

POTENT SPACESAVERS OF PATENT QUALITY: MAXIPLAAT CASSETTE FILTERS

FILTER CLASSES M6 – F9

FILTER TYPE	FILTER CLASS	TEST STANDARD	ENERGY EFFICIENCY CLASS*
MX75	M6	EN 779	–
MX85	F7	EN 779	C
MX95	F8	EN 779	B
MX98	F9	EN 779	B

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



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 polishing 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 protec-

tion 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**.

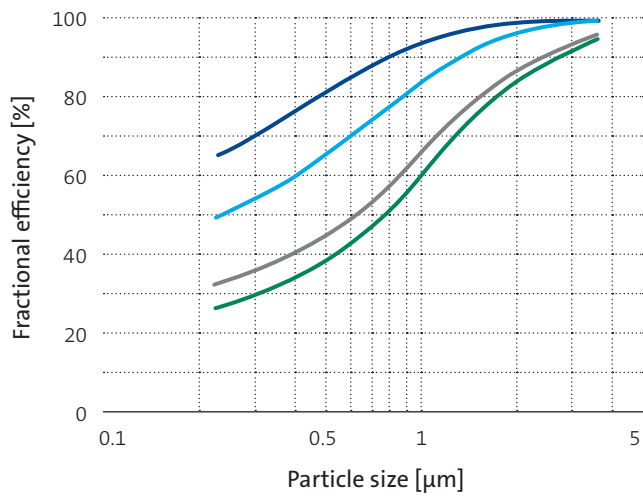
The extras

- 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 E10, E11 and E12, plus in 140 mm depths, with and without a front frame / gasket.

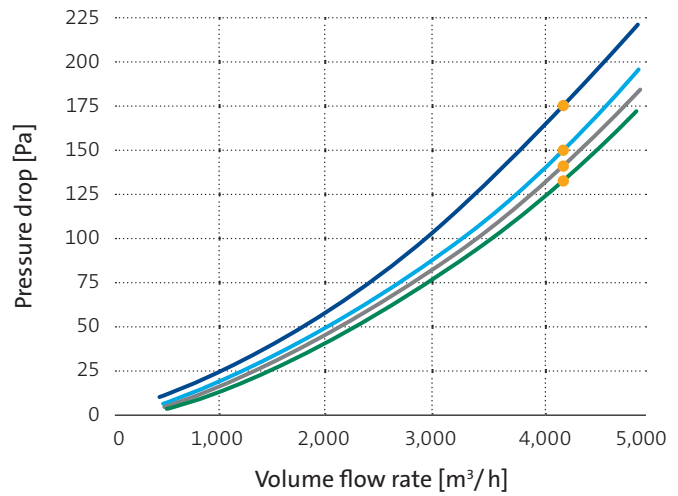
GEOMETRIES AVAILABLE		1/1	5/6	1/2
Nominal volume flow rate	m ³ /h	4,250	3,500	2,000
Filtering area	m ²	18	14.5	7.5
Front frame for mounting frame	mm	592×592×25 610×610	490×592×25 508×610	287×592×25 305×610
Overall depth	mm	292		
Weight, approx.	kg	7	6	4
Thermal stability	C°	70		
Moisture-resistance (rel.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

TECHNICAL FILTER TEST DATA TO EN 779

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



Initial pressure drop curves



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

KEY DATA		MX 75	MX 85	MX 95	MX 98
Filter class		M 6	F 7	F 8	F 9
Nominal volume flow rate	●	m³/h 4,250			
Initial pressure drop	Pa	135	140	150	175
Initial efficiency	%	—	45	65	80
Minimum efficiency	%	—	41	61	76
Average efficiency (0.4 µm) E_a	%	75	86	92	96
Max. recommended volume flow rate	m³/h	5,500			
Recommended final pressure drop*	Pa	650			
Bursting strength**	Pa	> 6,000			
Dust holding capacity approx. (AC Fine / 800 Pa)	g	2,300	1,900	1,700	1,500

* 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. You will find instructions on how to handle and dispose of loaded filters in our information on product safety and eco-compatibility. Subject to technical alterations.

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

