

DAFCO FILTRATION GROUP®

SERIES 1100 PLEATED AIR FILTER



DESCRIPTION

The Series 1100 pleated filters incorporate a 100% synthetic media with an ASHRAE 52.2 MERV 11 (Minimum Efficiency Reporting Value). The 1" and 2" filters handle velocities up to 500 FPM – the 4" filters up to 625 FPM.

The media is laminated to an expanded metal support grid on the air-exiting side, preventing fluttering, and maintaining uniformity of the pleats. The filter pack is enclosed in a heavy-duty, moisture resistant, die-cut frame that will not warp, crack or distort under normal operating conditions.

Diagonal front and back media retainers are an integral part of the filter frame. The media pack is bonded to every part of the frame, preventing any possibility of air by-pass. Integral pleat separators on the 4" filters provide additional pleat stabilization for the most demanding applications.

BENEFITS

It is possible for a flat filter to face load, thus restricting air flow and creating unnecessary strain on equipment. The Series 1100 filters accumulate heavier, more restrictive particles at the bottom of the pleats, leaving the sides open longer for effective filtration. The Series 1100 filter is engineered to provide maximum efficiency. In general, deeper pleats result in longer filter life and more time between changeouts.

- Rigid construction with consistent media extends the service life
- Well-built, efficient and easy-to-handle medium efficiency filters
- •Achieves MERV 11 (per ASHRAE Standard 52.2-2007)
- Low initial pressure drop
- Consistent efficiency

APPLICATIONS

These filters can be used without modification in side-access filter housing or built-up filter bank. They offer better efficiency than conventional permanent or disposable flat filters. The Series 1100 filters, when used as pre-filters, substantially extend the life of more expensive high efficiency filters. They are the perfect filters for residential, commercial and industrial use.



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- MERV 11 (per ASHRAE Standard 52.2-2007)
- Initial efficiency is over 2 times greater than traditional cotton poly
- Initial efficiency greater than 74% on 1-3 micron particles
- Moisture resistant 100% synthetic media
- Long service life means lower operating costs
- Low initial pressure drop
- A wide range of sizes in 1", 2" and 4" thicknesses



DIMENSIONS AND PERFORMANCE DATA

PART NO.	NOMINAL SIZE**	CAPACITY MEDIUM	(cfm) HIGH
19619 19620 19621 19622 19624 19625 19626 19627 19630 19630 19630 19633 19633 19633 19634 19635 19636 19637 19637 19640 19641 19642 19643 19645 19646	$\begin{array}{c} 10 \times 20 \times 1 \\ 10 \times 24 \times 1 \\ 10 \times 25 \times 1 \\ 12 \times 12 \times 1 \\ 2 \times 20 \times 1 \\ 12 \times 20 \times 1 \\ 12 \times 25 \times 1 \\ 14 \times 20 \times 1 \\ 14 \times 25 \times 1 \\ 14 \times 25 \times 1 \\ 15 \times 25 \times 1 \\ 15 \times 25 \times 1 \\ 15 \times 20 \times 1 \\ 16 \times 16 \times 1 \\ 16 \times 20 \times 1 \\ 16 \times 20 \times 1 \\ 16 \times 20 \times 1 \\ 18 \times 18 \times 1 \\ 18 \times 20 \times 1 \\ 18 \times 25 \times 1 \\ 20 \times 20 \times 24 \times 1 \\ 20 \times 25 \times 1 \\ 20 \times 25 \times 1 \\ 20 \times 25 \times 1 \\ 24 \times 24 \times 1 \\ 25 \times 25 \times 1 \end{array}$	525 625 625 750 775 725 875 900 775 975 650 825 1000 1050 850 925 1125 1175 1050 1250 1300 1500 1500 1500	700 825 850 825 1000 1025 975 1150 1200 1050 1325 1400 1325 1400 1325 1400 1550 1500 1500 1550 1400 1550 2000 2150
19648 19649 19650 19651 19652 19653 19654 19655 19656 19657 19660 19661 19662 19663 19663 19664 19665	$\begin{array}{c} 10 \times 20 \times 2 \\ 12 \times 20 \times 2 \\ 12 \times 24 \times 2 \\ 14 \times 20 \times 2 \\ 14 \times 25 \times 2 \\ 15 \times 20 \times 2 \\ 16 \times 16 \times 2 \\ 16 \times 20 \times 2 \\ 16 \times 24 \times 2 \\ 16 \times 25 \times 2 \\ 18 \times 24 \times 2 \\ 18 \times 25 \times 2 \\ 20 \times 20 \times 2 \\ 20 \times 24 \times 2 \\ 20 \times 24 \times 2 \\ 20 \times 25 \times 2 \\ 24 \times 24 \times 2 \\ 25 \times 25 \times 2 \end{array}$	525 625 750 725 900 775 650 825 1000 1050 1125 1175 1050 1250 1300 1500 1500 1625	700 825 1000 975 1200 1025 875 1100 1325 1400 1500 1550 1400 1550 1400 1550 2000 2150
19666 19667 19668 19669 19670 19671 19672 19673 19674	12 x 24 x 4 16 x 20 x 4 16 x 25 x 4 18 x 24 x 4 20 x 20 x 4 20 x 24 x 4 20 x 25 x 4 20 x 25 x 4 24 x 24 x 4 25 x 29 x 4	1000 1100 1400 1500 1400 1650 1750 2000 2525	1250 1400 1750 1875 1750 2100 2200 2500 3150

FEET PER MINUTE (FPM)

	INITIAL	INITIAL		FINAL	
FILTER	MEDIUM	RESISTANCE	HIGH	RESISTANCE	RESISTANCE*
DEPTH	VELOCITY	(MEDIUM "w.g.)	VELOCITY	(HIGH "w.g.)	(ALL FILTERS)
]"	375	0.33	500	0.48	1.0
2"	375	0.21	500	0.34	1.0
4"	500	0.22	625	0.32	1.0

*Recommended final resistance. System may dictate a lower change-out point. (Filters tested to 1.5")

PRINCIPLE OF FILTRATION

DESIGN AND CONSTRUCTION



SERIES 1100 ENGINEERING SPECIFICATIONS

1.0 General

AIR FLOV

AIR FLOW

- Filters shall be Aerostar Series 1100 extended surface pleated air filters as manufactured by Filtration Group, Inc.
 - 1.2 Filters shall be available in depths of 1", 2", and 4".
 - 1.3 Filters shall be UL Classified.
 - 1.4 Manufacturer shall provide documentation from an external certification body that the manufacturing location is ISO 9000 Registered.

2.0 Filter Material of Construction

- 2.1 Media shall be 100% synthetic media that does not support microbial growth.
- 2.2 Frame shall be a heavy-duty, high strength, moisture resistant paperboard with cross member design that increases filter rigidity and prevents breaching. Frame shall be made with 100% recycled paperboard with an average of 35% post-consumer content. Frame shall be recyclable.
- 2.3 Filters shall have a 100% postconsumer recycled expanded metal support grid bonded to the air-exiting side of the filter to maintain pleat uniformity and prevent fluttering. Metal support grid shall be recyclable.

3.0 Filter Performance

- 3.1 Filters shall be MERV 1.1 in all filter depths when fully tested in accordance with ASHRAE 52.2 2007 Test Standard.
- 3.2 Initial resistance of filters shall not exceed 0.30" w.g. in 1" at 375 fpm air flow; 0.34" w.g. in 2" at 500 fpm airflow; and 0.22" in 4" at 500 fpm air flow.
- 3.3 Filter shall be rated to withstand a continuous operating temperature up to 150°F
- 3.4 Filters shall have a recommended final resistance of 1.0" w.g.

MERV (MINIMUM EFFICIENCY REPORTING VALUE)

A numerical system for comparing filters based on

minimum particle size efficiency. A MERV of 1

is least efficient; a 16 is the most efficient.

(See ASHRAE 52.2)

Distributed by:



1.00

PARTICLE SIZE [um]

**Special sizes available upon request

100

90 80

70

60 50 40

30

20

10 0 0.10

EFFICIENCY [%]

SERIES 1100 PLEATED FILTER

DAFCO FILTRATION GROUP®

SERIES 1100

SERIES 400

TRADITIONAL

COTTON

POLY

10.00

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WHEN CLEAN AIR MATTERS

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