



Conforme à VDI 6022

## MFI

### COMPACT CONSTRUCTION FOR LARGE VOLUME FLOW RATES

Prefilters or final filters for the separation of fine dust, or particulate filters for the most critical requirements in ventilation systems

- Filter classes M5, M6, F7, F9, E10, E11, H13, H14
- Performance data to EN 779 or EN 1822
- Eurovent certification for fine dust filters
- Meets the hygiene requirements of VDI 6022
- Highest energy efficiency according to Eurovent document 4/11
- Filter media for special requirements, glass fibre papers, with spacers made of hot-melt adhesive or textile threads
- Low initial differential pressure due to ideal pleat position and largest possible filter area
- Compact depth construction
- Fitting into standard cell frames for filter walls (type SIF), into mounting frames (type MF), or into universal casings (type UCA) for duct installation

## Application



### Application

- Mini Pleat filter insert type MFI for the separation of fine dust and suspended particles such as aerosols, toxic dusts, viruses and bacteria from the supply and extract air in ventilation systems with large volume flow rates and the requirement for long filter life
- Fine dust filter: Prefilter or final filter for the separation of fine dust in ventilation systems.
- Particulate filter: Main or final filter used for the most critical requirements of air cleanliness and sterility in areas such as industry, research, medicine, pharmaceuticals, and nuclear engineering

### Special characteristics

- Leakage test is standard for all particulate filters of classes H13, H14

## Description



### Filter classes

- Fine dust filters M5, M6, F7, F9
- Particulate filters E10, E11, H13, H14

### Construction

- PLA: Frame made of plastic
- SPC Frame made of galvanised steel, powder-coated RAL 9010, pure white

### Options

- Number of filter packs
- FNU: Flat section seal on the upstream side
- FND: Flat section seal on the downstream side
- OT: Oil mist test (only for filter classes H13, H14)
- OTC: Oil mist test with certificate (only for filter classes H13, H14)

### Useful additions

- Filter wall (SIF)
- Mounting frame (MF)
- Universal casing (UCA)

### Construction features

- As standard, constructions PLA and SPC used as fine dust filters have no seal.
- Constructions PLA and SPC with optional flat section seal
- Construction SPC as particulate filter with flat section seal. Filter classes E11, H13 and H14 with protection grid on the downstream side

### Materials and surfaces

- Filter media made of high-quality, moisture-resistant glass fibre papers, pleated
- Spacers provide a uniform spacing of the pleats
- Joint sealing compound made of permanently elastic two-component polyurethane adhesive
- Frame made of plastic (option) or of galvanised sheet steel, powder-coated RAL 9010, pure white

## INFORMATION TECHNIQUE

Filter class according to EN 779	M5	M6	F7	F9
Average efficiency according to EN 779	60 %	65 %	85 %	>95 %
Initial differential pressure at nominal volume flow rate	90 Pa	90 Pa	110 Pa	140 Pa
Recommended final differential pressure	450 Pa	450 Pa	450 Pa	450 Pa
Maximum operating temperature	80 °C	80 °C	80 °C	80 °C
Maximum relative humidity	100 %	100 %	100 %	100 %

Filter class according to EN 1822	E10	E11	H13	H14
Efficiency according to EN 1822	>85 %	>95 %	>99.95 %	>99.995 %
Initial differential pressure at nominal volume flow rate	160 Pa	160 Pa	265 Pa	300 Pa
Recommended final differential pressure	450 Pa	450 Pa	600 Pa	600 Pa
Maximum operating temperature	80 °C	80 °C	80 °C	80 °C
Maximum relative humidity	100 %	100 %	100 %	100 %

Mini Pleat filter insert type MFI for the separation of fine dust and suspended particles such as aerosols, toxic dusts, viruses and bacteria from the supply and extract air in ventilation systems.

Use as fine dust filters, i.e. as prefilters or final filters in ventilation systems; or as particulate filters, i.e. main or final filters for the most critical requirements of air cleanliness and sterility in areas such as industry, research, medicine, pharmaceuticals, and nuclear engineering.

Compact depth construction, suitable for systems with high volume flow rates and a requirement for long filter life.

Filter medium is made of high-quality, moisture-resistant glass fibre papers, with spacers.

Low initial differential pressure due to ideal pleat position and largest possible filter area.

Mini Pleat filter inserts are available in all commercial sizes, filter classes M5, M6, F7, F9, E10, E11, H13, H14.

As standard, fine dust filters have no seal; flat section seal as an option.

As particulate filters with flat section seal. Filter classes E11, H13 and H14 with protection grid at the side.

Mini Pleat filter inserts used as fine dust filters are certified by Eurovent and meet the hygiene requirements of VDI 6022.

Special characteristics

- Leakage test is standard for all particulate filters of classes H13, H14

Materials and surfaces

- Filter media made of high-quality, moisture-resistant glass fibre papers, pleated
- Spacers provide a uniform spacing of the pleats
- Joint sealing compound made of permanently elastic two-component polyurethane adhesive
- Frame made of plastic (option) or of galvanised sheet steel, powder-coated RAL 9010, pure white

Construction

- PLA: Frame made of plastic
- SPC Frame made of galvanised steel, powder-coated RAL 9010, pure white

Sizing data

- Filter class
- Volume flow rate [m<sup>3</sup>/h]
- Initial differential pressure [Pa]
- Nominal size [mm]

MFI

MFI – H13 – SPC / 592 x 592 x 292 x 8 / PD / FND / OT

1

2

3

4

5

6

7

8

**1] Type**

**MFI** Mini Pleat filter insert

**2] Filter class**

**M5** Fine dust filter according to EN 779  
**M6** Fine dust filter according to EN 779  
**F7** Fine dust filter according to EN 779  
**F9** Fine dust filter according to EN 779  
**E10** Particulate filter according to EN 1822  
**E11** Particulate filter according to EN 1822  
**H13** Particulate filter according to EN 1822  
**H14** Particulate filter according to EN 1822

**3] Construction**

**PLA** Frame made of plastic  
**SPC** Frame made of galvanised steel,  
powder-coated RAL 9010, pure white

**4] Nominal size [mm]**

B x H x T

**5] Number of filter packs**

**6**

**8**

**6] Protection grid**

No entry: none  
**PD** Protection grid on the downstream side  
(only for filter classes E11, H13 and H14)

**7] Seal**

No entry: none  
**FNU** Flat section seal on the upstream side  
**FND** Flat section seal on the downstream side

**8] Testing**

No entry: no leakage test  
**OT** Oil mist test  
(only for filter classes H13, H14)  
**OTC** Oil mist test with certificate  
(only for filter classes H13, H14)