62509 - TF1 Sigma 22mm Slip Socket Installer Pack 265ml

The Fernox TF1 Sigma Filter Installer Pack includes everything needed to successfully clean and protect a domestic central heating system in line with BS 7593:2019 and the Benchmark Commissioning Checklist. It includes the industry leading TF1 Sigma Filter with 22mm slip socket connection, Fernox Cleaner F3 and Fernox Protector F1 265ml. The complete solution to cleaning, protecting and guarding central heating systems.

- Complete pack for cleaning and protecting a central heating system.
- TF1 Simga Filter is a high-performance, magnetic in-line system filter ideal for restricted spaces as it is capable of multiple orientations. This simple to install, composite plastic filter fits onto vertical and horizontal pipework, and works by allowing hydrocyclonic action to deliver contaminants to the unit's powerful magnet assembly for safe removal.
- Protector F1 & Cleaner F3 265ml treat an average sized UK home of up to 100L, 12 radiators and 190 sqm of underfloor heating. Smaller volume product – less packaging waste and lower environmental impact.
- 265ml chemicals can be conveniently dosed via the Fernox TF1 Sigma Filter
- Impressive 10 year warranty

Additional Info

The Fernox TF1 Sigma Filter is constructed from a high strength engineering polymer, suitable for heating and cooling system applications. The glass reinforced polymer has good hydrolysis resistance, as well as high resistance to strain and abrasion. The polymer is compatible with glycols and additives used in central heating systems.

The TF1 Sigma Filter has been designed to ensure there is minimal pressure loss in addition to maintaining a high collection efficiency. The internal HPS, magnet assembly and area of low flow have all been engineered to allow the filter to capture a range of system contaminates, whilst not impacting the rest of the heating system.

The Fernox TF1 Sigma Filter utilises a range of high-quality component parts that ensure the filter offers optimum performance. All valves are designed to allow users to operate them easily by hand, whilst also providing a secure connection to the system and a service point. The magnet is manufactured using a premium grade of neodymium, enabling a high efficiency capture rate, as well as a robust filtration medium that will ensure a continued and consistent level of collection.

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Application

The TF1 Sigma Filter can be installed on vertical or horizontal pipework, in accordance with the flow direction indicated by the arrow on the manifold. Ideally the TF1 Sigma Filter should be fitted on the return to the boiler and can be installed at up to 45º from the vertical position if space or head height is restricted. The TF1 Sigma Filter is designed to protect the boiler from the damaging effects of circulating corrosion debris, which has collected in the system as a result of a chemical reaction when water comes into contact with mixed metals used within a heating and cooling system.

The recommended ‘in use’ concentration of Protector F1 is 0.265%. One 265ml bottle will treat an average domestic system (100 litres). For open vented systems add via the feed and expansion tank. For sealed systems add via a suitable dosing point (e.g. a towel rail or an in-line TF1 system filter). Alternatively, use a suitable dosing vessel to inject the product into the system. In single feed indirect cylinders, e.g."Primatic" or similar, potable water chemicals must be used. Fernox recommends untreated or sludged systems are thoroughly cleaned and flushed in accordance with BS 7593:2019 and Benchmark using any product from the Fernox Cleaner range, before treating with Fernox Protector F1, as existing debris can damage the installation and may reduce the lifespan of the boiler and system.

One 265ml bottle of Cleaner F3 is sufficient to clean an average domestic central heating system (100 litres). Additional/repeat applications of Cleaner F3 may be used for larger, dirty systems. First, drain and refill the entire system with plain water. For optimum results, the entire system, including drop feed radiators where fitted, should be completely drainable. Preferably, full bore gate valves with hose connectors should be provided temporarily for this purpose. Motorised and thermostatically controlled valves must be set so that no part of the system is closed off during cleansing or rinsing. Discharges must be made to the foul drain and not to surface water drain.
For open vented systems add Cleaner F3 via the header tank. For sealed systems add via a suitable dosing point or TF1 Filter. Fernox Cleaner F3 can also be used in conjunction with a powerflushing unit. In this case, please refer to the unit manufacturer's instructions.
When pre-commission cleaning new systems, Fernox Cleaner F3 should be circulated for a minimum of one hour at normal operating temperature.
For cleaning existing systems, sludge and debris should be dispersed also within one hour at normal operating temperatures. However, to remove hardened iron oxides and limescale, the cleaning time can be extended to up to one week under the normal heating cycle. If a radiator still has a cold spot after one hour, increase the flow through the radiator by closing the valves on the other radiators. An additional or repeat dose of Cleaner F3 may be necessary in some cases.
Drain and flush thoroughly, at least twice, until the water runs clear.
When using Cleaner F3 with a powerflushing machine, cleaning should be completed within an hour. Use dynamic flushing with plain water until the water is clear. Refill system adding Fernox Protector F1 for long-term protection against corrosion and limescale .In single feed indirect cylinders, e.g."Primatic" or similar, potable water chemicals must be used.

Packaging, Handling & Safety

As with all magnetic products, if you have an implanted cardiac device extra caution should always be taken when handling any magnetic filter.

Individually packaged with instructions included. No special storage requirements.

Fernox Protector F1 is supplied in 265ml bottles and classified as non-hazardous for human health, but as with all chemicals, keep out of reach of children. In case of contact with eyes or skin, rinse immediately with plenty of water.

Fernox Cleaner F3 is supplied in 265ml bottles and classified as non-hazardous for human health, but as with all chemicals, keep out of reach of children. In case of contact with eyes or skin, rinse immediately with plenty of water.

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Specification

Filter Body – Glass filled, engineering polymer
Manifold – Glassed filled engineering polymer
Drain Valve – Nickel plated brass
Isolation Valves (if applicable) – Nickel plated brass
Circlip – Stainless Steel
Seals & Washers – EPDM

Protector F1 is a blend of inorganic and organic corrosion and scale inhibitors.
Form: Liquid
Odour: Aromatic (slight)
Colour: Yellow
pH(conc.): 8.1
pH(soln.): 7.0 to 8.0
SG: 1.18 at 20°C

Cleaner F3
Colour: Amber
Odour: Faintly Aromatic
Form: Liquid
pH (conc): 6.7
pH (in-use) 6.5 - 7.7
SG: 1.195 @ 20°C

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Performance

Suitable Fluids

Water
Inhibited Glycol Solutions
Fernox Chemical Range / System Additives

Maximum Percentage of Glycol

50%

Maximum Working Pressure

25 L/min

Maximum Working Temperature

100ºC

Capture Rate

Up to 100% of system contaminates

Operating Principle

Contaminated water enters the filter via the manifold, carrying a variety of system debris and particulate matter held in suspension. This debris, including ferrous impurities such as Magnetite, moves through the manifold and into the main body of the filter.

Due to the engineered flow characteristics created within the filter by the Hydronic Particle Separator, water is forced downwards, which helps to disrupt any dirt particles held in suspension. These particles then settle in the designated area of low flow at the base of the filter for easy removal.

The dynamic flow of the water within the filter also allows ferrous impurities to be captured by the high-powered magnet assembly.

Water is directed to pass over the magnet sheath and around the HPS, before exiting via the manifold. As a result, system debris cannot escape from the filter and is either trapped in the area of low flow, or captured by the powerful, neodymium magnet to allow clean water to exit the filter.

Any dirt collected within the filter can be discharged by removing the magnet from the sheath and opening the drain valve. This procedure is described in the cleaning guide and does not require disassembling the filter

Volumetrics & Barcodes

Barcode EAN	5014551625099	OCU Barcode	05014551002241
Single Unit Weight (kg)	2.1	Outer Carton Weight (kg)	8.5

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Single Unit Height (mm)	112	Outer Carton Height (mm)	240
Single Unit Width (mm)	346	Outer Carton Width (mm)	368
Single Unit Depth (mm)	179	Outer Carton Depth (mm)	354

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