PureFlow

COARSE AIR FILTER

First Line of Defense, Dust-Free Performance
A Cost-Effective Guardian of Clean Air

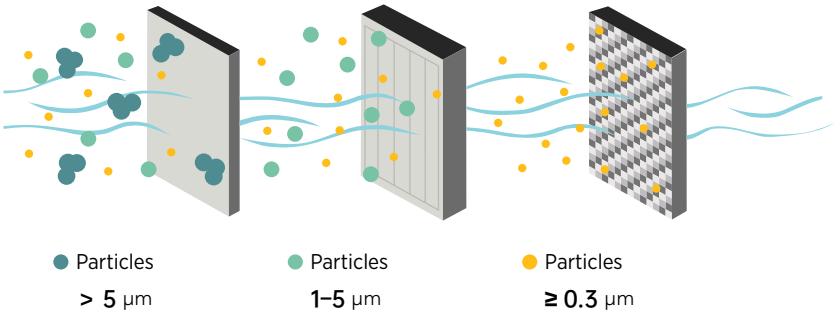
www.pureflowtec.com

HVAC Clean Room Industrial

COARSE AIR FILTER

Introduction

The coarse air filter is designed to capture large particulate contaminants (> 5 μm), such as dust, pollen, and debris. This effectively prevents the accumulation of dust and contamination inside the system, protects downstream filters – including medium-efficiency and HEPA filters – as well as other equipment components, and extends their service life.

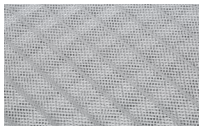


- Captures particles ⩾ 5 μm
- Some models are washable and reusable
- Versatile structural designs: panel type, bag type
- High dust holding capacity and low resistance design
- Compliant with EN 779:2012 standard
- Filtration Grade: G3–G4

ONE-STOP CLEANROOM SYSTEM SOLUTION PROVIDER

Polyester Synthetic Fiber

Polyester synthetic fiber is a common non-woven material with uniform structure, stable filtration efficiency, low resistance, and high dust-holding capacity. It is widely used in pre-filters (coarse air filters).



Metal Mesh

Metal mesh is typically woven from aluminum or galvanized steel wire, offering good mechanical strength and the advantage of being washable and reusable.

Nylon Mesh

Made from high-strength polyamide fibers, nylon mesh features excellent corrosion resistance, strong moisture resistance, easy cleaning, and reusability.

DPA Synthetic Fiber

DPA synthetic fiber is a dual-layer progressive synthetic material designed with a composite structure of coarse and fine fibers. It achieves a balance between high dust-holding capacity and low initial resistance.

Category

- Coarse Panel Air Filter
- Coarse Flat Panel Air Filter
- Non-woven Bag Filter
- Synthetic Fiber Bag Filter
- Nylon Mesh Filter
- All-Metal Dust Removal Filter
- DPA Dry Paint Mist Filter

Coarse Panel Air Filter

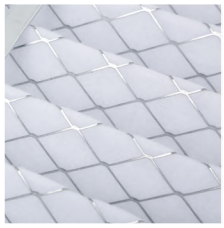
Product Range

Pre-filter

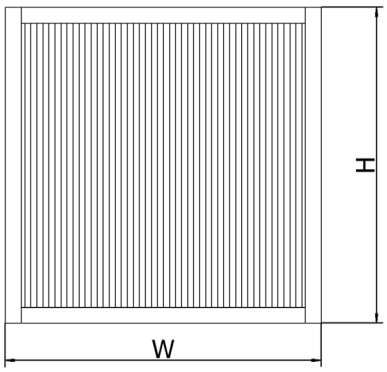
Applications

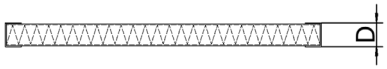
Filter Class

G Coarse



Structural Diagram





Specifications

- **Frame material**
  Galvanized, aluminum alloy, stainless steel, plastic, stiffened cardboard.
- **Mesh material**
  Galvanized and stainless steel.
- **Filter media**
  Specially designed high-flow, low-resistance polyester synthetic fiber media.
- **Filtration grade**
  G3-G4
- **Reference standard**
  EN 779:2012

Features

- **Compact structure, easy installation.**
  The flat rectangular design minimizes space requirements and simplifies installation/replacement.
- **Uniform filtration area, well-distributed airflow.**
  It ensures stable filtration efficiency and is ideal for low airflow and low-load systems.
- **Cost-effective, suitable for mass use.**
  Especially well-suited for coarse filtration applications, such as pre-filtration in central air conditioning and ventilation systems.
- **High adaptability.**
  Dimensions can be customized to meet system requirements, ensuring excellent compatibility.

Applications

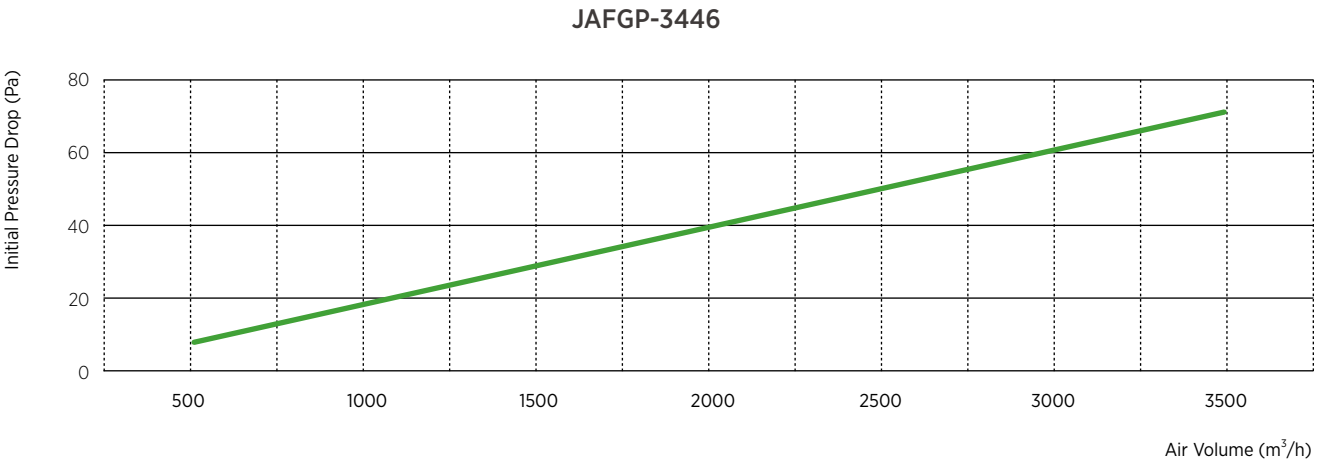
- Central air conditioning air supply systems in shopping malls, hospitals, and similar environments.
- Centralized ventilation systems for general industrial facilities.
- Pre-filtration for dedicated outdoor air systems in cleanrooms.

Data Sheet

Model	Overall Dimensions (W × H × D) mm	Filtration Area m^2	Rated Airflow m^3/h	Initial Pressure Drop Pa
JAFGP-1221	290 × 595 × 21	0.40	1200	65
JAFGP-1621	490 × 490 × 21	0.56	1600	65
JAFGP-1746	290 × 595 × 46	0.79	1700	72
JAFGP-1795	290 × 595 × 95	1.28	1700	70
JAFGP-1921	490 × 595 × 21	0.65	1900	65
JAFGP-2421	595 × 595 × 21	0.83	2400	65
JAFGP-2446	490 × 490 × 46	1.12	2400	72
JAFGP-2495	490 × 490 × 95	1.73	2400	70
JAFGP-2846	490 × 595 × 46	1.36	2800	72
JAFGP-2895	490 × 595 × 95	2.09	2800	70
JAFGP-3446	595 × 595 × 46	1.64	3400	72
JAFGP-3495	595 × 595 × 95	2.55	3400	70

Note: *Special specifications can be customized.*

Initial Pressure Drop and Airflow Performance Curve



Coarse Flat Panel Air Filter

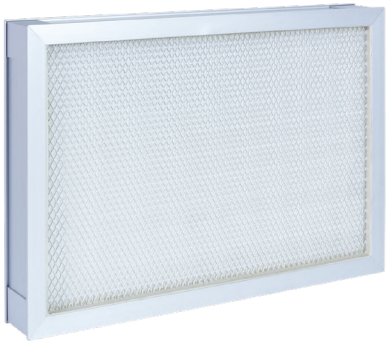
Product Range

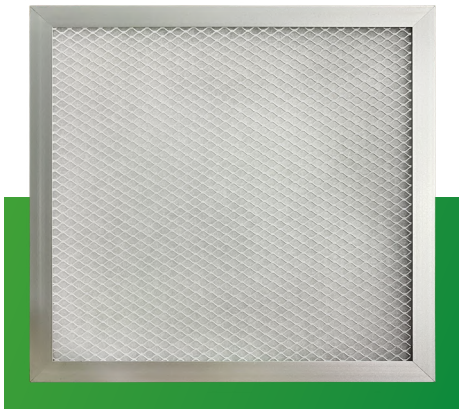
Pre-filter

Applications

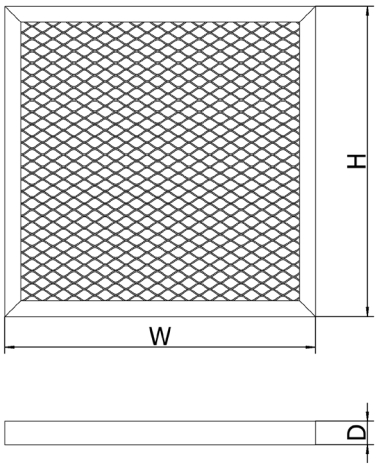
Filter Class

G Coarse





Structural Diagram



Specifications

- **Frame material**
  Galvanized, aluminum alloy, stainless steel.
- **Mesh material**
  Galvanized, aluminum alloy, stainless steel.
- **Filter media**
  Specially designed high-flow, low-resistance polyester synthetic fiber media.
- **Filtration grade**
  G3-G4
- **Reference standard**
  EN 779:2012

Features

- **Ultra-thin & lightweight.**
  Filter element thickness is typically 10 mm or 25 mm, making it lightweight and suitable for systems with limited installation space.
- **Low initial resistance, minimal air resistance.**
  Suitable for low energy consumption operations, improving the overall energy efficiency ratio of air conditioning systems.
- **Excellent cost control.**
  Simple structure, low manufacturing cost, a preferred choice for cost-effective projects.

Applications

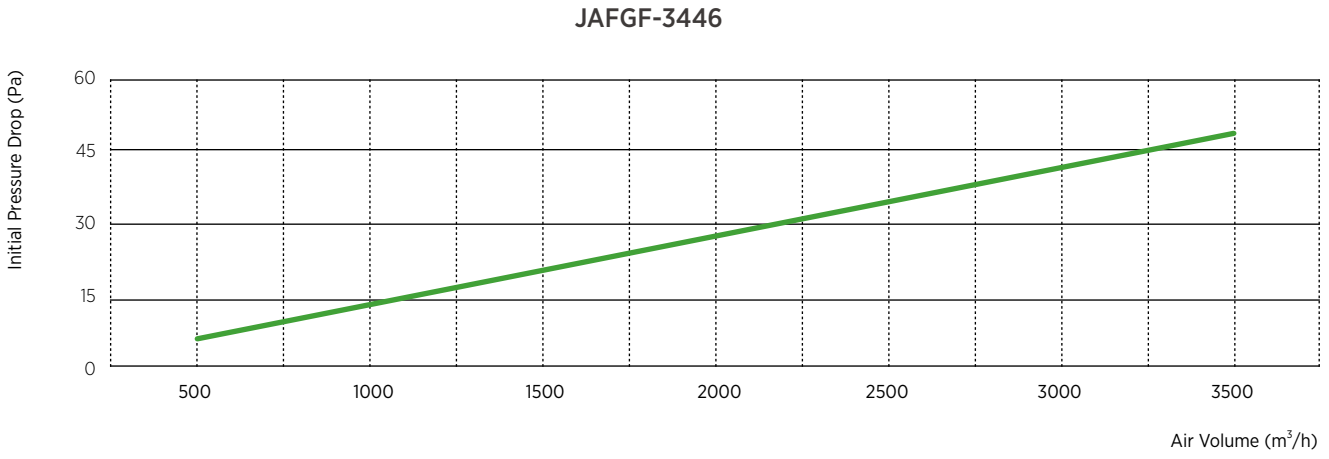
- Central air conditioning air supply systems in shopping malls, hospitals, and similar environments.
- Centralized ventilation systems for general industrial facilities.
- Pre-filtration for dedicated outdoor air systems in cleanrooms.

Data Sheet

Model	Overall Dimensions (W × H × D) mm	Filtration Area m^2	Rated Airflow m^3/h	Initial Pressure Drop Pa
JAFGF-1710	290 × 595 × 10	0.17	1700	50
JAFGF-1715	290 × 595 × 15	0.17	1700	46
JAFGF-1720	290 × 595 × 20	0.17	1700	42
JAFGF-1725	290 × 595 × 25	0.17	1700	38
JAFGF-2810	490 × 595 × 10	0.29	2800	50
JAFGF-2815	490 × 595 × 15	0.29	2800	46
JAFGF-2820	490 × 595 × 20	0.29	2800	42
JAFGF-2825	490 × 595 × 25	0.29	2800	38
JAFGF-3410	595 × 595 × 10	0.35	3400	50
JAFGF-3415	595 × 595 × 15	0.35	3400	46
JAFGF-3420	595 × 595 × 20	0.35	3400	42
JAFGF-3425	595 × 595 × 25	0.35	3400	38

Note: *Special specifications can be customized.*

Initial Pressure Drop and Airflow Performance Curve



Non-woven Bag Filter

Product Range

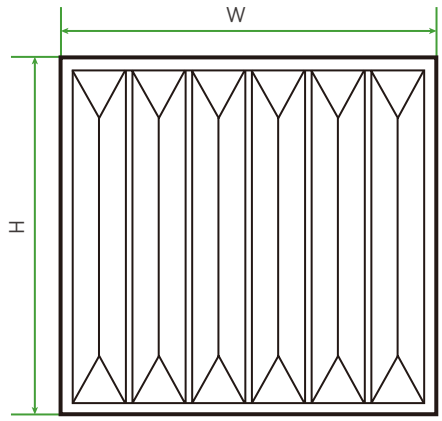
Pre-filter

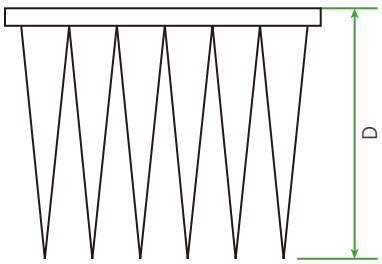
Applications

Filter Class

G Coarse

Structural Diagram





Specifications

- **Frame**
  Galvanized sheet, aluminum alloy, stainless steel.
- **Filter media**
  Specially designed polyester synthetic fiber filter material.
- **Filtration grade**
  G4
- **standard**
  EN 779:2012

Features

- **Stable filtration efficiency.**
  High dust holding capacity, with coarse efficiency up to G3-G4 grade.
- **Robust construction.**
  The filter bag utilizes ultrasonic heat sealing or stitching technology for enhanced durability and resistance to deformation.
- **Economical and practical.**
  Low cost, suitable for use as a pre-filter in most general ventilation systems.
- **Extended downstream filter service life.**
  Effectively captures larger particulate contaminants, protecting medium and high efficiency filtration stages.

Applications

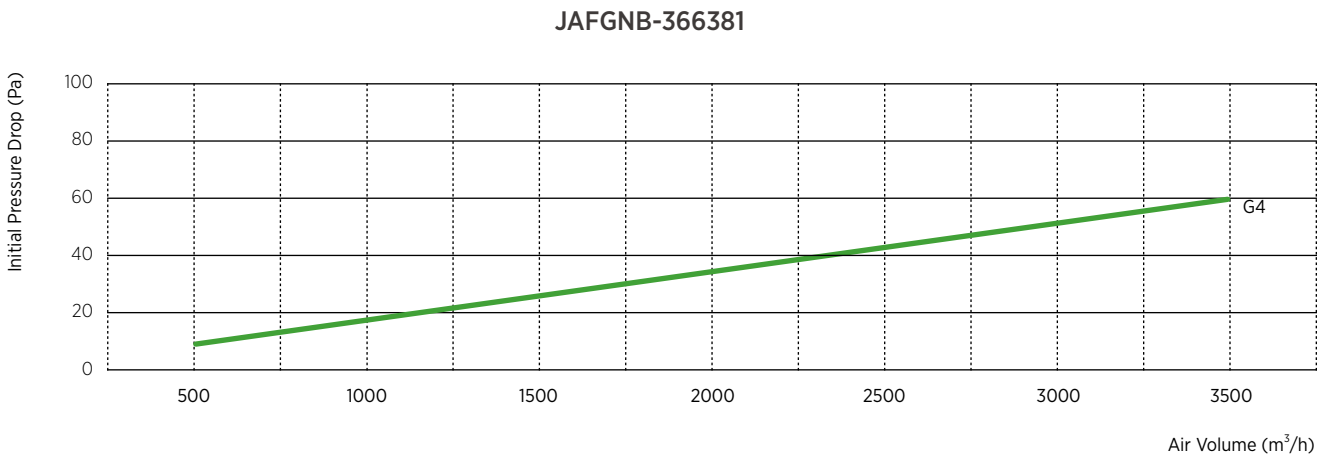
Used in centralized ventilation systems of public service areas such as shopping malls and hospitals, as well as in industrial facilities like electronics and biopharmaceutical plants, and in dedicated outdoor air systems for cleanrooms.

Data Sheet

Model	Overall Dimensions (W × H × D) (mm)	Number of Bags	Filtration Area (m^2)	Rated Airflow (m^3/h)	Initial Pressure Drop (Pa)
JAFGNB-183381	287 × 592 × 381	3	1.6	1800	60
JAFGNB-273600	287 × 592 × 600	3	2.5	2700	
JAFGNB-275600	490 × 592 × 600	5	4.2	2700	
JAFGNB-305381	490 × 592 × 381	5	2.3	3000	
JAFGNB-366381	592 × 592 × 381	6	3.3	3600	
JAFGNB-546600	592 × 592 × 600	6	5.0	5400	

Note: *Special specifications can be customized.*

Initial Pressure Drop and Airflow Performance Curve



Synthetic Fiber Bag Filter

Product Range

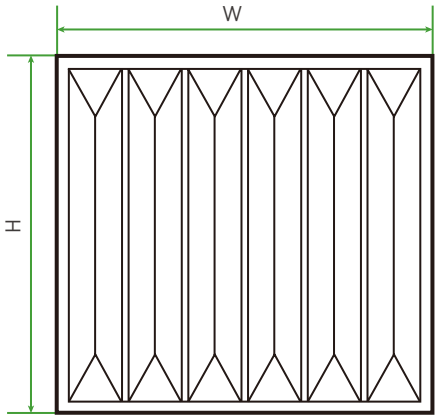
Pre-filter

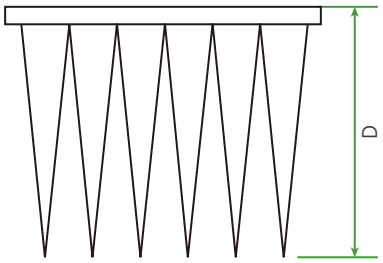
Applications

Filter Class

G Coarse

Structural Diagram





Specifications

- **Frame material**
  Aluminum alloy, stainless steel, galvanized steel sheet.
- **Filter material**
  Specially engineered high-flow, low-resistance synthetic fiber fabric filter media.
- **Filtration grade**
  G3-G4
- **Test standard**
  EN 779:2012

Features

- **Enhanced durability.**
  It utilizes anti-breakage synthetic fiber filter media with excellent tensile strength, ensuring long-term use without damage.
- **Low pressure drop design.**
  The material structure is loose and orderly, reducing initial resistance while maintaining efficiency and improving energy savings.
- **Eco-friendly and safe.**
  Free from glass fibers, no dust shedding, providing safer and more environmentally friendly use.

Applications

Used in centralized ventilation systems of public service areas such as shopping malls and hospitals, as well as in industrial facilities like electronics and biopharmaceutical plants, and in dedicated outdoor air systems for cleanrooms.

Data Sheet

Model	Overall Dimensions (W × H × D) (mm)	Number of Bags	Filtration Area (m^2)	Rated Airflow (m^3/h) @ Initial Pressure Drop (Pa)			
				G3		G4	
JAFGSB-313	287 × 592 × 300	3	1.3	1700	63	1700	68
JAFGSB-316	287 × 592 × 381		1.6		49		54
JAFGSB-323	287 × 592 × 550		2.3		33		38
JAFGSB-325	287 × 592 × 600		2.5		30		35
JAFGSB-417	287 × 592 × 300	4	1.7	1700	47	1700	52
JAFGSB-421	287 × 592 × 381		2.1		37		42
JAFGSB-430	287 × 592 × 550		3.0		24		29
JAFGSB-432	287 × 592 × 600		3.2		22		27
JAFGSB-518	490 × 490 × 300	5	1.8	2550	69	2550	74
JAFGSB-523	490 × 490 × 381		2.3		53		58
JAFGSB-533	490 × 490 × 550		3.3		35		40
JAFGSB-535	490 × 490 × 600		3.5		33		38
JAFGSB-626	592 × 592 × 300	6	2.6	3400	63	3400	68
JAFGSB-649	592 × 592 × 381		3.3		49		54
JAFGSB-633	592 × 592 × 550		4.7		33		38
JAFGSB-630	592 × 592 × 600		5.0		30		35
JAFGSB-734	592 × 592 × 300	7	3.4	3400	47	3400	52
JAFGSB-742	592 × 592 × 381		4.2		37		42
JAFGSB-761	592 × 592 × 550		6.1		24		29
JAFGSB-765	592 × 592 × 600		6.5		22		27

Note: *Special specifications can be customized.*

Nylon Mesh Filter

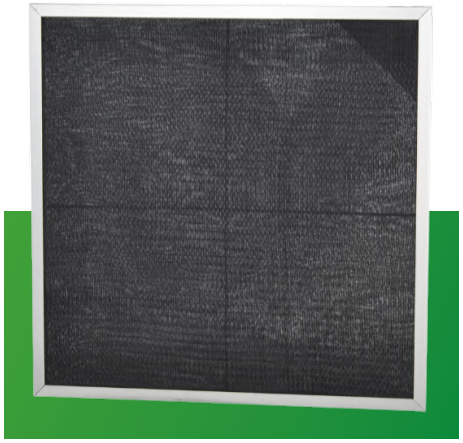
Product Range

Pre-filter

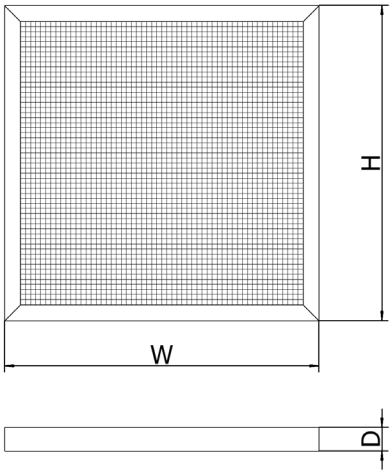
Applications

Filter Class

G Coarse



Structural Diagram



Specifications

- **Frame material**
  Aluminum alloy, stainless steel, galvanized steel sheet.
- **Filter material**
  Made from nylon fiber woven filtration media.
- **Filtration grade**
  G3-G4
- **Test standard**
  EN 779:2012

Features

- **Low initial resistance and excellent ventilation.**
  The nylon mesh features a relatively large pore size, resulting in low air resistance. It is suitable for coarse filtration and helps maintain stable system airflow.
- **Reusable after cleaning.**
  The filter mesh can be washed with water or cleaned with a vacuum cleaner, offering convenient maintenance and reducing long-term replacement costs
- **Moisture and mildew resistant.**
  Nylon material is not easily absorbent, making it suitable for high-humidity environments and preventing filter media from becoming moldy or deteriorated.

Applications

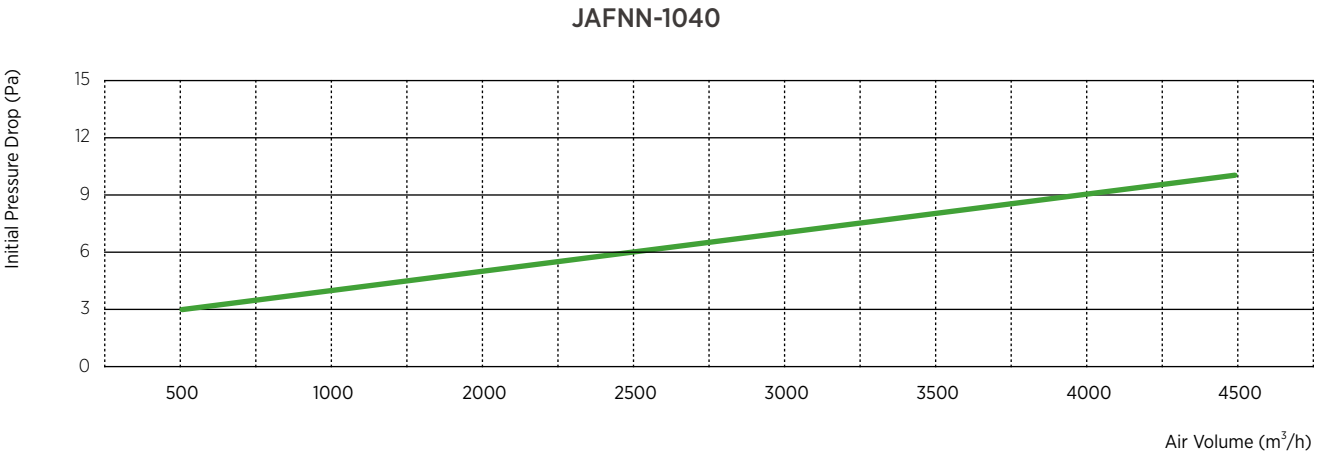
Used for dust filtration in refrigeration and air conditioning equipment, engineering dust protection, air purifiers, and air purification treatment systems.

Data Sheet

Model	Overall Dimensions (W × H × D) (mm)	Rated Airflow (m^3/h)	Initial Pressure Drop (Pa)	Filtration Area (m^2)
JAFNN-540	500 × 500 × 5	4000	12	0.25
JAFNN-580	500 × 1000 × 5	8000		0.50
JAFNN-5120	500 × 1500 × 5	12000		0.75
JAFNN-1040	500 × 500 × 10	4000	12	0.25
JAFNN-1080	500 × 1000 × 10	8000		0.50
JAFNN-10120	500 × 1500 × 10	12000		0.75

Note: *Special specifications can be customized.*

Initial Pressure Drop and Airflow Performance Curve



All-Metal Dust Removal Filter

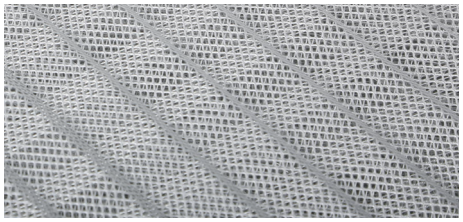
Product Range

Pre-filter

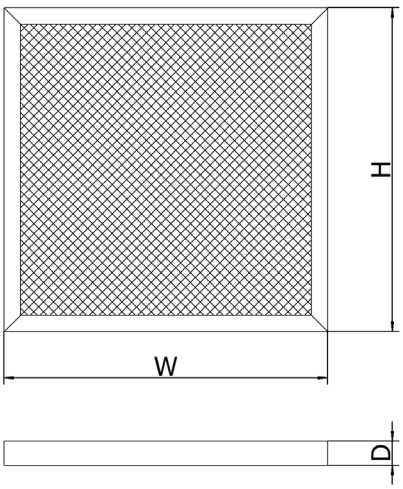
Applications

Filter Class

G Coarse



Structural Diagram



Specifications

- **Frame material**
  Aluminum alloy or stainless steel.
- **Filter material**
  Corrugated aluminum mesh, stainless steel mesh.
- **Filtration grade**
  G3-G4
- **Test standard**
  EN 779:2012

Features

- **Reusable.**
  The filter element can be reused multiple times, making it suitable for frequent dust removal and oil mist applications in industrial environments.
- **Stable filtration performance.**
  Although classified as coarse efficiency, the multi-layer metal structure is designed to effectively capture large particulate dust, oil mist, metal shavings, and other contaminants. It also offers excellent fire. resistance.
- **Robust and deformation-resistant.**
  Particularly suitable for industrial ventilation systems subject to strong vibrations and harsh environments, maintaining filtration integrity over extended periods.
- **High strength and durability.**
  Manufactured from stainless steel or galvanized steel wire mesh or perforated sheet, offering resistance to high temperatures, corrosion, and mechanical impact, ensuring a long service life.

Applications

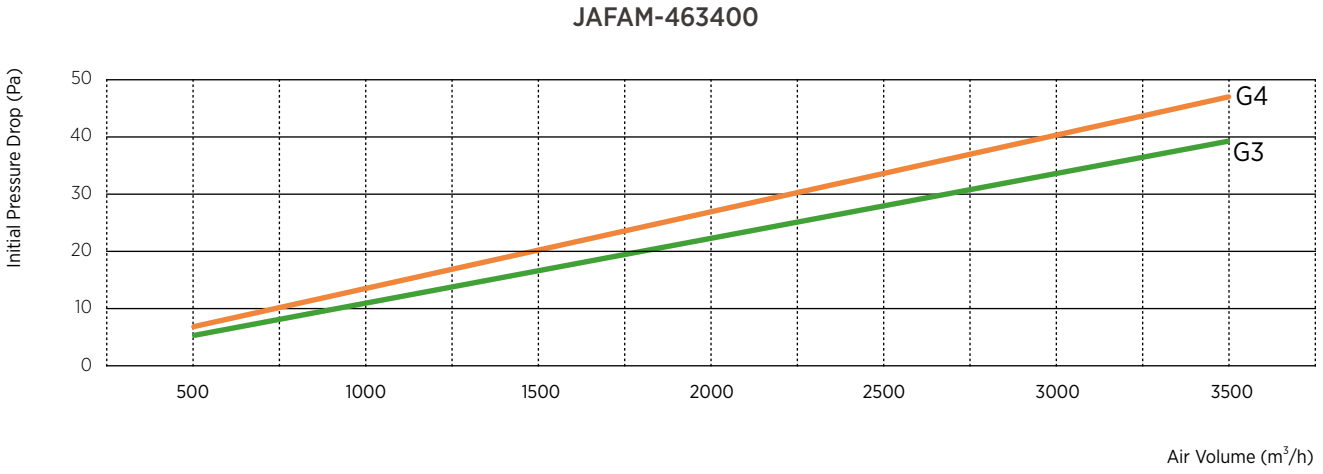
Coarse filtration for fresh air systems; suitable for acid and alkali resistant, high-strength, and high-temperature ventilation systems; and for wax spraying room filtration in automotive assembly workshops.

Data Sheet

Model	Overall Dimensions (W × H × D) (mm)	Rated Airflow (m^3/h)	Rated Air Velocity (m/s)	Initial Pressure Drop (Pa)	
				G3	G4
JAFAM-251400	290 × 490 × 25	1400	2.5	40	47
JAFAM-251700	290 × 595 × 25	1700			
JAFAM-252875	490 × 595 × 25	2875			
JAFAM-253400	595 × 595 × 25	3400			
JAFAM-461400	290 × 490 × 46	1400	2.5	40	47
JAFAM-461700	290 × 595 × 46	1700			
JAFAM-462875	490 × 595 × 46	2875			
JAFAM-463400	595 × 595 × 46	3400			

Note: *Special specifications can be customized.*

Initial Pressure Drop and Airflow Performance Curve



DPA Dry Paint Mist Filter

Product Range

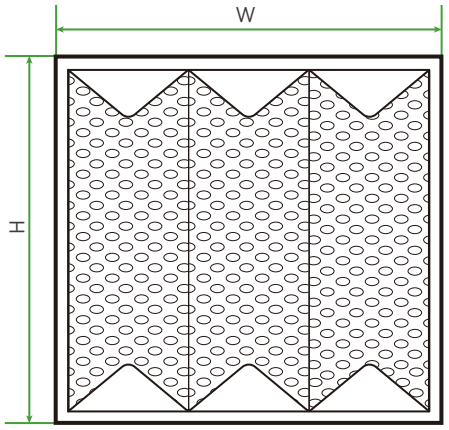
Pre-filter

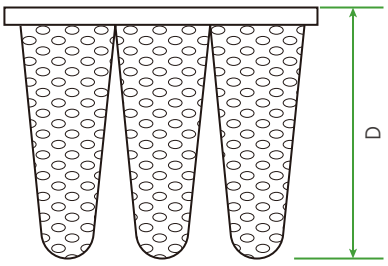
Applications

Filter Class

G Coarse

Structural Diagram





Specifications

- **Frame material**
  Galvanized sheet, stainless steel, aluminum alloy, ABS plastic.
- **Filtration grade**
  G3-G4

Features

- **High paint mist holding capacity.**
  Up to 27 kg/m 3, with a service life 3–6 times longer than conventional paint mist filtration products.
- **High paint mist interception efficiency.**
  99.8% effective interception rate for particles >10 μm, outperforming traditional coarse + medium-efficiency air filters..
- **Low initial air resistance.**
  Owing to the DPA's water- and paint-resistant material and honeycomb three-dimensional structure, the initial air resistance is approximately 20 Pa and can be maintained at a low level during operation, significantly reducing energy consumption costs.

Applications

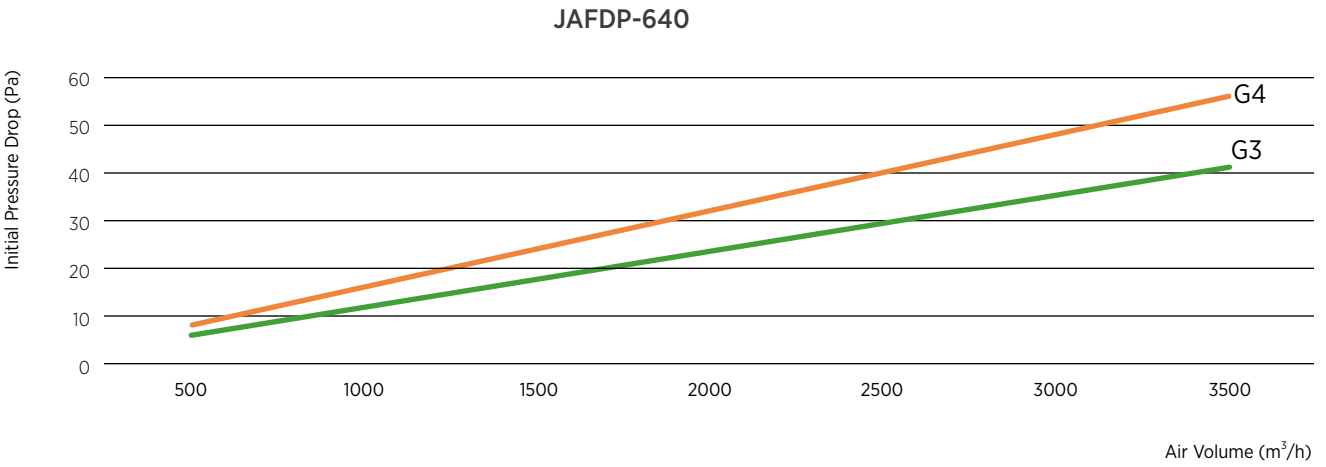
Paint mist filters are suitable for spray booths and other air filtration processes to capture high-solids coatings, powder coatings, water-based coatings, multi-component coatings, colorants, and adhesive residues.

Data Sheet

Model	Overall Dimensions (W × H × D) (mm)	Number of Bags	Filtration Area (m^2)	Rated Airflow (m^3/h)	Filtration Grade	Initial Pressure Drop (Pa)
JAFDP-340	287 × 592 × 550	3	1.92	1700	G3	40
JAFDP-540	490 × 592 × 550	5	3.28	2600		40
JAFDP-640	592 × 592 × 550	6	4.05	3400		40
JAFDP-355	287 × 592 × 550	3	1.92	1700	G4	55
JAFDP-555	490 × 592 × 550	5	3.28	2600		55
JAFDP-655	592 × 592 × 550	6	4.05	3400		55

Note: *Special specifications can be customized.*

Initial Pressure Drop and Airflow Performance Curve



PureFlow

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