viledon®

HIGH-TEMPERATURE FILTERS TYPE HITEMP

EFFICIENT AND RELIABLE AT HIGH TEMPERATURES





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 paintdrying 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, 20-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 70% (M6) and ISO ePM2,5 65% (F8). The corrugated aluminium separators with crimped edges, in conjunction with doublelayered 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) HT10 HT2.5 1/1	BOX FORM (BG) HT 10 HT 2.5 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.	m ²	15	7.5	12	6
Thermal stability	°C			260	



TECHNICAL FILTER TEST DATA TO EN 779 AND ISO 16890

— HT 2.5 BG

Fractional collection efficiency curves

HT 10 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		3,4	100	
Initial pressure drop	Ра	120	150	135	165
Class to ISO ISO 16890		ISO ePN	10 70%	ISO ePN	12,5 65%
Particulate matter efficiency ISO ePM1 ISO ePM2,5 ISO ePM10	%	2 4 7	8 0 73	5 6 8	5 5 7
Filter class to EN 779:2012		M	16	F	8
Recom. final pressure drop*	Ра		30	00	
Dust holding capacity approx. AC fine up to 300 Pa	g	520	420	520	420

-- HT 10 HG

FRAME VERSION	SIZE	POSITION OF SEAL	DESIGNATION / ORDERING CODE
Box variant	1/1	universal	HT10-BG-610x610x292-U-L
box vanant	1/2	universal	HT10-BG-305x610x292-U-L
Variant	1/1	front side	HT10-HG-592x592x292-1-L
	1/1	box side	HT10-HG-592x592x292-2-L
with front frame	1/2	front side	HT10-HG-287x592x292-1-L
		box side	HT10-HG-287x592x292-2-L
Boxvariant	1/1	universal	HT 2.5-BG-610 x 610 x 292-U-L
box vanant	1/2	universal	HT2.5-BG-305x610x292-U-L
	1/1	front side	HT 2.5-HG-592 x 592 x 292-1-L
Variant		box side	HT 2.5-HG-592 x 592 x 292-2-L
with front frame	1/2	front side	HT 2.5-HG-287 x 592 x 292-2-L
		box side	HT2.5-HG-287x592x292-1-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 information or figures given are subject to tolerances due to normal production fluctuations. Our explicit written confirmation is required in each case for the correctness of the information. 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. 02-ST-124-May-2022-EN

FREUDENBERG FILTRATION TECHNOLOGIES



