



Conforme à VDI 6022

## MFPCR

### POUR LES EXIGENCES LES PLUS CRITIQUES CONCERNANT LA PURETÉ DE L'AIR INTÉRIEUR, LES ZONES BLANCHES ET LES APPAREILS

HEPA and ULPA filters as high-efficiency particulate filters for the separation of suspended particles in clean room systems. Used for industrial, research, medical, pharmaceutical, and nuclear engineering applications.

- Filter classes H14, U15, U16
- Performance data tested to EN 1822
- Meets the hygiene requirements of VDI 6022
- Filter media for special requirements, glass fibre papers with spacers made of thermoplastic hot-melt adhesive
- Perfect adjustment to individual requirements due to variable pleat depths
- Low initial differential pressure due to ideal pleat position and largest possible filter area
- Automatic filter scan test
- Fitting into filter fan units, clean room workbenches, or operating theatre ceilings

## Application



### Application

- Mini Pleat filter panel type MFPCR for the separation of suspended particles such as aerosols, toxic dusts, viruses and bacteria from the supply and extract air in clean room systems with controlled air cleanliness and airflow
- Particulate filter: Final filter for the most critical requirements of air cleanliness and sterility in areas such as industry, research, medicine, pharmaceuticals, and nuclear engineering

### Special characteristics

- Ideal pleat geometry of the filter medium
- Low initial differential pressure at high filtration performance
- Low-turbulence airflow on the downstream side
- Filter scan test ensures leak-free construction as well as compliance with the stated efficiency and differential pressure

## Description



### Filter classes

- Particulate filters H14, U15, U16

Construction

- ALB: Frame made of extruded aluminium sections (depth 69 mm)
- ALC: Frame made of extruded aluminium sections (depth 78 mm)
- ALG: Frame made of extruded aluminium sections (depth 90 mm)

Special construction:

- Filter frame with knife edge profile
- Filter frame with U-channel section, filled with a gel as fluid seal

Options

- FT: Pleat depth
- PU: Protection grid on the upstream side
- PD: Protection grid on the downstream side
- PB: Protection grid on both sides
- CSU: Continuous seal on the upstream side
- CSD: Continuous seal on the downstream side
- CSB: Continuous seal on both sides
- OT: Oil mist test (only for filter class H14)

Construction features

- Perimeter continuous seal on the upstream side as standard
- Some constructions with optional continuous seal on the downstream side or on both sides
- Protection grid made of expanded metal, can be fitted on the downstream or upstream side or both sides as required

Materials and surfaces

- Filter media made of high-quality, moisture-resistant glass fibre papers, pleated
- Spacers made of thermoplastic hot-melt adhesive provide a uniform spacing of the pleats
- Joint sealing compound made of permanently elastic two-component polyurethane adhesive
- Frame made of extruded aluminium sections

INFORMATION TECHNIQUE

Filter class according to EN 1822	H14	U15	U16
Efficiency according to EN 1822	>99.995 %	>99.9995 %	>99.99995 %
Nominal face velocity	0.45 m/s	0.45 m/s	0.45 m/s
Initial differential pressure at nominal face velocity for frame ALB	110 Pa	130 Pa	–
Initial differential pressure at nominal face velocity for frame ALC	95 Pa	115 Pa	140 Pa
Initial differential pressure at nominal face velocity for frame ALG	85 Pa	100 Pa	120 Pa
Maximum operating temperature	80°C	80°C	80°C
Maximum relative humidity	100 %	100 %	100 %

Mini Pleat filter panels MFPCR for the separation of suspended particles such as aerosols, toxic dusts, viruses and bacteria from the supply and extract air in clean room systems with controlled air cleanliness and airflow.

Use 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. The filter media are made of high-quality, moisture-resistant glass fibre papers, with spacers made of thermoplastic hot-melt adhesive.

Different pleat depths enable perfect adjustment to individual requirements.

Mini Pleat filter panels for clean room technology available in standard and special sizes, filter classes H14, U15, U16.

As standard, Mini Pleat filter panels for clean room technology are fitted with a perimeter continuous seal on the upstream side.

Some constructions are available with an optional seal on the downstream side or on both sides, or with a protection grid, fitting as required.

As standard, Mini Pleat filter panels for clean room technology are subjected to an automatic filter scan test.

#### Special characteristics

- Ideal pleat geometry of the filter medium
- Low initial differential pressure at high filtration performance
- Low-turbulence airflow on the downstream side
- Filter scan test ensures leak-free construction as well as compliance with the stated efficiency and differential pressure

#### Materials and surfaces

- Filter media made of high-quality, moisture-resistant glass fibre papers, pleated
- Spacers made of thermoplastic hot-melt adhesive provide a uniform spacing of the pleats
- Joint sealing compound made of permanently elastic two-component polyurethane adhesive
- Frame made of extruded aluminium sections

#### Construction

- ALB: Frame made of extruded aluminium sections (depth 69 mm)
- ALC: Frame made of extruded aluminium sections (depth 78 mm)
- ALG: Frame made of extruded aluminium sections (depth 90 mm)

#### Special construction:

- Filter frame with knife edge profile
- Filter frame with U-channel section, filled with a gel as fluid seal

#### Sizing data

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

MFPCR

MFPCR – H14 – ALC / 1220 x 610 x 78 x 58 / PD / CSU / ST							
1	2	3	4	5	6	7	8

<b>1 Type</b> MFPCR Mini Pleat filter panel for clean room technology	<b>5 Pleat depth</b> FT
<b>2 Filter class</b> H14 Particulate filter according to EN 1822 U15 Particulate filter according to EN 1822 U16 Particulate filter according to EN 1822	<b>6 Protection grid</b> No entry: none PU Protection grid on the upstream side PD Protection grid on the downstream side PB Protection grid on both sides
<b>3 Construction</b> ALB Frame made of extruded aluminium profile (depth 69 mm) ALC Frame made of extruded aluminium profile (depth 78 mm) ALG Frame made of extruded aluminium profile (depth 90 mm)	<b>7 Seal</b> CSU Continuous seal on the upstream side CSD Continuous seal on the downstream side CSB Continuous seal on both sides
<b>4 Nominal size [mm]</b> B x H x T	<b>8 Testing</b> ST Scan test OT Oil mist test (only for filter class H14)