



KSFS-PM

- Variant KSFS-PM: Casing with prefilter



With sealing integrity test facility



Optional double-groove service board



Explosion-proof construction
optional

KSFS

FITTING OF FILTER ELEMENTS FOR THE SEPARATION OF SUSPENDED PARTICLES IN AREAS WITH CRITICAL REQUIREMENTS

Ducted particulate filter for Mini Pleat filter panels, Mini Pleat filter cells, and activated carbon filter cells. For installation into the ductwork of ventilation systems. Used in medicine, biology, the pharmaceuticals industry, and sensitive technical areas.

- Ducted particulate filter made of sheet steel with decontaminable powder coating RAL 9010 and clamping mechanism made of stainless steel

- Robust, welded construction with doubled-edged perimeter flanges with pre-drilled holes ensures secure sealing
- One-stage or two-stage casing, for the fitting of fine dust filters as prefilter stage and of particulate filters as second filter stage
- Secure sealing and convenient handling due to tensioning lever for a consistent contact pressure and hence sealing integrity between the casing and filter element
- With sealing integrity test facility for filter elements

Optional equipment and accessories

- Optional double-groove service board for contamination-free filter change ('safe change')
- Plastic service bag with O-ring for contamination-free filter change
- Explosion-proof construction for protection zones 1 and 2, as well as 21 and 22

General information



Application

- Ducted particulate filters for critical requirements
- Casing for duct installation
- Fitting of filter elements for the separation of suspended particles such as aerosols, toxic dusts, viruses and bacteria from the supply or extract air.
- Fitting of activated carbon filter cells for the separation of gaseous odorous substances and contaminants from the supply and extract air

Nominal sizes

- B × H × T [mm]

Variants

- M: Casing without prefilter
- PM: Casing with prefilter

Construction

- SPC steel, powder-coated RAL 9010 (pure white)
- SPC-Ex steel, powder-coated RAL 9010 (pure white) in explosion-proof construction

- STA stainless steel
- STA-Ex stainless steel in explosion-proof construction

Options

- MD: Casing with double-groove service board

Accessories

- Plastic service bag with O-ring

Useful additions

- Suitable filter elements to be ordered separately
- Mini Pleat filter panels (MFP)
- Mini Pleat filter cells (MFC)
- Activated carbon filter cells (ACF)
- Other filter elements upon request
- Spigot (KSFSSP)

Construction features

- Casing with robust, doubled-edged connecting flanges with pre-drilled holes.
- Automatically adjusting clamping mechanism which guarantees sealing integrity between the casing and the filter element; this clamping mechanism can only be closed when the filter element is properly seated
- Cover plate with profiled seal and 4 clamping screws with star grips
- Prefilter casing for fitting Mini Pleat filter panels as fine dust filters
- Double-groove service board and plastic service bag for contamination-free filter change
- Sealing integrity test facility for Mini Pleat filter panels as particulate filters
- Casing with indentations to ensure the precise fitting of the filter elements
- Leakage classes D according to EN 15727 and L1 according to EN 1886
- Leakage test for each individual casing

Materials and surfaces

- Casing made of sheet steel, powder-coated RAL 9010, pure white, or of stainless steel
- Stainless steel clamping mechanism

Installation and commissioning

- Installation orientation: horizontal or vertical (rotated by 90°)

- Pressure measurement points for each filter unit are part of the supply package but must be set up on site by others

Standards and guidelines

- EN 15727; Ventilation for buildings – Ducts and ductwork components, leakage classification and testing
- EN 1886; Ventilation for buildings – Air handling units – Mechanical performance
- ATEX Directive 2014/34/EU

Maintenance

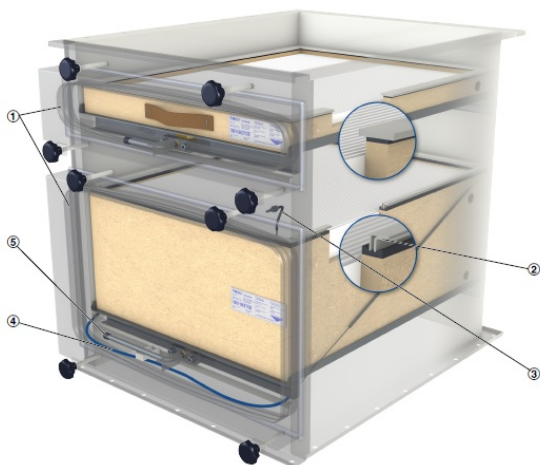
- Filter change: Ejection mechanism for the easy removal of the filter elements from the filter casing

TECHNICAL INFORMATION

Function, Specification text, Order code



Schematic illustration of KSFS



- ① Double-groove service board (optional)
- ② Sealing integrity test facility
- ③ Spigot for sealing integrity test facility
- ④ Ejection mechanism for filter change
- ⑤ Clamping mechanism for the filter element

Specification text

Ducted particulate filters KSFS for critical requirements as filter casings for installation into the ductwork of ventilation systems. Fitting of filter elements for the separation of suspended particles such as aerosols, toxic dusts, viruses and bacteria from the supply or extract air; also for the fitting of activated carbon filter cells for the adsorption of gaseous odorous substances and contaminants. Filter casings are available as one-stage construction or two-stage construction for the fitting of fine dust filters as prefilter stage and of particulate filters as second filter stage. Ducted particulate filter KSFS with robust, doubled-edged connecting flanges with pre-drilled holes. Clamping mechanism made of stainless steel with tensioning lever for uniform sealing integrity between the casing and filter element. Filter casing with sealing integrity test facility, available with optional double-groove service board and plastic service bag for contamination-free filter change. The cover plate is fitted with a profiled seal and 4 clamping screws with star grips. Pressure measurement points are part of the supply package but must be set up on site by others. Leakage classes D according to EN 15727 and L1 according to EN 1886. Leakage test for every casing. Optional: Filter casing KSFS with explosion protection, use in areas with a potentially explosive atmosphere of zones 1 and 2, as well as zones 21 and 22 (Ex II 2G Ex IIC T6 Gb and Ex II 2D Ex IIIB T80 °C Db). The filter casings must be connected to the earth potential. All conductive and dissipative parts must be connected together and grounded. Conductive dusts are excluded from the application. Under no circumstances should metallic foreign materials enter the filter casing.

Materials and surfaces

- Casing made of sheet steel, powder-coated RAL 9010, pure white, or of stainless steel
- Stainless steel clamping mechanism

Construction

- SPC steel, powder-coated RAL 9010 (pure white)
- SPC-Ex steel, powder-coated RAL 9010 (pure white) in explosion-proof construction
- STA stainless steel
- STA-Ex stainless steel in explosion-proof construction

KSFS	–	PM	–	SPC	/	710 x 794 x 710	/	MD
1		2		3		4		5

1 Type
KSFS Duct particulate filter for high requirements

2 Variant
M Casing without prefilter
PM Casing with prefilter

3 Material
SPC steel, powder-coated RAL 9010 (pure white)
SPC-EX steel, powder-coated RAL 9010, pure white, in explosion-proof construction
STA stainless steel
STA-EX stainless steel in explosion-proof construction

4 Nominal size [mm]
B x H x T

5 Service board
No entry required: Without
MD casing with service board

KSFS-M



- Variant KSFS-M: Casing without prefilter

KSFS-PM



- Variant KSFS-PM: Casing with prefilter

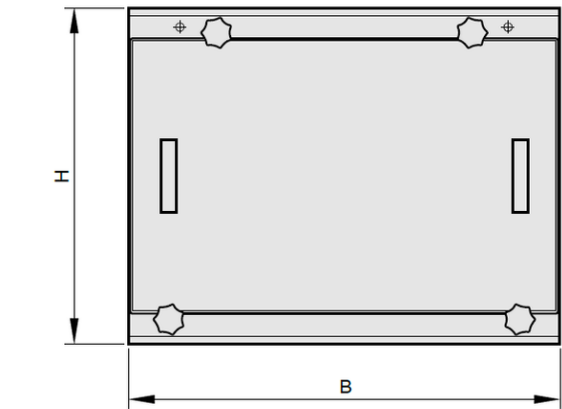
Product specific data – KSFS-M

Nominal size			Filter size	~ Weight
B [mm]	H [mm]	T [mm]	B × H × T [mm]	(kg)
710	411	405	305 × 610 × 150	40
710	411	710	610 × 610 × 150	50
710	553	405	305 × 610 × 292	55
710	553	710	610 × 610 × 292	65
710	553	862	762 × 610 × 292	70

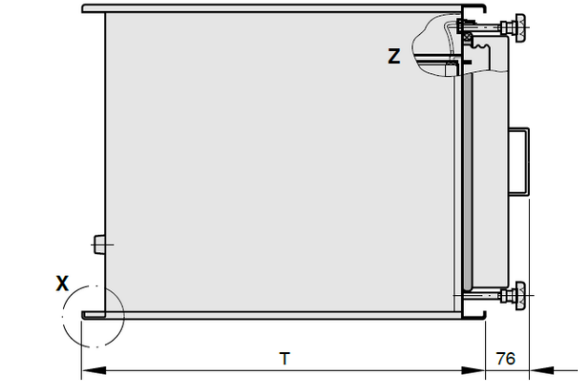
Product specific data – KSFS-PM

Nominal size			Prefilter size	Main filter size	~ Weight
B [mm]	H [mm]	T [mm]	B × H × T [mm]		(kg)
710	652	405	305 × 610 × 60	305 × 610 × 150	60
710	652	710	610 × 610 × 60	610 × 610 × 150	70
710	794	405	305 × 610 × 60	305 × 610 × 292	70
710	794	710	610 × 610 × 60	610 × 610 × 292	85
710	794	862	762 × 610 × 60	762 × 610 × 292	95

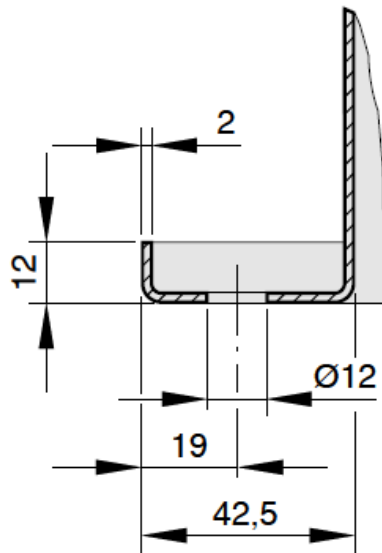
KSFS-M, front view



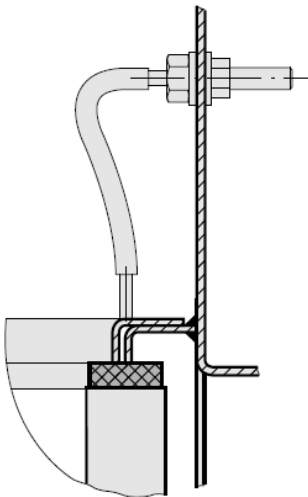
KSFS-M, side view



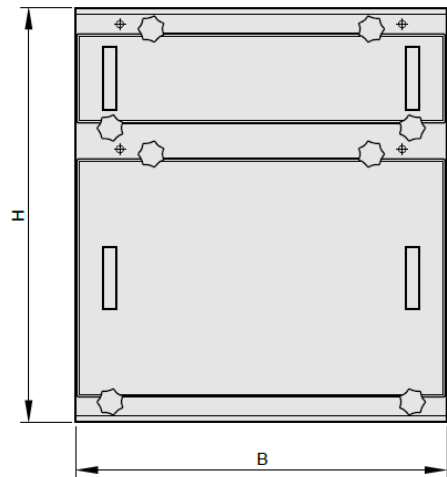
Detail X



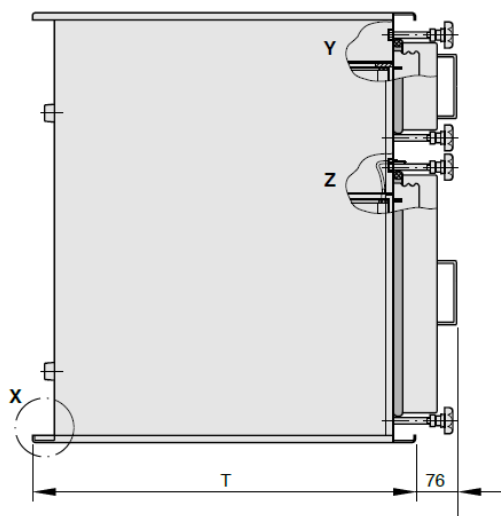
Detail Z



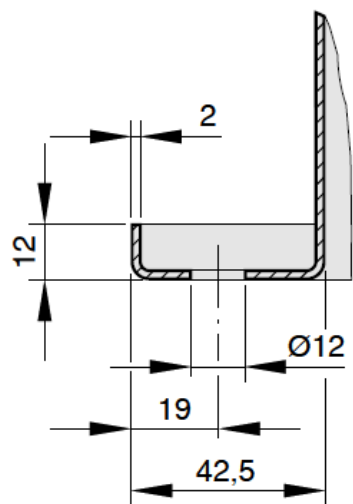
KSFS-PM, front view



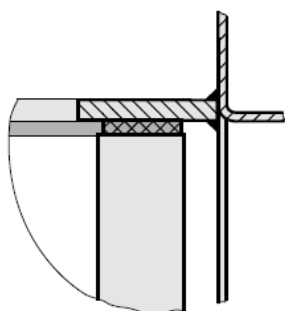
KSFS-PM, side view



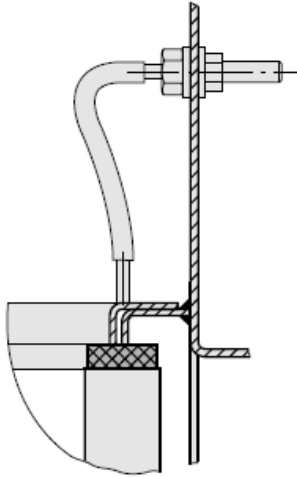
Detail X



Detail Y



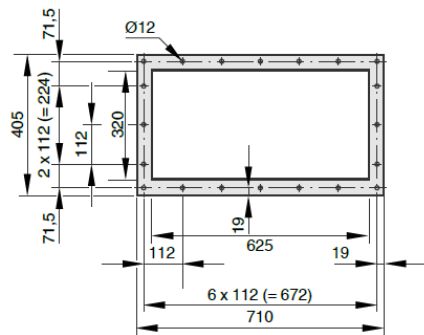
Detail Z



Installation and commissioning

- Observe the installation and maintenance manual
- Installation orientation: horizontal or vertical (rotated by 90°)
- Casing with indentations to ensure the precise fitting of the filter elements
- Pressure measurement points for each filter unit are part of the supply package but must be set up on site by others

KSFS flange dimensions



For filter 305 x 610 (B x H)

KSFS flange dimensions

