

# EFFICIENT AIR FILTRATION IN CLEANROOMS – HEPA FILTERS WITH MDF FRAME

## FILTER CLASS H 13

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	78	50	305×305	6
H13	ISO 35 H	150	50 125	305×610 457×457	6
H13	ISO 35 H	292	200	610×610	6



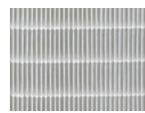
### The application

Viledon® HEPA filters of filter class H 13 are used in intake, exhaust and recirculated air filtration in air-conditioning systems with stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning technology (operating theaters, intensive care units in hospitals, laboratories, cleanrooms, etc.)
- in sensitive industrial processes
- as final filters in ceiling air outlets
- as "police filters" in dust removal 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 ho-



homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.

- The frame consists of MDF (medium-density fiber board) and is fully incinerable.
- The entire filter element is non-corroding and easy to dispose of, as it is metal-free.
- Protection grids on request.
- Continuous, homogeneously foamed-on polyurethane gasket; on request also available with a flat gasket.
- Each filter element is tested for leak-proofing in accordance with EN 1822, and delivered together with the corresponding test certificate.

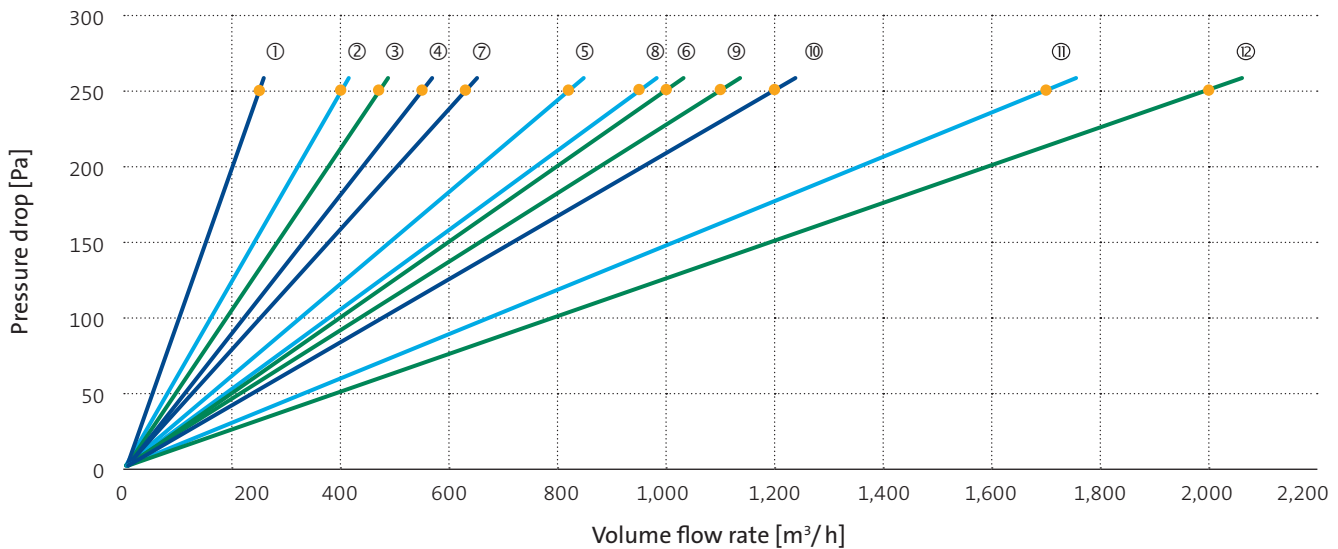
\* Most Penetrating Particle Size

\*\* 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		610×610	457×457	305×610	305×305
Frame depth	mm	78 150 150 292	78 150 150 292	78 150 150 292	78 150 150 292
Pleat depth	mm	50 50 125 200	50 50 125 200	50 50 125 200	50 50 125 200
Nominal volume flow rate ●	m³/h	1,200 1,200 1,700 2,000	630 630 950 1,100	550 550 820 1,000	250 250 400 470
Initial pressure drop	Pa	250	250	250	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



① 305 mm × 305 mm / Frame depth 78 mm	⑤ 305 mm × 610 mm / Frame depth 150 mm	⑨ 457 mm × 457 mm / Frame depth 292 mm
② 305 mm × 305 mm / Frame depth 150 mm	⑥ 305 mm × 610 mm / Frame depth 292 mm	⑩ 610 mm × 610 mm / Frame depth 78 mm
③ 305 mm × 305 mm / Frame depth 292 mm	⑦ 457 mm × 457 mm / Frame depth 78 mm	⑪ 610 mm × 610 mm / Frame depth 150 mm
④ 305 mm × 610 mm / Frame depth 78 mm	⑧ 457 mm × 457 mm / Frame depth 150 mm	⑫ 610 mm × 610 mm / Frame depth 292 mm

— Pleat depth 50 mm    
 — Pleat depth 125 mm    
 — Pleat depth 200 mm    
 ● Nominal volume flow rate

## Item code of product line H 13 (Example)

**SF 13** – **M** – **0610** × **0610** × **292** × **20** – **N 1 0 N**  
 ▼            ▼            ▼            ▼            ▼            ▼            ▼            ▼            ▼  
**①**        **②**        **③**        **④**        **⑤**        **⑥**        **⑦**        **⑧**        **⑨**        **⑩**

- |   |  |   |
|---|--|---|
| <ul style="list-style-type: none"> <li>① EPA filter class H 13</li> <li>② Frame material:<br/>M = MDF</li> <li>③ Frame width [mm]: 4 digits</li> <li>④ Frame length [mm]: 4 digits</li> <li>⑤ Frame depth [mm]: 3 digits</li> <li>⑥ Faltentiefe [cm]: 2-stellig<br/>05 = 50 mm<br/>12 = 125 mm<br/>20 = 200 mm</li> </ul> | <ul style="list-style-type: none"> <li>⑦ Pleat depth [cm]: 2 digits<br/>05 = 50 mm<br/>12 = 125 mm<br/>20 = 200 mm</li> <li>⑧ Type of gasket:<br/>N = PU semicircular profile gasket<br/>W = flat gasket</li> <li>⑨ Position of gasket:<br/>1 = one side<br/>3 = both sides</li> </ul> | <ul style="list-style-type: none"> <li>⑩ Protection grid:<br/>0 = without<br/>3 = both sides / powder-coated metal mesh</li> <li>⑪ Execution:<br/>N = standard<br/>S = special version</li> </ul> |
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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.