MAXIPLEAT CASSETTE FILTERS BOX TYPE SERIES

viledon®

THE FLOW-OPTIMIZED FILTER SOLUTION ON EPA LEVEL

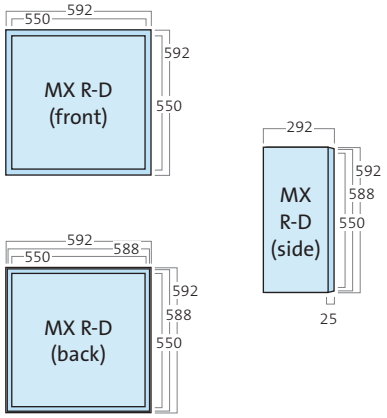
FILTER TYPE	FILTER CLASS TO ISO 16890	FILTER CLASS TO EN 1822:2009
MX H10 R-D	ISO ePM1 95%	E 10
MX 100 R-D	ISO ePM1 > 95%	E 11
MX 120 R-D	–	E 12

The application

Viledon® MaxiPleat cassette filters of the box type series offer maximized operational reliability and cost-efficiency for intake air filtration in turbomachinery systems. In this application they meet the stringent requirements for clean air quality, particularly under critical on-site conditions with high humidity in coastal areas and offshore installations, where space is limited and when process safety does not permit any compromises.

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.
- The MaxiPleat box type design offers an **enlarged face opening and filtering area** resulting in reduced pressure drop and a higher dust holding capacity.
- 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.
- An **optional water barrier** reduces water carry-over and gives a higher degree of security when required. Foamed-on PU gasket upon request.
- Besides the boxtype version, MaxiPleat cassette filters can be obtained in **standard version** with a 25 mm or 20.5 mm front frame thickness. This geometry allows the installation of the Viledon® **MaxiPleat Modular Filter System**. All MaxiPleat filter series are also available in **filter classes** ISO ePM10 85% to ISO ePM1 80%.



GEOMETRIES AVAILABLE		1/1	5/6	1/2
Nominal volume flow rate MX H10 Nominal volume flow rate MX 100 / MX 120	m^3/h		4,250 3,400	
Filtering area MX H10 / MX 100 Filtering area MX 120	m^2	21 25	16.9 20.7	8.5 12.0
Front frame for mounting frame	mm	592 × 592	490 × 592	287 × 592
Overall depth	mm		292	
Weight, approx.	kg	7.6	6.5	4.4
Thermal stability	C°		70	
Moisture-resistance (rel. hum.)	%		100	

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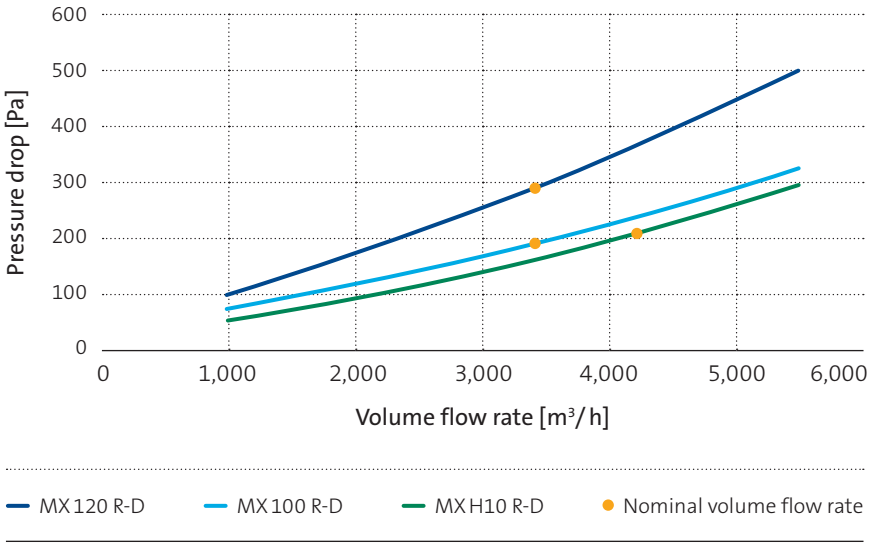
TECHNICAL FILTER TEST DATA TO EN 1822 AND ISO 16890

Initial pressure drop curves



KEY DATA		MX H10 R-D	MX 100 R-D	MX 120 R-D
Nominal volume flow rate ●	m³/h	4,250	3,400	3,400
Initial pressure drop	Pa	210	190	290
Class to ISO 16890		ISO ePM1 95%	ISO ePM1 > 95%	–
Particulate matter efficiency ISO ePM1 ISO ePM2,5 ISO ePM10	% 	 96 97 99	 97 99 > 99	 n. a. n. a. 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	800	750	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. 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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