Potent Spacesavers of Patent Quality: MaxiPleat Cassette Filters

Filter Classes F 6 – F 9

Filter Type	Filter Classes	Energy Classification	Test Standard
MX 75	F 6	–	EN 779
MX 85	F 7	EE 2*	EN 779
MX 95	F 8	EE 1*	EN 779
MX 98	F 9	EE 1*	EN 779

* Installed in the 2nd filter stage with Class F 5 prefiltration

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 moisture-resistant up to 100 % rel. humidity, thermally stable up to 70 °C (temporarily up to 80 °C), **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 E 10, E 11 and E 12 (former H 10, H 11 and H 12), plus in 140 mm depths, with and without a front frame / gasket.

Available geometries		1 / 1	5 / 6	1 / 2
Nominal air flow rate	m^3/h	4250	3500	2000
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	292	292
Weight, approx.	kg	7	6	4

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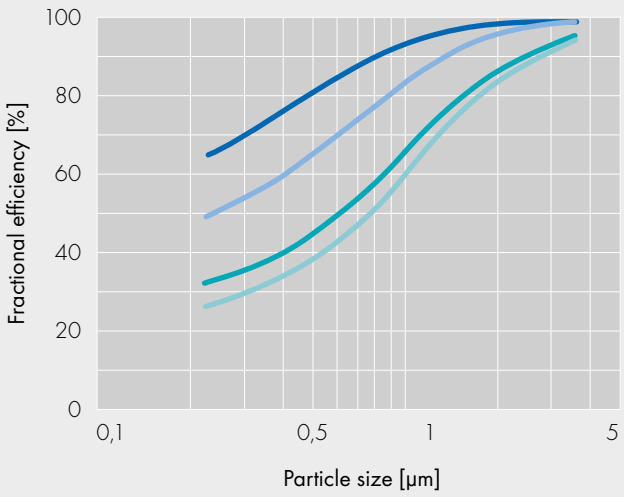
Technical filter data

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

MX 98 **MX 85**
MX 95 **MX 75**

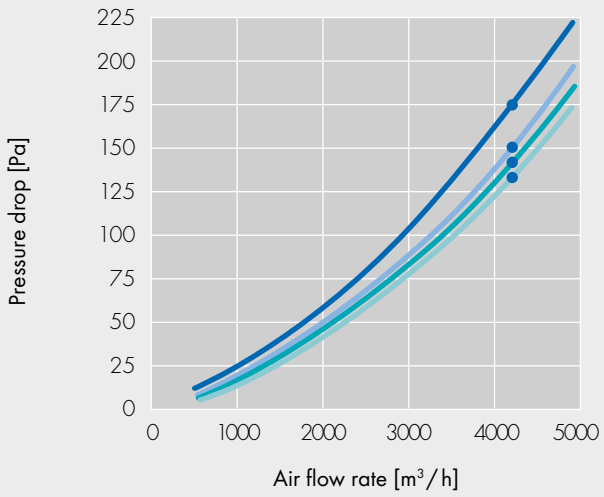
MX 75, MX 85, MX 95, MX 98



Initial pressure drop curves

MX 98 **MX 85** Nominal
MX 95 **MX 75** air flow rate ●

MX 75, MX 85, MX 95, MX 98



Key data		MX 75	MX 85	MX 95	MX 98
Average efficiency (0,4 µm)	%	75	86	92	96
Nominal air flow rate ●	m³/h	4250	4250	4250	4250
Max. permissible air flow rate	m³/h	5500	5500	5500	5500
Initial pressure drop	Pa	135	140	150	175
Recommended final pressure drop*	Pa	650	650	650	650
Bursting strength**	Pa	>6000	>6000	>6000	>6000
Dust holding capacity (AC Fine / 800 Pa)	g	2300	1900	1700	1500

* 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 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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