

MAXIPLEAT CASSETTE FILTERS



CLEANROOM TECHNOLOGY ADAPTED

FILTER TYPE	FILTER CLASS TO ISO 16890	FILTER CLASS TO EN 1822:2009
MX H10	ISO ePM1 95%	E 10
MX 100	ISO ePM1 >95%	E 11
MX 120	–	E 12



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 sensitive 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 low 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 can be obtained with a 20.5 mm thick front frame or without a front frame. An **optional water barrier** reduces water carry-over and gives a higher degree of security when re-

quired. 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.

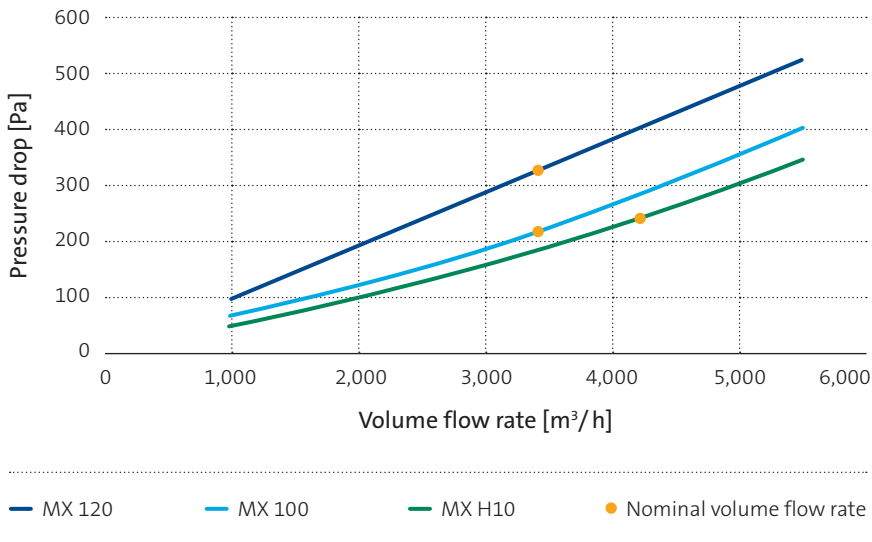
The extras

- 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 filter series are also available in Filter classes ISO ePM10 85% to ISO ePM1 80%, plus in 140 mm depths, with and without a front frame / gasket.

GEOMETRIES AVAILABLE		1/1	5/6	1/2
Nominal volume flow rate MX H10	m³/h		4,250	
Nominal volume flow rate MX 100 / MX 120			3,400	
Filtering area MX H10 / MX 100	m²	18	14.5	7.5
Filtering area MX 120		23	19	11
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 1822 AND ISO 16890

Initial pressure drop curves



KENNDATEN		MX H10	MX 100	MX 120
Nominal volume flow rate	● m³/h	4,250	3,400	3,400
Initial pressure drop	Pa	240	220	320
Class to ISO 16890		ISO ePM1 95%	ISO ePM1 > 95%	–
Particulate matter efficiency				
ISO ePM1		96	97	n. a.
ISO ePM2,5	%	97	99	n. a.
ISO ePM10		99	> 99	n. a.
Cut-off particle size	µm	1	0.5	n. a.
Filter class to EN 1822:2009		E 10	E 11	E 12
Recom. final pressure drop*	Pa		650	
Bursting strength**	Pa		> 6,000	
Dust holding capacity at AC fine up to 800 Pa	g	750	700	450

* 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.