

# MV EXTENDED SURFACE FILTERS – ENERGY EFFICIENT FILTRATION COST EFFECTIVE MAINTENANCE



## FILTER CLASSES MERV 12–MERV 16

FILTER TYPE	MERV CLASS	NOMINAL VOLUME FLOW RATE [cfm]
MV 75	12	1,970
MV 85	13	1,970
MV 95	16	1,970

MERV classes are determined by the ASHRAE 52.2:2007 test standard.



### The application

Viledon® MV extended surface filters have been developed specifically for intake, exhaust and recirculated air filtration HVAC systems that have stringent requirements for clean air quality and cost efficiency.

### The characteristics

- MV filters are constructed for **ease of handling and installation.**
- Freudenberg developed and manufactured **100% synthetic and hydrophobic filter media.**
- **The MV filter media elements are potted into a high strength all plastic frame.** This assures the user maximum

operational dependability and consistent filtration throughout each specific application.

- **Entire filter element is free of metals, halogens and glass fibers** as well as corrosion proof and fully incinerable which reduces disposal costs.

### The special features

- **Patented 1 in. recess design for extended surface filters** drastically lowers pressure drop when used in conjunction with pleated or panel style pre-filters on the face of the filters. The patented 1 in. recess provides full utilization of the entire prefilter media area.

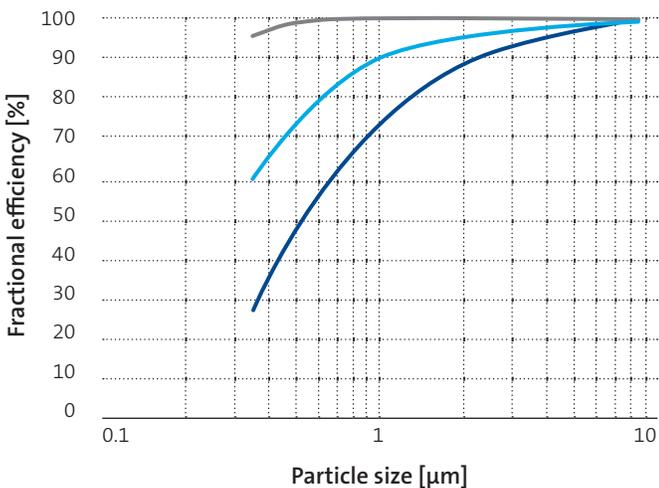
- **The sturdy construction assures optimum performance under turbulent flow conditions and load changes.** This means that the risk of particle or fiber shedding is practically eliminated.
- Freudenberg developed and manufactured organic synthetic filter media.
- **Fine, progressively structured, thermally bonded media** provides exceptionally low pressure drop at high efficiency levels.
- Media is resistant to physical damage from moisture and chemicals.
- **Light weight design** provides easy handling and reduced cost for transport, shipping and disposal.
- The MV 95 is available in a fire retardant version as MVFR95.

GEOMETRIES AVAILABLE		1/1	5/6	1/2
Nominal air flow rate	cfm	1,970	1,640	985
Effective filtering area	ft <sup>2</sup>	131	108	58
Front frame for mounting frame	in	23 <sup>3/8</sup> × 23 <sup>3/8</sup> × 6/8	19 <sup>3/8</sup> × 23 <sup>3/8</sup> × 6/8	11 <sup>3/8</sup> × 23 <sup>3/8</sup> × 6/8
Overall depth (Non-Recess)	in	11.5	11.5	11.5
Overall depth (1" Recess)	in	12.5	12.5	12.5
Weight, approx.	lbs	10	8	5
Thermal stability	°F	160	160	160
Moisture-resistance (rel. hum.)	%	100	100	100
Suitable for standard mounting frame	in	24 × 24	20 × 24	12 × 24

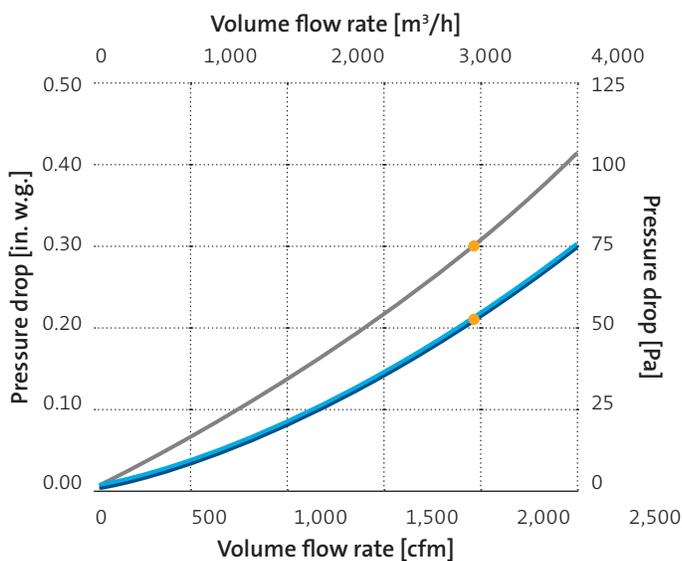


## TECHNICAL FILTER TEST DATA TO ASHRAE 52.2

Initial fractional collection efficiency plotted against particle size (ASHRAE 52.2)



Initial pressure drop curves



— MV 75      — MV 85      — MV 95      ● Nominal air flow rate

KEY DATA		MV 75	MV 85	MV 95
Filter class ASHRAE 52.2		MERV 12	MERV 13	MERV 16
Nominal volume flow rate	● cfm	1,970	1,970	1,970
Initial pressure drop	in. w.g.	0.22	0.22	0.31
Bursting Strength	in. w.g.	>25	>25	>25
Recom. final pressure drop*	in. w.g.	1.5	1.5	1.5

75: 09-288B, 85:09-288A, 95:09-1015

\* 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.

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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