

## STAINLESS STEEL SIDE STREAM MAGNETIC FILTER

#### **Installation Manual**



#### **Product Overview:**

The CORE Side Stream Filter has been designed to operate in the most arduous heating and cooling systems, complying with the latest BSRIA recommendations.

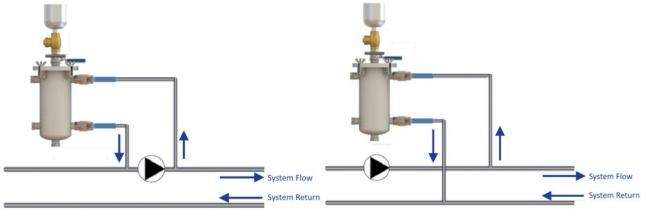
#### **Installation Location:**

The CORE Side Stream Filter has two inlet connections on the upper half of the main body and two outlet connections on the lower half of the body (only one of each is used depending on flow direction).

Installation location on the system circuit is flexible, although it is recommended to be installed prior to the heat exchanger/boiler/cooler.

Please note, the BSRIA recommended installation circuit is highlighted below, avoiding system dead-legs.





**BSRIA Compliant** 

NOT BSRIA Compliant (but still acceptable)

#### **Unboxing:**

- 1- Remove ancillary components from either end of the box, and keep them together in two separate groups, as they are packed together to suit the top (magnet) and lower (body) sections of the Filter. Discard the cardboard sections from either end of the box.
- 2- Remove the centre cardboard protecting the Filter body and lift the Filter from the box. You will have all the parts shown in the Components list in the next section.
- 3- Please note, all the packaging is made from recyclable cardboard. Please recycle this packaging once you have finished using it.

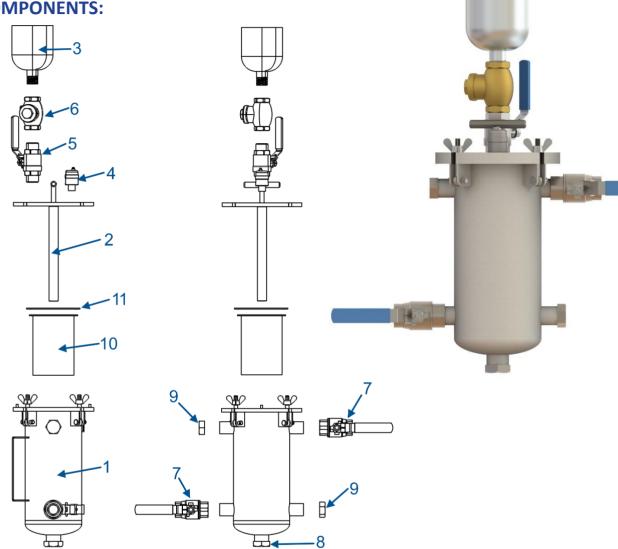


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### **COMPONENTS:**



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Number	Part				
1	Stainless Steel Body				
2	Magnetic Rod Assembly				
3	Tundish (Dosing Pot)				
4	Automatic Air Vent (AAV)				
5	Ball Valve				
6	Non-Return Valve (NRV)				
7	Ball Valve				
8	Drain Plug				
9	Blanking Plug				
10	Stainless Steel Mesh Basket				
11	Seal				

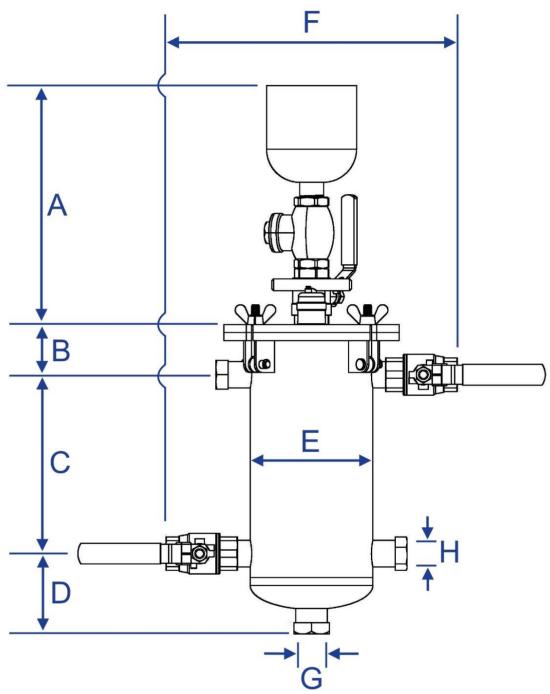


## STAINLESS STEEL SIDE STREAM MAGNETIC FILTER





#### **DIMENSIONS:**



Dimensions								
Α	В	С	D	E	F	G	Н	
300.50mm	63mm	225mm	101mm	154mm	366mm	1" inch	1" inch (x4 off)	



# STAINLESS STEEL SIDE STREAM MAGNETIC FILTER Installation Manual BRITAIN

#### **SPECIFICATIONS:**

Manufacturing Location	United Kingdom			
Body Material	Stainless Steel 304			
Inlet and Outlet Pipe	1" inch			
Automatic Air Vent	Yes			
Operational Mode	Side Stream			
Install Orientation	Vertical			
Magnet Type	Single 'Easy to Clean' Rod			
Magnet in Contact with Fluid	Yes			
Maximum Flow Rate	100 litres/minute			
Maximum Operating Pressure	6 Bar			
Low Pressure Drop Design	Yes			
Maximum Operating Temperature	+90°C (+194°F)			
Minimum Operating Temperature	-20°C (-4°F)			
Non-Ferrous Filtration	Yes			
Non-Ferrous Filtration Method	Reuseable Stainless Steel Mesh			
Chemical Dosing Tundish (Dosing Pot)	Yes			
Non-return Valve for Tundish (Dosing Pot)	Yes			
Isolation Valves	Yes			
Drain Plug	Yes			
Maximum Capture on Magnet	1815 grams			
Cleaning Method	Wipe Rod Clean – 'Easy to Clean'			
Filter Cartridge Required	No			
Warranty	10 Years			



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#### **Assembly:**

- 1- The magnetic rod assembly (2) comes fixed to the stainless steel body (1), no action is needed at this stage.
- 2- Use the paper template to position the holes for mounting the Filter in the desired location. Once the position has been decided, the inlet and outlet ball valves (7) and blanking caps (9) can be fitted to the filter body to suit the connecting pipe work. The bottom drain plug (8) comes fitted to the body of the filter.
- 3- Components can now be fitted to the top of the Filter.
- 4- Assemble the automatic air vent (AAV) (4) into the ½" inch threaded hole, use of PTFE tape or thread sealant is advised.
- 5- Assemble the ball valve (5) into the 1" inch threaded hole, use of PTFE tape or thread sealant is advised.
- 6- Assemble the non-return valve (NRV) (6) onto the 1" inch ball valve (5), ensuring the arrow is pointing down towards the magnet plate, use of PTFE tape or thread sealant is advised.
- 7- Finally, assemble the tundish (dosing pot) (3) into the non-return valve (6), use of PTFE tape or thread sealant is advised.
- 8- Your Filter is now ready to be fixed in position and attached to the connecting pipe work.

#### **Commissioning the Filter:**

If the system is not clean, it is recommended to cleaned and flushed the system to remove any unwanted debris before installing this Filter.

- 1- Calculate the amount of 'chemical' (inhibitor, biocide...etc...) needed for the system, and apply through the tundish (dosing pot) (3). It is important to open the ball valve (5) when adding the 'chemical' and close it again after dosing the non-return valve (NRV) (6) will prevent any fluid being forced out through the tundish (dosing pot) during operation, however closing the isolation valve (5) is good practice and will ensure this does not happen.
- 2- The ball valves (7) can now be opened to fill the Filter and allow the unit to be put into operation.



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#### **Magnet Cleaning:**

- 1- Isolate the Filter from the system by closing the two ball valves (7) and slowly remove the bottom drain plug (8) to empty the Filter. Replace the drain plug (8) immediately after draining.
- 2- Undo the four wing nuts from the swing bolts on top of the Filter and remove the magnet assembly (2) using the T bar handle.

NOTE - Do not put the magnet assembly (2) near any metal surface (or metal tools) as it will be strongly attracted to ferrous items (such as mild steel), and this may damage the assembly. A flat clean plastic or wooden surface is preferred.

- 3- The mesh basket (10) can then be removed and cleaned of any debris it has collected.
- 4- Once cleaned, re-install the mesh basket (10) back into the Filter.
- 5- Clean the magnetic rod assembly (2), using gloves or a suitable cloth.
- 6- Check that the seal (11) is still in the correct position and clean, clean and reposition if necessary.
- 7- Re-install the cleaned magnetic rod assembly (2), use the two dowels on the upper flange to locate the magnet plate correctly.
- 8- Flip the four swing bolts into position and tighten the wing nuts in an even and progressive order until finger-tight.
- 9- The ball valves (7) can now be opened to re-fill the Filter and allow the unit to be put into operation.
- 10- Refill the unit and restart the operation.

