

HIGH VOLUME FLOW FILTERS FOR CLEANROOMS



FILTER CLASS H14

FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	FRAME DEPTH [mm]	STANDARD DIMENSIONS [mm]	GASKET [mm]
H14	ISO 45 H	292	305 × 305 305 × 610 610 × 610 762 × 610	6



The application

Viledon® high volume flow filters are used in intake, exhaust and recirculated air filtration in cleanrooms in air-conditioning systems with ultra-stringent requirements for clean air quality and sterility, e.g.

- in sophisticated air-conditioning technology (operating theaters/intensive care units in hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.)
- in sensitive and highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food and beverage processing, micro-electronics, etc.)
- in dust-removing machines and devices, where hazardous dust is filtered and the air is circulated back to the working environment

The special features and benefits

- High-efficiency micro-glass-fiber papers are used as filter media.
- The MiniPleat technology employed, plus the V-shaped configuration of the pleat package, ensure a particularly large filtering area for maximum air flow rate per filter element together with homogeneous media velocity, coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation with a very long lifetime.
- Viledon® high volume flow filters feature recessed grips at the side and a gripping lug for easier handling and installation.
- The frame consists of galvanized steel or stainless steel sheeting and is extremely solid and moisture-resistant.
- Each filter element is tested for leak-proofing in accordance with EN 1822,

and delivered together with the corresponding test certificate.

- Viledon® high volume flow filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 “Hygiene requirements for HVAC systems and units”.
- A continuous and homogeneously foamed-on profile gasket made of polyurethane. Also available with a flat gasket on request.
- Meet the requirements laid down in DIN EN 60335-2-69 for filters being used in dust-eliminating machines and equipment of dust class “H”.

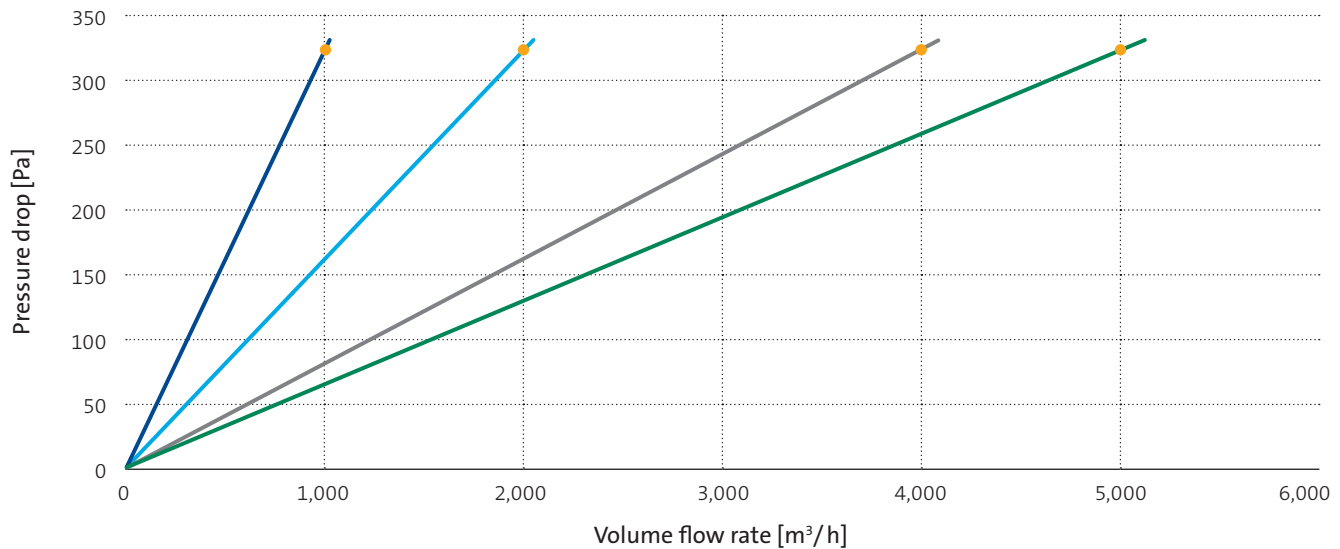
* Most Penetrating Particle Size

** 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		762 × 610	610 × 610	305 × 610	305 × 305
Frame depth	mm	292	292	292	292
Pleat depth	m ²	44	38	19	9
Nominal volume flow rate ●	m ³ /h	5,000	4,000	2,000	1,000
Initial pressure drop	Pa	320	320	320	320
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



— 305 × 305 mm — 305 × 610 mm — 610 × 610 mm — 762 × 610 mm ● Nominal volume flow rate

Item code of product line H 14 (Example)

SF 14 – B – 0610 × 0610 × 292 / V12 × 25 – N 1 0 N

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① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

- ① HEPA filter class H 14
- ② Frame material:
B = galvanized steel sheets
S = stainless steel sheets
- ③ Frame width [mm]: 4 digits
- ④ Frame length [mm]: 4 digits
- ⑤ Frame depth [mm]: 3 digits
- ⑥ Number and pleat depth of the panels [mm]: e.g. V12 × 25 = 12 panels, 25 mm pleat depth
- ⑦ Type of gasket:
N = PU semicircular profile gasket
W = glued-on flat gasket
Z = without
- ⑧ Position of gasket:
0 = without
1 = one side
3 = both sides
- ⑨ Protection grid:
0 = without
- 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.