TF1 Total Filter
62296

- Hydrocyclonic and magnetic in-line filter
- Unique action, removes magnetic and non-magnetic contaminants
- Dosing point for Fernox ‘F’ range products
- Cleaned in minutes without removal or disassembly
- Will not block or restrict flow
- All valves and fittings included

This award-winning TF1 Total Filter combines hydrocyclonic action with powerful Neodymium magnetic assemblies, to remove magnetic and non-magnetic contaminants from system water and contain them safely within the filter. It fits onto vertical and horizontal pipework, can be cleaned in minutes, does not restrict flow in any way.

Additional Information

The TF1 Total Filter is constructed from a high strength, glass reinforced polymer, which has good hydrolysis resistance as well as high resistance to strain and abrasion. The polymer is compatible with glycols and additives and is suitable for use in central heating systems.

The TF1 Total Filter has been designed to ensure there is minimal pressure loss whilst continuing to maintain a high collection efficiency. The unique hydrocyclonic action, 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 TF1 Total Filter utilises a range of high-quality component parts that ensure the filter offers optimum performance. All isolation valves are designed to allow users to operate them easily by hand, whilst also providing a secure connection to the system and a robust 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.

Application

The TF1 Total Filter can be connected directly on to the pipework using the valve fittings provided. The TF1 Total Filter can be installed in any one of 24 separate orientations enabled by its unique inlet/outlet mechanism. The TF1 Total Filter (UK patent granted No. 2448232) is a revolutionary in-line filter, which combines Hydrocyclonic action with specially designed magnet assemblies, to remove both magnetic and non-magnetic contaminants from system water and contain safely within the filter before removal.

The TF1 Total Filter can be installed on vertical or horizontal pipework, in accordance with the flow direction indicated by the

arrow on the manifold. Ideally the 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.

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 - 50 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, move through the manifold and into the main body of the filter.
The TF1 Total Filter utilises Hydrocyclonic filtration. A Hydrocyclone is a static device that applies centrifugal force to a liquid mixture to promote the separation of particles.
The Hydrocyclonic action has been designed to convert incoming liquid velocity into rotary motion. As water enters the filter, it spins around and down the outside of the filter, carrying particles with it. The shape of the filter has been designed to create a dead zone at the bottom where heavier particles are deposited.
The Hydrocyclone in the TF1 Total Filter has been optimised in order to allow for the maximum filtration ability of both magnetic and non-magnetic material.
Once the flow of water has reached the bottom of the filter, water moves back up through the centre of the TF1 Total Filter, carrying particles over the magnet sheath, promoting further magnetic filtration and enhancing the collection capabilities of 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
Isolation Valves – Nickel plated brass
Circlip – Stainless Steel
Seals & Washers – EPDM

Single Item	
Height mm	112
Width mm	346
Depth mm	179
Weight kg	1.850
Barcode EAN	5014551622968

Outer Carton	
Outer Height mm	240
Outer Width mm	368
Outer Depth mm	354
Outer Weight kg	7.500
Transit Type	CP1 1200 x 1000
OCU Barcode	05014551001367

Last modification	26-02-2021 (d/m/y)