



### Power flushing filter for high performance power flushing pumps



- 2 x 11,000 gauss of magnetic power spread over 400 cm<sup>2</sup> surface area.
- Increases power flushing efficiency.
- Reduces time taken to flush a system.
- Prevents re-circulation of debris through the boiler.
- Minimises water consumption.
- Reduces black iron oxide discharged to waste.
- Transparent cylinders demonstrate system contamination and the need to clean magnets.
- By-pass enables magnets to be cleaned without interrupting power flush process.
- Supplied in protective tool case.
- 3/4" or 1" BSP connections available.

Power flushing is the fastest and most effective means of cleansing sludge and corrosion debris from central heating systems, utilising a high flow of water to loosen and ultimately expel the debris, usually containing large quantities of black iron oxide, from the system.

Clear water is forced through a system, pushing debris ahead of it, and this continues until the dump water finally runs clear. This may take a considerable time.

The CombiMag Twin power flush filter has been developed from the standard CombiMag for use on commercial heating systems, in conjunction with the Clearflow CF90 or CF210 power flushing pumps. It will quickly remove circulating black iron oxide contamination from the flushing water, using the power of two rare earth magnets to extract magnetic iron oxides from the water flow.



The CombiMag Twin filter is installed in line with the power flushing pump. The cyclone construction directs contaminated water through a powerful magnetic field, such that even the smallest of particles are retained on the central magnets, from which they may be easily cleaned during and after power flushing.

Collected debris, which may otherwise lead to blockages in smaller bore pipework, is prevented from re-entering

the heating system.

The rapid removal of debris from the flushing water prevents saturation of the cleaning solution with black sludge, leading to a more effective power flush.



The debris retained on the magnet is an impressive visual aid. It demonstrates to property owners what has been removed from the system, confirms the need for the power flush, and demonstrates



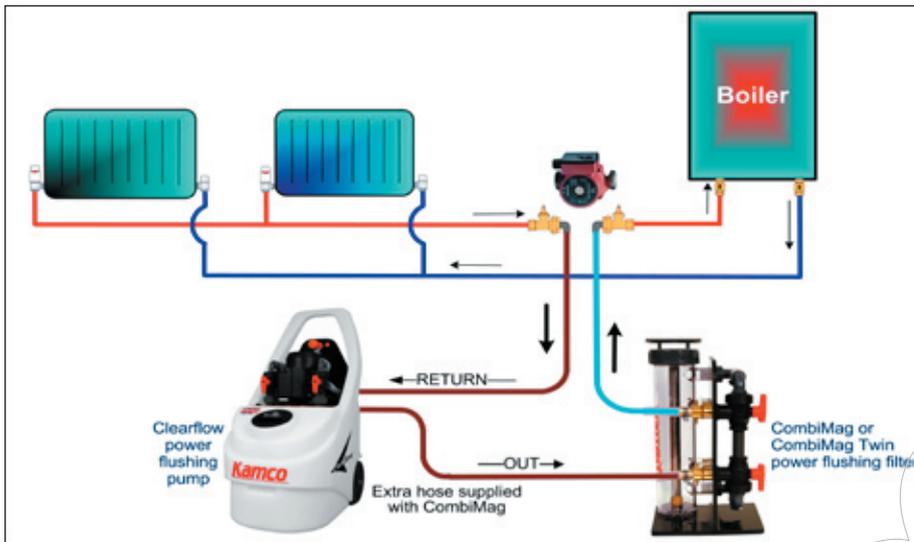
that the clean has been professionally carried out.

Time savings on every job when using the CombiMag Twin will rapidly cover its cost, reducing job time and consequent disruption.

The more effective cleansing process achieved when power flushing with a CombiMag Twin filter reduces heating costs and gives a more efficient heating system.



## CombiMag Twin power flushing filter



### Instructions for use

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 Twin 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 or in the case.
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 Twin 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 cylinders for leaks.
  2. After initial circulation for approximately ten minutes, if magnets appear dirty, turn both three-port valves 180° into the **BYPASS** position.
  3. Remove the securing ring from the top of the cylinders and, gripping the handles firmly, carefully lift out the magnets.
- Note: the magnets are very powerful and are strongly attracted to steel surfaces. Take care not to trap fingers and avoid contact with sensitive equipment.*
4. Inspect the magnets 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 (see pictures below).

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 CombiMags ensuring that the magnet locates within the circular recess at the base of each 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 magnets

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

### Caution

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

### Technical data

Strength of each magnet:	11,000 gauss
Length of magnet:	400mm
Magnet surface area:	2 x 201 cm <sup>2</sup>
Weight of unit:	4.95 kg
Overall height:	475mm
Overall width:	215mm
Overall depth:	245mm

