

EFFICIENT AIR FILTRATION IN CLEANROOMS – HEPA FILTERS WITH ALUMINUM FRAME

FILTER CLASS H 13, UP TO PLEAT DEPTH 60 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]
H13	ISO 35 H	68	50	305 × 305	6
H13	ISO 35 H	78	60	457 × 457 610 × 610	6
H13	ISO 35 H	150	50	610 × 1,220	6



The application

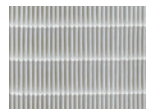
Viledon® HEPA filters of filter classes H13 are used in intake and recirculated air filtration for cleanrooms and in laminar flow boxes with ultra-stringent requirements for clean air and sterility, e.g.

- in sophisticated air-conditioning applications (operating theatres/intensive care units of hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.)
- in sensitive 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 **equi-distance 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 contin-



uous, 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.

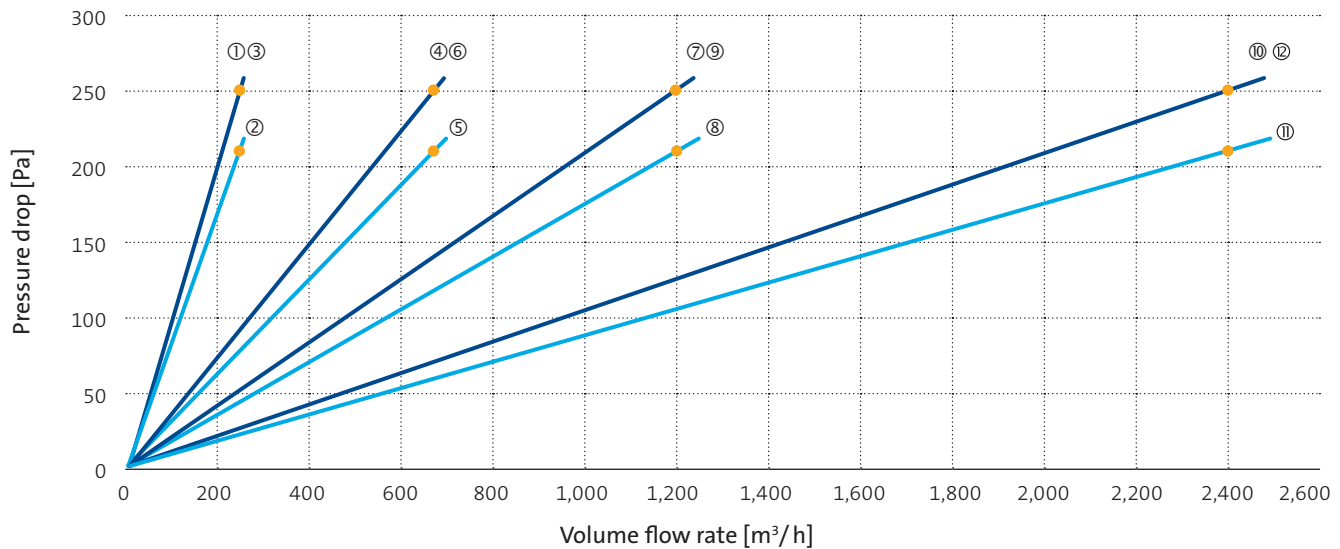
* Most Penetrating Particle Size

** 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 78 150	68 78 150	68 78 150	68 78 150
Pleat depth	mm	50 60 50	50 60 50	50 60 50	50 60 50
Nominal volume flow rate ●	m³/h	2,400	1,200	670	250
Initial pressure drop	Pa	250 210 250	250 210 250	250 210 250	250 210 250
Arrestance efficiency MPPS*	%	≥ 99.95	≥ 99.95	≥ 99.95	≥ 99.95
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 | ⑤ 457 mm × 457 mm / Frame depth 78 mm | ⑨ 610 mm × 610 mm / Frame depth 150 mm |
| ② 305 mm × 305 mm / Frame depth 78 mm | ⑥ 457 mm × 457 mm / Frame depth 150 mm | ⑩ 610 mm × 1,220 mm / Frame depth 68 mm |
| ③ 305 mm × 305 mm / Frame depth 150 mm | ⑦ 610 mm × 610 mm / Frame depth 68 mm | ⑪ 610 mm × 1,220 mm / Frame depth 78 mm |
| ④ 457 mm × 457 mm / Frame depth 68 mm | ⑧ 610 mm × 610 mm / Frame depth 78 mm | ⑫ 610 mm × 1,220 mm / Frame depth 150 mm |

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

Item code of product line H 13 (Example)

SF13 - 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 H13 | 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.