

# MAXIPLSAT CASSETTE FILTERS



## POTENT SPACESAVERS OF PATENT QUALITY

FILTER TYPE	FILTER CLASS TO ISO 16890	FILTER CLASS TO EN 779:2012	ENERGY EFFICIENCY CLASS*
MX 75	ISO ePM10 85%	M6	–
MX 85	ISO ePM2,5 65%	F7	C
MX 95	ISO ePM1 65%	F8	B
MX 98	ISO ePM1 80%	F9	B



### The application

Viledon® MaxiPleat cassette filters offer maximized operational reliability and cost-efficiency for supply, exhaust and recirculated air filtration in ventilation systems which have stringent requirements for clean air quality, particularly under critical on-site conditions, high air flow rates, where space is limited and when process safety does not permit any compromises, e. g.

- in intake air filtration for turbomachinery
- in industrial processes (chemicals, pharmaceuticals, foods and beverages, optics, electronics, surface treatment, etc.)
- in sophisticated air-conditioning applications (laboratories, libraries, museums, airports, office buildings, etc.)
- as policing filters in dust removal applications

### The special features and benefits

- High-strength micro-glassfiber papers with a special thermoplastic bonding system and **hydrophobic coating** are used as filter media.
- Our patented thermal embossing process, with its optimum V-shaped pleat geometry, ensures full utilization of the filtering area and uniform dust deposition, plus **homogeneous air flow coupled with a low average pressure drop**, i.e. a very slow increase in the pressure drop. This means a **long useful lifetime, with cost-efficient and reliable operation**.
- The leak-proof casting of the dimensionally stable pleat pack in the distortion-resistant plastic frame results in **outstanding bursting strength** as well as **high security against dust penetration**. Gripping lugs facilitate mounting and removal, and protection

**grids** on both sides minimize the risk of damage to the filter medium.

- Besides the standard version with 25 mm front frame thickness, the filters are also available with a 20.5 mm thick front frame or without a front frame. **An optional water barrier** reduces intaken water from reaching the clean-air side. Foamed-on PU gasket upon request.
- The entire filter element is **non-corroding and fully incinerable**, as it contains no metal parts. Frame and protection grids are made of halogen-free plastic.
- Viledon® MaxiPleat filters are **microbiologically inactive** and meet all hygiene requirements for HVAC systems to EN 13779 and the German VDI Guideline 6022.

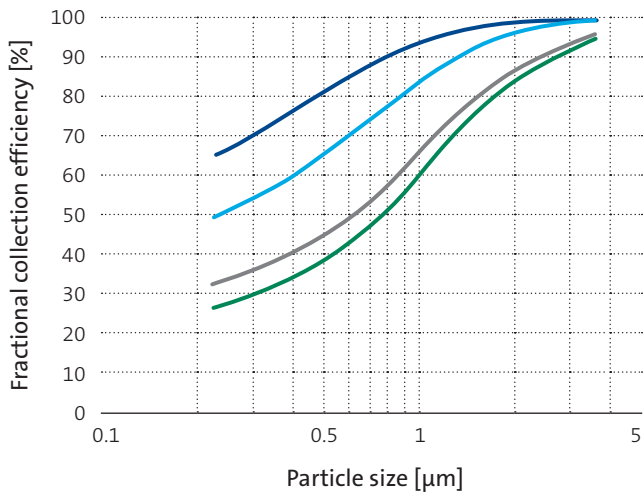
### The extras

- With the MaxiPleat Modular Filter System, MaxiPleat filters of different filter classes and depths can be combined in a positive fit by simple plug-on. This allows an **additional filter stage to be inserted** without any structural modifications (see separate data sheet).
- The MaxiPleat cassette filters are also available in Filter classes ISO ePM1 ≥ 95% and E12, plus in 140 mm depths, with and without a front frame / gasket.

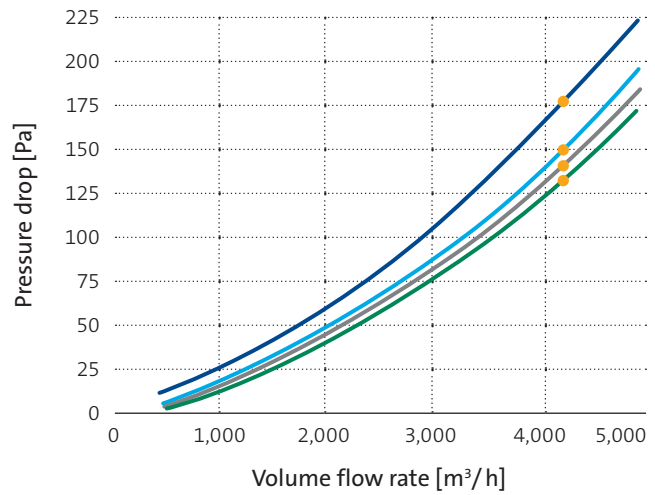
GEOMETRIES AVAILABLE		1/1	5/6	1/2
Nominal volume flow rate	m³/h	4,250	3,500	2,000
Filtering area	m²	18	14.5	7.5
Front frame for mounting frame	mm	592×592×25 610×610	490×592×25 508×610	287×592×25 305×610
Overall depth	mm	292		
Weight, approx.	kg	7	6	4
Thermal stability	°C	70		
Moisture-resistance (rel. hum.)	%	100		

# TECHNICAL FILTER TEST DATA TO EN 779 AND ISO 16890

Fractional collection efficiency curves



Initial pressure drop curves



— MX98      — MX95      — MX85      — MX75      ● Nominal volume flow rate

KEY DATA		MX 75	MX 85	MX 95	MX 98
Nominal volume flow rate	● m³/h	4,250			
Initial pressure drop	Pa	135	140	150	180
Class to ISO 16890		ISO ePM10 85%	ISO ePM2,5 65%	ISO ePM1 65%	ISO ePM1 80%
Particulate matter efficiency					
ISO ePM1		54	60	68	84
ISO ePM2,5	%	62	69	76	88
ISO ePM10		86	88	92	96
Cut-off particle size	µm	6	5	4	2.5
Filter class to EN 779:2012		M6	F7	F8	F9
Recom. final pressure drop**	Pa	650			
Bursting strength***	Pa	>6,000			
Dust holding capacity at AC fine up to 800 Pa	g	1,600	1,500	1,100	900

\* As part of the EUROVENT Certification, rated at 3,400 m³/h

\*\* 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.

\*\*\*Tested by Blue Heaven Technologies, Kentucky, USA

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.

Freudenberg Filtration Technologies SE & Co. KG  
 69465 Weinheim, Germany  
 Phone +49 (0) 6201 80-6264 | Fax +49 (0) 6201 88-6299  
 viledon@freudenberg-filter.com | www.freudenberg-filter.com

