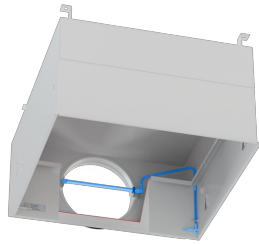


Top entry circular spigot



Aerosol feed



Low-leakage shut-off damper,  
manually adjustable



Damper blade for volume flow  
rate balancing

## TFC

### FOR CRITICAL AIR CLEANLINESS AND CRITICAL HYGIENE REQUIREMENTS, SUITABLE FOR CEILING INSTALLATION

Ceiling mounted particulate filters as a final filter stage with Mini Pleat filter panels for the separation of suspended particles. Used in medicine, biology, the pharmaceuticals industry, and sensitive technical areas.

- Easy, time-saving and secure filter change, can be completed by one person due to special press-in frame
- Quick and easy diffuser fixing with central screw and spring
- Robust, welded construction
- With or without optional sealing integrity test facility
- Compact construction, suitable for low ceilings, integration with all clean room ceiling systems from various manufacturers
- Various diffusers to ideally meet individual requirements
- Horizontal (circular, rectangular) or vertical (circular) connection
- Choice of low-leakage shut-off damper or volume flow limiter for horizontal connection
- Equipment for differential pressure measurement and particle sampling for measurements
- Filter element can be easily accessed from the clean air side even after installation thanks to a removable cross bar
- For air cleanliness classes 5 to 8 according to ISO 14644-1
- Meets the hygiene requirements of VDI 6022
- Leakage class: EN 1886 L1, EN 15727 class D



TESTED TO VDI 6022

Tested to VDI 6022

#### Application

- Particulate filter air terminal device for ceiling installation as a final filter stage and for air distribution
- Fitting of filter elements for the separation of suspended particles such as aerosols, toxic dusts, viruses or bacteria from the supply or extract air.

#### Special features

- Compact construction
- Easy to use
- High operational reliability

#### Classification

- Hygiene tested to VDI 6022
- SC, SCH, SCV, SCM, SCD, SCA, TC, TCM, TCA, SR

#### Nominal sizes

- 400, 500, 600, 625, 680, 825 mm

#### Constructions

- G: Gel seal (frame depths 91 – 105 mm)
- CF: Continuous seal or flat seal (frame depths 78 – 90 mm)
- CFL: Continuous seal or flat seal (frame depth 150 mm)
- FT: Flat seal (frame depth 78 mm)
- FTL: Flat seal (frame depth 150 mm)

#### Material Gehäuse

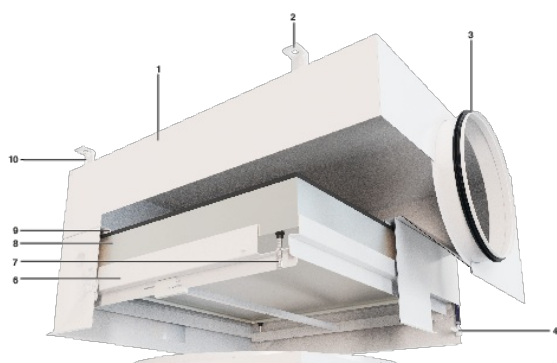
- SPC: Steel, powder-coated RAL 9010, pure white
- STA: Stainless steel (only for SC, TC, SR)

#### Classification

- Hygiene tested to VDI 6022
- SC, SCH, SCV, SCM, SCD, SCA, TC, TCM, TCA, SR

## TECHNICAL INFORMATION

Function, Specification text, Order code





- 1 Casing
- 2 Fixing bracket
- 3 Spigot with lip seal
- 4 Internal measuring tube
- 5 Air terminal device
- 6 Clamping mechanism for the filter element
- 7 Clamping screws
- 8 Filter element
- 9 Filter fitting
- 10 Pressure measurement point

Specification text

Particulate filter air terminal device type TFC for ceiling installation as final filter stage and for air distribution. Fitting of filter elements for the separation of suspended particles such as aerosols, toxic dusts, viruses and bacteria from the supply or extract air. Casing with side entry or top entry circular spigot or with side entry rectangular spigot. As standard, ceiling mounted particulate filters with circular spigots are fitted with a lip seal. Choice of different constructions: low-leakage ('air-tight') shut-off damper, either manually adjustable or with electric actuator; volume flow limiter; damper blade for volume flow rate balancing; recessed side entry spigot; or aerosol feed. Casing without test groove for filters with flat seal, continuous foam seal or gel seal; casing with test groove as an option for filters with flat seal. Filter depths from 78 to 150 mm. Sheet steel casing with RAL 9010 powder coating; stainless steel as an option. Casing and diffuser are suitable for installation into commercially available plasterboard and mineral fibre ceilings as well as in walk-on ceiling systems. Installation into clip-in tile ceilings is also possible (optional). External diffuser as standard, internal diffuser as an option for flush installation. Fixing on the cross bar with central screw and spring; can be removed so that the filter (downstream side) can be checked. The filter elements are pressed into place by an installation subframe with four clamping screws. As standard, the casings are fitted with an internal measuring tube and pressure measurement points for monitoring the differential operating pressure. As standard, the pressure measurement points are at the top, optionally at the side; in case of false ceiling installation the measurement points are at the top. For the fitting of Mini Pleat filter panels with flat seal, continuous foam seal or gel seal. Leakage test for each casing. Leakage class L1 to EN 1886; leakage class D to EN 15727.

Variants

- SC: Side entry circular spigot
- SCH: Side entry circular spigot, manually adjustable shut-off damper
- SCE: Side entry circular spigot, shut-off damper with electric actuator 24 – 240 V AC
- SCV: Side entry circular spigot, volume flow limiter
- SCM: Side entry circular spigot, damper blade for volume flow rate balancing
- SCD: Side entry circular spigot, recessed
- SCA: Side entry circular spigot, aerosol feed
  
- TC: Top entry circular spigot
- TCM: Top entry circular spigot, damper blade for volume flow rate balancing
- TCA: Top entry circular spigot, aerosol feed
  
- SR: Side entry rectangular spigot

Air terminal devices

- ADLQ: Ceiling diffuser
- DLQ: Ceiling diffuser
- DLQL: Ceiling swirl diffuser with baffle element made of acoustic fleece
- LF: Ceiling diffuser
- FD: Ceiling swirl diffuser
- TDF: Ceiling swirl diffuser
- VDWF: Ceiling swirl diffuser
- PCD: PROCONDIF® diffuser
- AIRNAMIC: Ceiling swirl diffuser

TFC	-	SC	-	CF	-	SPC	-	CC	-	ID	-	VDWF	/	600 x 24	-	248	-	20	/	T
1		2		3		4		5		6		7		8		9		10		11

1 Type

TFC Ceiling mounted particulate filter

2 Variant

- SC Side entry circular spigot
- SCH SC with manually adjustable shut-off damper
- SCE SC with electrical shut-off damper (24 – 240 V AC)
- SCM SC with damper blade for volume flow rate balancing
- SCV SC with volume flow limiter
- SCD SC with recessed spigot
- SCA SC with aerosol feed
- TC Top entry circular spigot
- TCM TC with damper blade for volume flow rate balancing
- TCA TC with aerosol feed
- SR Side entry rectangular spigot

### 3 Filter fitting and construction

Without test groove

G Filter with gel seal (frame depths 91 – 105 mm)

CF Filter with continuous seal and flat seal (frame depths 78 – 90 mm)

CFL Filter with continuous seal and flat seal (frame depth 150 mm) (only for SC, SCM, SCA, TC, TCM, TCA, SR)

With test groove

FT Filter with flat seal (frame depth 78 mm)

FTL Filter with flat seal (frame depth 150 mm) (only for SC, SCM, SCA, TC, TCM, TCA, SR)

### 4 Casing material

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

STA Stainless steel (only for SC, TC, SR)

### 5 Type of ceiling

No entry: standard

CC Clip-in tile ceiling

### 6 Position of air terminal device

ED External

ID Internal (not for nominal size 250)

### 7 Air terminal device

No entry: none

#### Steel, powder-coated (SPC)

External diffuser (ED)

ADLQ, DLQ, DLQL, LF, FD, TDF, VDWF, PCD, AIRNAMIC

Internal diffuser (ID)

LF, FD, TDF, VDWF

#### Stainless steel (STA)

Internal or external diffuser (ID, ED)

LF, VDWF

### 8 Nominal size [mm]

Without diffuser

400, 500, 600, 625, 680, 825

External diffuser (ED)

ADLQ, DLQ, DLQL, FD, TDF

400, 500, 600, 625, 680

AIRNAMIC, PCD

600, 625

LF

400, 500, 600, 625, 680, 825

VDWF × 16

400 × 16

VDWF × 24

500 × 24, 600 × 24, 625 × 24, 680 × 24

VDWF × 48

625 × 48

VDWF × 54

680 × 54

VDWF × 72

825 × 72

#### Internal diffuser (ID)

LF, FD, TDF

400, 500, 600, 625, 680

VDWF × 16

400 × 16

VDWF × 24

500 × 24, 600 × 24, 625 × 24, 680 × 24

VDWF × 48

625 × 48

VDWF × 54

680 × 54

9 Spigot size [mm]

Specify diameter

For variant SR

Specify size (width × height)

10 Flange width [mm]

0 (AIRNAMIC only)

10 – 55

11 Suspension/measurement points

T Suspension and measurement points at the top

S Side suspension and measurement points

FC False ceiling installation, measurement points at the top

Order example: TFC-SC-CF-SPC-CC-ID-VDWF/600×24-248-20/T

Type	TFC
Variant	Side entry circular spigot
Filter fitting and construction	Filter with continuous seal and flat seal (frame depths 78 – 90 mm)
Casing material	Steel, powder-coated, RAL 9010 (pure white)
Type of ceiling	Clip-in tile ceiling
Position of air terminal device	Internal diffuser
Air terminal device	VDWF
Nominal size [mm]	600 × 24 blades
Spigot size [mm]	Ø 248
Flange width [mm]	20
Suspension/measurement points	Suspension and measurement points at the top

## Variants



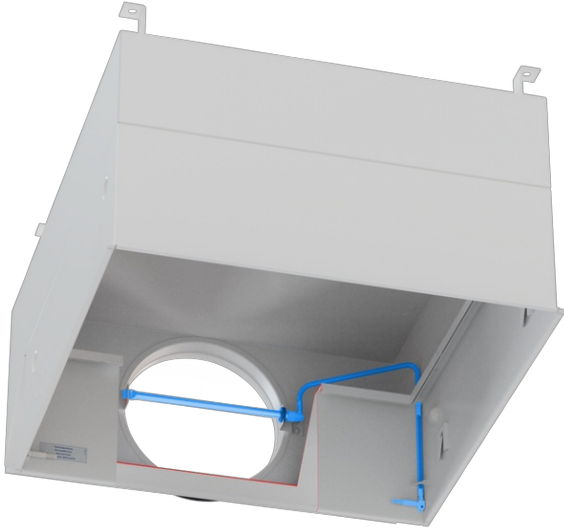
### Variant TFC-SC



Variant TFC-SCH Shut-off damper, manually adjustable



Variant TFC-SCA With aerosol feed



Variant TFC-SCM Damper blade for volume flow rate balancing



Variant TFC-SCD With recessed spigot





Variant TFC-SCE Shut-off damper with electric actuator Supply voltage 24 to 240 V AC



Variant TFC-SCV Volume flow limiter, Type VFL Factory set to a reference volume flow rate Can be adjusted



Variant TFC-TC



Variant TFC-TCA With aerosol feed



Variant TFC-TCM Damper blade for volume flow rate balancing



Variant TFC-SR

