

## Welcome!

## Introducing IAF Air Filters

(i.	innovation around filtration™
W	ny IAF is High Quality Filter?
	w to choose a good filter, as you know filter manufacture do notmake eir own media.
1.	Media for fiberglass media (micron fiberglass for medium and sub micron fiberglass for HEPA)
	IAF uses the best media (ex: USA/French/Tiongkok)
	Reliable and Trustworthy in true efficiency of the filter
	Very strong media - not broken even with high speed airflow
2.	Sealant should be PU c ause it will penetrate deep into the filter (not hot melt because just on the surface)
3.	Here are 2 seperator for filter
	- Hot melt for mini pleat. IAF uses high temperature (175°) hot melt



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6 - 7	F Series - Pre Filter Pleated Panel
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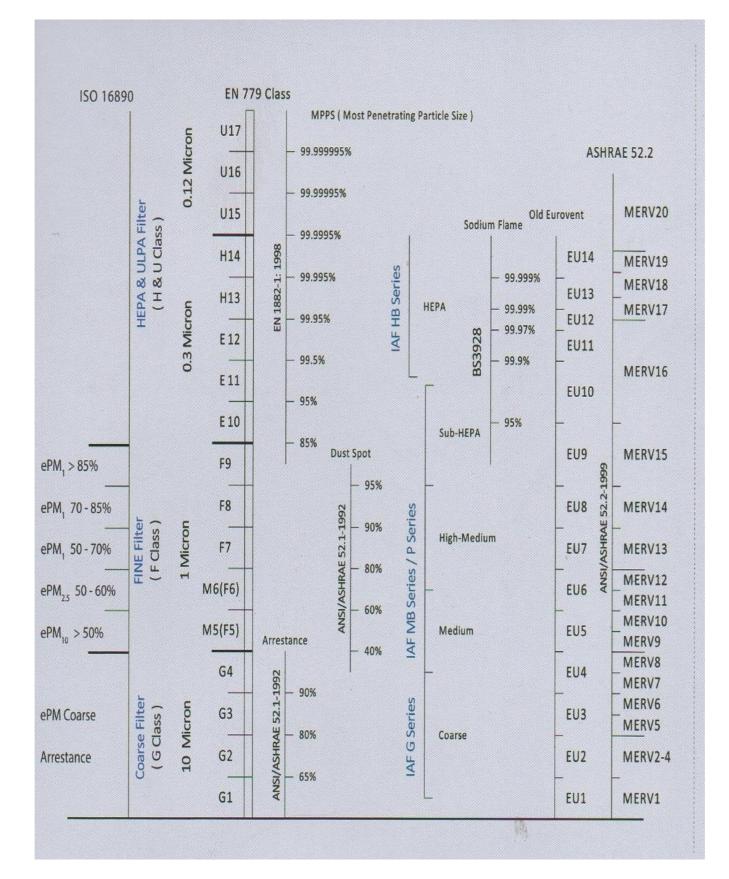
## **Our Products: MEDIUM FILTERS**

18 - 19	PU Series - Synthetic Ultrasonic Pocket Filter
20 - 21	PF Series - Fiberglass Media Pocket Filter
22 - 23	MB Series - Medium Box Filter
24 - 25	MBGT-4V
26 - 27	V-Bank - Plastic Frame Filter
28 - 31	Pocket Filter

## **Our Products: HEPA/ULPA FILTERS**

32 - 33	HB Series - High Efficiency Box Filter
34 - 35	HBMP Series - High Efficiency Box Filter
36 - 37	IAF C-Carbon - Particle and Gaseous Disposable Filters
38 - 40	FFU (Fan Filter Unit)

# Filter Efficiency & Classifications



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## Cleanroom Standard ISO 14644-1

"Classification of Air Cleanliness"

Maximum Concentration Limits (particles/m<sup>3</sup> of air)

			Particl	e Size		
ISO	= 0.1 µm	= 0.2 µm	= 0.3 µm	= 0.5 µm	= 1 µm	= 5 µm
1	10	2				
2	100	24	10	4		
3	1,000	237	102	35	8	
4	10,000	2,370	1,020	352	83	
5	100,000	23,700	10,200	3,520	832	29
6	1,000,000	237,000	102,000	35,200	8,320	293
7				352,000	83,200	2,930
8				3,520,000	832,000	29,300
9				35,200,000	8,320,000	293,000

Comparison between selected equivalent classes of FS 209 and ISO 14644-1

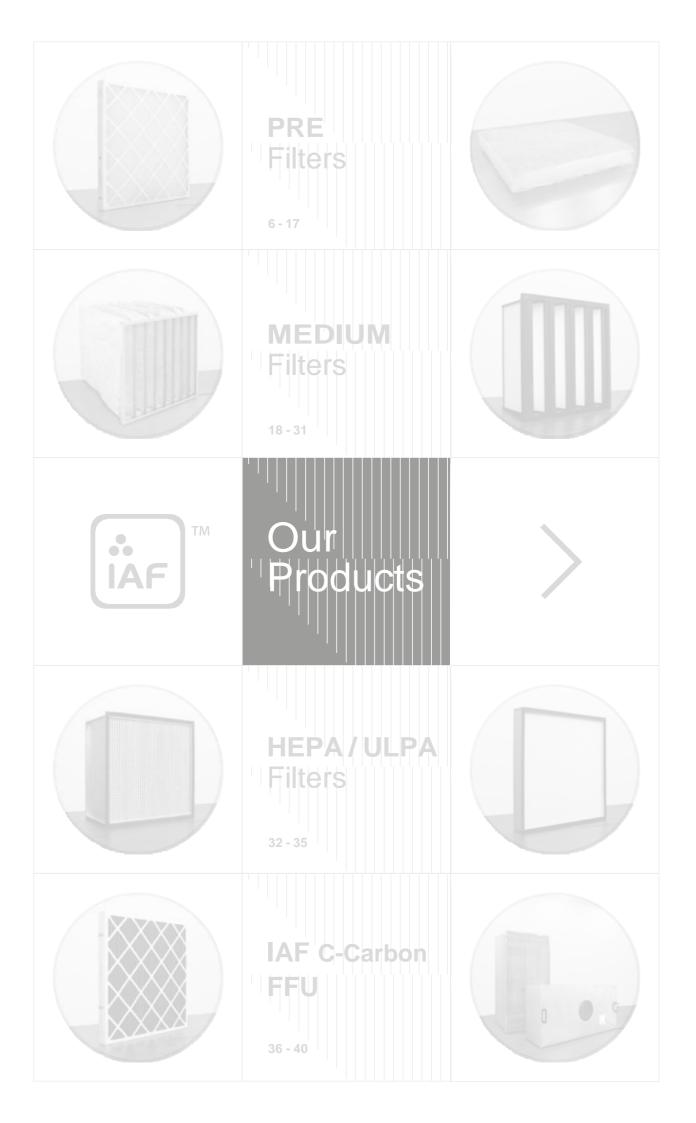
			Particle Siz	ze		
ISO 14644-1 Classes	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8
FS 209 Classes	Class 1	Class 10	Class 100	Class 1,000	Class 10,000	Class 100,000

## Cleanroom Standard EU GGMP

"European Union Guide to Good Manufacturing Practice"

Maximum permitted number particles/m³ equal to or above

	'	est	in ope	ration
Grade	= 0.5 µm	= 5 µm	= <b>0</b> .5 μm	= 5 µm
A	3,500	0	3,500	0
B (a)	3,500	0	350,000	2,000
C (a)	350,000	2,000	3,500,000	20,000
D (a)	3,500,000	20,000	not defined (c)	not defined (c)
				1







#### Media

Progressive density fiberglass media pad

#### Frame

Highest wet strength beverage boardor reusable alumunium frame

#### EN 779 Class

G3

Recommended Final Pressure 1"W.G. (250 Pa)

Maximum Operating Temperature 150°F

## Available Sizes

#### Size 1

Nominal size (inch): **16 x 20 x 1** Actual size (mm): **390 x 492 x 22** 

#### Size 2

Nominal size (inch): **20 x 20 x 1** Actual size (mm): **492 x 492 x 22** 

#### Size 3

Nominal size (inch): 20 x 24 x 1 Actual size (mm): 492 x 594 x 22

#### Size 4

Nominal size (inch): 24 x 24 x 1 Actual size (mm): 594 x 594 x 22

#### Size 5

Nominal size (inch): 12 x 24 x 2 Actual size (mm): 289 x 594 x 44

#### Size 6

Nominal size (inch): 16 x 20 x 2 Actual size (mm): 390 x 492 x 44

#### Size 7

Nominal size (inch): **20 x 20 x 2** Actual size (mm): **492 x 492 x 44** 

#### Size 8

Nominal size (inch): 20 x 24 x 2 Actual size (mm): 492 x 594 x 44

#### Size 9

Nominal size (inch): 24 x 24 x 2 Actual size (mm): 594 x 594 x 44

(Other dimensions or special sizes are available upon request)

## **General Description**

The F series features progressive density fiberglass media pad allowing for full depth filtration. The adhesive coated fibers purpose to retent dusts which have been captured, thus minimizing dusts by pass. Frame: Strength Beverage cardboard Ex: Canada or reusable alumunium frame

## Applications

- Heavy-duty pre-filter for extending the life of higher efficiency filters
- Suitable for use in a dusty condition

## Filter Media

- High density fiberglass media pad (Excellent quality media with high dust holding capacity)
- **Progressive density media from coarse to fine fibers** (Full dust loading throughout the depth of the filter media for extended service life)
- Unique leno-backing design unlike traditional design (Maintains dimensional stability and adds to the rigidity of the filter structure)
- Fibers are treated with heavy coating of special adhesives (Maximizes dust retention as dusts trapped will bond to the filter fibers)

## Filter Construction

- High wet strength, doule-wall beverage carrier board frame (High strength and moisture-resistant board frame)
- Media is bonded to every cell side (Ensures no dirty air by-pass around the filter)
- Media is bonded to all points of the die-cut board frame (Adds to the rigidity of the filter)

## Packaging

• Filter is covered with carton layer when delivered (Media protection from handling damage)

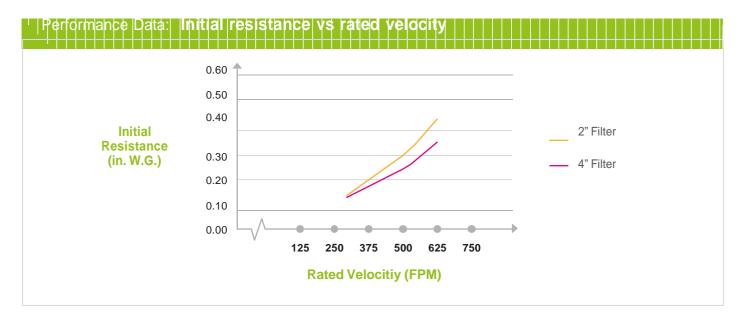
## Advantages over Substitutes

- F Series (Pre-filter pleated panel) (Has higher dust holding capacity and more suited for coarse dust applications, so longer lifetime)
- W Series (Washable filter) (Relatively inexpensive) + (Maintenance-free: 'useand-dispose' system [Several times of washing is equivalent to one use of F Series]) (If the dust is sticky and oily, then the washable filter could not be washed surely)

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## Specification

#### Media

Rigid synthetic media without wire mesh or conventional with wire mesh

#### Frame

Highest wet strength beverage board or reusable alumunium frame

EN 779 Class

G4

Efficiencies

25 - 30%

**U.L. Classification** 

U.L. Class 2

## Recommended Final Pressure 1"W.G. (250 Pa)

### Maximum Temperature 200°C

## Available Sizes

#### Size 1

Nominal size (inch): 12 x 24 x 1 Actual size (mm): 289 x 594 x 22

#### Size 2

Nominal size (inch): 16 x 20 x 1 Actual size (mm): 390 x 492 x 22

#### Size 3

Nominal size (inch): 24 x 24 x 1 Actual size (mm): 594 x 594 x 22

#### Size 4

Nominal size (inch): 12 x 24 x 2 Actual size (mm): 289 x 594 x 44

#### Size 5

Nominal size (inch): **20 x 20 x 2** Actual size (mm): **492 x 492 x 44** 

#### Size 6

Nominal size (inch): 20 x 24 x 2 Actual size (mm): 492 x 594 x 44

#### Size 7

Nominal size (inch): 24 x 24 x 2 Actual size (mm): 594 x 594 x 44

#### Size 8

Nominal size (inch): 12 x 24 x 4 Actual size (mm): 289 x 594 x 95

## THE FIRST IN THE MARKET

Higher moisture resistance media, No wiremesh support/no corrosion

## **General Description**

Higher moisture resistance media, no wiremesh support/no corrosion. Frame: Strength Beverage cardboard Ex: Canada or reusable alumunium frame. Intended to trap relatively coarse dust particles, this pleated filter is commonly used as pre-filter to extend the service life of higher efficiency filters. Conventional blue media with wiremesh support. G4 efficiency.

## Applications

 Pre-filter or first filter to extend the service life of higher efficiency filtersand higher moisture resistance.

## Filter Media

- Synthetic ex Europe (Longer service life and can be used for applications in humid operating condition)
- Uniform pleat spacing maintained by media bonding at all points of the die-cut board frame (Optimum media utilization for maximum dust holding capacity)
- Uniform U-shape pleat design rather than traditional V-Shapemaintained by wire mesh (Minimum resistance to airflow)
- The media is bonded to every cell side (Ensures no dirty air by-pass)
- Possible to be cleaned by compressor

## Filter Construction

- Moisture-resistant beverage board frame imported from CANADA (Frame is able to withstand humid operating condition) or reusable alumunium frame, so only the media is changed)
- No wire mesh support avoid corrosion (Or conventional wire mesh support)

## Packaging

Filter is packed in carton box when delivered (Media protection fromhandling, transportation or storing damage)

#### Size 9

Size 10

Nominal size (inch): **20 x 20 x 4** Actual size (mm): **492 x 492 x 95** 

#### Size 11

Nominal size (inch): 24 x 24 x 4 Actual size (mm): 594 x 594 x 95

(Other dimensions or special sizes are available upon request)

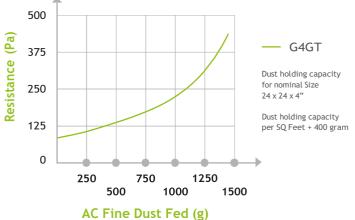
Nominal size (inch): 20 x 24 x 4 Actual size (mm): 492 x 594 x 95





Performance Data: Airflov





#### Media

Progressive density fiberglass media pad

EN 779 Class

G4

Average arrestance 90%

Recommended Final Resistance 2.0"W.G. (500 Pa)

Capacity Up to 2000 CFM

Initial Resistance 30 Pa @ 1000 CFM 85 Pa @ 2000 CFM

Maximum Operating Temperature 150°F

## Available Sizes

Size

Nominal size (inch): 24 x 24 x 4 Actual size (mm): 615 x 615 x 95

(Other dimensions or special sizes are available upon request)

## **General Description**

IAF G4GT PADS features progressive density fiberglass media pad allowing for full depth filtration. The adhesive-coated fibers purpose to retent dusts which have been captured, thus minimizing dusts by-pass.

Due to the media's high dust loading capacity, G4GT PADS best functions as heavy-duty pre-filter to extend the life of higher efficiency filter (MBGTTXT) in a dusty environment especially for gas turbine.

## **Applications**

- Heavy-duty pre-filter for extending the life of higher efficiency filters (MBGTTXT)
- Suitable for use in a dusty condition

## Filter Media

- High density fiberglass media pad (Excellent quality media with high dust holding capacity)
- **Progressive density media from coarse to fine fibers** (Full dust loading throughout the depth of the filter media for extended service life)
- Unique leno-backing design unlike traditional design (Maintains dimensional stability and adds to the rigidity of the filter structure)
- Fibers are treated with heavy coating of special adhesives (Maximizes dust retention as dusts trapped will bond to the filter fibers)
- More media, higher dust holding capacity 400-500 gram per SQ feet

## Filter Construction

- High wet strength, doule-wall beverage carrier board frame
- Media is bonded to every cell side (Ensures no dirty air by-pass around the filter)
- Media is bonded to all points of the die-cut board frame (Adds to the rigidity of the filter) + (Or reusable metal frame is available)



## CC "Arresrters" Series: CC - 600 G / M5 (F5), FF - 560 GX / M5 (F5), CC- 660 G / M6 (F6)

Specially designed for terminal filtration of auto spray-paint as the final filtration barrier with characteristics of high dust holding capacity, low pressure drop and economical. Adhesive and enhanced rigidity ensure high dust holding capacity and robust construction. This ceiling filter ensures a completely uniform air distribution and an all round laminar air flow throughout the spray booth.

Constructed from selected high-performance and high strength synthetic fiber by progressive density multi-layer technique which is thermally bonded and impregnated in full depth with a special tackifier coating to prevent any releaseor fall-off of fibers. The medias are free of silicon.

The air exit side of the media is particularly compact and smooth allowing high depth loading to ensure high dust holding capacity with higher filtration efficiency and expand the life span of media. It can filter particles larger than  $10\mu m$  to prevent them damaging to the quality of painting.

Resistant to chemical impacts of such as chemical solvents and acid smog, etc.



## Application

Installed at the auto assembly plants as the final filtration ceiling of spray-paint booth

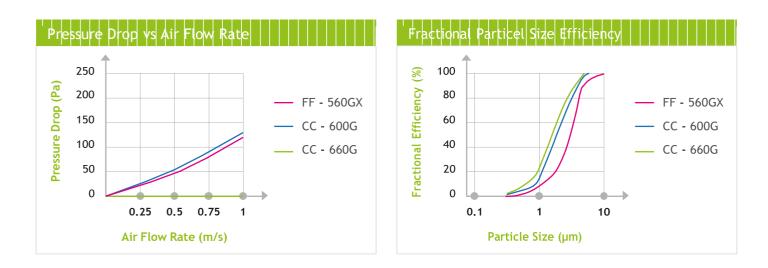
Designed for terminal filtration of ceiling of spray-paint shop of autosurface refinishing facilities and ventilation equipment.

Work as the final filtration barrier in all kinds of spray-paint booth which requires high gloss and polishing surface.

## **Quality Guarentee**

Ensure the stabilization of quality according to En779: 2002 and DINCERTCO.

Conform to the fire-proofing classification standards of European Union DIN53438-F1 and American UL900-Class 2.





## How to choose high quality ceiling medias?

## **Function of Filtration**

Filter destructive particles failed to be caught by pre-filtration system

## **Function of Evenness**

Ensure the paintings over-sprayed pressed to the floor and exhausted

## No Dustfall

Ensure the fibers not falling down and no shaking under condition of strongwind

## **Migration Test**

"Arresters" Series	CC - 600 G	FF - 560 G	CC - 660	
Average Arrestance @0.4µm	<b>98</b> %	<b>96</b> %	<b>99</b> %	
Average Efficiency	57%	46%	70%	
Air Velocity	0.25 m/s	0.25 m/s	0.25 m/s	
Initial Pressure Drop	26 Pa	26 Pa	54 Pa	
Suggested Final Pressure Drop	450 PA	450 PA	450 PA	
Dust Holding Capacity	509 g	430 g	380 g	
EN779 Class	M5 (F5)	M5 (F5)	M6 (F6)	

According to EN779: 2002 Dust: DEHS

Parameters			
"Arresters" Series	CC - 600 G	FF - 560 G	CC - 660
Continuous high-temp resistance	100 °C	100 °C	100 °C
High-temp resistance with mesh	180 °C	180 °C	180 °C
Media Thickness	20 mm	20 mm	20 mm
Relative Humidity	100%RH	100%RH	100%RH
Standard Roll Sizes	2m x 20m	2m x 20m	2m x 20m
Standard Koll Sizes	1m x 20m	1m x 20m	1m x 20m
Regenerative / Washable	No	No	No
Migration Class	RO	RO	RO
Sizes are available on customer's request			

Sizes are available on customer's request.

Migration Test Class	No. of Particles
R0	< 100
R1	< 1000
R2	< 10,000
R3	< 100,000



## VNF-290, VNF-300

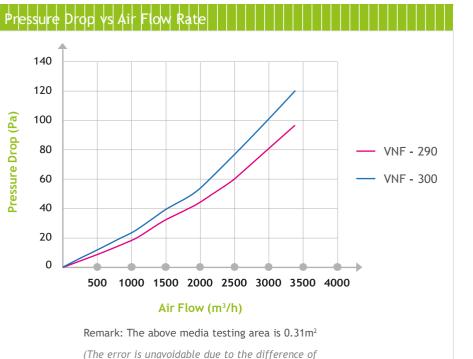
Designed as the pre filtration of general ventilation equipment installed at the buildings, factories and entrance of air control system.

The filter media is constructed from selected high performance, non-breakable fibers in a progressive density multi-layering technique to ensure high depth loading with optimal lowest pressure drop performance, to achieve gravimetric arrestance in accordance with En779: 2002 standard ratings.

The air exit side of the media is particularly compact and smooth with print of efficiency class.

Resistant to chemical impacts, such as chemical solvents and acid smog, etc.

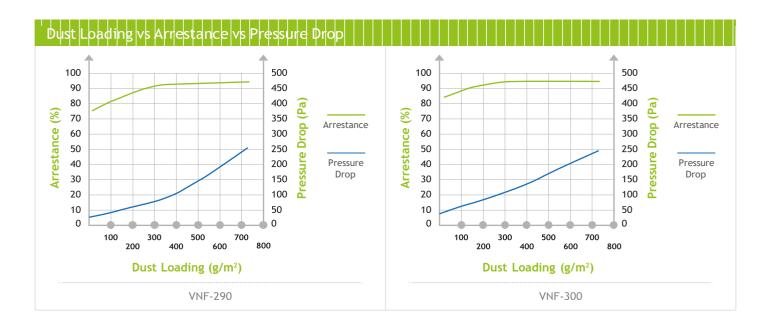




manufacture and testing to concrete product)

## Application

- General air handling units
- Air conditioning systems
- Ventilation systems of all kinds
- Air Intake pre-filtration
- Railway, car ventilation
- Intake and exhaust air systems for heavy industry and chemical plants





## **Quality Guarentee**

Ensure the stabilization of quality according to En779: 2002 and DINCERTCO.

Conform to the flammability classification standards of DIN53438-F1, UL900-Class 1, DIN5510-S2 and NFF 16-101/NF F 16-102-M1.

Media is printed with DIN marks.

## **Migration Test**

"All-Rounders" Series	VNF-290	VNF-300
Average Arrestance	86%	91%
Air Velocity	1.5 m/s	1.5 m/s
Initial Pressure Drop	35 Pa	35 Pa
Suggested Final Pressure Drop	250 PA	250 PA
Dust Holding Capacity	620 g	500 g
EN779 Class	G3	G4
Test according to EN779: 2002	•	*

Parameters				
"All-Rounders" Series	VNF-290	VNF-300		
Temperature Resistance	100 °C	100 °C		
Temporary Resistance Temperature	120 °C	120 °C		
Media Thickness	20±3 mm	20±2 mm		
Relative Humidity	100%RH	100%RH		
Standard Roll Sizes	2m x 20m	2m x 20m		
Standard Note Sizes	1m x 20m	1m x 20m		
Regenerative / Washable	Yes	Yes		
Specific sizes are available on request.				



## **Media Features**

Designed as the pre filtration of general ventilation equipment mounted in buildings, factories and inlet of air control system.

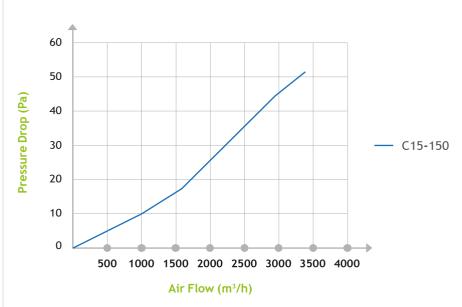
Selected synthetic fibers with high performance and rigidity. The advanced technology of progressive density with multi-layers can ensure the high dust holding capacity and low pressure drop.

Media of the air outlet side is specially compact and smooth with the print of efficiency class on it.

Resistant to chemical of solvents, acidity and smog, etc.



## Pressure Drop vs Air Flow Rate



Remark: The above media testing area is 0.31m<sup>2</sup>

(The error is unavoidable due to the difference of manufacture and testing to concrete product)

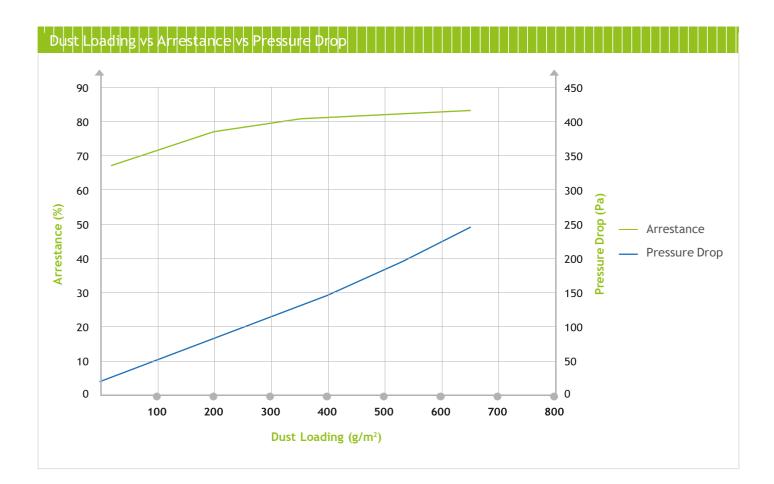
## Application

General air control and adjustment instrument + General ventilation system including mass transit vehicles like train, subway, etc.

Pre-filtration of air inlet system + Pre-filtration of spray painting

## **Quality Guarentee**

Tested according to En779: 2002 and DIN CERTCO to ensure the product quality conform DIN53438-F1, UL900-Class 1.

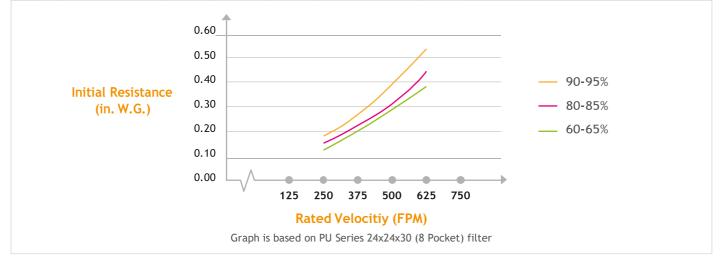


Technical Data				
Model	C15-150			
Average Arrestance Efficiency	79%			
Air Velocity	1.5 m/s			
Initial Pressure Drop	20 Pa			
Suggested Final Pressure Drop	250 Pa			
Dust Holding Capacity	520 g			
En779 Filtration Class	G2			
Common Temperature	100°C			
Instant Temperature	120°C			
Thickness of media	14±2mm			
Relative Humidity	100%R H			
Standard Roll dimension	2mx40m			
Stanuaru Koli umension	1mx40m			
Washable	Yes			
Test according to EN779: 2002				
Other sizes are available on request				





## Performance Data: Initial resistance vs rated velocity



#### Media

Ultrasonically welded synthetic media

Recommended Final Resistance 1.0" W.G. (250 Pa)

Maximum Operating Temperature 2000F

## Efficiency & Media Color



## Available Sizes

#### Size 1

Nominal size (inch): 12 x 24 x 21 Actual size (mm): 287 x 592 x 534 Number of pocket: 3 & 4

### Size 2

Nominal size (inch): 20 x 20 x 21 Actual size (mm): 490 x 490 x 534 Number of pocket: 5

#### Size 3

Nominal size (inch): 20 x 24 x 21 Actual size (mm): 490 x 592 x 534 Number of pocket: 6

#### Size 4

Nominal size (inch): 24 x 24 x 21 Actual size (mm): 592 x 592 x 534 Number of pocket: 6 & 8

#### Size 5

Nominal size (inch): 24 x 24 x 30 Actual size (mm): 592 x 592 x 762 Number of pocket: 8 & 10

The filter sizes fit into frame sizes:  $610 \times 610 \mid 305 \times 610 \mid 508 \times 610$ 

(Other dimensions or special sizes are available upon request)

## General Description

Engineered to improve Indoor Air Quality (IAQ), PU Series pocket filter is characterized by it's high strength **synthetic** media and **ultrasonically** welded edges. PU Series pocket filter serves two primary functions: as pre-filter to extend the life of higher efficiency filters or as final filter in constant or variable airflow conditions. Rigid frames, no sharp edges (safe for installation)

## **Applications**

- Pre-filter to extend the life of higher efficiency filters or final filter in constant airflow condition
- Also possible to be used in variable air volume systems

## Filter Media

- High-strength synthetic media (Media is durable and moisture-resistant)
- Contains about 40% more dust holding capacity than the competing standard synthetic pocket filter (Longer service life)
- Uniform aerodynamic pocket spacer (Full inflation without blocking the pockets, allowing for full media utilization)
- Edges feature ultrasonic welding (no stitching) (Creates a strong and leak-free edge sealing)
- Adhesive gel is applied along all cell sides (Acts as cushion to protect the media from tearing)

## Filter Construction

- The frame of the filter is self-manufactured (Quality is closely monitored and controlled)
- No staples is used (Strong construction with using roller former
- Each pocket media is clinched to the mouthring and each mouthring is clinched to the header (Pockets are securely fastened) + (Sturdy construction)
- Unique header design with no welding (No welding and only one rivet is needed, thus eliminating risk of leakage)
- Safety feature: no sharp edge





#### Media

Fiberglass

Recommended Final Resistance

## 1.5"W.G. (375 Pa)

**U.L. Classification** 

U.L. Class 2

Maximum Operating Temperature 150°F

## Available Sizes

### Size 1

Nominal size (inch): 12 x 24 x 22 Actual size (mm): 287 x 592 x 559 Number of pocket: 3 & 4 Rated Air Flow Capacity (CFM): 750 & 1000

#### Size 2

Nominal size (inch): 24 x 24 x 22 Actual size (mm): 592 x 592 x 559 Number of pocket: 6 & 8 Rated Air Flow Capacity (CFM): 1500 & 2000

#### Size 3

Nominal size (inch): 12 x 24 x 30 Actual size (mm): 287 x 592 x 762 Number of pocket: 3 & 4 Rated Air Flow Capacity (CFM): 1000 & 1000

#### Size 4

Nominal size (inch): 24 x 24 x 30 Actual size (mm): 592 x 592 x 762 Number of pocket: 6 & 8 Rated Air Flow Capacity (CFM): 2000 & 2000

#### Size 5

Nominal size (inch): 12 x 24 x 36 Actual size (mm): 287 x 592 x 915 Number of pocket: 3 & 4 Rated Air Flow Capacity (CFM): 1000 & 1000

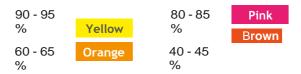
#### Size 6

Nominal size (inch): 24 x 24 x 36 Actual size (mm): 592 x 592 x 915 Number of pocket: 6 & 8 Rated Air Flow Capacity (CFM): 2000 & 2000

### The filter sizes fit into frame sizes: 610 x 610 | 305 x 610 | 508 x 610

(Other dimensions or special sizes are available upon request)

## Efficiency & Media Color



## General Description

Engineered to improve Indoor Air Quality (IAQ), PF Series pocket filter is characterized by the highest dust holding capacity **fiberglass** media. PF Series pocket filter serve two primary functions: as pre-filter to extend the service life of higher efficiency filters or as final filter in constant or variable airflow conditions. Rigid frames, no sharp edges (safe for installation)

## Applications

- Pre-filter to extend the life of higher efficiency filters or final in constantairflow condition
- Also possible to be used in variable air volume systems

## Filter Media

- High loft fiberglass media imported from US manufacturer (High dustholding capacity media of superior quality)
- Uniform aerodynamic pocket spacer (Full inflation without blocking the pockets)
- Edges feature stitched carefully (Combine with wax glued span-stitching media is leak free)
- Adhesive gel is applied a long all cell sides (Act as cushion to protect the media from tearing)

## **Filter Construction**

- The frame of the filter is self-manufactured using made-in-USA machines (Quality is closely monitored using roller former)
- No staples is used (Sturdy construction with no sharp edges)
- Each pocket media is clinched to the mouth ring and each mouth ring isclinched to the header (Pockets are securely fastened) + (Sturdy construction)
- Unique header design with no welding (No welding and only one rivet is needed)
- Safety feature: no sharp edge

## Packaging

- Filter is covered with carton layer when delivered (Media protection from handling damage)
- **Pockets are pre-folded** (Space efficient during storage and transportation)
- Filter is strapped with paper (Easy removal during installation)

## Advantages over Substitutes

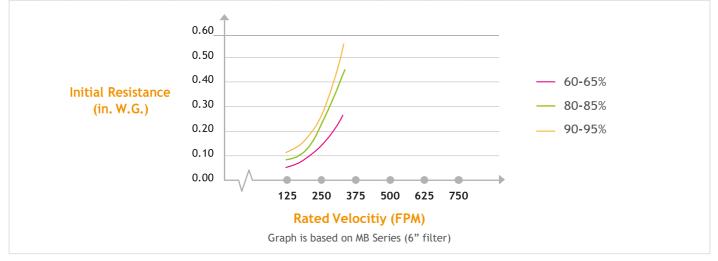
Compared to Synthetic media bag filter, Fiberglass media bag offers higher dust holding capacity & longer service life.



ТΜ



## Performance Data: Initial resistance vs rated velocity



#### Media

Micro-fine fiberglass media

Frame Galvanized or wood frame

**EN 779 Class** F7, F8

Recommended Final Pressure 1.5"W.G. (375 Pa)

Efficiencies 80-85%, 90-95%

## Available Sizes

#### Size 1

Nominal size (inch): 12 x 24 x 6 Actual size (mm): 287 x 592 x 152

#### Size 2

Nominal size (inch): 24 x 24 x 6 Actual size (mm): 592 x 592 x 152

#### Size 3

Nominal size (inch): 12 x 24 x 12 Actual size (mm): 287 x 592 x 292

#### Size 4

Nominal size (inch): 20 x 20 x 12 Actual size (mm): 490 x 490 x 292

#### Size 5

Nominal size (inch): 20 x 24 x 12 Actual size (mm): 490 x 592 x 292

#### Size 6

Nominal size (inch): 24 x 24 x 12 Actual size (mm): 592 x 592 x 292

(Other dimensions or special sizes are available upon request)

## **General Description**

The MB Series is commonly used as medium filter in variable air flow condition, usually in clean room applications as pre-filter filter to extend the life of higher efficiency filters or as final filter.

Fiberglass media: ex USA. PU sealant is used between media and frames to better prevent leakage and damage (not hot melt sealant).

## Applications

• Final filter or as pre-filter to extend the life of higher efficiency in variable airflow conditions

## Available Types

- Single Header, Double Header, and No Header
- MB-48: also available in high capacity type (higher media area, longer service life, and may be a more cost-efficient option in the long run)

## Filter Media (ex USA/Europe)

- Highest grade micro-fine fiberglass media (Excellent quality, moistureresistant media)
- Uniform corrugated aluminium separators with folded edges (Maintains uniform pleat spacing for uniform airflow distribution) + (No sharp edges which may tear the media or cause operational injuries)
- The media is strongly bonded to each cell side and ample Polyurethane sealant is applied to the cell sides perpendicular to the media (Maximum sealing to ensure no leakage between the spacing of the media and cell sides)

## Filter Construction

- The frame and cell sides are self-manufactured using excellent roller formers (Quality is closely monitored and controlled)
- U-Shape unique interlocked header design with no welding and no sharp corners (Ensures no dirty air by-pass around the filter) + (Promotes easy and safe handling during installation)
- The back of the filter is supported with X-shape steel bars (Provides additional support to the filter)



## **Product Introduction**

The lter media is constructed by super ne glass bers. The continuous hotmeltglues can ensure the consistency of the pleat distance so as to enhance the

rigidity, prevent falling off of media pack and ensure the optimal air ow through the lter.

Polyurethane sealing glue is used between media and frames to better prevent the leakage and damage. Bene t to environmental protection by using excellentABS frame as no toxic gas is produced when being burned. With good advantages among like products, larger effective ltration area, lower

resistanceand higher dust holding capacity.

## Material

<mark>Media</mark> Fiber

glass

Fram eABS

Separator Hot-melt glue

Sealing Gasket Polyurethane

#### Metal Mesh

Powder coating steel mesh (on customer request)

#### Sealing Strip

5mm thickness sealing strip

## Product Features

High ef ciency micro ber glass medium for Gas Turbine.

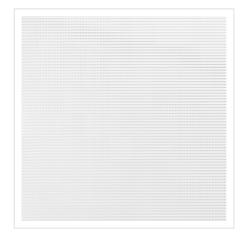
Highest dust holding capacity, long lter life time and no ber discharge.

V-shape mini pleat design and metalfree robust and sturdy plastic frame.

Fully polyure than escaled in frame, thus leakage free.

Ef ciency class: M6(F6), F7, F8, F9(black frame), H11, H13 (blue frame).

Waterproof media as a Salt Barrier(preventing salt water leaching)



## Application

Work as the main Iter in the GasTurbine Air Intake System.

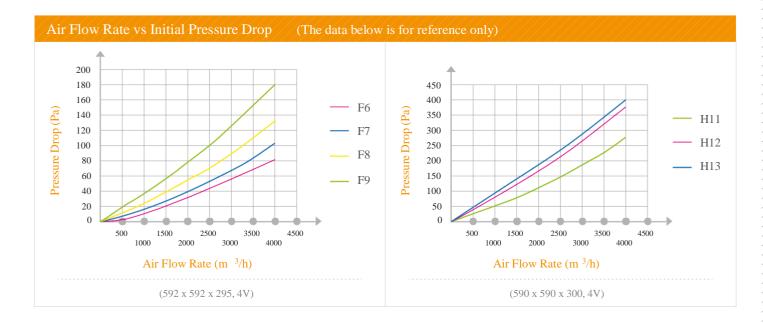
High-humidity ventilation system.

Ventilation systems where has large air output and narrow installation space.

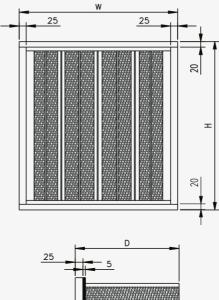
## Working Condition

Max. Temperature: 70 C

Max. Humidity: 100%RH



## **Installation Dimension**





EN779 Class	Dimension (height x width x depth) (mm)	Initial Pressure Drop(– 5% Pa) / Air Flow Rate (m±/b)	Effective Filtration Area (m	Suggested Final Pressure Drop (Pa)
	287 x 592 x 295	4V 70/1700	7.5	
M5 (F6)	490 x 592 x 295	4V 70/2750	13.5	350
	592 x 592 x 295	4V 70/3400	16.6	
	287 x 592 x 295	4V 85/1700	7.5	
F7	490 x 592 x 295	4V 85/2750	13.5	350
	592 x 592 x 295	4V 85/3400	16.6	
	287 x 592 x 295	4V 110/1700	7.5	
F8	490 x 592 x 295	4V 110/2750	13.5	400
	592 x 592 x 295	4V 110/3400	16.6	
	287 x 592 x 295	4V 150 / 1700	7.5	
F9	490 x 592 x 295	4V 150/2750	13.5	400
	592 x 592 x 295	4V 150/3400	16.6	
1144	590x 590 x 300	4V 180/3000	21.5	450
H11	287 x 590 x 300	4V 180 / 1400	9.8	450
1110	590x 590 x 300	4V 265/3000	21.5	150
H12	287 x 590 x 300	4V 265 / 1400	9.8	450
H13	590x 590 x 300	4V 280/3000	21.5	450
	287 x 590 x 300	4V 280 / 1400	9.8	450



## **Product Introduction**

The lter media is constructed by super ne glass bers. The continuous hotmeltglues can ensure the consistency of the pleat distance so as to enhance the

rigidity, prevent falling off of media pack and ensure the optimal air ow through the lter.

Polyurethane sealing glue is used between media and frames to better prevent the leakage and damage. Bene t to environmental protection by using excellentABS frame as no toxic gas is produced when being burned. With good advantages among like products, larger effective ltration area, lower

resistanceand higher dust holding capacity.

## Material

Media Fiber glass

Fram eABS

Separator Hot-melt glue

Sealing Gasket Polyurethane

Metal Mesh

Powder coating steel mesh(on customer request)

## Sealing Strip

5mm thickness sealing strip

## **Product Features**

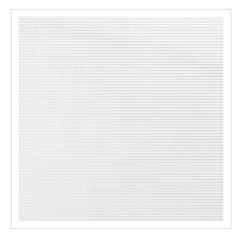
High ef ciency micro ber glass medium.

Highest dust holding capacity, long Iter life time and no ber discharge.

V-shape mini pleat design and metalfree robust and sturdy plastic frame.

Fully polyure than escaled in frame, thus leakage free.

Ef ciency class: M6(F6), F7, F8, F9(black frame), H11, H13 (blue frame).



## Application

Work as the main Iter in the GasTurbine Air Intake System.

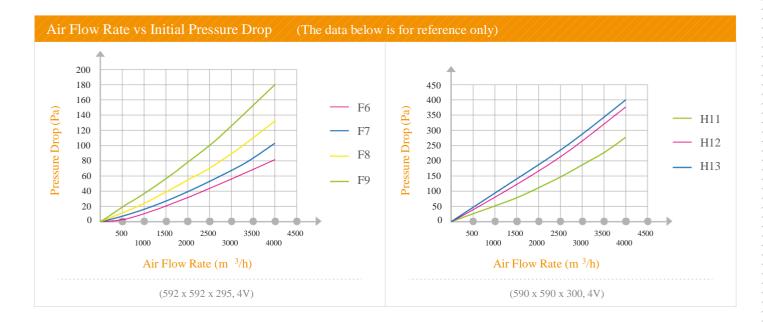
High-humidity ventilation system.

Ventilation systems where has large air output and narrow installation space.

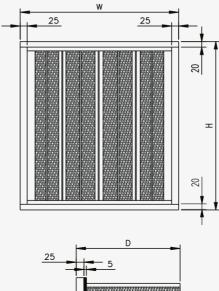
## Working Condition

Max. Temperature: 70 C

Max. Humidity: 100%RH



## **Installation Dimension**





EN779 Class	Dimension (height x width x depth) (mm)	Initial Pressure Drop(– 5% Pa) / Air Flow Rate (m±/b)	Effective Filtration Area (m	Suggeste Final Pressure Drop (Pa
	287 x 592 x 295	4V 70/1700	7.5	
M5 (F6)	490 x 592 x 295	4V 70/2750	13.5	350
	592 x 592 x 295	4V 70/3400	16.6	
	287 x 592 x 295	4V 85/1700	7.5	
F7	490 x 592 x 295	4V 85/2750	13.5	350
	592 x 592 x 295	4V 85/3400	16.6	
	287 x 592 x 295	4V 110/1700	7.5	
F8	490 x 592 x 295	4V 110/2750	13.5	400
	592 x 592 x 295	4V 110/3400	16.6	
	287 x 592 x 295	4V 150 / 1700	7.5	
F9	490 x 592 x 295	4V 150/2750	13.5	400
	592 x 592 x 295	4V 150/3400	16.6	
1144	590x 590 x 300	4V 180/3000	21.5	450
H11	287 x 590 x 300	4V 180 / 1400	9.8	450
	590x 590 x 300	4V 265/3000	21.5	
H12	287 x 590 x 300	4V 265 / 1400	9.8	450
H13	590x 590 x 300	4V 280/3000	21.5	450
	287 x 590 x 300	4V 280 / 1400	9.8	450

Remark: Other sizes and ef ciencies are available on reque



## **Product Introduction**

Use super ne melt brown synthetic bers with burst proof weld seams. Metalstrip is xed between each bag to enhance the rigidity of the pocket Iter and assembled into galvanized steel sheet frames or plastic frames.

When the system meets with sudden ventilation or pause of air ow, the rigidstructure of bags can avoid second dust. With high-frequency welding at the edge of bags, free of glues in media and no breakage of bers, the

performances are greatly enhanced.

Aerodynamic Iter pocket spacers for uniform airow and maximum media usage resulting in minimal pressure drop. Advanced design for air ow structure.

## Material

#### Media

Synthetic

be

r

Frame Galvanized sheet, aluminum alloy, etc.

Sealing GasketPE gasket

## **Product Features**

Sturdy and durable

High air ow rate with low resistance

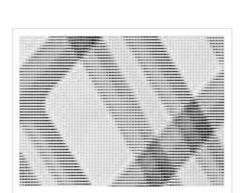
Extended surface area with high dustholding capacity

Ef ciency: G3, G4, M5(F5), M6(F6), F7, F8, etc.

## Application

Main Iter used in commercial and industrial ventilation and air conditioning system.

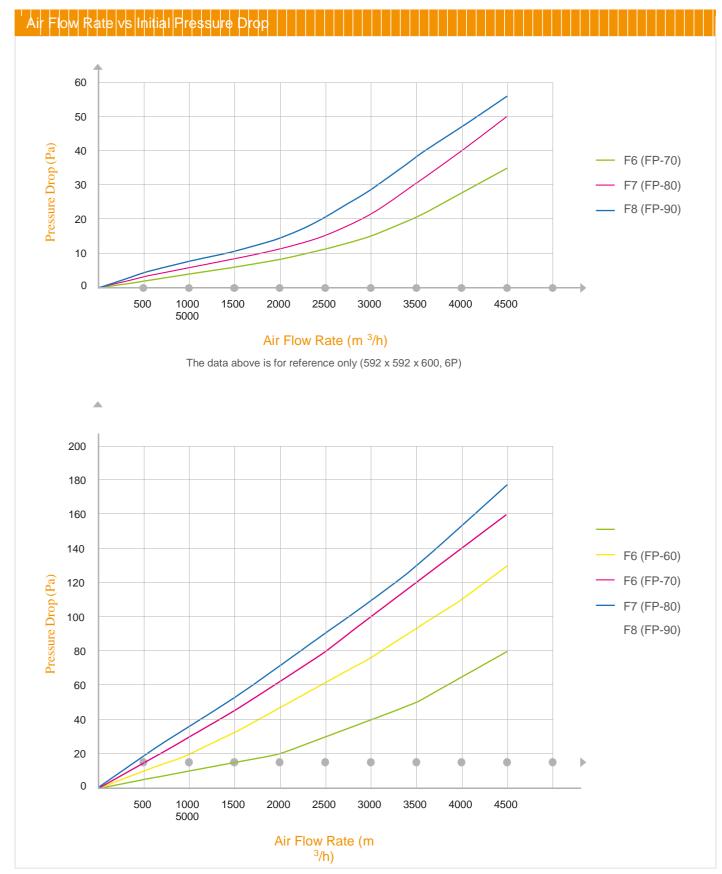
Widely used in air supply system of spraypainting room, pharmaceutical factory, operating room and electron.



## Working Condition

Max. operating temperature: 100 C

Max. operating humidity: 100%RH (noncondensation state)



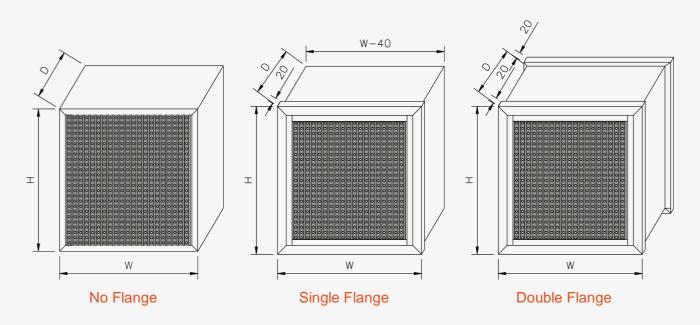
The data above is for reference only (592 x 592 x 600, 8P)

## Product Technical Data

EN779 Class	Dimensian (height x width x depth) (mm)	Bag s	Initial Pressure Drop (- 5% Pa) /Air Flow Rate (mt/b)	Effective Filtration Area (m²)	Suggested Final Pressure Drop (Pa)
	592 x 592 x 600	6	20 / 3400	4.2	
	592 x 287 x 600	3	20 / 1700	2.1	
G3	592 x 592 x 530	6	32 / 3400	3.6	250
(FP- 30)	592 x 287 x 530	3	32 / 1700	1.8	230
	592 x 592 x 350	6	38 / 3400	2.3	
	592 x 287 x 350	3	38 / 1700	1.2	
	592 x 592 x 600	8	30 / 3400 45 / 4250	5.6	
	592 x 592 x 600	6	34 / 3400	4.2	
	592 x 287 x 600	4	30 / 1700	2.8	
G4	592 x 592 x 530	8	35 / 3400	4.8	050
(FP- 40)	592 x 592 x 530	6	37 / 3400	3.6	250
	592 x 287 x 530	4	35 / 1700	2.4	
	592 x 592 x 350	6	42 / 3400	2.3	
	592 x 287 x 350	3	42 / 1700	1.2	
	592 x 592 x 600	8	35 / 3400 53 / 4250	5.6	
	592 x 592 x 600	6	38 / 3400	4.2	
M5	592 x 287 x 600	4	35 / 1700	2.8	
(F5) (FP- 50)	592 x 592 x 530	8	45 / 3400	4.8	450
50)	592 x 592 x 530	6	48 / 3400	3.6	
	592 x 287 x 530	4	45 / 1700	2.4	
	592 x 592 x 600	8	47 / 3400 72 / 4250	5.6	
	592 x 592 x 600	6	55 / 3400	4.2	
M6	592 x 287 x 600	4	47 / 1700	2.8	450
(F6) (FP- 60)	592 x 592 x 530	8	60 / 3400	4.8	450
,	592 x 592 x 530	6	65 / 3400	3.6	
	592 x 287 x 530	4	60 / 1700	2.4	
	592 x 592 x 600	8	100 / 3400 125 / 4250	5.6	
	592 x 592 x 600	6	115 / 3400	4.2	
M6	592 x 287 x 600	4	100 / 1700	2.8	
мь (F6) (FP- 70)	592 x 592 x 530	8	110 / 3400	4.8	450
	592 x 592 x 530	6	120 / 3400	3.6	
	592 x 287 x 530	4	110 / 1700	2.4	
	592 x 592 x 600	8	116 / 3400 150 / 4250	5.6	
	592 x 592 x 600	6	130 / 3400	4.2	
F7	592 x 287 x 600	4	116 / 1700	2.8	
(FP- 80)	592 x 592 x 530	8	125 / 3400	4.8	450
	592 x 592 x 530	6	140 / 3400	3.6	
	592 x 287 x 530	4	125 / 1700	2.4	
	592 x 592 x 600	8	126 / 3400 160 / 4250	5.6	
	592 x 592 x 600	6	155 / 3400	4.2	
F8	592 x 287 x 600	4	126 / 1700	2.8	
(FP-	592 x 592 x 530	8	145 / 3400	4.8	450

	592 x 592 x 530	6	160 / 3400	3.6	
	592 x 287 x 530	4	145 / 1700	2.4	
Remark: Other sizes and ef ciency are available on request					

## Mounting Dimensions



Remark: When the Iter is mounted vertically, the aluminum foil should be perpendicular to the ground

## **Product Technical Data**

EN779 Class	Dimension (height x width x depth)	Initial Pressure Drop (– 5% Pa) /Air Flow Rate (m±/b)	Effective Filtration Area (m²)	Suggested Final Pressure Drop (Pa)
	610 x 610 x 78	95/2000	4.3	
	610 x 305 x 150	120 / 1300 175 / 1650	3.6	
	610 x 610 x 150	120 / 2700 175 / 3300	7.2	450
M6 (F6)	610 x 305 x 292	110 / 1700 160 / 2125	7.2	450
	610 x 610 x 292	110 / 3400 160 / 4250	14.5	
	592 x 592 x 292	110 / 3200 160 / 4000	13.6	
	610 x 610 x 78	25 / 2000	4.3	
	610 x 305 x 150	130 / 1300 190 / 1650	3.6	
F8	610 x 610 x 150	130 / 2700 190 / 3300	3.6	450
го	610 x 305 x 292	150 / 1700 200 / 2125	7.2	450
	610 x 610 x 292	150 / 3400 200 / 4250	14.5	
	592 x 592 x 292	150 / 3200 200 / 4000	13.6	
Remark: Speci c	Remark: Speci c sizes are available on request (with double- anged or single- anged available)			
Resistance data is	subject to actual measurements			

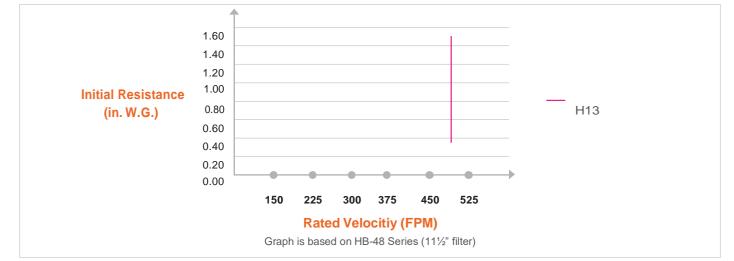


IAF Air Filters

ТМ



## Performance Data: Initial resistance vs rated velocity



#### Media

Micro-fine fiberglass media

#### Frame

Galvanized steel, stainless steel, aluminum or wood frame

## EN 779 Class

H10, H13 & H14

#### **Recommended Final Pressure**

2.0"W.G. (500 Pa) to 3.0"W.G. (750 Pa)

#### Efficiencies

95% (H10),99.99% (H13),99.999% (H14) - INDIVIDUALLY DIN TESTED -

## Available Sizes

#### Size 1

Actual size (inch): 12 x 12 x 5 7/8 Actual size (mm): 305 x 305 x 149

#### Size 2

Actual size (inch): 12 x 24 x 5 7/8 Actual size (mm): 305 x 610 x 149

#### Size 3

Actual size (inch): 24 x 24 x 5 7/8 Actual size (mm): 610 x 610 x 149

#### Size 4

Actual size (inch): 24 x 30 x 5 7/8 Actual size (mm): 610 x 762 x 149

#### Size 5

Actual size (inch): 24 x 36 x 5 7/8 Actual size (mm): 610 x 915 x 149

#### Size 6

Actual size (inch): 24 x 48 x 5 7/8 Actual size (mm): 610 x 1220 x 149

#### Size 7

Actual size (inch): 36 x 48 x 5 7/8 Actual size (mm): 915 x 1220 x 149

#### Size 8

Actual size (inch): 12 x 24 x 11½ Actual size (mm): 305 x 610 x 292

#### Size 9

Actual size (inch): 24 x 24 x 11½ Actual size (mm): 610 x 610 x 292

(Other dimensions or special sizes are available upon request)

## **General Description**

The HB Series is commonly used as final filter in variable airflow conditions, typically for clean room applications. Wide range of efficiencies: H10, H13, H14, U15.

High quality submicron fiberglass media ex: USA/French.

Full depth PU sealant, not hot melt.

Individually DIN test for each filter, Guaranteed.

## Applications

- Final filter for variable airflow conditions
- May also be used as pre-filter for extending the life of ULPA filters

## Available Types

- Single Header, Double Header, and No Header
- HB-58: also available in high capacity type (higher media area, longer service life, thus may be a more cost-efficient option in the long run)

## Filter Media

- Highest grade micro-fine fiberglass media (Excellent quality, moistureresistant media)
- Media is pleated over uniform corrugated aluminum separators with folded edges (Maintains uniform pleat spacing for uniform airflow distribution) + (This results in minimum resistance to airflow for maximum media utilization) + (Folded edges ensures no sharp edges which may tear the media or cause operational injuries)
- The media is bonded to each cell side and ample Polyurethane sealant is applied to the cell sides perpendicular to the media (The filter pack is completely immersed to the cell sides, shutting of all leak paths)

## Filter Construction

- We are manufacturing our own frame
- Metal clinching, not cheap rivet







#### Media

High quality sub-micron Fiberglass paper

#### Frame

Aluminum

## EN 779 Class

H14, U15, U16, U17

### **Recommended Final Pressure**

2.0"W.G. (500 Pa)

#### Efficiencies

99.999% (H14) / 99.9999% (U15) 99.99999% (U16) / 99.999999% (U17)

- INDIVIDUALLY DIN TESTED -

#### Maximum Temperature

70°C

## Available Sizes

#### Size 1

Actual size (inch): 12 x 12 x 3 Actual size (mm): 305 x 305 x 69

#### Size 2

Actual size (inch): 12 x 24 x 3 Actual size (mm): 305 x 610 x 69

#### Size 3

Actual size (inch): 24 x 24 x 3 Actual size (mm): 610 x 610 x 69

#### Size 4

Actual size (inch): 24 x 30 x 3 Actual size (mm): 610 x 762 x 69

#### Size 5

Actual size (inch): 24 x 36 x 3 Actual size (mm): 610 x 915 x 69

#### Size 6

Actual size (inch): 24 x 48 x 3 Actual size (mm): 610 x 1220 x 69

#### Size 7

Actual size (inch): 36 x 48 x 3 Actual size (mm): 915 x 1220 x 69

(Other dimensions or special sizes are available upon request)

Installation Resistance Table at Nominal Air Flow				
Depth (mm)	Class			
	H14	U15	U16	U17
69	125	145	165	-
117	75	80	90	110

Efficien¢y			
Efficiency	Efficiency EN 1822		
@0.3 µm		@ MPPS	
99.999%	H14	99.995%	
@0.12 μm			
99.9995%	U15	99.9995 %	
99.99995%	U16	99.99995%	
99.999995%	U17	99.999995%	

## **General Description**

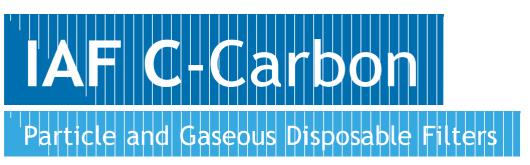
The HBMP Series are designed for use in clean rooms, clean benches, biohazard benches and other clean work stations. These filters ensure the necessary levels of contamination control in clean room environments. High quality submicron fiberglass media Ex:USA/French.

HQ High Temperature hot melt seperator (175°C). HQ PU Sealant full depth. Individually DIN test for each filter to ensure no leakage at all.

## Applications

- Factory tested to meet the most stringent legal and industry requirements
- High efficiency safeguards process, product and workers
- Functional reliability: leak or scan tested
- Powder coating face guards also available: 81mm & 85mm
- Gel seal is also available







## Available Sizes

#### Size 1

Nominal size (inch): 12 x 24 x 2 Actual size (mm): 289 x 592 x 45 Air Flow Capacity CFM - @300 FPM: 600

- @500 FPM: **1000** 

Rec. Final Resistance (in. w.g): 1.2"

#### Size 2

Nominal size (inch): 24 x 24 x 2 Actual size (mm): 592 x 592 x 45 Air Flow Capacity CFM - @300 FPM: 1200 - @500 FPM: 2000 Rec. Final Resistance (in. w.g): 1.2"

#### Size 3

Nominal size (inch): 12 x 24 x 4 Actual size (mm): 289 x 592 x 95 Air Flow Capacity CFM - @300 FPM: 600 - @500 FPM: 1000 Rec. Final Resistance (in. w.g): 1.2"

#### Size 4

Nominal size (inch): 24 x 24 x 4 Actual size (mm): 592 x 592 x 95 Air Flow Capacity CFM - @300 FPM: 1200 - @500 FPM: 2000 Rec. Final Resistance (in. w.g): 1.2"

(Other dimensions or special sizes are available upon request)

## **General Description**

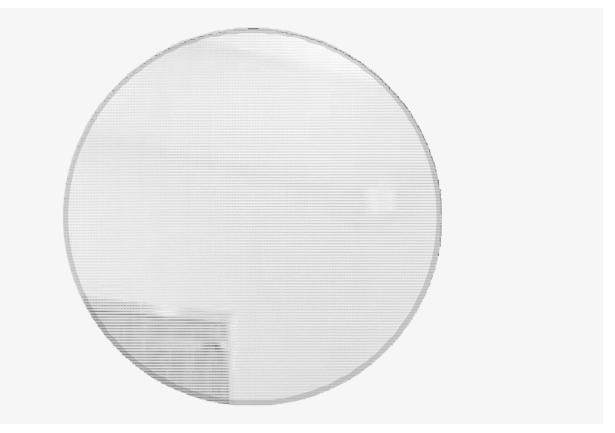
- IAF C1, IAF C2, IAF C3
- For particle and gaseous disposable filters (including odors) very effective for cigarette smoke
- IAF C-Carbon wide spectrum of odor and gases removal
- IAF C-Carbon filter media is ex Europe
- Easy Installation
- High quality carbon (Carbon ex Europe)
- 3 different grades for low, medium and high contamination
- Moisture resistance, High strength beverage board frame
- Each filter is sealed in a poly bag to make sure no gases adsorption prior to installation

## **Applications**

- Diesel Odors
- Refuse, Sewer Odors (Trash, dumpsters, STP [Sewage Treatment Plant])
- Cooking Odors (Restaurants)
- Chemical Odors (Cleaning chemicals and solvents)
- Common Indoor Air Contaminants Associated with Furnishings and Electronic Equipment (Formaldehyde and volatile organic compounds [VOCs])
- Corrosion Protection of Electronic Equipment, Data Centers and Server Rooms
- **Construction Odors** (Sealants, paints, solvents, and adhesives)







## **Product Introduction**

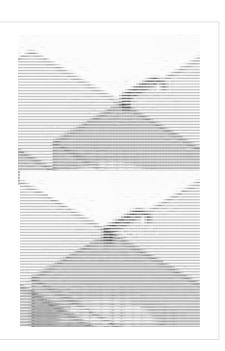
Low watts, sound, and High Static. Fan Diameter: 400mm, stronger. (Higher air volume and static pressure)

IAF Fan-Filter-units (FFU) are mainly used in ceiling grid systems of cleanroom facilities in order to reduce the particle concentration. IAF Fan-Filter-Unit is suitablefor turbulent or laminar ow clean room and dust control environment. IAF

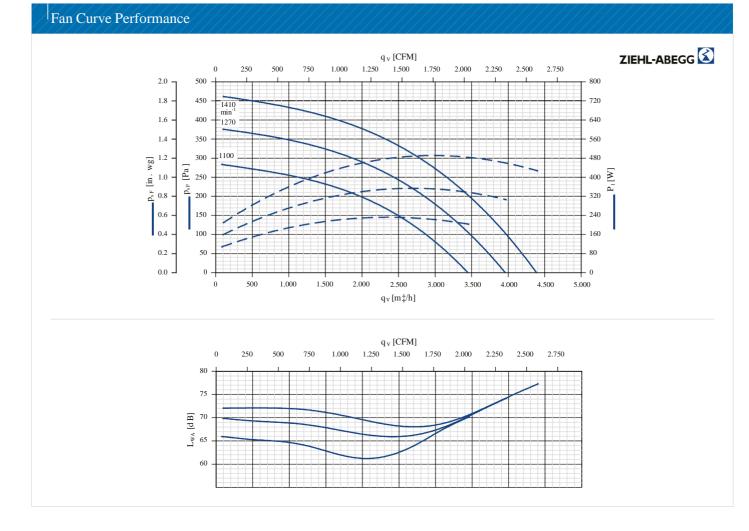
Fan-Filter-Unit system is capable to archieve the required cleanroom conditions/classes by providing laminarity and re-circulation upon ltration of the air.

It can be be easily upgraded and intergrated into any celing con guration in accordance with clean room design from Class 10,000 to Class 1.

It delivers high quality air Itration and distribution performance which suitable formost of the semiconductor, micro-electronics, pharmaceutical,



microbial industry that demand high quality of contamination or dust control environment.



## **Standard Features**

- Low sound, low watts,high static pressure, and lowoperating costs
- Variable speed switch features small scale adjustment offan speed (AC motor)
- Solid state speed controller standard (EC motor computercontrol)
- Forward-curved centrifugal fan Ziehl Abegg
- High Ef ciency Particulate Air (HEPA) Filter Ef ciency99.99% @ 0.3 micron (H13)
- Snap-in pre Iter allows for easy replacement andmaintenance
- Walkable Top Plenum (excluding pre lter), rated at 250 lbs.
- Rigid Steel Body provide walkable platform (not more than200 lbs)

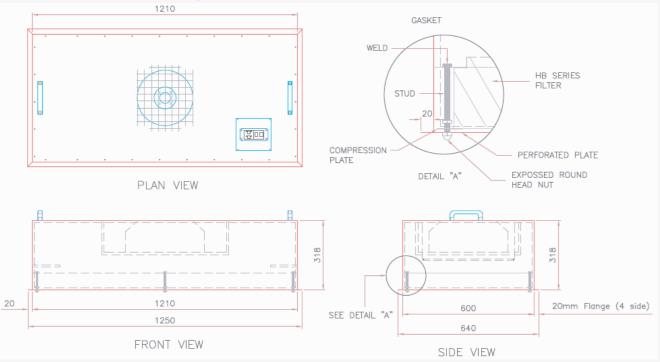
## **Optional Features**

- Solid-State Speed Control: EC Control
- Room-Side Replacement (RSR) available with dry / gel seallter element; Iter is replacement from the roomside
- RSRE provides lter and motor/blower assemblyreplacement from the roomside
- Ultra-low Penetration Air (ULPA) Filter: 99.9995% ef cient @ 0.12 micron (U15)
- Monitoring and Control System: Online or PC monitoringand adjustment
- Duct Collar 10 (254 mm) and 12 (305 mm)
- Snap-in pre Iter allows for easy replacement andmaintenance
- Finishing: Powder coated, Aluminium or Stainless Steel
- Room-side 3/8 Challenge Port and Static Port: Offersconvenient aerosol challenge and Iter testing
- Custom sizes and con gurations available; perfect formini-environment applications
- Metric sizes available

## Standard Application for IAF Fan-Filter-Unit



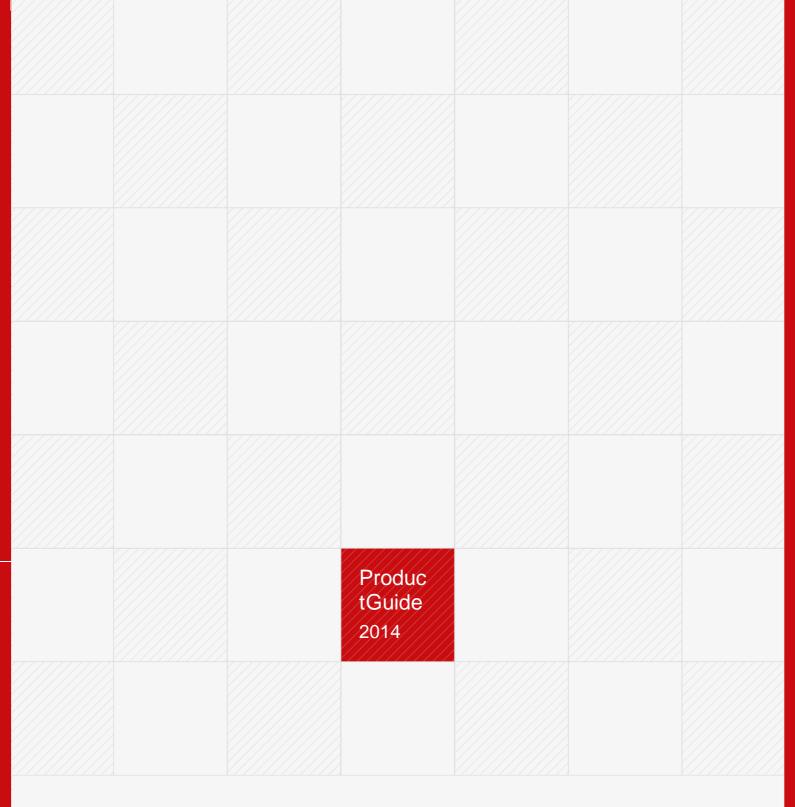
## IAF Fan-Filter-Unit Design



## IAF Fan-Filter-Unit Performance

Total Static Protouro	l far i Salaristani Shawai Sum
	C M)3 /H14 (Fa)[m/W (EC Fan≬6©art
EQ58£ 400	<b>31</b> 0 1 <b>537</b> 250 35 <b>339</b> 0 10 5 <b>688</b>
ICAL CO	570 1660/1250.35-50150 100-56687

\*\*\* Remark: Others sizes and design of Fan-Filter-Unit is available upon request.





## IAF Air Filter

JI. Raya Modern Industri No. 11 Cikande - Serang 42186, INDONESIAPhone: +62 (254) 401-019 Fax: +62 (254) 401-032 Email: info@iafair Iter.com Website: www.iafair Iter.com

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