

AIR FILTER

PRODUCTS





SECONDARY FILTER





About Us

Established in 1960, Japan Air Filter began as a family business primarily focusing on delivering top-notch air purification products and well-received related quality products. Through a legacy of generations of excellence, today JAF has become a leading provider of extensive Air Filtration and Air Pollution Control Products & Solutions across the world. Driven by values of quality, reliability and sustainability, we are firmly committed to our mission of delivering reliable products for enhancing indoor air quality as well as odour, corrosion and pollution control.

Inspired by our founder's vision of creating products that are 'good for the people and good for the environment', JAF continually improves its product line through the latest technology and a keen emphasis on research and development. Over the years, we have forged a solid reputation by supplying industries and businesses around the globe with cutting-edge air purification products and services that consistently meet a wide range of needs.

A Vision of Global Growth

As a rapidly growing organisation, one of JAF's core objectives is to expand its businesses beyond Japan. With hard work and much coordination, this goal came into realisation in 2015 with the opening of JAF's first overseas factory in Malaysia. This was then followed by the inception of JAF Singapore in 2016, JAF Thailand in 2017 and JAF Indonesia and JAF China in 2018.

Today, backed by world-renowned Japanese technology, JAF Malaysia aspires to become the industry's most trusted name for an all-encompassing range of air purification solutions. JAF continues to establish its foothold across Asia, with numerous sales offices in key markets such as Indonesia, Thailand, Singapore and China, as well as global distribution of products to Pakistan, Bangladesh, Middle East, Europe and more. By making our presence felt in more countries, we aspire to make quality air purification solutions more easily attainable and beneficial to every level of the society.

PRODUCT Category

AIR FILTER PRODUCTS

PRE-FILTER

JS-FB Mat
JS Mat
DeaMat S/P
DeaNet
DeaMat GDM
DeaMat DMG - A 90
MiraDeep Borsa G
JS Mat GPM 30 / GPM 60
DeaMat HT
DeaMat GHT-200 & GHT-100
DeaMat GPM
DeaMat G50 G60 G85 G90
DeaKleen EC/SD/SU/SP
DeaKleen MG
DeaKleen GT
DeaKleen Anti-Microbial
Grease filter

SECONDARY FILTER

MiraDeep Borsa	23
Miradeep Borsa FG	24
MiraCel MB	25
MiraCel II MH	26
MiraCel II	27
MiraCel & MiraCel with Antimicrobial	28
MiraCel HT	29
MiraCel GT	30
MiraCel V	32
MiraCel V GT	33

HEPA FILTER

LunaCel ULPA	34
LunaCel TS	35
LunaCel HC	36
LunaCel STD	37
LunaCel HT	38
LunaCel E10	39
LunaCel TS E10	40
LunaKleen	41
TetraKleen	42
LunaCel V	43
LunaCel VBX	44
LunaCel VL	45
LunaKleen Hood	46
LunaKleen Ghood	47





JAF

Secondary Filter



MiraDeep Borsa



Miradeep Borsa FG



MiraCel MB



MiraCel II MH



MiraCel II



MiraCel & MiraCel with Antimicrobial



MiraCel HT



MiraCel GT



MiraCel V



MiraCel V GT

Hepa Filter



LunaCel ULPA



LunaCel E10



LunaCel VBX



LunaCel TS



LunaCel TS E10



LunaCel VL



LunaCel HC



LunaKleen



LunaKleen Hood



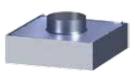
LunaCel STD

TetraKleen





LunaCel V



LunaKleen Ghood





JS-FB Mat Glass Fiber Pre-filter

JS - FB Mat

- · Fiber glass auto roll media
- White colour and impregnated with gel
- High dust holding capacity and high cleaning efficiency
- · High resiliency and flexibility
- · Inexpensive from operating and replacement stand point
- Available in easy-to-handle continuous roll form and operation velocity of 500

Specification

		Media Dimension		Average Pressure Loss (Pa)			Air												
Туре	Length (m)	Thickness (mm)	Width average (mm)	Arrestance (%)	Initial	Final	Velocity (m/s)												
JS - FB Mat 3'		80	830																
JS - FB Mat 4'		tolerance													1169		40	050	0.5
JS - FB Mat 5'	20	(-5/+10mm)	1474	80	80 48	250	2.5												
JS - FB Mat 6'	Mat 6'		1778																
Measuring method: ASHRAE 52.1 - 1992			·	·		Initial Res	sistance +/-10%												

Measuring method: ASHRAE 52.1 - 1992 Other code sizes / construction are available

Material And Operating Condition

	Material	Fiber Glass		
Media	Enhanced	Fiber Glass		
inculu	Adhesive	Non-combustible oil		
	Preserve Method	Dispose after usage		
Max Temperature		80°C		
Temperature Usage Range		Continuously use time : -23~+80		

Inflammable Test Result

Test Item	Test Results	Test Method
After Flame Time (sec)	0	
Residual Dust Time (sec)	0	
Existence of Cotton Fire	Nil	JACA No.11A method
Combustion Distance (mm)	2.4	moulou
Groups	Class 3	



Roll Type Synthetic Fiber Pre-filter

JS Mat

- · Synthetic fiber roll filter with progressive density
- Media with excellent heat resistance, water resistance, inflammable using synthetic fiber

Specification	_					
Specification	Cr	201	citi	02	tir	n
	U	761		υa	uv	

			Media Dimension			nsion Average Pressure Loss (Pa)			Air
	Туре	Length (m)	Thickness (mm)	Roll Diameter (mm)	Width average (m)	Arrestance Efficiency (%)	Initial	Final	Velocity (m/s)
W-EC	Washable		10	400-420		75-80 (G2)	19	130	
W-SD	Washable	20	18-20	660-690	2	80-85 (G3)	25	200	1.5
W-SU	Washable		20-22	660-690		87-92 (G4)	30	200	

Measuring method: ASHRAE 52.1 & 52.2

Material And Operating Condition

	Material	Synthetic Fiber			
Media	Enhanced	Throw after use (recommended)			
Max Temperature (Continuous)		80°C			
Temper	ature Usage Range	Continuously use time : -20~+100			

Please consult for cleaning

Cannot be used as electrical dust collector after filter

Initial Resistance +/-10%





Synthetic Pre-filter

DeaMat S/P

- Standard synthetic pre-filter come with Rod Retainer
- Customize size is possible
- Low Initial Pressure Loss
- · Easy to install and long service life
- Reusable Frame
- No Glue/Adhesive

Specification

Turne	Nominal Size	Actual Size	Air Velocity	Average Arrestance	Pressure	Loss (Pa)
Туре	W×H×D (in)	W×H×D (mm)	(m/s)	Efficiency (%)	Initial	Final
	24x24x1	594x594x21		75.00		
U U U	24x24x2	594x594x46		75-80 (G2)	40-50	
	24x24x4	594x594x95		(02)		
	24x24x1	594x594x21		00.05		
SD	24x24x2	594x594x46	2.5	80-85 (G3)	55-65	250
	24x24x4	594x594x95		(00)		
	24x24x1	594x594x21				
SU	24x24x2	594x594x46		87-92 (G4)	80-85	
	24x24x4	594x594x95				

Measuring method: ASHRAE 52.1 & 52.2

Please discuss for measurement other than standard. Frame is optional

Material And Operating Condition

Media	Synthetic Fiber
Maximum Temperature	93°C
Washable	Yes
Cellside	Aluminium Extrusion
Support Grid	Galvanized Steel Rod Retainer

Initial Resistance +/-10%



Standard Synthetic Fiber Pre-filter

DeaNet

- · Standard synthetic pre-filter in the forms of pad

- Customize size is possible
 High dust holding capacity and easy to install
 Have a sturdy, long lasting welded wire mesh support grid

Specification

Nominal Size	Actual Size	Air Flow	Filter Grade EN 779	Initial Resistance by % of rated airflow (Pa)		Final Resistance	
	W×H×D (mm)		EN (19	70%	100%	120%	- (Pa)
12x24x2	290x594x44	28/ 1000		28	45	60	
24x24x2	594x594x44	56 / 2000	G2	20	40	00	
12x24x4	290x594x95	28 / 1000	G2	20	40	52	
24x24x4	594x594x95	56 / 2000		20	40	52	
12x24x2	290x594x44	28 / 1000	G3	25	65	00]
24x24x2	594x594x44	56 / 2000		35	60	90	050
12x24x4	290x594x95	28 / 1000		0.0		75	250
24x24x4	594x594x95	56 / 2000		30	55	75	
12x24x2	290x594x44	28 / 1000		50	0.5	110]
24x24x2	594x594x44	56 / 2000	G4	50	85	110	
12x24x4	290x594x95	28 / 1000		45	00	105	
24x24x4	594x594x95	56 / 2000		45	80	105	
leasuring method: ASHR	easuring method: ASHRAE 52.1 & 52.2						

Measuring method: ASHRAE 52.1 & 52.2 Other sizes are available upon request

Material and Operating Conditions

Cellside	Galvanized Steel, Aluminium
Media	Special Synthetic Fiber
Maximum Operating Temperature	93°C
Support Grid	Welded Wire Mesh Support Grid





Water Repellant Fiber Glass Pre-filter

DeaMat GDM

- · Fiber glass filter for mist removal
- · Best for air intake with mist at on-shore platform and coastal area
- · Low pressure drop
- · Economical & long service life

Specification

Outer Dimension	Outer Dimension	Air Velocity	Initial Pressure Loss
W×H×D (in)	W×H×D (mm)	(m/s)	(Pa)
24x24x3	610x610x75	2.5	57±20%

Initial Resistance +/-10%

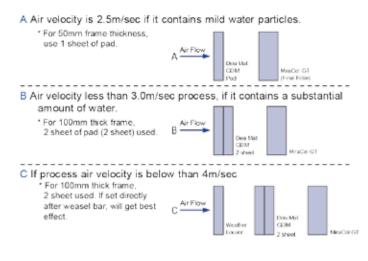
Please discuss for measurement other than standard * Processions speed is speed that pass-through the effective area of the filter

Material And Operating Condition

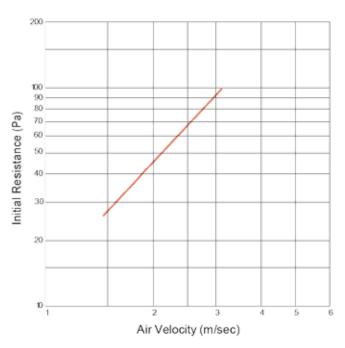
Media	Fiber Glass
Usage Temperature Limit (Continuous)	80°C

Coloured surface is downstream side.

Usage Example



Initial Resistance for DeaMat GDM





Water Repellant Fiber Glass Pre-filter

DeaMat DMG - A90

- As a preliminary filter for the filtration of coarse dust-particles in general ventilation and air conditioning equipment.
- Progressively structured glass fibre filtermedia impregnated throughout with a harmless gel for filtration of coarse dust-particles.
- Colour air inlet side is white, colour clean air side is green.

Specification

Outer Dimension	Air Velocity	Initial Pressure Loss	Final Pressure Loss
W×H×D (mm)	(ms)	(Pa)	(Pa)
635x635x110mm	1.5	33Pa	250

Initial Resistance +/-10%

JAF[®]

Material And Operating Condition

Gravimetric efficiency	89%
Filtration Class	G3
Intake air velocity	1.5 m/s
Initial pressure drop	33 Pa
Recommended final pressure drop	250 Pa
Temperature resistance	120ºC
Dust holding capacity	511 g/m2
Reaction to fire	non-combustible (Warr. BS 476/4)



Extended surface synthetic pocket filters

MiraDeep Borsa G

- MiraDeep Borsa G s a high performance synthetic media pocket filter. The nique pocket design to enable the filter to have high dust holding capacity and long service life characteristic.
- Typically use as prefilter or as a final filter in difficult operating conditions such as variable air volume, repeated fan shut down and turbulent airflow.

Specification

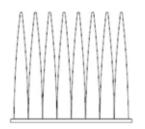
Actual Size (W x H x D) mm	Number of pockets	Gross media area m² / ft²	Air flow capacity CMH / CFM	Initial resistance Pa / in W.G.	Filter grade	Arrestance %
592 x 592 x 305	8	3.2 / 35	5100 / 3000	115 / 0.45	G4	90
287 x 592 x 305	4	1.6 / 18	2550 / 1500	115 / 0.45	G4	90
592 x 592 x 405	8	4.2 / 45	5100 / 3000	90 / 0.35	G4	90
287 x 592 x 405	4	2.1 / 23	2550 / 1500	90 / 0.35	G4	90
592 x 592 x 610	8	6.4 / 69	5100 / 3000	65 / 0.26	G4	90
287 x 592 x 610	4	3.2 / 35	2550 / 1500	65 / 0.26	G4	90

Measuring method : ASHRAE 52.1 & 52.2 Inflammability : UL Class 900

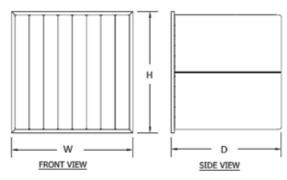
Material and Operating Conditions

Header frame	Galvanised steel (21mm or 25mm)
Media	Synthetic fibre
Efficiency	G4 with 90% arrestance
Recommended final pressure	1.5" WG/ 375Pa
Maximum operating temperature	66°C (150° F)

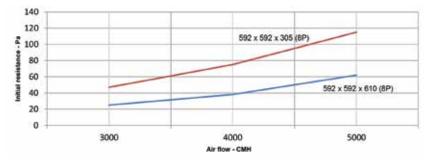
Outer Dimension Diagram



PLAN VIEW



Air flow vs Initial resistance





Roll Type Synthetic Fiber Pre-filter

JS Mat GPM 30 / GPM 60

- Progressive material
- 100% polyester
- Thermal bonded polyester fiber
- · Surface treated with special adhesive to prevent dust lost
- Heavy dust holding capacity
- Promote good laminar flow patterns
- Final filter for paint booth system

Specification

	Media Dimension					Pressure	Loss (Pa)		
Туре	Length (m)	Thickness (mm)	Weight (gram/m²)	Width (m)	Efficiency (%)	Initial	Final	Air Velocity (m/s)	
GPM 30	20	18	350	0	53	23	450	2.5	
GPM 60	20	22	600		58	25	450	2.5	

Measuring method : ASHRAE 52.1 - 1992

Material And Operating Condition

	Туре	White Ceiling Filter			
	Material	100% Polyester			
Media	Surface	Treated with adhesive			
	Preserve Method	Throw after use (recommended)			
	Scrim	Final layer to create laminar fow patterns			
Max Ter	nperature	100°C			
Humidity		100% RH			
Washab	ility	No			

Initial Resistance +/-10%





High Temperature Panel Filter

DeaMat HT

- Fiber glass
- Rigid aluminium mesh frame
- Up to 300°C
- · High air flow rate
- Low initial pressure drop
- Heavy dust holding capacity
- Longer service life
- · Pre-filter for auto mobile and industrial coating lines at hot air ovens

Specification

Turne	Actual Size	Colour	Air Flow	Air Flow (CMM/CFM) Average Arres		Pressure	Loss (Pa)
Туре	W×H×D (mm)	Colour		2.5 m/s	Efficiency (%)	Initial	Final
HT 250	250x250x14	Doigo/W/bito	8.8 / 311	14.8 / 524	80-85	80-85 50	250
HT 500	480x480x14	Beige/ White	18 / 636	30 / 1059	(G3)	50	250

3 Other sizes are available upon request

Initial Resistance +/-10%

Material And Operating Condition

Frame	Expanded aluminium
Media	Fiber Glass
Gasket	No
Туре	High temp panel
Maximum Temperature	<300°C
Washable	No



Roll Type Synthetic Fiber Pre-filter

DeaMat GHT-200 & GHT-100

- COARSE FILTER BARRIER for high temperature curing ovens to prevent fouling of product surface
- Self-extinguishing according to DIN 53438-F1
- 100% SYNTHETIC
- Excellently suited for application in paint finishing curing ovens of all kind as well as air handling systems processing hot air flows between 100° and 240°C
- The FHT-SERIES are designed to be able to operate at constant high temperatures up to 180°C (FHT-100) and 240°C (FHT-200)
- The FHT-SERIES are constructed to suit different arrestance and pressure drop levels at two different filtration classes G3 and G4.

Specification

			Average	Pressu	re Drop	
Туре	Roll Size	Air Velocity ^{m/s}	Arrestance %	Initial	Final	Dust Holding Capacity - Asherae Dust (g/m2)
GHT-200	1x20m / 2x20m	1	91 (G4)	41	250	525
GHT-100	1x40m / 2x40m	1	89 (G3)	26	250	475

Initial Resistance +/-10%

Material And Operating Condition

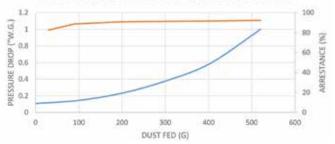
Unit	GHT-200	GHT-100			
٥C	240	180			
mm	20	10			
%	100	100			
-	no	no			
Roll size standard	1x20M, 1X40M, 2X20M, 2X40M				

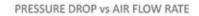
PERFORMANCE PARTICULARS (FHT-200 G4)

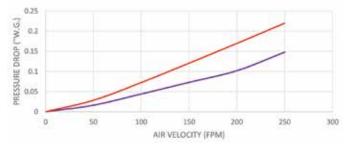
- FHT-200 G4, WHEN EXPOSED TO TEMPERATURES ABOVE 180°C, DO SLIGHTLY DISCOLOR from light/yellow into toasty brown.
- The discoloration of the FHT-200 G4 DOES NOT AFFECT THE INTEGRITY OR FILTRATION PERFORMANCE of the filter media.
- Filter life depends on CONDITIONS OF USE, and TYPE OF CONTAMINATION PRESENTED.

Initial Resistance for GHT-200 & GHT-100

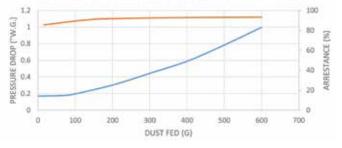
FHT-100 DUST LOADING vs PRESSURE DROP vs ARRESTANCE



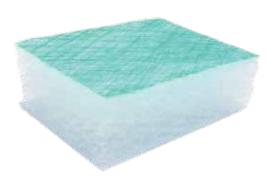




FHT-200 DUST LOADING vs PRESSURE DROP vs ARRESTANCE







Fiber Glass Pre-filter For Paint Mist Usage

DeaMat GPM

- Glass fiber with synthetic resin sizing
- Heavy paint holding capacity
- High airflow and economical
- Available in rolls and cut pads
- Filtration of solvent-based paint and lacquer particles in spray booths of the surface treatment

Specification

	Turne	Roll Size Thickness		Dust Holding Capacity	Pressure Loss (Pa)		
	Туре	W×H(m)	(mm)	(gram/m2)	Initial	Final	
	GPM 220	2x20	50	2200	47	200	

Measuring method : 90% BS 2831 - nº2 test Other sizes are available upon request Initial Resistance +/-10%

Material And Operating Condition

Media	100% Fiber Glass
Maximum Temperature	<100°C
Colour	Green/white
Humidity	100% RH

Coloured surface is downstream side.



Fiber Glass Pre-filter

DeaMatG50 G60 G85 G90

- Progressive density holding fiber glass pad
- Categorized by 4 type of arrestance efficiencyCustomize size is possible
- Available in water resistance beverage board

Specification

Туре	Nominal Size W×H×D (in)	Actual Size W×H×D (mm)	Air Velocity	Average	Pressure Loss (Pa)		Dust Holding	
Type					Intial		Capacity(g/m2)	
G50	24x24x1	594x594x22		50	35	134	510	
G60	24x24x2	594x594x44	2.5	60	47	134	600	
G85	24x24x2	594x594x44	2.0	85	44	147	1050	
G90	24x24x4	594x594x95		90	78±20%	373	2800 (Test: AC-Fine)	

Please discuss for measurement other than standard.

Initial Resistance +/-10%

Material And Operating Condition

Media	Fiber Glass
Usage Temperature Limit (Continuous)	80°C

Colored surface is downstream side.





Standard Synthetic Fiber Pre-filter

DeaKleen EC/SD/SU/SP

- Pre-filter for HVAC applications
- Low pressure drop pleated design resulting in lower energy costDisposable pleated panel filter
- Robust construction for reliable construction
- Moisture resistant beverage board
- · Mixture of cotton and synthetic fiber
- · Alternative frame available upon request

Specification

Туре	Nominal Size W×H×D (in)	Actual Size WxHxD (mm)	Air Flow CMM / CFM	No of Pleats		Arrestance ncy (%)	Initial Resistance (Pa)	Final Resistance
				Fleats	EN779	ASHRAE	Resistance (Fa)	(Pa)
	12x24x2	290x594x44	28 / 1000	15				
	20x24x2	492x594x44	47 / 1680	24			63	
SP	24x24x2	594x594x44	56 / 2000	28]	Merv 8		
3F	12x24x4	290x594x95	28 / 1000	19]	(30-35%)		
	20x24x4	492x594x95	47 / 1680	17]		50	
	24x24x4	594x594x95	56 / 2000	21]			
	12x24x1	290x594x22	28 / 1000	14				
	20x24x1	492x594x22	47 / 1680	24			68	-
	24x24x1	594x594x22	56 / 2000	28]		60	
	12x24x2	290x594x44	28 / 1000	15	G4			
	20x24x2	492x594x44	47 / 1680	24				
SU	24x24x2	594x594x44	56 / 2000	28				
	12x24x4	290x594x95	28 / 1000	10				
	20x24x4	492x594x95	47 / 1680	17			50	250
	24x24x4	594x594x95	56 / 2000	21	(90-92%)			-
	12x24x2	290x594x44	28 / 1000	11		Merv 7 (25-30%)		
	20x24x2	492x594x44	47 / 1680	17				
SD	24x24x2	594x594x44	56 / 2000	21			63	
5D	12x24x4	290x594x95	28 / 1000	9]			
	20x24x4	492x594x95	47 / 1680	14			50	
	24x24x4	594x594x95	56 / 2000	18				
	12x24x2	290x594x44	28 / 1000	8				
	20x24x2	492x594x44	47 / 1680	12			63	
EC	24x24x2	594x594x44	56 / 2000	15				
EC	12x24x4	290x594x95	28 / 1000	7	1			
	20x24x4	492x594x95	47 / 1680	12	1		50	
	24x24x4	594x594x95	56 / 2000	15	1			

Measuring method : ASHRAE 52.1 & 52.2

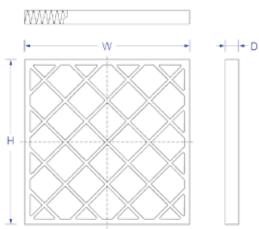
Inflammability : UL Class 900

Other sizes are available upon request

Material And Operating Condition

Cellside	Beverage Board, Double Wall
Media	Special Synthetic Fiber
Maximum Operating Temperature	93°C
Support Grid	Welded Wire Mesh Support Grid

Outer Dimension Diagram



Initial Resistance +/-10%



Standard Synthetic Fiber Pre-filter

DeaKleen MG

- · Classsified M5 in accordance with EN779
- · High loft glass fibre pleated media increase dust holding capacity
- · Radial pleats for even dust loading and welded wire grid for stabilizing the media
- · High wet-strength beverage board frame
- Available in 2" & 4" •
- UL 900 certified •
- Available with anti-microbial feature •

Specification

Nominal Size W×H×D (in)	Actual Size	Air Flow	No of	Average Arrestance Efficiency (%)		Initial	Final
			Pleats	EN779	ASHRAE	Resistance (Pa)	Resistance (Pa)
12x24x2	290x594x44	28 / 1000	15				- 300
20x20x2	492x492x44	40 / 1430	24			115	
20x24x2	492x594x44	47 / 1680	24				
20x25x2	492x619x44	50 / 1786	24				
24x24x2	594x594x44	57 / 2036	28	145	Merv 10		
12x24x4	290x492x95	28 / 1000	10	M5	(45-55%)	100	
20x20x4	492x492x95	40 / 1430	17				
20x25x4	492x619x95	50 / 1786	17				
24x24x4	594x594x95	57 / 2036	21				
29x25x4	720x619x95	71 / 2536	27				
leasuring method : AS	HRAE 52.1 & 52.2			·	·	In	itial Resistance +/-10%

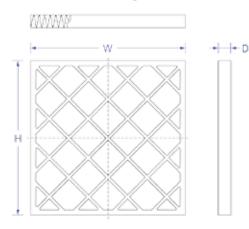
Inflammability : UL Class 900

Other sizes are available upon request

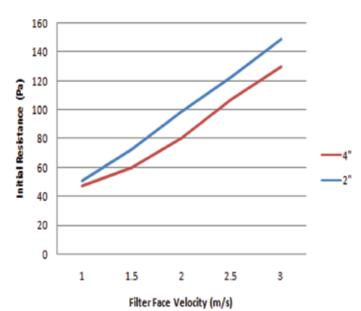
Material and Operating Conditions

Cellside	Beverage Board, Double Wall
Media	Special Synthetic Fiber
Maximum Operating Temperature	93°C
Support Grid	Welded Wire Mesh Support Grid

Outer Dimension Diagram



Initial Resistance DeaKleen MG





High Performance Synthetic Fiber Pre-filter

DeaKleen GT

- · Air filter for compressors and gas turbines
- · With a special selection media, DeaKleen GT has higher dust holding capacity
- · Lower pressure drop
- · Pleating pattern makes the filter has longer lifespan

Specification

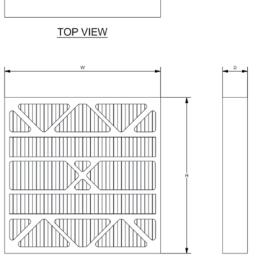
	Madal	Dimension	Rated Air Flow	Average			Dust Holding
	Model	W×H×D (mm)	m³/min	Arrestance (Weight method %)	Initial	Final	Capacity
	DKH-X90-FFH	594x594x95mm	56/70	90	49/80 +- 20%	294	550/440
Measuring method : ASHRAE 52.1 & 52.2 Initial Resist							

Measuring method : ASHRAE 52.1 & 52.2 Inflammability : UL Class 900 Other sizes are available upon request

Material and Operating Conditions

Media	Synthetic fiber
Cell side	Cardboad
Continuos max temperature	93°C

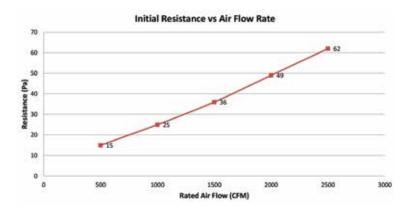
Outer Dimension Diagram



FRONT VIEW

SIDE VIEW

Initial Resistance DeaKleen GT





Standard Synthetic Fiber Pre-filter

DeaKleen Anti-Microbial

- · Pre-filter for HVAC applications
- · Low pressure drop pleated design resulting in lower energy cost
- Disposable pleated panel filter •
- Robust construction for reliable construction .
- Moisture resistant beverage board
- · Mixture of cotton and synthetic fiber
- · Alternative frame available upon request

Specification

Туре	Nominal Size	Nominal Size Actual Size W×H×D (in) WxHxD (mm)	Air Flow CMM / CFM	No of Pleats		Average Arrestance Efficiency (%)		Final Resistance
				Fleats	EN779	ASHRAE	Resistance (Pa)	(Pa)
	12x24x2	290x594x44	28 / 1000	15				
	20x24x2	492x594x44	47 / 1680	24			63	
SP	24x24x2	594x594x44	56 / 2000	28		Merv 8		
J.	12x24x4	290x594x95	28 / 1000	19		(30-35%)		
	20x24x4	492x594x95	47 / 1680	17			50	
	24x24x4	594x594x95	56 / 2000	21				
	12x24x1	290x594x22	28 / 1000	14			68	
	20x24x1	492x594x22	47 / 1680	24				
	24x24x1	594x594x22	56 / 2000	28				-
	12x24x2	290x594x44	28 / 1000	15			63	
	20x24x2	492x594x44	47 / 1680	24				
SU	24x24x2	594x594x44	56 / 2000	28				
	12x24x4	290x594x95	28 / 1000	10				
	20x24x4	492x594x95	47 / 1680	17	G4		50	250
	24x24x4	594x594x95	56 / 2000	21	(90-92%)			
	12x24x2	290x594x44	28 / 1000	11		Merv 7		
	20x24x2	492x594x44	47 / 1680	17		(25-30%)		
00	24x24x2	594x594x44	56 / 2000	21			63	
SD	12x24x4	290x594x95	28 / 1000	9				
	20x24x4	492x594x95	47 / 1680	14			50	
	24x24x4	594x594x95	56 / 2000	18				
	12x24x2	290x594x44	28 / 1000	8				
	20x24x2	492x594x44	47 / 1680	12			63	
EC	24x24x2	594x594x44	56 / 2000	15				
EC	12x24x4	290x594x95	28 / 1000	7				
	20x24x4	492x594x95	47 / 1680	12			50	
	24x24x4	594x594x95	56 / 2000	15				

Measuring method : ASHRAE 52.1 & 52.2

Inflammability : UL Class 900 Other sizes are available upon request

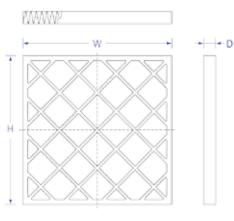
Material And Operating Condition

Cellside	Beverage Board, Double Wall
Media	Special Synthetic Fiber
Maximum Operating Temperature	93°C
Support Grid	Welded Wire Mesh Support Grid

• Anti-microbial (intercept) Feature

- 1. Safe antimicrobial (intercept) for human & environment The harmless intercept is safe to human and environment.
- 2. Wide range of trapping performance The efficiency performance, air flow, pressure drop of filter impregnated with antimicrobial (intercept) is no different from standard filter.
- 3. Exceptional anti-microbial effect Strengthen to deal with gram-negative bacteria. Antimicrobial effect is permanent & continuous.

Outer Dimension Diagram



Initial Resistance +/-10%



Initial Resistance +/-10%



Metal Type Pre-filter

Grease Filter

- · Standard, permanent type, metal washable filters
- For air or Grease Applications
- G2 class as per EN779
- · Multiple layers of corrugated fine mesh and expanded metal media
- Available as standard 1", 2" & 4" depths
- Customize frames & other sizes are possible
- · Completely washable

Specification

Nominal Size	Actual Size	Air Flow	(CMM/CFM)	Resista	I nce (Pa)
W×H×D (in)	W×H×D (mm)	@2.5 m/s	@3.2 m/s	Initial	
12x24x2	290x594x44	28 / 1000	35 / 1250	25@2.5 m/a	100
24x24x2	594x594x44	56 / 2000	70 / 2500	25@2.5 m/s	100

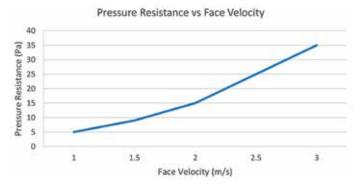
Measuring method : EN779

Other sizes are available upon request

Material And Operating Condition

Cellside	Stainless Steel, Galvanized Steel
Media	Stainless Steel, Aluminium (Multiple layers of corrugated and fine mesh expanded metal sheets)
Maximum Operating Temperature	up to 300°C

Airflow Resistance



* Filter size: 24x24x2"





Synthetic Type Medium High Performance Filter

MiraDeep Borsa

- Available in efficiencies M6, F7, F8 and F9
- · Long life, high dust holding capacity
- Aerodynamically designed pocket configuration
- · Synthetic media with sturdy construction
- · Easy installation
- Available for header size 21mm and 25mm

Specification

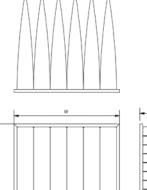
		No	Rated	F	Rated Initial R	esistance (Pa)		Final
Nominal Size W×H×D (in)	Actual Size W×H×D (mm)	No. of Pockets	Air Flow CMM / CFM	M6 60-65% MERV 11	F7 80-85% MERV 13	F8 90 - 95% MERV 14	F9 > 95% MERV 15	Resistance (Pa)
24x24x36	594×594×900	10	56 / 2000	65	75	85	95	
24x24x36	594×594×900	8	56 / 2000	50	60	65	72	
24x24x36	594x594x900	6	56 / 2000	55	65	70	77	
12x24x36	289×594×900	4	28 / 1000	50	60	65	72	
12x24x36	289x594x900	3	28 / 1000	55	65	70	77	
24x24x30	594×594×750	10	56 / 2000	65	70	85	95	
24x24x30	594×594×750	8	56 / 2000	55	65	78	86	
24x24x30	594x594x750	6	56 / 2000	60	75	90	100	
12x24x30	289×594×750	5	28 / 1000	65	70	85	95	
12x24x30	289x594x750	4	28 / 1000	55	65	78	86	
12x24x30	289x594x750	3	28 / 1000	60	75	90	100	450
24x24x21	594×594×530	10	56 / 2000	90	95	135	149	1
24x24x21	594×594×530	8	56 / 2000	85	105	130	143	
24x24x21	594x594x530	6	56 / 2000	90	120	140	154	
12x24x21	289×594×530	5	28 / 1000	90	95	135	149	
12x24x21	289x594x530	4	28 / 1000	85	105	130	143	
12x24x21	289x594x530	3	28 / 1000	90	120	140	154	
24x24x15	594x594x380	8	56 / 2000	80	130	145	160	
12x24x15	289x594x380	4	28 / 1000	80	130	145	160	
24x24x15	594x594x380	6	56 / 2000	85	135	180	200	
12x24x15	289x594x380	3	28 / 1000	85	135	180	200	

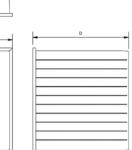
Measurement method : ASHRAE 52.1 & 52.2 EN779 Inflammability : UL Class 900 Other sizes are available upon request

Operating Condition

Operating Temperature	70°C
Usage Humidity Limit (continuous)	95%RH

Outer Dimension Diagram



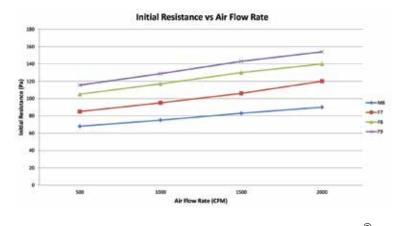


Material

Header	Galvanized steel (Single Header)
Media	Synthetic Fiber

Initial Resistance +/-10%

Initial Resistance for MiraDeep Borsa





Fibre Glass Type Medium High Performance Filter

MiraDeep Borsa FG

- Available in efficiencies M6, F7 and F8
- Long life, high dust holding capacityLow pressure resistance using new stitching technology
- · Aerodynamically pattern pocket for optimum airflow

Specification

Nominal Size	Actual Size	No.	AirFlow	Weight	Average Efficiency	Pressure Re	esistance(Pa)
W×H×D (in)	W×H×D (mm)	of Pockets	CMM /CFM	(kg)	(%)	Initial	Final
24x24x36	594×594×920	6	56 / 2000	2.3		118	
12x24x36	289×594×920	3	28 / 1000	1.3	F8 90-95%	118	
24x24x20	594×594×514	8	56 / 2000	2.2	MERV 14	167	
12x24x20	289×594×514	4	28 / 1000	1.3		167	
24x24x36	594×594×920	6	56 / 2000	2.3		78	
12x24x36	289×594×920	3	28 / 1000	1.3	F7	78	450
24x24x20	594×594×514	8	56 / 2000	2.2	80-85% MERV 13	118	450
12x24x20	289×594×514	4	28 / 1000	1.3	-	118	
24x24x36	594×594×920	6	56 / 2000	2.3		59	
12x24x36	289×594×920	3	28 / 1000	1.3	M6	59	
24x24x20	594×594×514	8	56 / 2000	2.2	60-65% MERV 11	78	
12x24x20	289×594×514	4	28 / 1000	1.3		78	
leasurement method : ASHRAE 52.1 & 52.2 EN779 Initial Resistance +/-10							

Inflammability : UL Class 900 Other sizes are available upon request

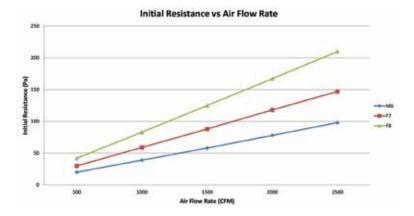
Operating Condition

Maximum Temperature	70°C
Usage Hwumidity Limit (Continuous)	95%RH

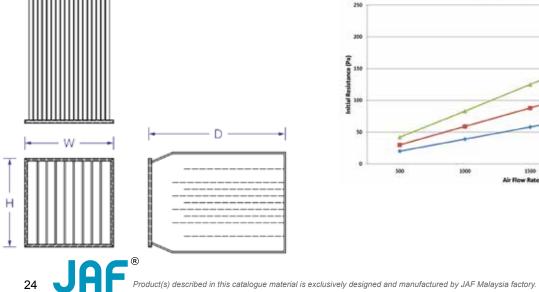
Material

Неа	ader	Galvanized Steel (Single header)
Me	dia	Glass Fiber

Initial Resistance for MiraDeep Borsa FG



Outer Dimension Diagram





Rigid Type Medium High Efficiency Filter

MiraCel MB

- · Available in efficiencies M5, M6, F7 and F8
- · Includes an enclosing frame of corrosion-resistant galvanized steel
- Includes unique bridge style plastic contour
- Stabilizers on the air entering and air exiting sides, to ensure pleat support through turbulent or varying airflows.

Specification

Nominal Size	Actual Size	Air Flow Average Efficie	Average Efficiency	Resistanc	tance (In. W.G)	
WxHxD (mm)	WxHxD (mm)	CMM / CFM		Initial	Final	
24x24x12	594x594x292	56 / 2000				
20x24x12	492x594x292	47 / 1680	F8 90-95%	104		
20x20x12	492x492x292	40 / 1430	- 90-95% MERV 14	104		
12x24x12	289x594x292	28 / 1000				
24x24x12	594x594x292	56 / 2000				
20x24x12	492x594x292	47 / 1680	F7			
20x20x12	492x492x292	40 / 1430	80-85% MERV 13	77	075	
12x24x12	289x594x292	28 / 1000				
24x24x12	594x594x292	56 / 2000			375	
20x24x12	492x594x292	47 / 1680	M6	44		
20x20x12	492x492x292	40 / 1430	60-65% MERV 11			
12x24x12	289x594x292	28 / 1000				
24x24x12	594x594x292	56 / 2000				
20x24x12	492x594x292	47 / 1680	M5 40-45% MERV 10	10		
20x20x12	492x492x292	40 / 1430		42		
12x24x12	289x594x292	28 / 1000				

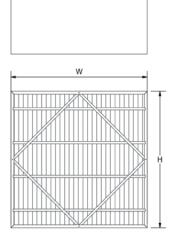
Measurement method : ASHRAE 52.1 & 52.2 EN779

Inflammability : UL Class 900 Other sizes are available upon request

Operating Condition

Maximum Operating Temperature	93°C
Usage Humidity Limit (continuous)	95%RH

Outer Dimension Diagram



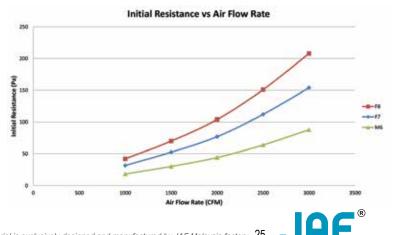
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Material

Cellside	Galvanized Steel
Media	Meltblown synthetic media protected by a scrim on the air leaving side
Header	Double Header, Single Header and None Header

Initial Resistance +/-10%

Initial Resistance for MiraCel MB





Mini-Pleat Type Medium High Efficiency Filter

MiraCel II MH

- Available in efficiency M6, F7, F8 and F9
- Available for single header (SH), double header (DH), and none header (NH)
- 4" deep high efficiency, light weight, reduce shipping cost and storage space
- Easy Handling, installation and removal
- · Microglass paper with water repellent binder
- Available with anti-microbial

Specification

Nominal Size Actual S	Actual Size		Average Efficiency	Pressure Resistance (Pa)	
	W×H×D (mm)		(%)	Initial	Final
12x24x4	289x594x95/105	28 / 1000	F8		375
20x24x4	492x594x95/105	46 / 1643	90-95% MERV 14	165	
24x24x4	594x594x95/105	56 / 2000			
12x24x4	289x594x95/105	28 / 1000	F7 80-85% MERV 13	145	
20x24x4	492x594x95/105	46 / 1643			
24x24x4	594x594x95/105	56 / 2000			
12x24x4	289x594x95/105	28 / 1000	M6 60-65%	95	
20x24x4	492x594x95/105	46 / 1643			
24x24x4	594x594x95/105	56 / 2000	MERV 11		

Inflammability : UL Class 900 Other sizes are available upon request

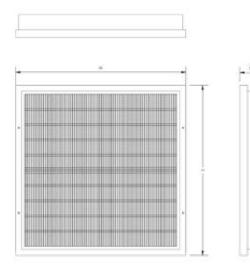
Operating Condition

Maximum Temperature	70°C
Usage Humidity Limit (Continuous)	95%RH

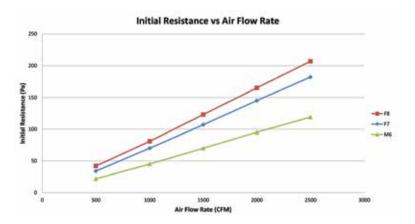
Material

Cellside	Galvanized steel
Media	Fiber Glass
Separator	Hot Melt
Sealant	Adhesive

Outer Dimension Diagram









Specification

Mini-Pleat Type Medium High Efficiency Filter

MiraCel II

- Available in efficiencies M6, F7, F8 and F9
- 4" depth, light weight, reduce shipping cost and storage space
- Easy handling, installation and removal
- Highly moisture resistance and sturdy beverage board frameMicroglass paper with water repellent binder
- Available with anti-microbial

Nominal Size	Actual Size	Air Flow	Average Efficiency	Pressure Resistance (Pa)		
W×H×D (in)	W×H×D (mm)		(%)	Initial	Final	
12x24x4	289x594x95	28 / 1000	F8			
20x24x4	492x594x95	46 / 1643	90-95% MERV 14	165	375	
24x24x4	594x594x95	56 / 2000				
12x24x4	289x594x95	28 / 1000	F7 80-85% MERV 13	145		
20x24x4	492x594x95	46 / 1643				
24x24x4	594x594x95	56 / 2000				
12x24x4	289x594x95	28 / 1000	M6	95		
20x24x4	492x594x95	46 / 1643	60-65%			
24x24x4	594x594x95	56 / 2000	MERV 11			

Measurement method : ASHRAE 52.1 & 52.2 EN779 Inflammability : UL Class 900 Other sizes are available upon request

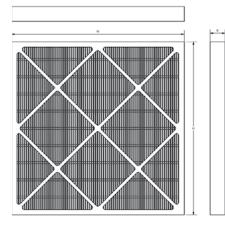
Operating Condition

Maximum Operating Temperature	70°C
Usage Humidity Limit (Continuous)	95%RH

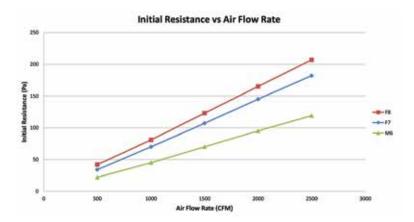
Material

Cellside	Beverage Board / Galvanized Steel
Media	Fiber Glass
Separator	Hot Melt
Sealant	Adhesive

Outer Dimension Diagram



Initial Resistance for MiraCel II





Initial Resistance +/-10%



Standard Type Medium High Efficiency Filter

MiraCel & MiraCel with Antimicrobial

- Available in M6, F7, F8 and F9
- · Box type filer with wet-laid fine sheet media ideal for high humidity application
- Easy Installation
- Available in 6" and 12" depth •
- · Available for High Temperature Operation

Specification

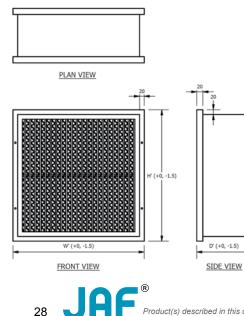
Nominal Size	Nominal Size W×H×D (in)Actual Size W×H×D (mm)Air Flow CMM / CFMWeight (kg)Average Efficiency (%)	Pressure Resistance (Pa)				
		Initial	Final			
24x24x12	594×594×292	56 / 2000	7.4			
12x24x12	289×594×292	28 / 1000	4.5		145	375
20x24x12	492×594×292	46 / 1643	5.5	F8		
24x24x6	594×594×149	28 / 1000	3.8	90-95% MERV 14		
12x24x6	289×594×149	14 / 500	2.3		88	375
20x24x6	492×594×149	23 / 822	2.8			
24x24x12	594×594×292	56 / 2000	6.9	F7 80-85% MERV 13	130	375
12x24x12	289×594×292	28 / 1000	4.3			
20x24x12	492×594×292	46 / 1643	5.3			
24x24x6	594×594×149	28 / 1000	3.5		70	
12x24x6	289×594×149	14 / 500	2.2			375
20x24x6	492×594×149	23 / 822	2.7			
24x24x12	594×594×292	56 / 2000	6.9		97	
12x24x12	289×594×292	28 / 1000	4.3	M6 60-65% MERV 11		375
20x24x12	492×594×292	46 / 1643	5.3			
24x24x6	594×594×149	28 / 1000	3.5			
12x24x6	289×594×149	14 / 500	2.2		40	375
20x24x6	492×594×149	23 / 822	2.7			

Measurement method : ASHRAE 52.1 & 52.2 EN 779 Inflammability : UL Class 900 Other size are available upon request

Operating Condition

Maximum Operating Temperature	93°C
Usage Humidity Limit (Continuous)	95%RH

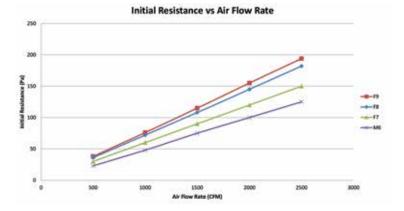
Outer Dimension Diagram



Material

Cellside	Galvanized Steel
Media	Fiber Glass
Seperator	Aluminium
Sealant	Polyurethane
Header	Single, Double or None

Initial Resistance for MiraCel





High Temperature Type Medium High Efficiency Filter

MiraCel HT

- Available in efficiency M6, F7, F8 and F9
- High temperature operation
- · Aluminium separator to maintain media structure
- · Secondary filter for automobile and Industrial coating lines at hot air ovens

Specification

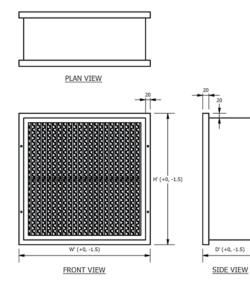
Nominal Size	minal Size Actual Size Air Flow Weight Average Efficiency	Pressure Resistance (Pa				
	W×H×D (mm)	CMM / CFM	(kg)	(%)	Initial	Final
24x24x12	594×594×292	56 / 2000	7.4			
12x24x12	289×594×292	28 / 1000	4.5		145	375
20x24x12	492×594×292	46 / 1643	5.5	F8		
24x24x6	594×594×149	28 / 1000	3.8	90-95% MERV 14		375
12x24x6	289×594×149	14 / 500	2.3		88	
20x24x6	492×594×149	23 / 822	2.8			
24x24x12	594×594×292	56 / 2000	6.9	-	130	375
12x24x12	289×594×292	28 / 1000	4.3			
20x24x12	492×594×292	46 / 1643	5.3	F7		
24x24x6	594×594×149	28 / 1000	3.5	- 80-85% - MERV 13	70	375
12x24x6	289×594×149	14 / 500	2.2			
20x24x6	492×594×149	23 / 822	2.7			
24x24x12	594×594×292	56 / 2000	6.9		97	
12x24x12	289×594×292	28 / 1000	4.3	M6 60-65% MERV 11		375
20x24x12	492×594×292	46 / 1643	5.3			
24x24x6	594×594×149	28 / 1000	3.5			
12x24x6	289×594×149	14 / 500	2.2		40	375
20x24x6	492×594×149	23 / 822	2.7			

Inflammability : UL Class 900 Other size are available upon request

Operating Condition

Maximum Operating Temperature	200°C
Usage Humidity Limit (Continuous)	95%RH

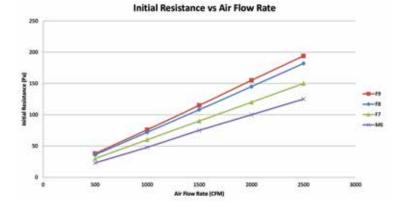
Outer Dimension Diagram



Material

Cellside	Galvanized Steel
Media	Fiber Glass
Seperator	Aluminium
Sealant	Fiber Glass
Header	Single, Double or None

Initial Resistance for MiraCel HT





Standard Type Medium High Efficiency Filter

MiraCel GT

Description

· MiraCel GT high efficiency filters are designed to work under extreme operating conditions where severe surging or pulsation occur. Available in high efficiency, high dust holding capacity, low average operating resistance, light weight, easy to install, longer life than standard filters and less filter change out.

Application

· MiraCel GT are heavy duty filters for use in ventilation systems with high efficiency requirements, even under extreme operating conditions such as those found in gas turbines, centrifugal compressors, and similar equipments.

MiraCel GT - Rm

Model Number	RM 60	RM 60	RM 90	RM 90	
Nominal filter size (inch)	24x24x12	24x24x6	24x24x12	24x24x6	
Actual filter size (mm) W x H x D	594x594x292	594x594x149	594x594x292	594x594x149	
Rated air flow (CMH / CFM)	3400 / 2000	1700 / 1000	3400 / 2000	1700 / 1000	
Initial resistance at rated air flow (Pa / inWG)	135 / 0.53	135 / 0.53	180 / 0.70	180 / 0.70	
Recommended final resistance (Pa / inWG)	635 / 2.5	635 / 2.5	635 / 2.5	635 / 2.5	
Average atmosphere dust spot efficiency (%)	66	66	88	88	
Average arrestance by weight on AC Fine Test Dust (%)	98	98	99	99	
Media type	Fine woven glass mat				
Temperature limit	Up to 120° C continuous				

Measurement method : ASHRAE 52.1 & 52.2 EN779 Inflammability : UL Class 900

Initial Resistance +/-10%

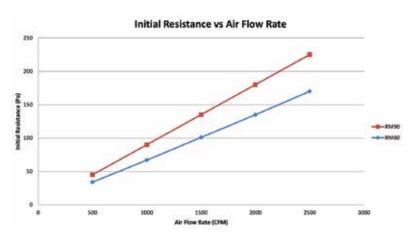
Material and operating Condition

Cellside	Galvanised steel
Header	Galvanised steel
Media	Moisture resistant with graduated density fibre glass media
Faceguard	Welded Galvanized Steel wire
Separators	Aluminium / PET
Gasket	Neoprene and other options
	Polyurethene sealand or fibre glass
Recommended Final Resistant	630 Pa or 2.5 in w.g.
Temperature	Up to 80°C for XW model, Up to 150°C for RM, XL and XN
Filter Class	Refer to technical data

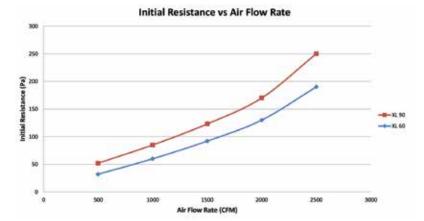
MiraCel GT-XL

Туре	XL 60	XL 90
Nominal filter size (inch)	24x24x12	24x24x12
Actual filter size (mm) W x H x D	594x594x292	594x594x292
Initial resistance (Pa / inWG)		
at 4250 CMH or 2500 CFM	190 / 0.75	250 / 1.00
at 3400 CMH or 2000 CFM	130 / 0.51	170 / 0.67
Final resistance (Pa / inWG)	635 / 2.5	635 / 2.5
Average atmosphere dust spot efficiency (%)	70	90
Average arrestance by weight on AC fine test dust (%)	98.2	99.95
Media type	Fiber glass	
Temperature limit	Up to	120°C

Initial Resistance for MiraCel GT RM



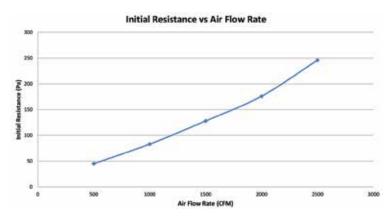
Initial Resistance for MiraCel GT XL



MiraCel GT-XW

Туре	XW 98
Nominal filter size (inch)	24x24x12
Actual size (mm) W x H x D	592x592x292
Initial resistance (Pa / inWG)	
at 4250 CMH / 2500 CFM	246 / 0.96
at 3400 CMH / 2000 CFM	176 / 0.70
Final resistance (Pa / inWG)	635 / 2.5
Burst pressure (Pa / inWG)	> 6400
Average efficiency (%)	97
Average arrestance on AC fine test dust (%)	100

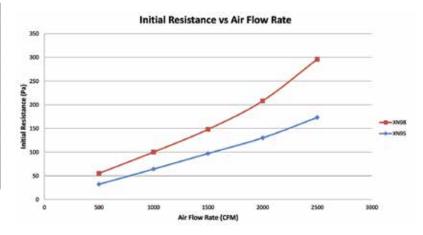
Initial Resistance for MiraCel GT XW



MiraCel GT-XN

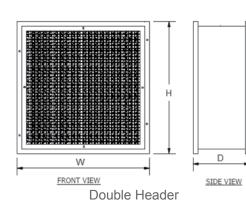
Туре	XN 95	XN 98
Nominal filter size (inch)	24x24x12	24x24x12
Actual size (mm) W x H x D	592x592x292	592x592x292
Initial resistance (Pa / inWG)		
at 4250 CMH / 2500 CFM	173 / 0.68	296 / 1.16
at 3400 CMH / 2000 CFM	130 / 0.51	208 / 0.82
Final resistance (Pa / inWG)	635 / 2.5	635 / 2.5
Burst pressure (Pa / inWG)	> 6400	> 6400
Average efficiency (%)	94	96
Average arrestance on AC fine test dust (%)	100	100

Initial Resistance for MiraCel GT XN



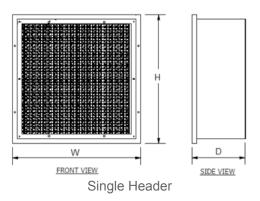
Outer Dimension Diagram







PLAN VIEW







High Air Flow Type Medium High Efficiency Filter

MiraCel V

- Available in efficiencies M6, F7, F8 and F9
- Designed for high air volume application
- More media areas with low pressure drop
- longer lifespan
- Low energy consumption

Specification

Nominal Size	Nominal Size Actual Size Air Flow Weight	Weight	Average Efficiency	Pressure Resistance (Pa)		
W×H×D (in)	W×H×D (mm)		(kg)	(%)	Initial	Final
24x12x12	592x287x292	28 / 1000	5	F9	130	
24x24x12	592x592x292	56 / 2000	8.5	>95% MERV 15		
24x12x12	592x287x292	28 / 1000	5	F8	440	
24x24x12	592x592x292	56 / 2000	8.5	90-95% MERV 14	110	- 500
24x12x12	592x287x292	28 / 1000	5	F7 80-85%	90	500
24x24x12	592x592x292	56 / 2000	8.5	MERV 13	90	
24x12x12	592x287x292	28 / 1000	5	M6 60-65%	85	
24x24x12	592x592x292	56 / 2000	8.5	MERV 11		

Measurement method : ASHRAE 52.1 & 52.2 EN779

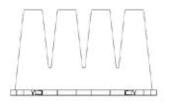
Inflammability : UL Class 900 Other sizes are available upon request

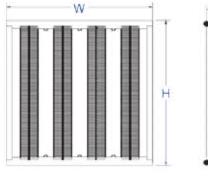
Operating Condition

Maximum Temperature	70°C
Usage Hwumidity Limit	95%RH
(Continuous)	(no dew condensation)

Please discuss for high temperature.

Outer Dimension Diagram (ABS Frame)







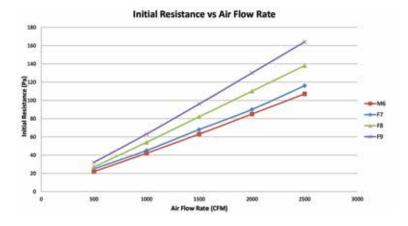
Material

Cellside	ABS
Media	Fiber Glass
Separator	Hot Melt
Sealant	Polyurethane
Header	Neoprene

Initial Resistance +/-10%

Standard position for gasket is upstream.

Initial Resistance for MiraCel V





High efficiency filter for rotating machinery

MiraCel V GT

Description

MiraCel V GT high efficiency filters are designed to work under extreme operating conditions where severe surging or pulsation occur. Available in high efficiency, high dust holding capacity, low average operating resistance, light weight, easy to install, longer life than standard filters and less filter change out.

· Application

MiraCel V GT are heavy duty filters for use in ventilation systems with high efficiency requirements, even under extreme operating conditions such as those found in gas turbines, centrifugal compressors, and similar equipments.

Specification

MiraCel V GT	Normal Actual Size				Media	Filter class	Average	Average arrestance on AC
	Size W×H×D (mm)	W×H×D (mm)	at 4250 CMH / 2500 CFM	at 3400 CMH / 2000 CFM	area (M²/ft²)	EN779/ EN1822	efficienct EN 779	fine test dust(%)
60	24x24x12	592x592x292	90 / 0.36	60 / 0.24	18.2 / 196	F6	60/65%	98
90	24x24x12	592x592x292	100 / 0.4	75 / 0.3	18.2 / 196	F7	80/90%	99
95	24x24x12	592x592x292	120 / 0.48	90 / 0.36	18.2 / 196	F8	90-95%	99.9
98	24x24x12	592x592x292	170 / 0.67	130 / 0.52	18.2 / 196	F9	>95%	99.9
100	24x24x12	592x592x292	225 / 0.9	185 / 0.73	18.2 / 196	E10	>99%	100

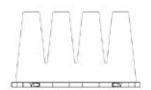
Measurement method : ASHRAE 52.1 & 52.2 EN779 Inflammability : UL Class 900

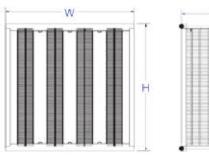
Initial Resistance +/-10%

Material And Operating Condition

Cellside	ABS
Header	Single Header
Media	Moisture resistant with graduated density fiber glass media Galvanize & Steel
Faceguard	Epoxy coated or Plastic
Separators	Hotmelt
Gasket	Neoprene and other option
Sealant	Polyurethane
Temperature	Up to 70°C
Recommended final Resistance	635 Pa or 2.5 in WG

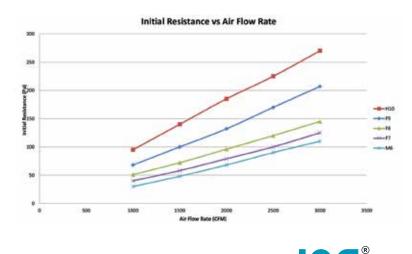
Outer Dimension Diagram (ABS Frame)







Initial Resistance for MiraCel V GT





Standard Type ULPA Filter

LunaCel ULPA

- ULPA filter has better performance than HEPA filter
- 99.9995% efficiency and above for 0.12µm particles
- · Show effectiveness as super clean room for semiconductors, medical, microorganism lab field

Specification

Nominal Size	Actual Size	Air Flow	Weight	Effciency	Pressure Re	sistance (Pa)
W×H×D (in)	W×H×D (mm)	CMM/CFM	(kg)		Initial	Final
12x12x6	305×305×149	3.5/125	3.5			
12x24x6	305×610×149	7/250	5			
24x24x6	610×610×149	14/500	7.5			
30x24x6	762×610×149	17.5/625	9	99.9995 (U15)		
36x24x6	915×610×149	21/750	10.5		250	500
48x24x6	1220×610×149	28/1000	13.5		200	
12x12x12	305×305×292	7/250	6			
12x24x12	305×610×292	14/500	8.5			
24x24x12	610×610×292	28/1000	13.5			
30x24x12	762×610×292	35/1250	15.5			
easuring method: IES	-RP-1 & EN1822					Initial Resistance +/-1

Inflammability: UL Class 900 Other sizes are available upon request

Operating Condition

Operating Temperature	70°C
Usage Humidity Limit (Continuous)	95%RH (no dew condensation) (However, craft paper: 85%)

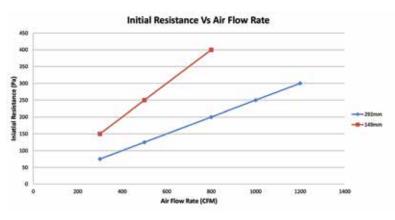
Please discuss for high temperature.

Material

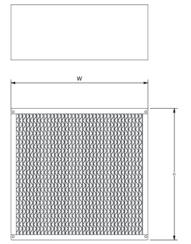
Cellside	Plywood, G.I., Stainless Steel, Galvanize Steel MDF			
Media	Fiber Glass			
Separator	Aluminium			
Sealant	Polyurethane			
Gasket	EPDM, Neoprene			

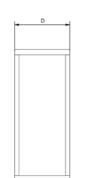
Standard position for gasket is upstream.

Initial Resistance for LunaCel ULPA



Outer Dimension Diagram







Very High Air Capacity HEPA Filter

LunaCel TS

- · Low pressure drop
- · Reduces energy cost
- · High efficiency for final filtration in air conditioning systems filter housings and diffusers
- Available for efficiency H13, H14, U15 and above

Specification

Nominal Size Actua	Actual Size		Weight Effciency (kg) (% @ 0.3μm)	Pressure Resistance (Pa)		
W×H×D (in)	W×H×D (mm)				Initial	Final
12x12x6	305×305×149	7 / 250	4			
12x24x6	305×610×149	14 / 500	5.5			
24x24x6	610×610×149	28 / 1000	8			
30x24x6	762×610×149	35 / 1250	9.5			
36x24x6	915×610×149	42 / 1500	11	99.99 and above	230	750
48x24x6	1220×610×149	56 / 2000	14	(H13)	200	100
12x12x12	305×305×292	14 / 500	7			
12x24x12	305×610×292	28 / 1000	10.5			
24x24x12	610×610×292	56 / 2000	17			
30x24x12	762×610×292	70 / 2500	20			

Measuring method: IES-RP-1 & EN1822

Inflammability: UL Class 900 Other sizes are available upon request

Operating Condition

Operating Temperature	70°C
Usage Humidity Limit	95%RH (no dew condensation)
(Continuous)	(however craft paper: 85%RH)

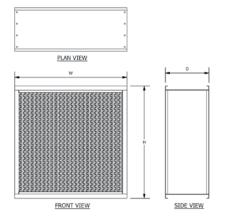
High Temperature filters available upon request

Material

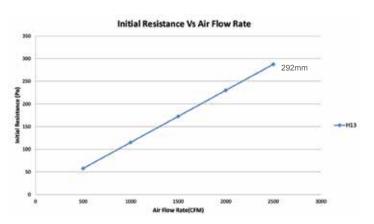
Cellside Wide	Plywood, MDF, Galvanized Steel, Stainless Steel, Aluminium, Gel Seal
Media	Fiber Glass
Separator	Aluminium, PET
Sealant	Polyurethane
Gasket	EPDM, Neoprene

Standard position for gasket is upstream.

Outer Dimension Diagram

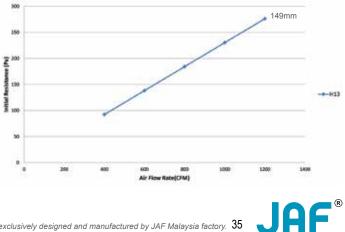


Initial Resistance for LunaCel TS



Initial Resistance +/-10%







High Air Capacity HEPA Filter

LunaCel HC

- · Ultra-fine fire retardant fibreglass
- · Galvanized steel, anodized aluminium, stainless steel, MDF, plywood with various separator construction options. Standard depth 292mm & 149mm
- Available for efficiency H13 and H14
- Dry seal and gel seal are available

Specification

Nominal Size	Actual Size Air Flow	Weight	Effciency	Pressure Re	sistance (Pa)	
W×H×D (in)	W×H×D (mm)	CMM/CFM	(kg)	(% @ 0.3µm)	Initial	Final
12x12x6	305×305×149	7 / 250	3.5			
12x24x6	305×610×149	14 / 500	5			
24x24x6	610×610×149	28 / 1000	7.5			
30x24x6	762×610×149	35 / 1250	9			
36x24x6	915×610×149	42 / 1500	10.5	99.99 and above	350	750
48x24x6	1220×610×149	56 / 2000	13.5	(H13)		100
12x12x12	305×305×292	14 / 500	6			
12x24x12	305×610×292	28 / 1000	9.5			
24x24x12	610×610×292	56 / 2000	16			
30x24x12	762×610×292	70 / 2500	19			
easuring method: IES	-RP-1 & EN1822		1	1	1	Initial Resistance +/

Inflammability: UL Class 900 Other sizes are available upon request

Operating Condition

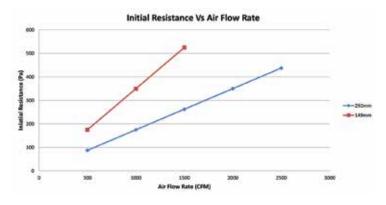
Operating Temperature	70°C
Usage Humidity Limit	95%RH (no dew condensation)
(Continuous)	(however craft paper: 85%RH)

Material

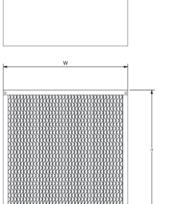
Cellside Wide	Plywood, MDF , Galvanized Steel, Stainless Steel, Aluminium, Gel Seal
Media	Fiber Glass
Separator	Aluminium, PET
Sealant	Polyurethane
Gasket	EPDM, Neoprene

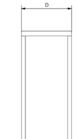
Standard position for gasket is upstream.

Initial Resistance for LunaCel HC



Outer Dimension Diagram







Standard Type HEPA Filter

LunaCel STD

- · Ultra-fine fire retardant fibreglass
- · Galvanized steel, anodized aluminium, stainless steel, MDF, Plywood with various separator construction options.
- Standard depth 292mm & 149mm
- Available for efficiency H13 and H14
- Dry seal and gel seal are available

Specification

Nominal Size		Air Flow	Weight	Effciency	Pressure Resistance (Pa)		
W×H×D (in)		Initial	Final				
12x12x6	305×305×149	3.5 / 125	3		250 5		
12x24x6	305×610×149	7 / 250	4.5				
24x24x6	610×610×149	14 / 500	6.5				
30x24x6	762×610×149	17.5 / 625	8	99.99 and above (H13)			
36x24x6	915×610×149	21 / 750	9.5			500	
48x24x6	1220×610×149	28 / 1000	12			200	
12x12x12	305×305×292	7 / 250	5.5				
12x24x12	305×610×292	14 / 500	8				
24x24x12	610×610×292	28 / 1000	13				
30x24x12	762×610×292	35 / 1250	15				
easuring method: IES	-RP-1 & EN1822					Initial Resistance +/-1	

Inflammability: UL Class 900 Other sizes are available upon request

Operating Condition

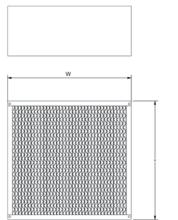
Operating Temperature	70°C
Usage Humidity Limit	95%RH (no dew condensation)
(Continuous)	(however craft paper: 85%RH)

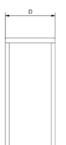
Material

Cellside Wide	Plywood, MDF, Galvanized Steel, Stainless Steel, Aluminium, Gel Seal
Media	Fiber Glass
Separator	Aluminium, PET
Sealant	Polyurethane
Gasket	EPDM, Neoprene

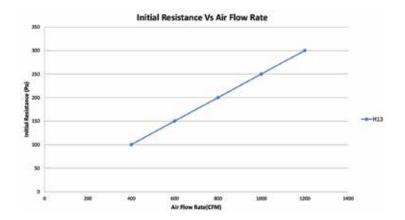
Standard position for gasket is upstream.

Outer Dimension Diagram





Initial Resistance for LunaCel STD







High Temperature HEPA Filter

LunaCel HT

- High temperature filter up to 250°C
- Ultra-fine fire retardant fibreglass
- Galvanized steel and stainless steel
- Standard depth 292mm & 149mm
- Available for efficiency H13 and H14

Specification

Nominal Size	ominal Size W×H×D (in)Actual Size W×H×D (mm)Air Flow CMM/CFMWeight (kg)Effciency (% @ 0.3μm)	Air Flow	Weight	Effciencv	Pressure Resistance (Pa)	
W×H×D (in)		Initial	Final			
12x12x6	305×305×149	7 / 250	3.5			
12x24x6	305×610×149	14 / 500	5			
24x24x6	610×610×149	28 / 1000	7.5			
30x24x6	762×610×149	35 / 1250	9			
36x24x6	915×610×149	42 / 1500	10.5	99.99 and above	350	750
48x24x6	1220×610×149	56 / 2000	13.5	(H13)	000	100
12x12x12	305×305×292	14 / 500	6			
12x24x12	305×610×292	28 / 1000	9.5			
24x24x12	610×610×292	56 / 2000	16			
30x24x12	762×610×292	70 / 2500	19			

Measuring method: IES-RP-1 & EN1822

Inflammability: UL Class 900 Other sizes are available upon request

Operating Condition

Operating Temperature	up to 250°C
Usage Humidity Limit	95%RH (no dew condensation)
(Continuous)	(however, craft paper: 85%RH)

Please discuss for high temperature.

Material

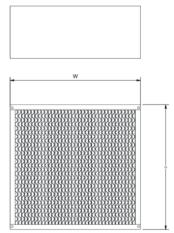
Otainland Otael, Oshuaninad Otael
Stainless Steel, Galvanized Steel
Fiber Glass
Aluminium
Red Silicone
Red Silicone

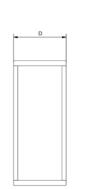
Initial Resistance +/-10%

Standard position for gasket is upstream.

Initial Resistance for LunaCel HT









Standard Type EPA Filter

LunaCel E10

- + 95% efficiency and above for $0.3 \mu m$ particles
- Resistance is largely lower compared to HEPA filter yet having better efficiency than middle-high efficiency filter, which can contribute lower running cost

Specification

Nominal Size W×H×D (in)Actual Size W×H×D (mm)Air Flow CMM/CFMWeight (kg)Effciency (% @ 0.3µm)	Actual Size	Air Flow	Weight	Effciencv	Pressure Resistance (Pa)	
	Initial	Final				
12x24x6	305×610×149	14 / 500	4.5	95% (E10)	237	500
24x24x6	610×610×149	28 / 1000	6.5			
12x24x12	305×610×292	28 / 1000	8			
24x24x12	610×610×292	56 / 2000	13			

Measuring method: IES-RP-1 & EN1822

Inflammability: UL Class 900 Other sizes are available upon request

Operating Condition

Operating Temperature	70°C
Usage Humidity Limit	95%RH (no dew condensation)
(Continuous)	(craft paper: 85%RH)

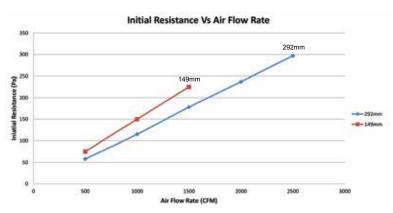
Please discuss for high temperature.

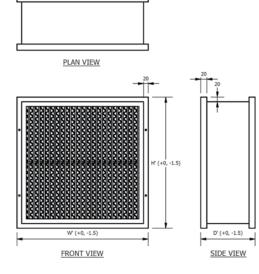
Material

Cellside	Plywood, Galvanized Steel, Stainless Steel, Aluminium, MDF
Media	Fiber Glass
Separator	Aluminium, PET
Sealant	Polyurethane
Gasket	Neoprene

Initial Resistance +/-10%

Initial Resistance for LunaCel E10









High Air Flow Type EPA Filter

LunaCel TS E10

- 95% efficiency and above for 0.3µm particles
- Low pressure drop
- · Reduces energy cost
- · High efficiency for final filtration in air conditioning systems, filter housings and Diffusers

Specification

Nominal Size	Actual Size	Air Flow	Weight	Effciency	Pressure Resistance (Pa)	
W×H×D (in)	W×H×D (mm)	CMM/CFM	(kg)	(% @ 0.3µm)	Initial	Final
12x12x6	305×305×149	7 / 250	3.5			
12x24x6	305×610×149	14 / 500	5			
24x24x6	610×610×149	28 / 1000	7.5			
30x24x6	762×610×149	35 / 1250	9			
36x24x6	915×610×149	42 / 1500	10.5	95% and above	157	500
48x24x6	1220×610×149	56 / 2000	13.5	(E10)	107	000
12x12x12	305×305×292	14 / 500	6			
12x24x12	305×610×292	28 / 1000	9.5			
24x24x12	610×610×292	56 / 2000	16			
30x24x12	762×610×292	70 / 2500	19			

Measuring method: IES-RP-1 & EN1822 Inflammability: UL Class 900 Other sizes are available upon request

Operating Condition

Operating Temperature	70°C
Usage Humidity Limit	95%RH (no dew condensation)
(Continuous)	(however craft paper: 85%RH)

Please discuss for high temperature.

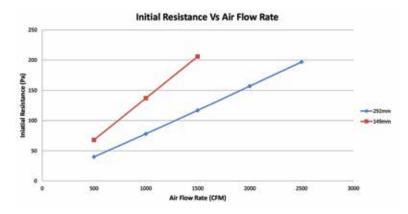
Material

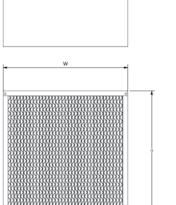
matorial	
Cellside	Plywood, Galvanized Steel, Stainless Steel, Aluminium, MDF
Media	Fiber Glass
Separator	Aluminium, PET
Sealant	Polyurethane
Gasket	Neoprene

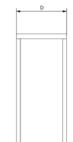
Initial Resistance +/-10%

Standard position for gasket is upstream.

Initial Resistance for LunaCel TS H10









Standard Type HEPA Filter

LunaKleen

- · Slim, light and compact type HEPA and ULPA filters
- Mini-pleat design
- Wide range of efficiency H13 to U17
- · Low off-gassing filter material to meet the cleanroom requirement
- 100% HEPA filter scan test for guaranteed performance
- Optional for gel seal

Specification

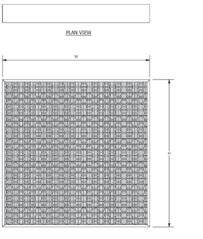
Iominal Size		Weight Effcienc	Effciency	Pressure Resistance (Pa)			
W×H×D (in)			Initial	Final			
12x12x3	305×305×69	2.5 / 88	2				
12x24x3	305×610×69	5.0 / 177	3				
24x24x3	610×610×69	10.0 / 355	5	99.9995	125		
30x24x3	762×610×69	12.6 / 443	6	(U15)	125		
36x24x3	915×610×69	15.0 / 532	7				
48x24x3	1220×610×69	20.0 / 709	9			500	
12x12x3	305×305×69	2.5 / 88	2		110		
12x24x3	305×610×69	5.0 / 177	3				
24x24x3	610×610×69	10.0 / 355	5	99.999			
30x24x3	762×610×69	12.6 / 443	6	(H14)			
36x24x3	915×610×69	15.0 / 532	7				
48x24x3	1220×610×69	20.0 / 709	9				
12x12x3	305×305×69	2.5 / 88	2		105		
12x24x3	305×610×69	5.0 / 177	3				
24x24x3	610×610×69	10.0 / 355	5	99.99			
30x24x3	762×610×69	12.6 / 443	6	(H13)			
36x24x3	915×610×69	15.0 / 532	7				
48x24x3	1220×610×69	20.0 / 709	9				

Inflammability: UL Class 900/FM Approval Other sizes are available upon request

Operating Condition

Operating Temperature	70°C
Usage Humidity Limit	95%RH Humidity
(Continuous)	(no dew condensation)

Outer Dimension Diagram



FRONT VIEW

D SIDE VIEW

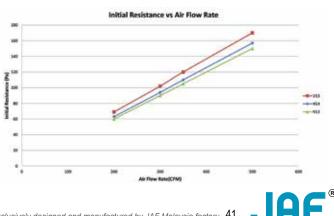
Material

Cellside	Anodized Aluminium
Media	Fiber Glass
Separator	Hot Melt
Faceguard	Anodized Aluminium, E.G Powder Baked
Sealant	Polyurethane
Gasket	EPDM, Neoprene, Gel Seal, Knife-edge, Joinless PU Gasket

Bothsides Come With Faceguard

Standard position for gasket is both up & downstream.

Initial Resistance for LunaKleen





PTFE Type HEPA / ULPA Filter

TetraKleen

- Ultra-high efficiency PTFE membrane
- Available for high efficiency H13, H14, U15, U16 and U17
- Ultra-low resistance to achieve optimum energy efficiency
- Negligible off-gassing properties (eg. boron, sodium, potassium, silicon)
 High durability media, minimize transportation cost, rough handling and installation damages
- High acid resistance to corrosive environment (acids, alkali, organic substances)

Specification

Nominal Size W×H×D (in)	Actual Size W×H×D (mm)	Air Flow (CMM / CFM)	Weight ^(kg)	Effciency (% @ 0.3µm/0.12µm)	Pressure Resistance (Pa)	
					Initial	Final
48x24x3	1220×610×69	20/709	9	99.9995 (U15)	85	
48x24x3	1220×610×69	20/709	9	99.999 (H14)	55	500
48x24x3	1220×610×69	20/709	9	99.99 (H13)	40	

Measurement method: IEST-RP-CC034.3 & EN1822

Inflammability: UL Class 900

Other size are available upon request

Operating Condition

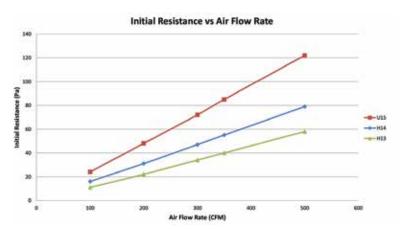
Operating Temperature	70°C
Usage Humidity Limit (Continuous)	95%RH Humidity

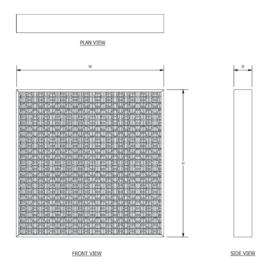
Material

Media	PolyTetra FluoroEthylene		
Separator	Hotmelt Adhesive		
Cellside	Anodized Aluminium		
Faceguard	E.G Powder Baked		
Nominal Depth	50mm, 69mm, 93mm, 117mm		
Gasket	EPDM		

Initial Resistance +/-10%

Initial Resistance for TetraKleen







High Air Capacity Mini-Pleat HEPA Filter

LunaCel V

- · Designed for high air volume application
- · More media areas with low pressure drop
- Longer lifespan .
- Low energy consumption
- ABS Frame
- Available from H10 to H14

Specification

lominal Size Actual Size Air Flow Weight E	Effciency	Pressure Resistance (Pa)				
W×H×D (in)	W×H×D (mm)	CMM/CFM	(kg)	(% @ 0.3µm)	Initial	Final
24x12x12	592x287x292	28 / 1000	5	99.99	200	
24x24x12	592x592x292	56 / 2000	8.5	(H13)	280	- 600
24x12x12	592x287x292	28 / 1000	5	99.95 (H12)	265	
24x24x12	592x592x292	56 / 2000	8.5			
24x12x12	592x287x292	28 / 1000	5	98	200	
24x24x12	592x592x292	56 / 2000	8.5	(E11)		
24x12x12	592x287x292	28 / 1000	5	95 (E10)	190	
24x24x12	592x592x292	56 / 2000	8.5			

Inflammability: UL Class 900 Other sizes are available upon request

Operating Condition

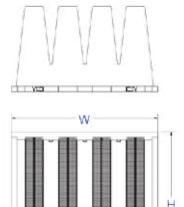
- 1	
Operating Temperature	70°C
Usage Humidity Limit (Continuous)	95%RH (no dew condensation)

Material

Cellside	ABS	
Media	Fiber Glass	
Separator	Hot Melt	
Sealant	Polyurethene	
Gasket	Neoprene, EPDM	

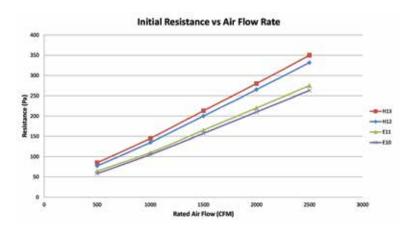
Gasket is optional.

Initial Resistance for LunaCel V



Outer Dimension Diagram





JAF[®]



High Air Capacity Mini-Pleat HEPA Filter

LunaCel VBX

- · Design for high air volume applications
- The enlarged media area ensures lower average pressure drop and longer • lifespan filter
- Low energy consumption
- Available for H13 H14
- V-Bank panels in a single filter enclose allow up to 2500 CFM with minimal . airflow resistance of 250Pa

Specification

Nominal Size	Actual Size	Air Flow	Weight	Effciency	Pressure Resistance (Pa)	
W×H×D (in)	W×H×D (mm)	CMM/CFM	(kg)	(% @ 0.3µm)	Initial	Final
12x24x12	305×610×292	25 / 1145	9.5	99.999	280	
24x24x12	610×610×292	66 / 2500	16	(H14)	200	750
12x24x12	305×610×292	25 / 1145	9.5	99.99	250	100
24x24x12	610×610×292	66 / 2500	16	(H13)	250	

Measuring method: IES-RP-1 & EN1822 Inflammability: UL Class 900 Other sizes are available upon request

Operating Condition

Outer Dimension Diagram

Operating Temperature	70°C
Usage Humidity Limit	95%RH
(Continuous)	(no dew condensation)

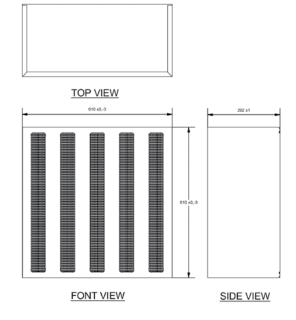
Material

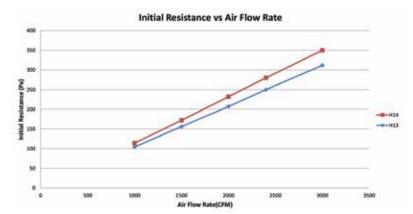
Cellside	Galvanized Steel, Stainless Steel
Media	Fiber Glass
Separator	Hot Melt
Sealant	Polyurethane
Gasket	EPDM, Neoprene

Initial Resistance +/-10%

Gasket is optional.

Initial Resistance for LunaCel VBX







High Air Capacity Mini-Pleat HEPA Filter

LunaCel VL

- · Design for high air volume applications
- The enlarged media area ensures lower average pressure drop and longer lifespan filter
 - Low energy consumption
 - Available for H13 H14
 - V-Bank panels in a single filter enclose allow up to 2500 CFM with minimal airflow resistance of 1.0" w.g

Specification

Nominal Size	Actual Size	Air Flow Weight Effciency		Effciency	Pressure Resistance (Pa)	
W×H×D (in)	W×H×D (mm)	CMM/CFM	(kg)	(% @ 0.3µm)	Initial	Final
24x12x12	592x287x292	32/1145	9.5	99.99	050	750
24x24x12	592x592×292	70/2500	16	and above (H13)	250	750

Measuring method: IES-RP-1 & EN1822

Inflammability: UL Class 900 Other sizes are available upon request

Operating Condition

Operating Temperature	70°C
Usage Humidity Limit	95%RH
(Continuous)	(no dew condensation)

Please discuss for high temperature.

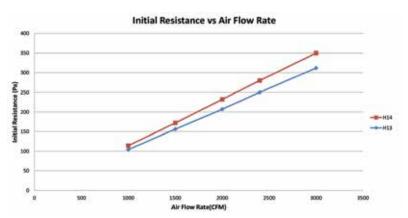
Material

Cellside	Galvanized Steel, Stainless Steel
Media	Fiber Glass
Separator	Hot Melt
Sealant	Polyurethane
Gasket	EPDM, Neoprene

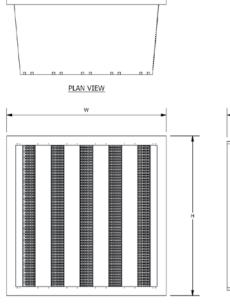
Initial Resistance +/-10%

Gasket is optional.

Initial Resistance for LunaCel VL



Outer Dimension Diagram





FRONT VIEW

SIDE VIEW





Permanent Type Ceiling Module

LunaKleen Hood

- · Compact HEPA & ULPA grade filters with hood cover
- Mini-pleat design
- Wide range of efficiency from H13 to U15
- · Low off-gassing filter material to meet the cleanroom requirement
- 100% HEPA filter scan test for guaranteed performance
- · Room side adjustable diffuser
- · Optional for test port

Specification

Nominal Size	Actual Size	Air Flow	Weight Ef	Effciency	Pressure Resistance (Pa)	
W×H×D (in)	W×H×D (mm)	CMM/CFM	(kg)	(% @ 0.3µm/0.12µm)	Initial	Recommended Final
24x24x6	600x600x152	10.0 / 355	5			
36x24x6	900x600x152	15.0 / 532	8	99.9995 (U15)	5 125	500
48x24x6	1210x600x152	20.0 / 709	12			
24x24x6	600x600x152	10.0 / 355	5		110	
36x24x6	900x600x152	15.0 / 532	8	99.999 (H14)		
48x24x6	1210x600x152	20.0 / 709	12			
24x24x6	600x600x152	10.0 / 355	5	99.99 (H13)	105	
36x24x6	900x600x152	15.0 / 532	8			
48x24x6	1210x600x152	20.0 / 709	12			

Measuring method: IES-RP-1 & EN1822

Inflammability: UL Class 900/FM Approval Other sizes are available upon request

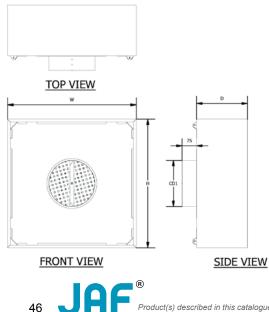
Operating Condition

Operating Temperature	70°C
Usage Humidity Limit (Continuous)	95%RH Humidity (no dew condensation)
(continuous)	(However, craft paper: 85%)

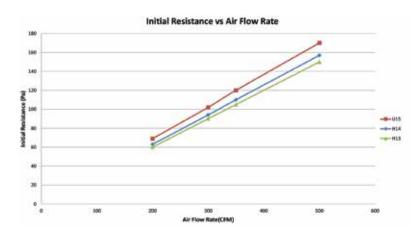
Material		
Cellside	Anodized Aluminium	
Media	Water Proof Non-Combustible Fiber Glass	
Separator	Hot Melt	
Faceguard	Anodized Aluminium, E.G. Powder Baked	
Sealant	Polyurethane	
Gasket	Neoprene, EPDM	
Collar	8", 10", 12"	

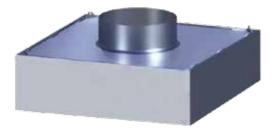
Initial Resistance +/-10%

Outer Dimension Diagram (Aluminium Frame)



Initial Resistance for LunaKleen Hood





RSC Housing Ceiling Module Gel

LunaKleen Ghood

- Wide range of efficiency H13 ~ U15
- 100% filter leak test for guaranteed performance
- · Final filter for pharma and microelectronics, cleanroom and equipment
- Room side replaceable filter

Specification

Nominal Size	Actual Size	Air Flow	Effciency	Pressur	Pressure Resistance (Pa)	
W×H×D (in)	W×H×D (mm)	CMM/CFM	(% @ 0.3µm/0.12µm)	Initial	Recommended Final	
600x600x152	570x570x81	10/355				
600x905x152	570x875x81	15/532	99.9995 (U15)	125		
600x1210x152	570x1180x81	20/709				
600x600x152	570x570x81	10/355				
600x905x152	570x875x81	15/532	99.999 (H14)	99.999 (H14) 110	500	
600x1210x152	570x1180x81	20/709				
600x600x152	570x570x81	10/355	99.99 (H13)	99.99 (H13) 105		
600x905x152	570x875x81	15/532				
600x1210x152	570x1180x81	20/709	(110)			

Measuring method : IES-RP-1 & EN 1822 Inflammability: UL Class 900 Other size are available upon request Final Resistance is based on Energy Efficiency Add 15 Parts Institute Construction

Add 15 Pa to Initial Resistance for Module Construction

Operating Condition

Operating Temperature	70°C
Usage Humidity Limit	95%RH Humidity
(Continuous)	(no dew condensation)

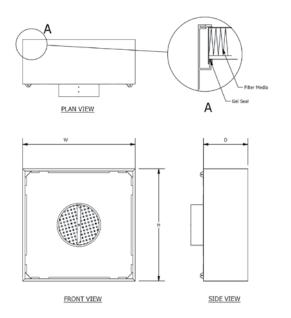
Material

Casing	Anodized Aluminium	
Collar	8", 10", 12"	
Filter	LunaKleen	
Gasket	Gel Seal	

Down stream side attached with face guard.

Initial Resistance for LunaKleen Ghood

Outer Dimension Diagram (Aluminium Frame)



Initial Resistance vs Air Flow Rate 180 180 140 130 ž 100 ž 80 HIA (Solda) -1115 -40 26 0 100



Initial Resistance +/-10%



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