

## COMBIMAG POWER FLUSHING FILTER



The CombiMag filter increases power flushing efficiency by removing circulating black iron oxide contamination from the system water. The filter is simply installed in line between the heating system and the power flushing pump.

The CombiMag controls the flow of water to give a high residence time within the cylinder, to ensure that the maximum amount of black iron oxide is extracted from the water by the powerful magnet.

The design is such that even at maximum capacity, there is always a clear passage for the circulating water.

The transparent cylinder enables progress of a power flush to be visually monitored, and enables the engineer to quickly check if the magnet requires cleaning.

The built in bypass enables the magnet to be cleaned without the need to temporarily stop the power flushing process.

### Benefits

Reduces dumping time by removing solids from the water whilst circulating.

Collects circulating deposits that could lead to blockages in restricted areas, and prevents them re-entering the system.

Protects the boiler during power flush.

By-pass enables the magnet to be inspected without the need to interrupt the power flush.

Reduces environmental contamination by collecting the iron oxide and reducing the amount of water consumed.

Provides an impressive visual aid to both the householder and the engineer by showing the quantity of sludge removed from the system, and confirming the need for a power flush.



Demonstrates why a permanently installed magnetic filter may be beneficial.



Wipe clean magnetic surface to minimise cleaning time and effort.

### Specification

Magnet: 11,000 gauss neodymium rare earth magnet, sleeved in stainless steel.

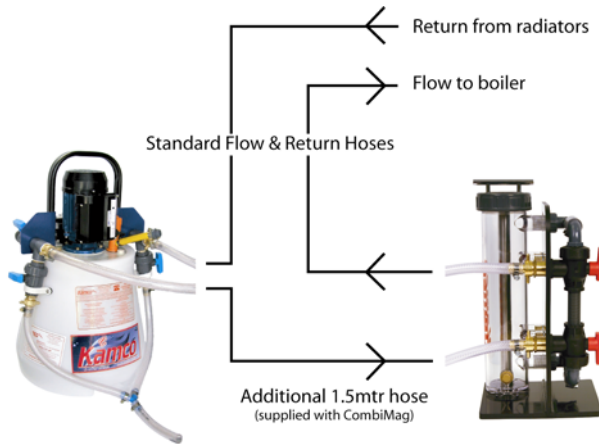
Maximum magnetic iron oxide capacity: 2.1 kg

Long water residence time within the cylinder.

Collects small as well as large particles.

Dual three-port by-pass valve system.

**COMBIMAG POWER FLUSHING FILTER (continued)**



**Connecting the Filter**

The power flushing pump can circulate the system water in either direction by operation of the flow reversing lever. However we suggest that the initial set-up is such that the CombiMag filter is installed before the boiler to offer the boiler a higher level of protection in the early stages of the power flush.

1. Place the CombiMag power flushing filter adjacent to the power flushing pump on a suitable drip tray.
2. Select the required direction of flow and position the pump flow reverser lever in that direction.
3. Install the filter on the flow from the flushing pump using the short (1½ metre) hose supplied. Connect the flow to the bottom connection on the filter.
4. Using the power flushing pump standard flow and return hoses connect both the pump and the top connection on the CombiMag to the heating system.
5. Both CombiMag three- port valves should be in the **CIRCULATE** position.

**Operating Instructions**

1. Turn on the power flushing pump and immediately check all connections, and the top of the CombiMag cylinder for leaks.
2. After initial circulation for approximately ten minutes, turn both three-port valves 180° into the **BYPASS** position.
3. Remove the securing ring from the top of the cylinder and, gripping the handle firmly, carefully lift out the magnet.

**Note: the magnet is very powerful and is strongly attracted to steel surfaces. Take care not to trap fingers and avoid contact with sensitive equipment.**

4. Inspect the magnet for collected deposits and, if necessary, clean as follows:



5. Grip the cylinder lid and handle with one hand. Whilst wearing disposable gloves, grip and slide the magnetite sludge down and off the magnet. Note: It is advisable to only remove a proportion of the deposits with each stroke, starting at the lower end of the magnet, rather than all at the same time. Clean the end of the magnet.
6. Collect the sludge in a suitable container for later disposal.



7. Re-assemble the CombiMag ensuring that the magnet locates within the circular recess at the base of the cylinder, and turn both three-port valves back into the **CIRCULATE** position.
8. Repeat the inspection and cleaning procedure as required during the flushing process.

**Cleaning the Magnet**

It is not necessary to remove all deposits during the intermediate cleans whilst power flushing. However, to ensure a long life the magnet should be thoroughly cleaned and dried at the end of each job.

**Caution**

**The CombiMag contains a very strong magnet and generates a very powerful magnetic field. When removed from the cylinder, keep away from electronic equipment, watches, mobile phones, credit cards etc.**