

TF1 Sigma Filter 1" Press fit 62594

- Pressure tested, innovative sealed unit design to maximise reliability and promote fast, easy cleaning via the drain valve
- Unique action, capturing a range of magnetic and non-magnetic debris through HPS technology
- Durable and robust construction, made from a high quality glass reinforced engineering polymer with brass on plastic manifold
- Convenient, mess-free and quick dosing via the drain valve - less time spent on-site when servicing the system
- Easy to install – fits on horizontal and vertical pipework orientation
- Will not block or restrict flow



A high-performance, precision-engineered in-line system filter, the TF1 Sigma Filter utilises a sealed, lidless design for increased reliability and strength. Ideal for use in restricted spaces due to its capability of being positioned in multiple orientations up to 45°. This simple to install, composite plastic filter fits onto vertical and horizontal pipework, and works by allowing Hydronic Particle Separation (HPS) action to deliver contaminants to the unit's powerful magnet assembly for safe removal.

Additional Information

The 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 contaminants, whilst not impacting the rest of the heating system.

The TF1 Sigma Filter utilises a range of high-quality component parts that ensure the filter offers optimum performance. The metal slip socket manifold provides a secure connection to the heating system. 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.

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 45° 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. Treating the system with a quality inhibitor product from the Fernox Protector range will prevent the formation of sludge and scale long term in accordance with regulations and best practice.

Package, 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.

Performance

Suitable Fluids:

Water

Inhibited Glycol Solutions

Fernox Chemical Range / System Additives

Maximum Percentage of Glycol - 50%

Maximum Working Pressure – 5 bar

Maximum flow rate - 50 L/min

Maximum Working Temperature - 100°C

Capture Rate - Up to 100% of system contaminants

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.

Water is forced down towards the bottom of the filter due to the engineered flow characteristics created within the filter by the Hydronic Particle Separator (HPS). The HPS action helps to disrupt any dirt particles held in suspension by the water, as well as direct these particles towards an engineered area of low flow at the base of the filter.

The dynamic flow of the water within the filter also allows ferrous impurities to be captured by the high-powered magnet assembly. To exit the filter, water must pass over the magnet sheath and around the HPS, then out of the manifold. In this way, system debris has difficulty escaping the unit, and is either trapped in the area of low flow, or captured by the powerful magnet, meaning clean water exits the filter.

Any dirt collected within the filter can then be discharged by removing the magnet from the sheath and opening the drain valve.

This procedure is shown in the cleaning guide and does not require system shutdown or the filter to be disassembled.

Specification

Filter Body – Glass filled, engineering polymer

Manifold – Glass filled engineering polymer

Drain Valve – Nickel plated brass

Circlip – Stainless Steel

Seals & Washers – EPDM

Single Item

Height mm	112
Width mm	346
Depth mm	179
Weight kg	1.619
Barcode EAN	5014551625945

Outer Carton

Outer Height mm	241
Outer Width mm	178
Outer Depth mm	352
Outer Weight kg	6.748
OCU Barcode	05014551002555
Transit Type	Euro 1200 x 800
Cartons per layer	6
Layers per transit type	5

Last modification

13-02-2023 (d/m/y)