The sturdy one for hygiene demands:
NanoPleat filters with innovative HSN technology

viledon®

Filter Type	Filter Class	Energy Classification	Test Standard
MV75 HSN	F6	–	EN 779
MV85 HSN	F7	EE 1*	EN 779
MV95 HSN	F8	EE 1*	EN 779

* Installed in the 2nd filter stage with Class F5 prefiltration

The innovation

Viledon® NanoPleat cassette filters, thanks to their innovative **HSN** media technology, are an ideal filtering solution for air-conditioning systems. They score excellently in terms of an **outstanding performance profile, marrying dependable fine-filtration to energy-economical and dependable operating characteristics and long useful lifetimes.** **H**ybrid-**S**ynthetic **N**anofiber nonwoven media constitute the core of this uniquely capable fine-filter.

The application

Viledon® NanoPleat filters have been developed specifically for intake, exhaust and recirculated air filtration in HVAC systems posing stringent requirements for clean air quality and cost-efficiency. They ensure clean, efficiently conditioned air

- in office buildings, production halls, airports, libraries, museums, laboratories, hospitals, old people's homes and care facilities, etc.
- in sensitive applications for the food and beverage industries, pharmaceuticals, chemicals, optics, electronics, and in operating theatres and intensive-care units, etc.

The special features and benefits

- **Consistently high filtration efficiency under all operating conditions** thanks to the unique hybrid-synthetic nanofiber nonwoven media.
- The **exceptionally low pressure drop** and the **high dust holding capacity** provide **ultra-efficient, energy-saving operating characteristics**, with a slow increase in the pressure drop and resultant additional lifetime reserves. This produces a **significant reduction in operating costs**.
- **Simplified handling** at installation, since the HSN medium will not be irreversibly damaged even if it comes into contact with slight pressure.
- The pleated HSN filter media, cast in a tough plastic frame in a leakproof configuration, are **exceptionally sturdy and water-repellent.** Even when exposed to high levels of dampness and moisture, the filter medium will not be saturated; in fact the water droplets will simply roll off the material's surface. The pressure drop remains almost unchanged even under these circumstances, thus providing **maximized operational reliability**.

- Viledon® NanoPleat filters are **highly resistant to chemicals, moisture-resistant** up to 100% rel. humidity, **microbiologically inert and meet all hygiene requirements for HVAC systems to EN 13779 and the German VDI Guideline 6022.** Their **microbial safety** has been confirmed by the Institute for Air Hygiene in Berlin.
- The sturdy construction ensures **optimum performance even under turbulent flow conditions or during load changes.** This means that the risk of particle or fiber shedding is practically eliminated.
- The filter elements are free of metals, halogens and glassfibers, **corrosion-proof** and also **fully incinerable** and thus disposal-friendly. The frame and filter media are **self-extinguishing** to DIN 53438 (Fire Class F1).

Available geometries		1/1	5/6	1/2
Nominal air flow rate	m^3/h	3400	2700	1500
Front frame for mounting frames	mm	592 × 592 × 25 610 × 610	490 × 592 × 25 508 × 610	287 × 592 × 25 305 × 610
Depth	mm	292	292	292
Weight, approx.	kg	5.8	4.8	3.3
Thermal stability / temporary peaks	°C	70 80	70 80	70 80

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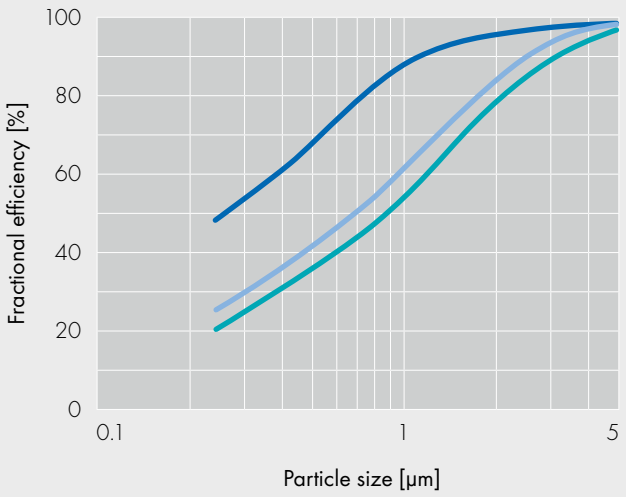
Technical filter data

Initial fractional collection efficiency
plotted against particle size at nominal air flow rate

MV 95 HSN — **MV 75 HSN** —
MV 85 HSN —

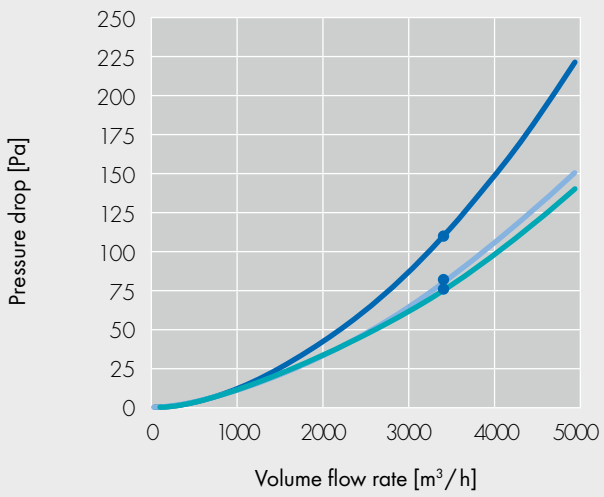
MV 95 HSN, MV 85 HSN, MV 75 HSN



Initial pressure drop curves

MV 95 HSN — **MV 75 HSN** — Nominal air flow rate ●
MV 85 HSN —

MV 95 HSN, MV 85 HSN, MV 75 HSN



Filter key data		MV 75 HSN	MV 85 HSN	MV 95 HSN
Filter class to EN 779		F 6	F 7	F 8
Nominal air flow rate ●	m³/h	3400	3400	3400
Initial pressure drop	Pa	75	80	110
Average efficiency (0.4 µm)	%	75	83	93
Initial efficiency (0.4 µm)	%	30	35	60
Initial efficiency (0.4 µm) after treatment to EN 779, Annex A	%	30	35	60
Recommended final pressure drop	Pa	450	450	450

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.

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