

TF1 Sigma Filter

Next generation of precision engineered, sealed, composite polymer system filters



• SEALED, NO-LID DESIGN

TF1 Sigma Filter has been designed as a sealed, watertight unit.

Due to its precision engineered design, this innovative, lidless, sealed filter has also been developed without the need for an air vent (air vents back into the system via the manifold). The TF1 Sigma Filter has been designed to eliminate all potential risk of leaks. There is no ongoing cost to service the filter as there are no replacement 'O' rings or components necessary over the lifetime of the filter.

• ENGINEERING GRADE HYBRID GLUE

The upper and lower moulded sections of the TF1 Sigma Filter body screw together. Engineering grade, hybrid glue is used to form a strong and permanent bond between the interlocking sections.

The glue used provides excellent toughness, high impact resistance, together with superior shear strength across a wide range of temperatures to reinforce the bond between the two sections of the filter body.

• IMPROVED THREAD DESIGN

All threads have been enhanced across the TF1 Sigma Filter, with improvements made to the size and pitch of the threads, ensuring that parts run together smoothly, so that a secure connection is made between individual components.

Removes the possibility of cross threading during installation, and further improves the overall durability of the filter.

• ADVANCED ENGINEERING POLYMER

The TF1 Sigma Filter is made from an injection moulded, engineering grade polymer.

This material is ideal for filters: it has high strength and hydrolysis resistance with an improved surface finish and mould-flow characteristics. This ensures each moulding is properly formed and provides strength and resistance against extremes in temperature and pressure.

• SIMPLE INSTALLATION PROCESS

The unique design features of the TF1 Sigma Filter ensures the installation process is as quick and easy as possible.

A slip socket version is available for quick installation, with spanner flats so the compression fittings can be tightened properly without damaging pipework. Installers can install the filter with ease.

10
YEAR
WARRANTY

FERNOX
MAKES WATER WORK

TF1 Sigma Filter

Next generation of precision engineered, sealed, composite polymer system filters



• DOSING POINT FOR CHEMICALS

The TF1 Sigma Filter drain valve is multi-functional.

When the system is pressurised, it acts as a dosing point for the Fernox Express products. The filter should be cleaned prior to dosing. After installation of the filter, Fernox 500ml range of chemicals can also be poured into the system via the drain valve by turning the filter upside down by 180 degrees.

• THICKER WALL SECTIONS

Wall sections of all injection moulded component parts have been increased and exceed alternative filter designs.

These modifications make the filter more durable and able to withstand higher system pressure. Thicker wall sections also help to improve the moulding process, leading to a higher quality surface finish.

• FLEXIBLE INSTALLATION ORIENTATIONS

The TF1 Sigma Filter can be installed in a variety of pipework orientations including horizontal, vertical, or at any point around the full 360° orientation. The filter can also be positioned up to 45° from vertical for maximum flexibility to allow installation in small or restricted spaces.

The TF1 Sigma Filter is suitable to fit in any location, including areas where clearance or space is limited.

• EXTENSIVE TESTING

The TF1 Sigma Filter has been extensively tested for dirt collection effectiveness and durability. Long-term integrity testing has pressure cycled the filter between 2 and 10 bar, as well as temperature cycled between -5°C and 90°C. The TF1 Sigma Filter has also been tested to ensure that it cannot become blocked by debris.

Fernox confidently provides a 10-year warranty on all TF1 Sigma Filters.

• IMPROVED SURFACE FINISH

The TF1 Sigma Filter has an improved surface finish when compared to alternative filter designs.

Glass fibres within the polymer are less apparent on the surface of the moulding, giving a more consistent surface finish and colour.

• UNIQUE SHAPE

The TF1 Sigma filter has a distinctive domed shape.

The shape gives the filter body greater strength and durability than a flat lid design, allowing the filter to withstand higher pressures.

• DOUBLE RADIAL SEALS

The TF1 Sigma Filter has been designed with double radial seals on the connection between the manifold and the main body of the filter, and between the upper and lower mouldings which form the main body.

The TF1 Sigma Filter is versatile and secure, allowing for a variety of installation positions. The seals are robust, and the precision mating faces ensures a smooth yet tactile feel when rotating the manifold into position. The double radial seal between the upper and lower mouldings ensure no water can leak from the filter body.

• IMPROVED SEALING FACES

The flatness of the valve sealing faces has been improved across the TF1 Sigma Filter. Injection moulded parts have been designed to ensure that the filter body can fully pack and fill the sealing faces.

Understanding the shrinkage of parts and design tolerances has allowed Fernox to create a truly watertight, composite polymer filter that has positive and secure seals. Installers can be confident in the security and reliability of the filter; minimising the risk of call-backs and saving time on-site.

• HIGH PERFORMANCE: MAGNETIC AND NON-MAGNETIC DEBRIS

The TF1 Sigma Filter has an excellent collection rate, across a range of flow rates. There are two sizes of the filter available (22mm and 28mm versions), making the product extremely versatile, and suitable for a variety of applications.

The moulded internal baffle disrupts the flow of water through the filter, and in doing so removes particles held in suspension by the water. The Hydronic Particle Separator (HPS) technology encourages a change in the flow trajectories of these particles, allowing particles to settle into the body and base of the filter for easy collection.

TF1 Sigma Filter is highly effective at capturing both magnetic and non-magnetic system debris. The HPS action decreases the velocity of both magnetic and non-magnetic particles as they pass through the filter, increasing the effectiveness of the magnet to capture this debris more efficiently whilst encouraging the non-magnetic debris to settle in the body of the filter.

