcium deposits forming.

#### **Products**

Multi-layered magnetic filter for air source heat pump 28mm

UKX070

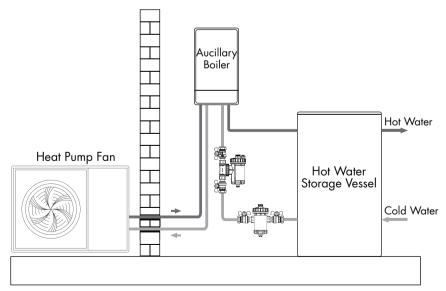
#### Location

The UK Cylinders magnetic heat pump filter, featuring our innovative direct multi-layered non ferrous filter, is suitable for all central heating systems and can be fitted anywhere, in any orientation on the central heating circuit.

For maximum system protection however, we recommend that you fit the magnetic filter on the flow to the boiler or heat pump, in order to protect it from impurities in the system, especially during pre-commissioning.

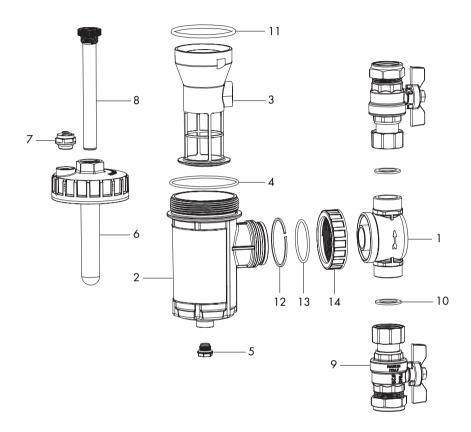
It is important that the flow through the UK Cylinders magnetic heat pump filter is in the same direction as that indicated by the arrow on the body.

The magnetic filter must be installed with the main cartridge chamber facing downward as shown. The magnetic filter can be installed in vertical, horizontal or inclined pipework.





# Components



Item	Qty	Component	Item	Qty	Component
1	1	Connector block	8	1	Removable magnet
2	1	Filter pot	9	2	Ball Valve
3	1	Multi-layered filter	10	2	Sealing washer
4	1	Filter pot 'O' ring	11	1	Cap 'O' ring
5	1	Drain plug	12	1	Retaining clip
6	1	Screw cap	13	1	Filter pot seal
7	1	Air vent	14	1	Connecting nut



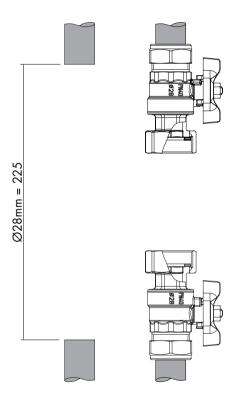
#### **Location Continued**

Ensure that the system is drained down and all system pressure has been released.

On open vented systems, make sure that the feed and expansion tank is either isolated or "tied up".

When siting the UK Cylinder mullti-layered magnetic filter, great care should be taken to place the filter so that you may still access the removable magnetic probe, screw cap, air bleed and drain plug. Doing this will aid the servicing of the filter and any chemical dosing in the future.

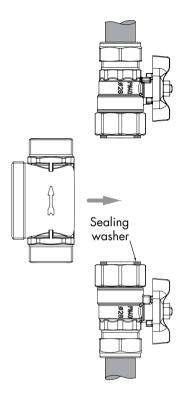
#### Installation



Having removed the prescribed section of pipework (as above), make sure that the open ends of both pieces of pipework are free of debris and ready to receive the nut and olive. Fit both isolation valves but do not tighten fully.



#### Installation Continued



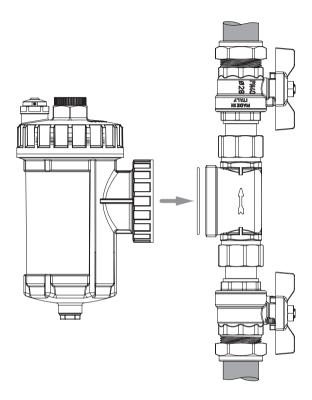
Slip the connector block between the isolation valves, taking particular care to ensure that the directional arrow on the connector block is pointing in the direction of the flow of water. Failure to do so will result in reduced flow and inhibited filter performance.

Hand tighten the isolation valves to the connector block making sure that the rubber washers provided have been situated between the two. When you are happy that the connector block and isolation valves are facing an appropriate direction for the installation, fully tighten all four nuts to create a watertight seal.

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#### **Installation Continued**



Present the filter to the connector block ensuring the air bleed is at the top and the drain plug is at the bottom.

Ensure that the sealing 'O' ring is used and fitted correctly.

Gently push the filter into the connector block and when you are satisfied with the position of the filter, hand tighten the filter pot connecting nut. If further tightening is required, gentle pressure can be applied with a suitably sized set of pump pliers.

# WARNING - EXCESSIVE TIGHTENING OF THE CONNECTOR BLOCK/FILTER POT CONNECTING NUT MAY IRREPARABLY DAMAGE THE FILTER.

Should you need to adjust the angle of the filter in relation to the pipework, simply slacken the connecting nut and rotate as required ensuring to re-tighten before commissioning the filter.

Your installation is now complete.

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### **Commissioning**

The commissioning procedure should be carried out as follows;

- 1 Open the lower isolation valve to the air bleed leave the upper most isolation valve closed. The air bleed should be closed initially during commissioning.
- 2 Making sure that all open ends of the system are closed, begin to refill the system.
- 3 Bleed radiators and other equipment as required.
- 4 Return to the magnetic filter and open the air bleed until water flows from it.
- 5 Open the top isolation valve and allow the remaining system volume to fill.
- 6 Open the air bleed again to ensure all air has been removed from the filter.

N.B. – Air may continue to be present in system pipework for a small period as the central heating is run after installation of the magnetic filter. We recommend that you check the air bleed again to ensure that all air has been purged from the system.

#### **Cleaning and Servicing**

We recommend that the multi-layered filter is serviced once every twelve months or in line with the servicing schedule of the boiler, heat pump or according to water conditions.

Prior to cleaning the multi-layered filter, ensure that the working environment is safe.

It is recommended that the boiler or heat pump is turned off before commencing any maintenance works. Caution should also be taken regarding the temperature of the contents of the filter.

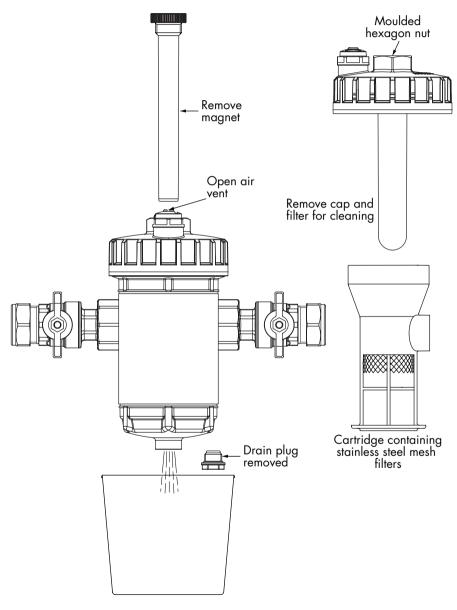
Firstly, turn the isolation valves to the closed position. Then, open the air bleed to relieve any system pressure.

- 1 Isolate multi-layered filter from the system by shutting both the isolating ball valves.
- 2 Unscrew the magnet from the filter screw cap, leaving the screw cap in situ.
- 3 Place a suitable container underneath the filter and remove the drain plug from the base of the filter using an Allen key or adjustable spanner.
- 4 Allow the filter contents to drain into the container and replace the drain plug.
- 5 Screw the magnet back into the filter screw cap and unscrew the complete filter cap assembly from the filter body. If you are unable to open the filter cap by hand a suitably sized spanner can be placed onto the moulded hexagon nut in the centre of the filter cap to provide leverage.
- 6 Remove the multi-layered non-ferrous mesh filter from the filter body.
- 7 Remove any residual debris from both the non-ferrous filter and screw cap using a soft cloth or disposable paper towel and rinse in clean water.
- 8 Re-assemble the filter and re-commission as detailed in the COMMISSIONING section of these instructions. Ensure that the SERVICE SCHEDULE is completed each time the filter is serviced.

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## **Cleaning and Servicing Continued**





#### **Chemical Dosing**

To dose the system using the multi-layered magnetic filter follow the procedure below;

- 1 Ensure the working environment is safe and the boiler is turned off at the switch.
- 2 Isolate the magnetic filter from the system by shutting both the isolating ball valves.
- 3 Place a suitable container underneath the filter and remove the drain plug from the base of the filter using an Allen key or adjustable spanner.
- 4 Allow the filter contents to drain into the container and replace the drain plug.
- 5 Remove the screw cap from the filter body and add any dosing chemicals as required.
- 6 The filter pot has a fluid volume of 500 ml.
- 7 Replace the filter screw cap and open the isolation valves to introduce the dosing chemicals into the circulating system fluid.
- 8 Re-commission the system as per the previous instructions in the COMMISSIONING section.
- 9 Complete the SERVICE SCHEDULE at the back of this instruction booklet.

#### **Technical Support & Warranty**

The UK Cylinder multi-layered magnetic filter designed for heat pump system is covered by a 5 year warranty against manufacturing fault.

To register your product for warranty, please visit www.intatec.co.uk.

For technical assistance, please contact our dedicated technical support line on 01889 272199.



## **Service Schedule**

			Tick as appropriate					
Service Number	Date	Attending Engineer	Filter content drained	Filter disassembled and cleaned	Inhibitor added	System cleanser added		
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								



#### Notes



#### Please leave this Manual for the User

To activate your product warranty please visit www.intatec.co.uk and click on Product Registration

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