viledon

HIGH-TEMPERATURE FILTERS TYPE HITEMP

EFFICIENT AND RELIABLE AT HIGH TEMPERATURES

FILTER TYPE	FILTER CLASS TO ISO 16890	FILTER CLASS TO EN 779:2012		
HT10	ISO ePM10 75%	M 6		
HT 2.5	ISO ePM2,5 75%	F8		















The application

The principal application for the Viledon® HT10 and HT2.5 High-Temperature Cassette Filters with an overall depth of 292 mm is air filtration in recirculated-air systems used for paint-drying processes in the automotive industry. The filters meet particularly stringent requirements for air purity, process reliability and cost-efficiency.

Besides the applications in surface treatment technology, the filters also meet the toughest of quality stipulations in general drying applications.

The characteristics and benefits

- The filters are available in two frame versions made of galvanized steel sheet: the box type (Type B), and the version with a flanged-on, 25-mmthick front frame (Type H).
- Both versions are fitted with protection grids made of galvanized steel mesh on both sides, thus ensuring safe and simple handling.

- The filter media used are pleated micro-glass-fiber papers with different fiber finenesses for Filter classes ISO ePM10 75% (M 6) and ISO ePM2,5 75% (F 8). The corrugated aluminium separators with crimped edges, in conjunction with double-layered filter paper at the pleats, provide maximized mechanical strength. This increases production dependability for the user.
- The filters are fitted with a thermally ultra-stable, abrasion-proof textileglass round cord seal, either on the upstream or downstream side, as a standard feature. The box versions of these filters can be installed from both up- and down-stream side which reduces stock levels and filter variants.
- They are thermally stable up to at least 260 °C. Special types with frames made of aluminium or aluminised sheet metal have a temperature resistance of up to 385 °C.

- Viledon® High-Temperature Cassette Filters satisfy the stringent requirements of Fire class F1 to DIN 53 438 and are thus self-extinguishing. They are also highly resistant to solvent vapors and are silicone-free.
- In addition to the standard versions, special variants with different dimensions or frame materials, higher thermal stability or special reinforcement, are available on request.

The special features

- Viledon® High-Temperatur Cassette Filters HT 10 and HT 2.5 excel in terms of especially high dust holding capacity and very good mechanical sturdiness, even when exposed to inhomogeneous air loadings.
- Thanks to low filter resistance values, very long useful lifetimes can be achieved coupled with exceptionally cost-efficient operating characteristics.

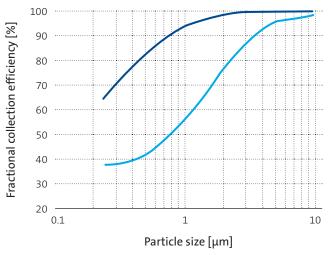
GEOMETRIES AVAILABLE		BOX FORM (BG) HT 10 HT 2.5 1/1	BOX FORM (BG) HT10 HT2.5 1/2	WITH FRONT FRAME (HG) HT 10 HT 2.5 1/1	WITH FRONT FRAME (HG) HT 10 HT 2.5 1/2
Nominal volume flow rate	m³/h	3,400	1,600	3,400	1,600
Dimensions	mm	610×610	305×610	592×592	287×592
Overall depth	mm			292	
Weight, approx.	kg	12	7	12	7
Filtering area, approx.	m²	15	7.5	12	6
Thermal stability	°C			260	



TECHNICAL FILTER TEST DATA TO EN 779 AND ISO 16890

Fractional collection efficiency curves

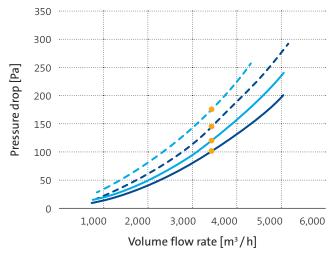
HT 10 BG



HT 2.5 BG

Initial pressure drop curves

-- HT 2.5 HG



KEY DATA		HT10 BG 1/1	HT10 HG 1/1	HT 2.5 BG 1/1	HT 2.5 HG 1/1
Nominal volume flow rate	m³/h	3,400			
Initial pressure drop	Pa	100	140	120	150
Class to ISO ISO 16890		ISO ePN	110 75%	ISO ePN	12,5 75%
Particulate matter efficiency ISO ePM1 ISO ePM2,5 ISO ePM10	%	3 4 7		8	9 4 5
Cut-off particle size	μm	8	3	4	4
Filter class to EN 779:2012		M	6	F	8
Recom. final pressure drop*	Pa		30	00	
Dust holding capacity approx. AC fine up to 300 Pa	g	520	420	520	420

-- HT10 HG

FRAME VERSION	SIZE	INSTALLATION	DESIGNATION/ORDERING CODE
Box variant galvanized steel sheet	1/1	both sides	HT10-BG-610x610x292-U-L
	1/2	both sides	HT10-BG-305x610x292-U-L
With front frame galvanized steel sheet	1/1	raw air side	HT10-HG-592x592x292-1-L
		clean air side	HT10-HG-592x592x292-2-L
	1/2	raw air side	HT10-HG-287x592x292-1-L
		clean air side	HT10-HG-287x592x292-2-L
Box variant galvanized steel sheet	1/1	both sides	HT2.5-BG-610x610x292-U-L
	1/2	both sides	HT2.5-BG-305x610x292-U-L
With front frame galvanized steel sheet	1/1	raw air side	HT2.5-HG-592×592×292-1-L
		clean air side	HT 2.5-HG-592 x 592 x 292-2-L
	1/2	raw air side	HT 2.5-HG-287 x 592 x 292-2-L
		clean air side	HT2.5-HG-287×592×292-1-L

^{*} For cost-efficiency or system-specific reasons it may be appropriate to change the filters before reaching the final pressure drop stated. It can also be exceeded in certain applications.

Nominal volume flow rate

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.

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

