

EFFICIENT AIR FILTRATION IN CLEANROOMS – HEPA FILTERS WITH ALUMINUM FRAME

FILTER CLASS H 14, FROM PLEAT DEPTH 125 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 | 150 | 125 | 305 × 610 457 × 457 593 × 593* | 6 |
| H14 | ISO 45 H | 292 | 175 | 610 × 610 | 6 |



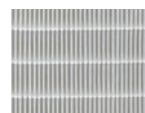
The application

Viledon® HEPA filters of filter class H 14 are used in intake, exhaust and recirculating air filtration in air-conditioning systems with high and ultra-stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning applications (operating theatres/intensive care units of hospitals, labs, cleanrooms, etc.)
- in sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food/beverages, micro-electronics, etc.)

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.

- 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 for 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.

* Only available in frame depth 292 mm

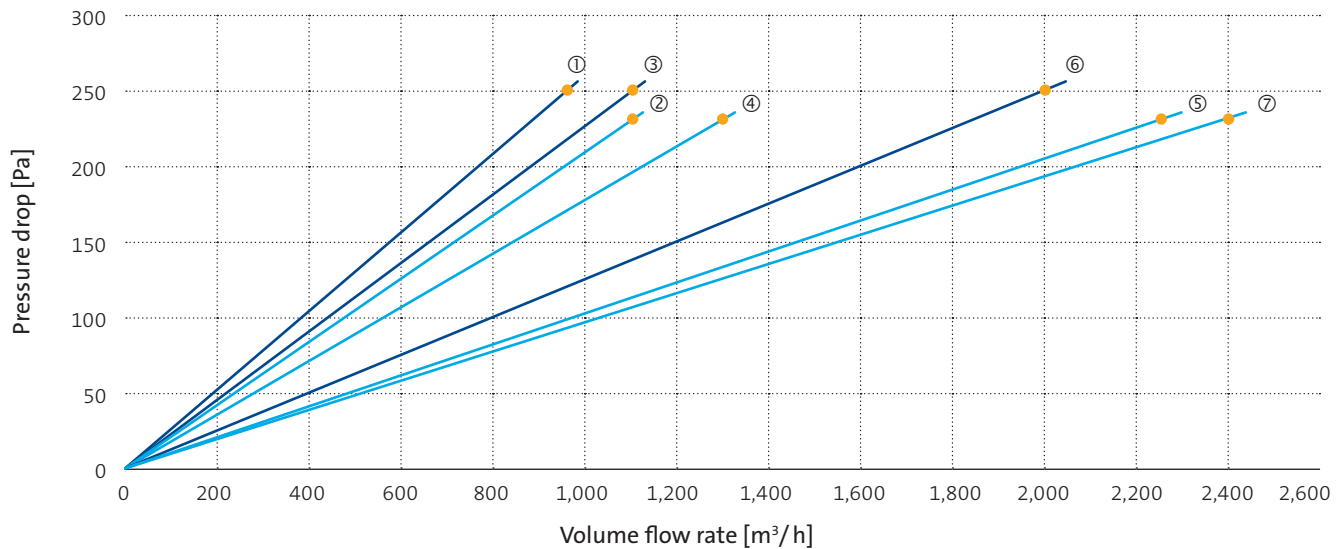
** Most Penetrating Particle Size

*** 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 | 593 × 593 | 457 × 457 | 305 × 610 |
|------------------------------------|------|---------------|-----------|---------------|-------------|
| Frame depth | mm | 150 292 | 292 | 150 292 | 150 292 |
| Pleat depth | mm | 125 175 | 175 | 125 175 | 125 175 |
| Nominal volume flow rate ● | m³/h | 2,000 2,400 | 2,250 | 1,100 1,300 | 950 1,100 |
| Initial pressure drop | Pa | 250 230 | 230 | 250 230 | 250 230 |
| 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



- ① 305 mm x 610 mm / Frame depth 150 mm ③ 457 mm x 457 mm / Frame depth 150 mm ⑤ 593 mm x 593 mm / Frame depth 292 mm
- ② 305 mm x 610 mm / Frame depth 292 mm ④ 457 mm x 457 mm / Frame depth 292 mm ⑥ 610 mm x 610 mm / Frame depth 150 mm
- ⑦ 610 mm x 610 mm / Frame depth 292 mm

— Pleat depth 125 mm — Pleat depth 175 mm ● Nominal volume flow rate

Item code of product line H 14 (Example)

SF 14 - A - 0610 x 0610 x 150 x 12 - N 1 3 N
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① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

- ① HEPA filter class H 14
- ② Frame material: A = aluminum
- ③ Frame width [mm]: 4 digits
- ④ Frame length [mm]: 4 digits
- ⑤ Frame depth [mm]: 3 digits
- ⑥ Pleat depth [cm]: 2 digits
12 = 125 mm
17 = 175 mm
- ⑦ Type of gasket:
N = PU semicircular profile gasket
Z = without
- ⑧ Position of gasket:
0 = without
1 = one side
3 = both sides
- ⑨ Protection grid:
3 = both sides / powdercoated metal mesh
- ⑩ Execution:
N = standard
S = special version

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.