

COMPACT F 50

viledon®

MAXIMIZED EFFICIENCY IN CONTINUOUS OPERATION

APPLICATIONS

For filtering intake, exhaust and recirculating air in air-conditioning systems such as:

- In paint lines
- In industrial processes (chemicals, pharmaceuticals, foods and beverages, optics, electronics, etc.)
- In sophisticated air-conditioning systems (hospitals, laboratories, libraries, museums, airports, etc.)
- In intake air filtration of gas turbines and compressors

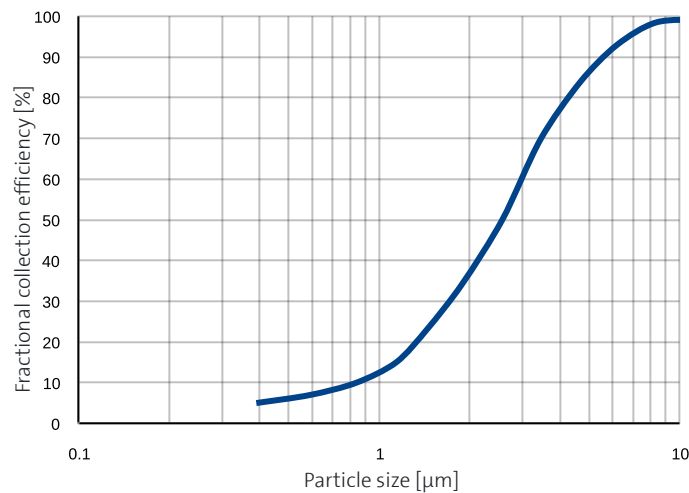


KEY DATA	F 50 1/1 5L	F 50 1/1 5S	F 50 1/1 8M	F 50 1/2 3L	F 50 1/2 3S
Filter class acc. to ISO 29461-1	ISO T5				
Class to ISO 16890	ISO ePM10 55%				
Nominal volume flow [m³ / h]	4,250	3,400	4,250	2,500	2,000
Face velocity [m/s]	3.2	2.7	3.2	3.7	3.0
Initial pressure drop [Pa]	50	65	80	50	65
Weight [kg]	2.1	1.6	2.5	1.2	0.9
Average efficiency [%]	51	49	50	51	
Average arrestance [%]	97	95	97	97	
Frame	PUR				
Filter area [m²]	4.0	2.0	4.7	2.4	1.2
Recommended final pressure drop [Pa]	450				
Dust holding capacity (AC Fine / 300 Pa) [g]	2,600	1,000	3,100	1,450	550
Dust holding capacity (AC Fine / 450 Pa) [g]	3,650	1,400	4,300	2,150	815
Energy efficiency class	A+	D	B	A+	D
Energy consumption [kWh/a]	445	906	600	445	906

KEY DATA	F 50 1/1 5L	F 50 1/1 5S	F 50 1/1 8M	F 50 1/2 3L	F 50 1/2 3S
Moisture resistance (rel. hum.) [%]			100		
Bursting strength acc. to ISO 29461-3 [Pa]			>3000		
KEY DATA	F 50 1/2H 8L	F 50 1/4 4L	F 50 1/4 4M	F 50 5/6 4L	F 50 5/6 4S
Filter class acc. to ISO 29461-1			ISO T5		
Class to ISO 16890	ISO ePM10 55%				
Nominal volume flow [m ³ / h]	2,100	1,525	1,200	3,400	2,700
Face velocity [m/s]	3.1	4.6	3.6	3.0	2.4
Initial pressure drop [Pa]	60	50	80	50	65
Weight [kg]	1.5	0.7	0.6	1.6	1.1
Average efficiency [%]	51	51		51	
Average arrestance [%]	97	97		97	
Frame			PUR		
Filter area [m ²]	3.0	1.4	1.1	3.2	1.6
Recommended final pressure drop [Pa]			450		
Dust holding capacity (AC Fine / 300 Pa) [g]	1,800	700	500	2,000	750
Dust holding capacity (AC Fine / 450 Pa) [g]	2,650	1,000	800	2,900	1,000
Energy efficiency class	A+	A+	B	A+	D
Energy consumption [kWh/a]	445	445	600	445	906
Moisture resistance (rel. hum.) [%]			100		
Bursting strength acc. to ISO 29461-3 [Pa]			>3000		

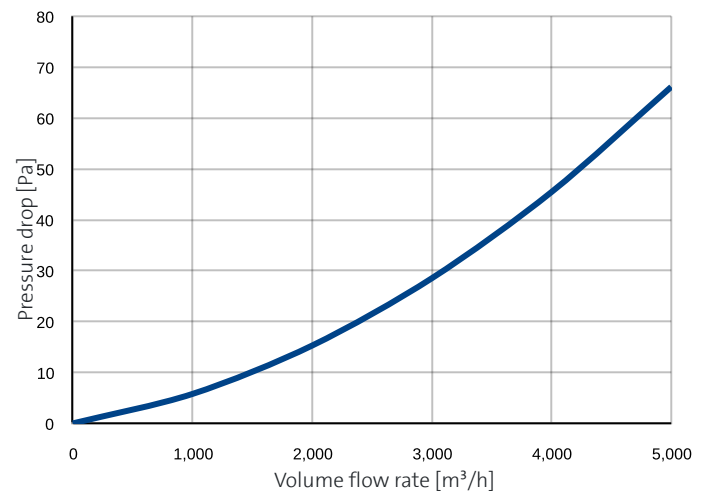
Fractional collection efficiency curve

■ F 50 1/1 5L



Initial pressure drop curve

■ F 50 1/1 5L



MEDIA AND CHARACTERISTICS

- Progressively structured high-performance nonwovens made in-house from tear-resistant synthetic organic fibers.
- Free of glass fibers, non-corroding and microbiologically inactive.
- Meets all the criteria laid down in VDI Guideline 6022 "Hygiene Requirements for HVAC systems and units".
- Functional reliability due to leak-proof welded configuration of the filter pockets, foamed-in polyurethane front frame.
- Aerodynamically optimized welded-in spacers (long-pocket filters only).
- Dimensionally stable construction of the filter element as a whole.
- Uniformly high quality of the filters is assured by our certified quality management system to ISO 9001, as well as by type-testing to EN 779.

FEATURES

- Durability, high arrestance, low pressure drops, long useful lifetimes and high cost-efficiency.
- Very good energy efficiencies (A+), thus cutting energy costs and downsizing CO2 emissions.
- Frame and filter medium are self-extinguishing to DIN 53438 (Fire class F 1).
- High functional reliability, even under extremely moist and wet operating conditions.

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.

INNOVATING TOGETHER

Contact us www.freudenberg-filter.com

 **FREUDENBERG**
FILTRATION TECHNOLOGIES