

EFFICIENT AIR FILTRATION IN CLEANROOMS – HEPA FILTERS WITH ALUMINUM FRAME

FILTER CLASS H 14, UP TO PLEAT DEPTH 70 MM

FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	FRAME DEPTH [mm]	PLEAT DEPTH [mm]	STANDARD DIMENSIONS [mm]	GASKET [mm]
H14	ISO 45 H	68	50	305 × 305 457 × 457 610 × 610 610 × 1,220	6
H14	ISO 45 H	78	60		6
H14	ISO 45 H	88	70		6
H14	ISO 45 H	150	50		6



The application

Viledon® HEPA filters of filter classes H14 are used in intake and recirculated air filtration for cleanrooms and in laminar flow boxes with ultra-stringent requirements for clean air and sterility, e.g.

- in sophisticated air-conditioning applications (operating theatres/intensive care units of hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.)
- in sensitive and highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food/beverages, micro-electronics, etc.)
- in ceiling outlets and modules for flexible cleanroom systems

The special features and benefits

- High-efficiency micro-glass-fiber papers are used as filter media.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar out-flow.
- The frame consists of extruded, anodized aluminum and is extremely solid and moisture-resistant.
- Viledon® HEPA filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 "Hygiene requirements for HVAC systems and units".



- Easy handling and mounting, thanks to high twist strength and a continuous, homogeneously foamed-on polyurethane gasket.
- Each filter element is tested using state-of-the-art scanning equipment for arrestance efficiency and leak-proofing in accordance with EN 1822, and delivered together with the corresponding test certificate.
- Viledon® HEPA filters feature protection grids on both sides made of powdercoated expanded metal.

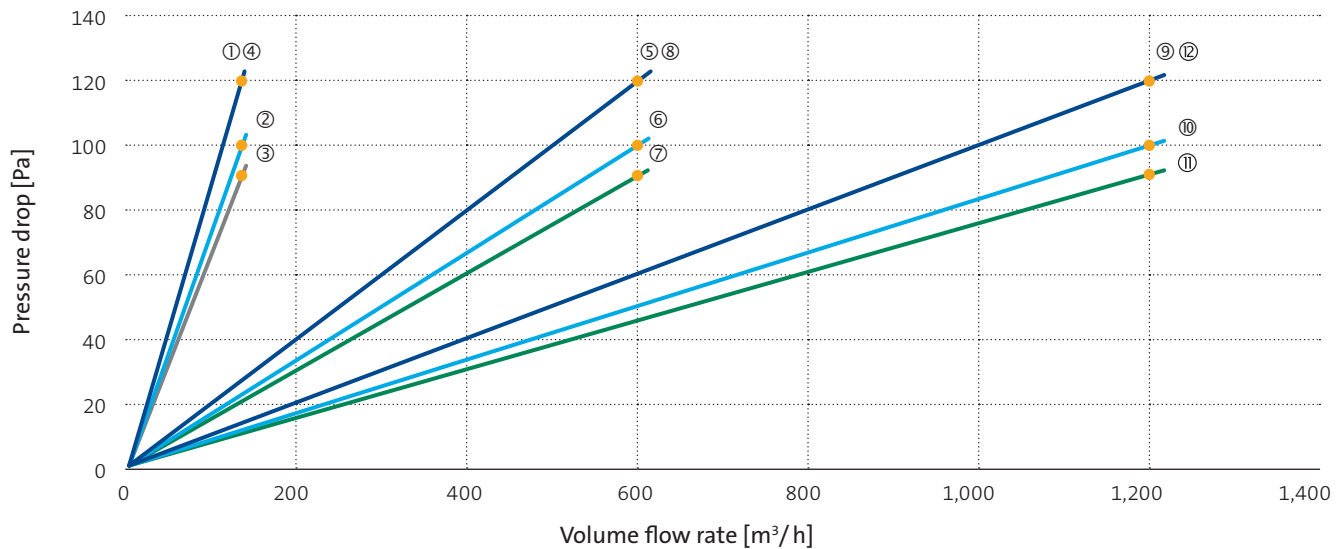
* Most Penetrating Particle Size

** For cost-efficiency or system-specific reasons it may be appropriate to change the filters before reaching the stated final pressure drop. It can also be exceeded in certain applications.

KEY DATA		610 × 1,220	610 × 610	457 × 457	305 × 305
Frame depth	mm	68 78 88 150	68 78 88 150	68 78 88 150	68 78 88 150
Pleat depth	mm	50 60 70 50	50 60 70 50	50 60 70 50	50 60 70 50
Nominal volume flow rate ●	m³/h	1,200	600	335	135
Initial pressure drop	Pa	120 100 90 120	120 100 90 120	120 100 90 120	120 100 90 120
Arrestance efficiency MPPS*	%	≥ 99.995	≥ 99.995	≥ 99.995	≥ 99.995
Recommended final pressure drop**	Pa	600	600	600	600
Max. permissible pressure drop	Pa	1,000	1,000	1,000	1,000
Thermal stability	°C	70	70	70	70
Moisture-resistance (rel. hum.)	%	100	100	100	100

TECHNICAL FILTER TEST DATA TO EN 1822

Initial pressure drop curves



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|--|--|--|
| ① 305 mm × 305 mm / Frame depth 68 mm | ⑤ 610 mm × 610 mm / Frame depth 68 mm | ⑨ 610 mm × 1,220 mm / Frame depth 68 mm |
| ② 305 mm × 305 mm / Frame depth 78 mm | ⑥ 610 mm × 610 mm / Frame depth 78 mm | ⑩ 610 mm × 1,220 mm / Frame depth 78 mm |
| ③ 305 mm × 305 mm / Frame depth 88 mm | ⑦ 610 mm × 610 mm / Frame depth 88 mm | ⑪ 610 mm × 1,220 mm / Frame depth 88 mm |
| ④ 305 mm × 305 mm / Frame depth 150 mm | ⑧ 610 mm × 610 mm / Frame depth 150 mm | ⑫ 610 mm × 1,220 mm / Frame depth 150 mm |

— Pleat depth 50 mm — Pleat depth 60 mm — Pleat depth 70 mm ● Nominal volume flow rate

Item code of product line H 14 (Example)

SF 14 - A - 0610 × 0610 × 068 × 05 - N 1 3 N

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① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

- | | | |
|--|--|--|
| ① HEPA filter class H 14 | ⑦ Type of gasket:
N = PU semicircular profile gasket
Z = without | ⑨ Protection grid:
3 = both sides / powdercoated metal mesh |
| ② Frame material: A = aluminum | ⑧ Position of gasket:
0 = without
1 = one side
3 = both sides | ⑩ Execution:
N = standard
S = special version |
| ③ Frame width [mm]: 4 digits | | |
| ④ Frame length [mm]: 4 digits | | |
| ⑤ Frame depth [mm]: 3 digits | | |
| ⑥ Pleat depth [cm]: 2 digits
05 = 50 mm
06 = 60 mm
07 = 70 mm | | |

The figures given are mean values subject to tolerances due to the normal production fluctuations. Our explicit written confirmation is always required for the correctness and applicability of the information involved in any particular case. Subject to technical alterations. You will find instructions on how to handle and dispose of loaded filters in our information on product safety and eco-compatibility.