

## POWERFLUSHING FILTER

- Removes and traps magnetite, rust and magnetic materials from the system
- Protects the boiler during powerflushing
- By-pass enables the magnet to be inspected without the need to interrupt the flushing process
- Rated temperature up to 85°C
- Compatible with all Fernox Cleaners and Protectors
- Easy to clean, simple to operate



### Product Uses

The Fernox Powerflushing Filter provides a fast and easy way to remove contaminants from system water during flushing. Simple to install, the filter significantly increases powerflushing efficiency thereby reducing time spent on-site.

The filter controls the flow of water to give a longer contact time within the cylinder, which allows the maximum amount of black iron oxide to be extracted by the powerful magnet from the water. Developed to ensure that even at maximum capacity, the water circulates without restriction. Additional benefits also include a built-in bypass which enables the magnet to be cleaned without the need to stop the powerflushing process even temporarily. On cleaning of the magnet the filter provides an impressive visual aid to show the householder the level of contaminant removed and therefore confirming the need to powerflush in order to protect the system's longevity.

### 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 contaminants
- Operates at temperatures up to 85°C
- Dual three-port by-pass valve system

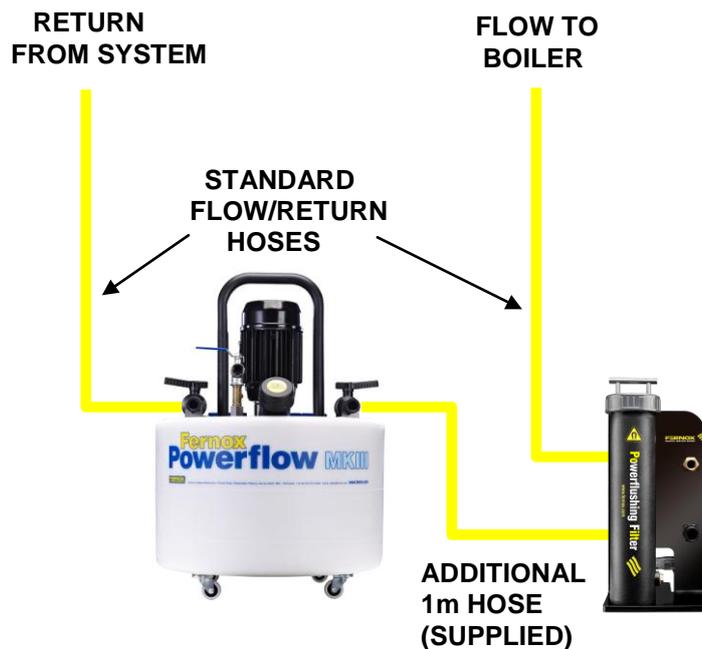
### Packaging, Handling and Storage

Individually packaged with hose and detailed instructions included. No special storage requirements required.

**Caution: The Fernox Powerflushing Filter 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 and pacemaker**

## Instructions for use

Please ensure that the initial set up is configured so that the Fernox Powerflushing Filter is installed immediately before the boiler to offer the highest level of protection in the early stages of the powerflushing process. The Fernox Powerflow MKIII Flushing Machine can circulate system water in either direction by operating the flow reversing lever.



## Connections

1. Place the Fernox Powerflushing Filter adjacent to the Fernox Powerflow MKIII Flushing Machine employing best practice to protect the customer's property for wet works.
2. Connect the lowermost connection on the filter to the "Flow" from the Fernox Powerflow Flushing Machine MKIII using the 1 meter extension hose and female camlock connector supplied<sup>1</sup>.
3. Secure the male camlock connector to the uppermost connection on the filter using PTFE tape.
4. Using an existing hose provided with Fernox Powerflow MKIII, connect the male camlock<sup>1</sup> on the filter to the heating system/boiler. Connect the return to the Powerflow MKIII using the second existing hose provided with the Fernox Powerflow MKIII.

**Note:** *If the current British Gas powerflushing machine is used the camlock adapters are not required.*

<sup>1</sup> Male and female camlock connectors supplied with Fernox Powerflow MKIII Flushing Machine for BG

## Operating Instructions

1. Ensuring that the reverse flow lever on the Powerflow MKIII is set in the “Flow” direction.
2. Ensure both three-port valves on the filter are in the **CIRCULATE** position.
3. Turn on the Powerflow MKIII flushing machine and immediately check all connections, including the top of the Fernox Powerflushing Filter cylinder for leaks.
4. After initial circulation for approximately 10 minutes, turn both three-port valves 180° into the **BYPASS** position.
5. Unscrew the securing ring from the top of the cylinder and 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 equipment sensitive to magnetic fields.**

6. Inspect the magnet for collected deposits and, if necessary, clean as follows:
7. Hold the cylinder lid handle tightly with one hand. Whilst wearing disposable gloves, slide the magnetite sludge down the shaft of the magnet into a suitable container. Note: Depending on the amount of sludge collected it is advisable to remove only a proportion of the deposits with each stroke, starting at the lower end. Clean the end of the magnet.
8. Ensure safe and responsible disposal of sludge.
9. Re-assemble the Fernox Powerflushing Filter ensuring that the magnet is located within the circular recess at the base of the cylinder, and turn both three-port valves back into the **CIRCULATE** position.
10. 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 powerflushing. However, to ensure a long life the magnet should be thoroughly cleaned and dried after each usage.