

NANOPLEAT FILTERS WITH HSN-TECHNOLOGY



THE STURDY ONE FOR HYGIENE DEMANDS

FILTER TYPE	FILTER CLASS TO ISO 16890	FILTER CLASS TO EN 779:2012	ENERGY EFFICIENCY CLASS
MV 75 HSN	ISO ePM10 85%	M 6	–
MV 85 HSN	ISO ePM2,5 80%	F 7	C
MV 95 HSN	ISO ePM1 75%	F 8	C
MV 98 HSN	ISO ePM1 85%	F 9	B



An ideal filter solution

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. Hybrid-Synthetic 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 medical technology, etc.

The special features and benefits

- Consistently high filtration efficiency under all operating conditions thanks to the unique HSN media.
- The 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, microbiologically inert and meet all hygiene requirements for HVAC systems to EN 16798-3:2017-11 and the German VDI Guideline 6022. Their microbial safety has been confirmed by the Institute for Air Hygiene in Berlin.

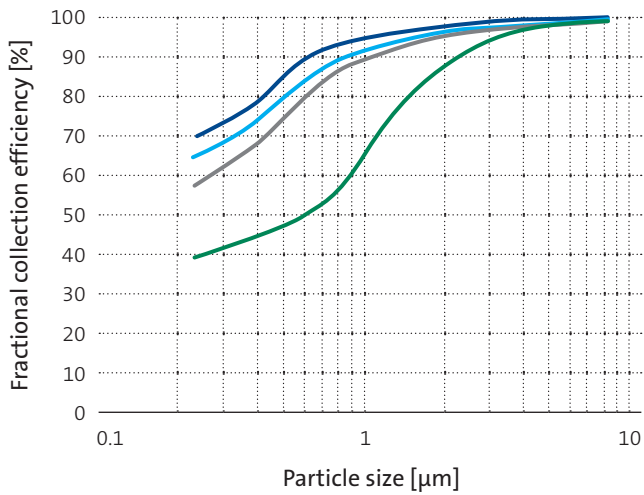
- The sturdy construction ensures optimum performance even under turbulent flow conditions or during load changes. This means that the risk of particle or fiber shedding is practically eliminated.

- The filter elements are free of metals and halogens, corrosion-proof and also fully incinerable and thus disposal-friendly.

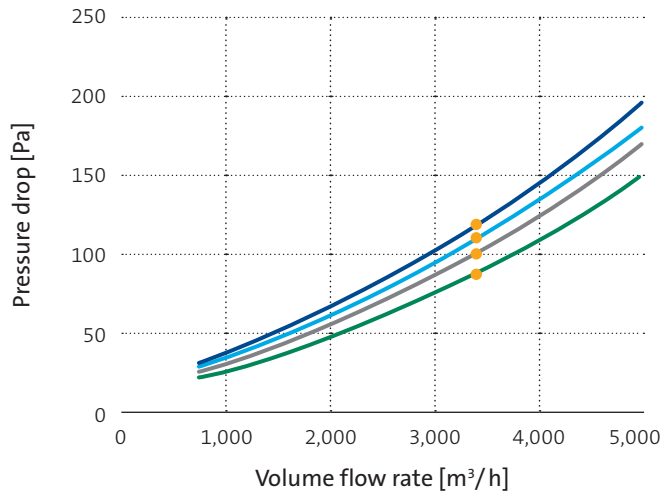
GEOMETRIES AVAILABLE		1/1	5/6	1/2
Nominal volume flow rate	m³/h	3,400	2,700	1,500
Header frame Suitable mounting frames	mm	592×592×25 610×610	490×592×25 508×610	287×592×25 305×610
Overall depth	mm		292	
Weight, approx.	kg	5.8	4.8	3.3
Temperature stability	°C		50	
Moisture-resistance (rel. hum.)	%		100	

TECHNICAL FILTER TEST DATA TO EN 779 AND ISO 16890

Fractional collection efficiency curves



Initial pressure drop curves



— MV 98 HSN — MV 95 HSN — MV 85 HSN — MV 75 HSN ● Nominal volume flow rate

KEY DATA		MV 75 HSN	MV 85 HSN	MV 95 HSN	MV 98 HSN
Nominal volume flow rate	● m ³ /h	3,400			
Initial pressure drop	Pa	85	100	110	120
Class to ISO 16890		ISO ePM10 85%	ISO ePM2,5 80%	ISO ePM1 75%	ISO ePM1 85%
Particulate matter efficiency					
ISO ePM1		44	74	79	85
ISO ePM2,5	%	58	81	84	88
ISO ePM10		87	93	94	96
Cut-off particle size	µm	7	5	4	3
Filter class to EN 779:2012		M6	F7	F8	F9
Recom. final pressure drop	Pa	450			

The figures given are mean values subject to tolerances due to 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.