Particulate filter air terminal devices

TFP

Easy cleaning and validation

Construction with removable spigot

Conforms to VDI 6022

For critical air cleanliness and very critical hygiene requirements, suitable for ceiling installation

Pharmaceutical clean room terminal filters as a final filter stage with Mini Pleat filter panels for the separation of suspended particles. Used in highly sensitive areas in the pharmaceuticals industry, medicine, and biology

- Mini Pleat filter panels with downstream fluid seal meet the highest hygiene requirements
- Easy, time-saving and safe filter change
- With hinged air diffuser, held securely by magnets, for easy cleaning and validation
- Filter change with patented turn clip
- Newly designed supports for suspended ceiling installation
- Robust, welded construction
- Compact construction, suitable for low ceilings
- Various diffuser faces to ideally meet individual requirements
- Horizontal or vertical connection possible
- Clip-on spigot for installation in continuous ceilings with horizontal connection
- For air cleanliness classes 5 to 8 according to EN ISO 14644-1
- Meets the hygiene requirements of VDI 6022

General information

Application
- Pharmaceutical clean room terminal filter for ceiling installation as final filter stage and for air distribution in sensitive areas of the pharmaceutical industry
- Fitting of filter elements for the separation of suspended particles such as aerosols, toxic dusts, viruses or bacteria from the supply or extract air.

Variants
- TC-S: Top entry circular spigot, top lateral suspension lugs
- TC-FC: Top entry circular spigot, with supports for mounting in false ceilings
- SC-S: Side entry circular spigot, top lateral suspension lugs
- SC-FC: Side entry circular spigot, with supports for mounting in false ceilings
- SCR-S: Side entry circular spigot, removable, top lateral suspension lug
- SCR-FC: Side entry circular spigot, removable, with supports for mounting in false ceilings

Construction
- Sheet steel, powder-coated, RAL 9010, pure white

Nominal sizes
- 400, 500, 600, 625 [mm]

Attachments
- FD: Ceiling swirl diffuser
- TDF: Ceiling swirl diffuser
- VDWF: Ceiling swirl diffuser

Useful additions
- Mini Pleat filter panels (MFP)
- Suitable filter elements to be ordered separately

Special characteristics
- Compact construction

- Flush ceiling installation
- Removable spigot for installation into closed ceilings
- Diffuser face plate can be hinged down
- Filter change with patented turn clip
- Supports for mounting in false ceilings

Construction features
- Welded filter casing with sealing frame for fitting filter elements, with a seal on the downstream side
- Mounted pressure measuring points for monitoring the operating differential pressure and internal measuring tube

Material and surfaces
- Casing and diffuser face plate made of sheet steel, powder-coated RAL 9010, pure white

Commissioning
- Fitting of filter elements with a fluid seal on the downstream side
- Pressing of the filter element is performed using four patented turn clips
- Air diffusers are hinged and held in place by magnets; no additional tools required
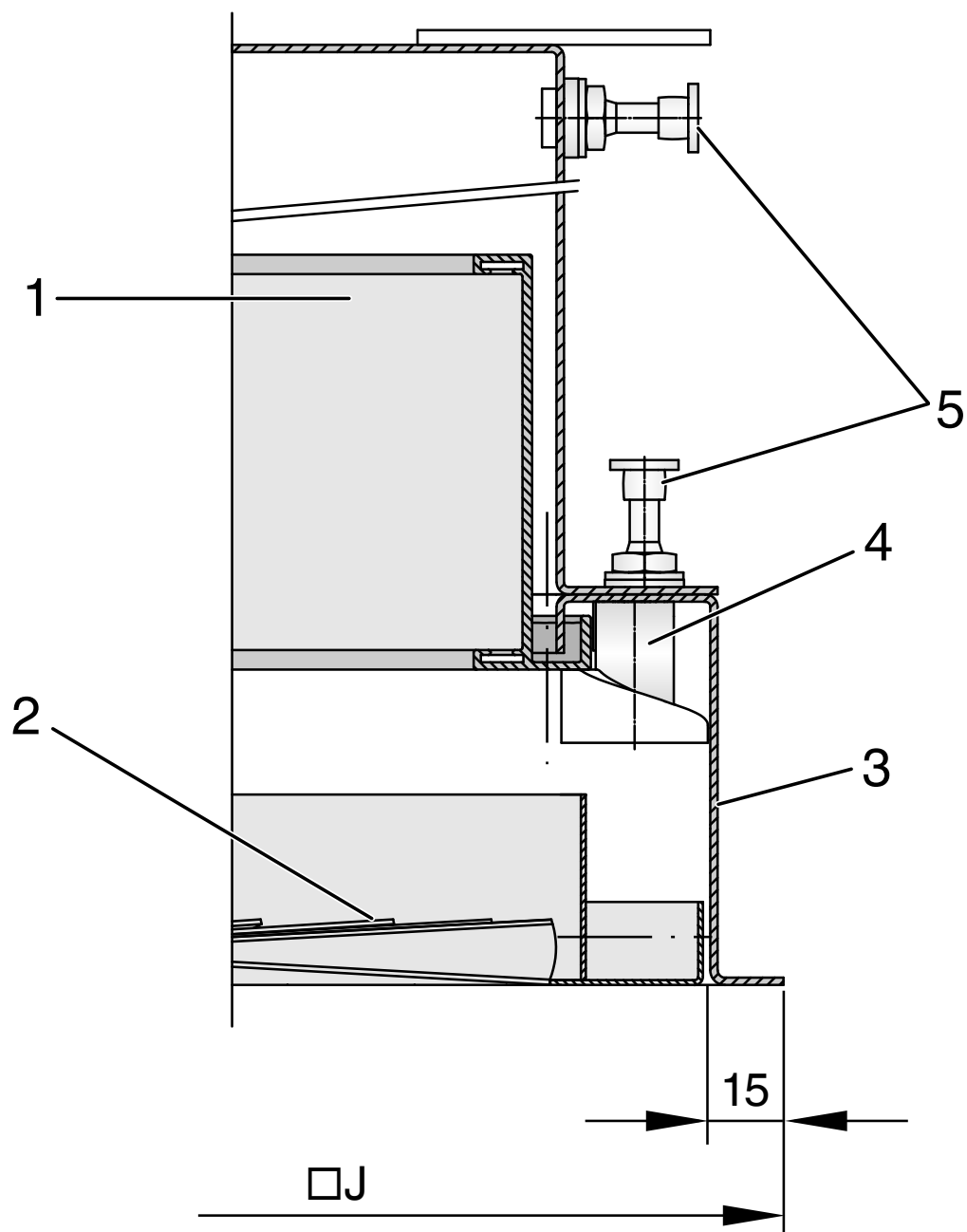
Standards and guidelines
- Hygiene compliance: VDI 6022, VDI 3803, DIN 1946 Part 4, ÖNORM H 6021 and ÖNORM H 6020, SWKI VA 104-01 and SWKI 99-3 and EN 16798

Maintenance
- Diffuser face can be hinged down for easy disassembly and cleaning
- Cleaning is possible with installed particulate filter (seal on downstream side)
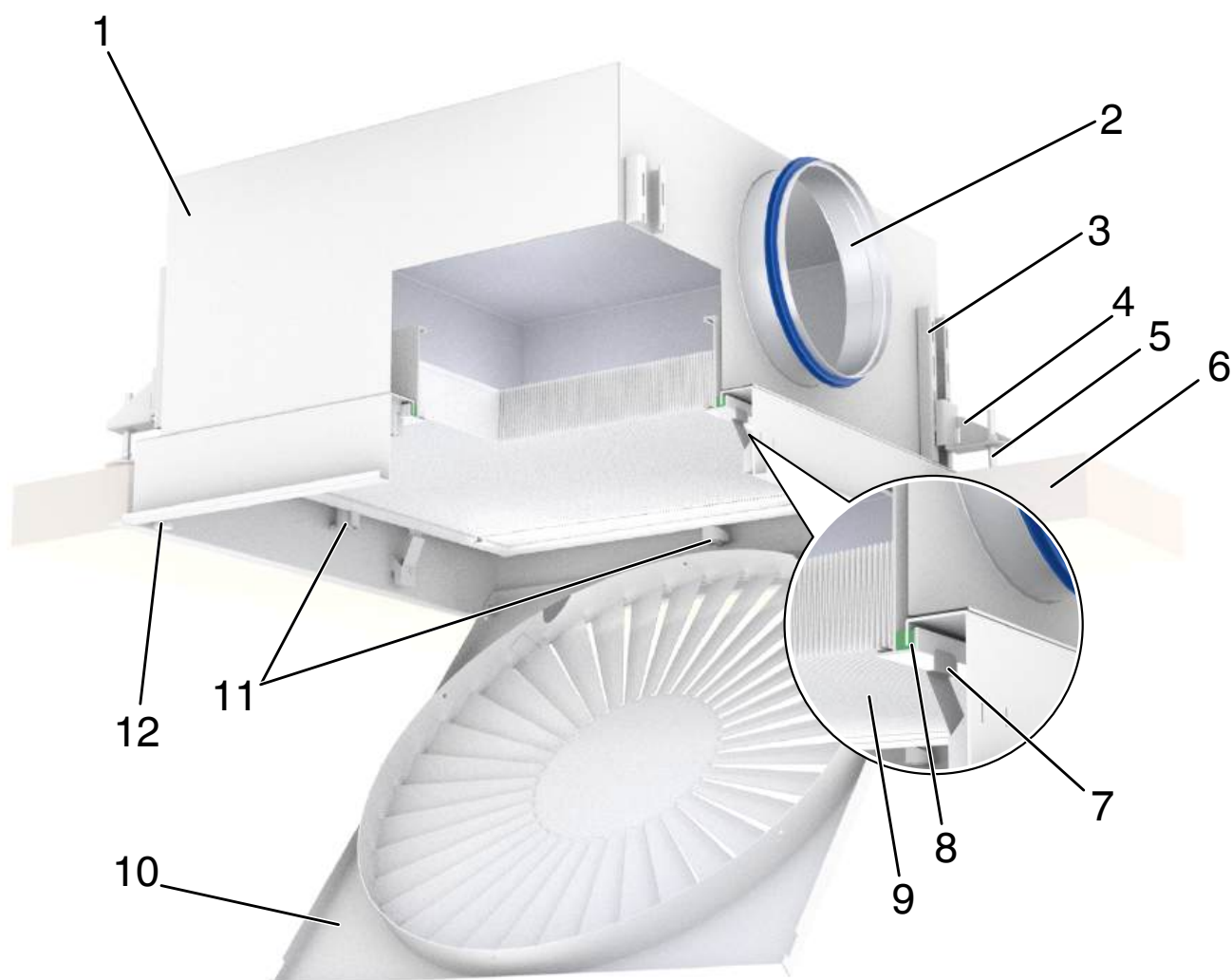- Easy replacement of filter elements thanks to special frame profile, no additional fluid sealing frame

Function

Filter seal in the casing base

1 Filter element
2 Air diffuser
3 Casing
4 Turn clip (patented)
5 Pressure measuring points

TFP: schematic illustration

1 Casing
2 Clip-on spigot with lip seal
3 C rail for adjustable supports
4 Supports for suspended ceiling
5 Lock nut
6 Suspended ceiling
7 Holding spring
8 Fluid seal
9 Filter pack
10 Air diffuser
11 Turn clips (patented)
12 Holding magnets

Specification text

This specification text describes the general characteristics of the product. Texts for variants can be generated with our Easy Product Finder design program.

Specification text

Pharmaceutical clean room terminal filter type TFP for ceiling installation as final filter stage and for air distribution in sensitive areas of the pharmaceutical industry.

Fitting of filter elements for the separation of suspended particles such as aerosols, toxic dusts, viruses and bacteria from the supply or extract air.

Welded filter casing with sealing frame for fixing the Mini Pleat filter panels, with a fluid seal on the downstream side.

With side entry or top entry spigot. Side entry spigot can be removed if desired.

Pressing the Mini Pleat filter panels is performed by four patented turn clips.

Casing with mounted pressure measurement points to monitor the operating differential pressure and with internal measuring tube.

Diffuser face plate made of sheet steel, powder-coated (RAL 9010), types FD and TDF; can be hinged down to facilitate disassembly and cleaning.

Leakage test for each casing.

Special features

- Compact construction
- Flush ceiling installation
- Removable side spigot, for installation in closed ceilings
- Diffuser face can be hinged down
- Filter change with patented turn clip
- Supports for mounting in suspended ceilings

Materials and surfaces

- Casing and air terminal device made of sheet steel, powder-coated, RAL 9010, pure white

Constructions

- Sheet steel, powder-coated, RAL 9010, pure white

Order code

TFP – SC – SPC – CC – VDWF / 600 × 24 – 198 – 15 / S

| | | | | | | | | | |
1   2   3   4   5   6   7   8   9   10

1 Type
TFP Pharmaceutical clean room terminal filters

2 Variant
SC Circular spigot, side entry
SCR Circular spigot, side entry, removable
TC Circular spigot, top entry

3 Casing material
SPC Steel, powder-coated, RAL 9010 (pure white)

4 Type of ceiling
No entry: Standard
CC Clamping cassette

5 Air diffuser
FD, TDF, VDWF

6 Nominal size [mm]
400, 500, 600, 625

7 Number of blades
Only with air diffuser VDW
0, 16, 24

8 Spigot diameter [mm]
158, 198

9 Flange width [mm]
15

10 Suspension/measuring points
S Suspension and measuring points on the side
FC With support for false ceiling installation, measuring points at the top

Order example: TFP-SC-SPC-CC-VDW/600×24-198-15/S

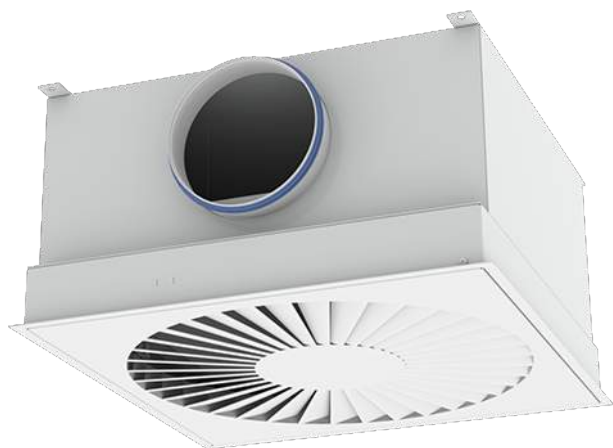|	
Type	TFP - Pharmaceutical clean room terminal filter
Variant	Circular spigot, side entry
Casing material	Steel, powder-coated, RAL 9010 (pure white)
Type of ceiling	Clamping cassette
Air diffuser	VDW
Nominal size [mm]	600
Number of blades	24
Spigot diameter [mm]	198
Flange width [mm]	15
Suspension/measurement points	Suspension and measurement points on the side

Variants

Product examples

Pharmaceutical clean room terminal filter, variant TFP-TC-S

- Top entry circular spigot

Pharmaceutical clean room terminal filter, variant TFP-SC-S

- Side entry circular spigot

Pharmaceutical clean room terminal filter, variant TFP-SC-FC

▪   Circular spigot, side entry

Pharmaceutical clean room terminal filter, variant TFP-SCR-S

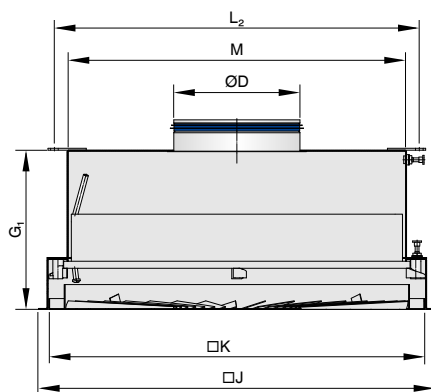▪   Side entry circular spigot, removable

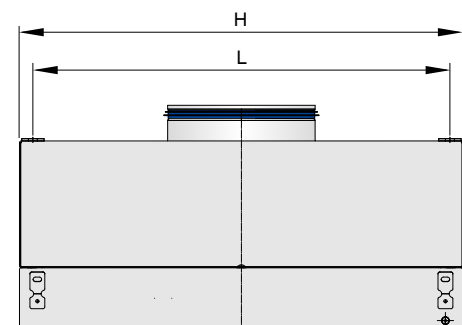**Pharmaceutical clean room terminal filter, variant TFP-SCR-FC-VDWF**

- Circular spigot, side entry, air diffuser VDWF

Dimensions

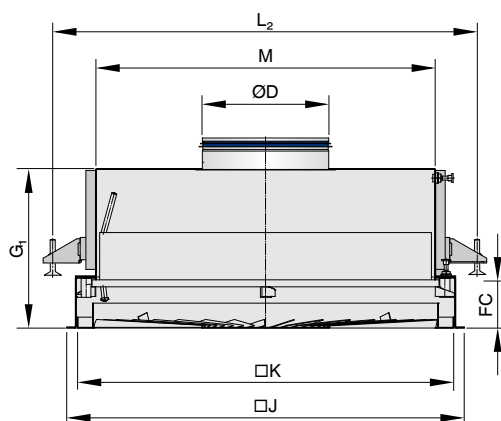**TFP-TC-S, front view**

TFP-TC-S, side view

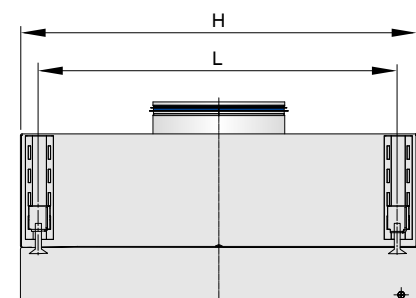**Product specific data TFP-TC-S**

All weights are net, without packaging

1	2	3	4	5	6		7	8		9
NS	B × H × T	∅D	G_1	K	H	M	J	L	L_2	kg
400	295 × 295 × 85	158	250	365	371	308	398	335	348	10
500	395 × 395 × 85	198	250	465	471	408	498	435	448	15
600	495 × 495 × 85	198	250	565	571	508	598	535	548	21
625	520 × 520 × 85	198	250	590	596	533	623	560	573	23

1 Nominal size 2 Filter size 3 Spigot diameter 4 Casing height 5 Overall dimensions of air terminal device 6 Overall dimensions of casing 7 Overall dimensions of casing flange 8 Top suspension, screw hole pitch 9 ~ Weight
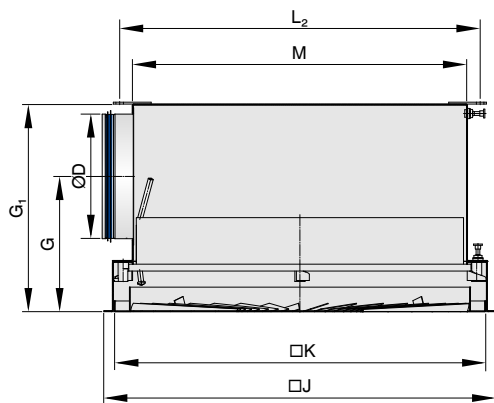
TFP-TC-FC, front view

TFP-TC-FC, side view

Product specific data TFP-TC-FC
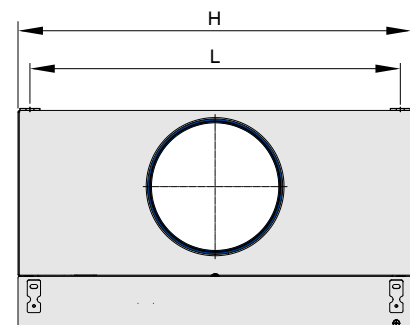
All weights are net, without packaging

1	2	3	4	5	6		7	8		9	10
NS	B × H × T	∅D	G_1	K	H	M	J	L	L_2	FC	kg
400	295 × 295 × 85	158	250	365	371	308	398	314	442	75 – 175	12
500	395 × 395 × 85	198	250	465	471	408	498	414	542	75 – 175	17
600	495 × 495 × 85	198	250	565	571	508	598	514	642	75 – 175	23
625	520 × 520 × 85	198	250	590	596	533	623	539	667	75 – 175	25

1 Nominal size 2 Filter size 3 Spigot diameter 4 Casing height 5 Overall dimensions of air terminal device 6 Overall dimensions of casing 7 Overall dimensions of casing flange 8 Top suspension, screw hole pitch 9 Suspended ceiling dimensions 10 ~ Weight
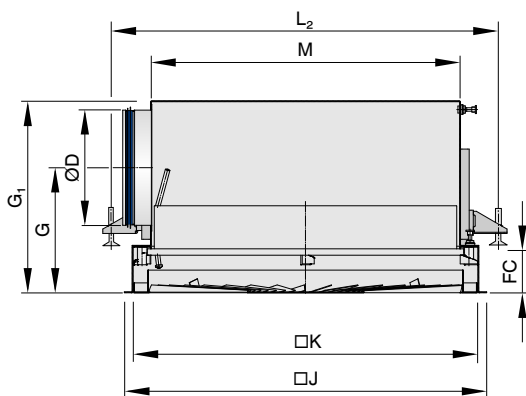
TFP-TC-S, front view

TFP-SC-S, side view

Product specific data TFP-SC-S
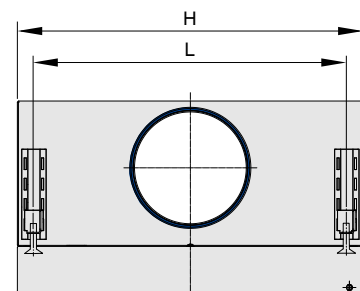
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NS	B × H × T	∅D	G_1	K	H	M	J	L	L_2	G	kg
400	295 × 295 × 85	158	330	365	371	308	398	335	348	215	11
500	395 × 395 × 85	198	330	465	471	408	498	435	448	215	16
600	495 × 495 × 85	198	330	565	571	508	598	535	548	215	22
625	520 × 520 × 85	198	330	590	596	533	623	560	573	215	24

1 Nominal size 2 Filter size 3 Spigot diameter 4 Casing height 5 Overall dimensions of air terminal device 6 Overall dimensions of casing 7 Overall dimensions of casing flange 8 Top suspension, screw hole pitch 9 ~ Weight
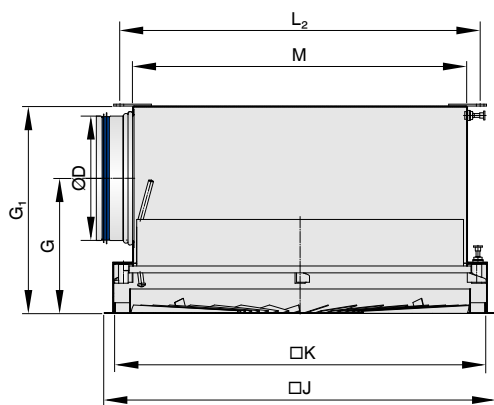
TFP-SC-FC, front view

TFP-SC-FC, side view

Product specific data TFP-SC-FC
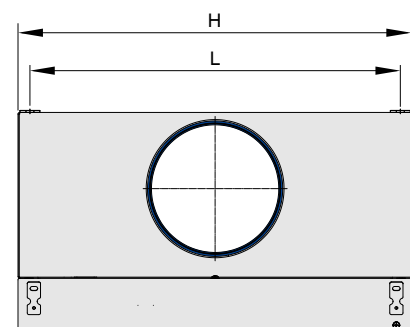
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1 Nominal size 2 Filter size 3 Spigot diameter 4 Casing height 5 Overall dimensions of air terminal device 6 Overall dimensions of casing 7 Overall dimensions of casing flange 8 Top suspension, screw hole pitch 9 Flange width 10 ~ Weight
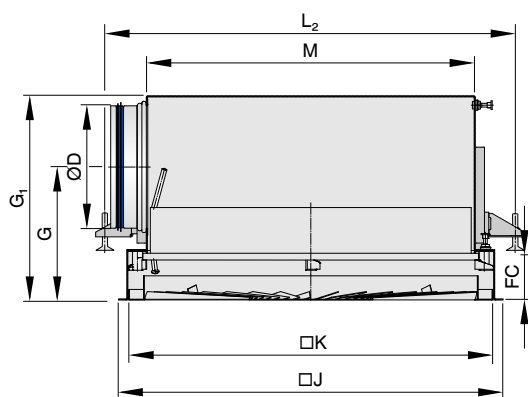
TFP-SCR-S, front view

TFP-SCR-S, side view

Product specific data TFP-SCR-S
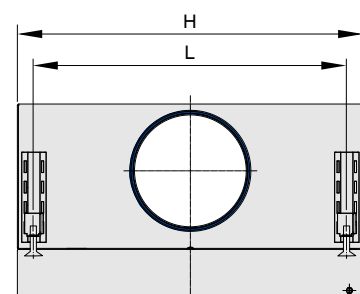
All weights are net, without packaging

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625	520 × 520 × 85	198	330	590	596	533	623	560	473	215	24

1 Nominal size 2 Filter size 3 Spigot diameter 4 Casing height 5 Overall dimensions of air terminal device 6 Overall dimensions of casing 7 Overall dimensions of casing flange 8 Top suspension, screw hole pitch 9 Flange width 10 ~ Weight

TFP-SCR-FC, front view

TFP-SCR-FC, side view
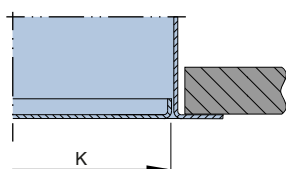

Product specific data TFP-SCR-FC

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1 Nominal size 2 Filter size 3 Spigot diameter 4 Casing height 5 Overall dimensions of air terminal device 6 Overall dimensions of casing 7 Overall dimensions of casing flange 8 Top suspension, screw hole pitch 9 Flange width 10 ~ Weight

Type of ceiling

Standard version, plasterboard or fibreboard ceiling

Version CC, clip-in tile ceiling