

## product catalogue

**Camfil Farr**

**Air Filter Products and Services**

**Air Filtration Solutions - Asia Pacific & Middle East**

**Camfil Farr – clean air solutions**







Camfil Farr - Ipoh, Malaysia plant.



Camfil Farr - Kunshan, China plant.

Dear Customer:

We are happy to provide this latest edition of the Camfil Farr Product Catalogue.

We've tried to make it easy to use and have included extensive product information, application guides and reference tools to simplify the selection of the right Camfil Farr Clean Air Solution. This catalogue along with additional application specific information is also on the enclosed CD.

Camfil Farr is a Clean Air Solution provider to the world, our product range includes many industry benchmark filters. Already a market leader in Europe and North America, growing Camfil Farr investments have made us the fastest growing Clean Air Solution provider in Asia. Building on our strength of in-house process development, continuous product R&D and global purchasing power Camfil Farr operates multiple factories and an extensive sales network dedicated to the support of our valued customers in Asia. We have also developed a wide range of technical support tools including software packages that can assist in Life Cycle Cost evaluation, Clean Room design, Filter Performance Data and Chemical Filter Selection.

We are also proud to be helping our customers become more environmentally friendly. Our R&D efforts are focused on developing sustainable solutions that take into account complete product life cycles. For a customer using high performance Camfil Farr products this translates into reduced energy consumption and lower operating costs. This is good for our customers and for the planet.

If you would like more information about any of these programs, please contact your local Camfil Farr Sales Office or Distributor.

Alternatively, you can visit our website at [www.camfilfarr.com](http://www.camfilfarr.com).

We are pleased to offer this wide range of Clean Air Solutions, please enjoy your reading.

Phil Whitaker  
President,  
Camfil Farr Asia & Middle East.



ALL HEPA/ULPA filters are individually tested according to EN 1822



Production in controlled environment



All plants are ISO 9000 certified



Advanced molecular filter production



## Index

### Pre-filtration, Class G3 to F5

Media Rolls - Filter class G3 to F5 .....	45
Cam Glass Media .....	46
Fan Coil Filter .....	47
Media Holding Frame (MHF) .....	48
AeroPleat® III .....	49
30/30® .....	50
AP Eleven .....	51
30/30® WR .....	52
Hi-Cap® HF 90/35 .....	53
Hi-Cap® Green HF 90/35 .....	54
airMet Metallfilter .....	55
Type F/S .....	56
ECO®Moisture Separator .....	57

### Bag and Compact Filters, Class F5 to F9

Hi-Flo® M-Series .....	60
Hi-Flo® P-Series .....	61
Hi-Flo® U-Series .....	62
Hi-Flo® A-Series .....	63
Hi-Flo® T-Series .....	64
Hi-Flo® Green .....	65
S-Flo P Series .....	66
S-Flo U Series .....	67
S-Flo A Series .....	68
Opakfil 2V .....	69
Opakfil Green .....	70
Opakfil CC .....	71
Durafil® ES .....	72
Durafil® ESB .....	73
OpakAir .....	74
Airopac® 3GGM .....	75
Airopac® 3GGMHF .....	76
EcoPleat Green .....	77
Airopac® Green .....	78
Riga-Flo .....	79
Riga-Flo P .....	80
3CPM Aeropac .....	81
3HCP8 Aeropac .....	82

### HEPA / ULPA Filters, Class E10 to U17

Micretain MDE11/MXE11/GGE11/TRE11 .....	84
Micretain MDS11/MXS11/GGS11/TRS11 .....	85
Absolute MDE13/MXE13/GGE13/TRE13 .....	86
Absolute MDS13/MXS13/GGS13/TRS13 .....	87
MegaFlo .....	88
Opakfil G Micretain - E10 .....	89
Opakfil Absolute H13 .....	90
Sofilair - E11, H13, H14 .....	91
Sofilair Green - E10, E12, H13, H14 .....	92
Megalam MD, MX, MG .....	93
Megalam MD - H13 to U15 .....	96
Megalam MX - H14 to U15 .....	97
Megalam MG - H14 to U15 .....	98
Megalam (Laminator) MDL, MXL, MGL - H14 to U15 .....	99
Silent Hood HD - H13 to U15 .....	100
Silent Hood HL - H13 to U15 .....	102
CPXRG - H13 .....	104

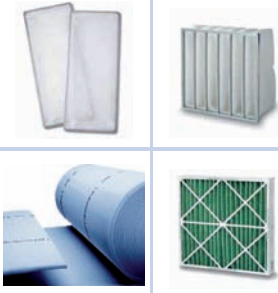

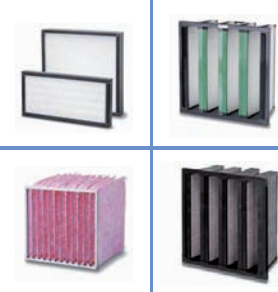
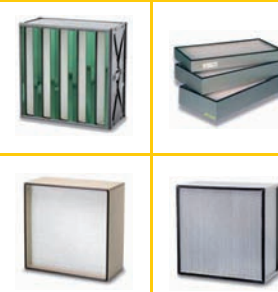


### Molecular Filtration

CityPleat .....	110
City-Flo .....	111
CityCarb® .....	112
CitySorb .....	113
Riga-Carb .....	114
CamSure .....	115
CamCarb® Mounting Frames .....	117
CamPure® GDM Green Disposable Modules .....	118
Gigapleat XPC .....	120
Gigapleat NXPP .....	121
Gigapleat NXPH .....	122
Gigapleat NXPC .....	123

### Frames, Housings and Speciality Filters

Pharmaseal AP .....	126
Pharmaseal Exhaust AP .....	129
Sofdistri .....	131
CamSafe .....	133
CamBox .....	134
FCBS-HF .....	135
FCBS-A .....	136
FCBL-CC .....	137
FCBL-HF .....	138
Absolute Filter Holding Frame .....	139
Filter Holding Frame .....	140
Termikfil 2000 .....	141
Absolute® 1FRK .....	142
Absolute® 1FRSI .....	143
Sofilair HT 120 - H13 .....	144
Airopac® HT-HF .....	145
30/30 GT .....	146
30/30® WR .....	147
CamClose .....	148
Hi-Cap® Green HF 90/35 .....	149
Cam-Flo XMGT .....	150
Cam GT® .....	151
Cam GT® Box Type .....	152
CamPulse GT Hemipleat .....	153
Tenkay Hemipleat .....	154
Dynavane .....	155
Gold Series .....	156
HemiPleat Goldcone Cartridges .....	157

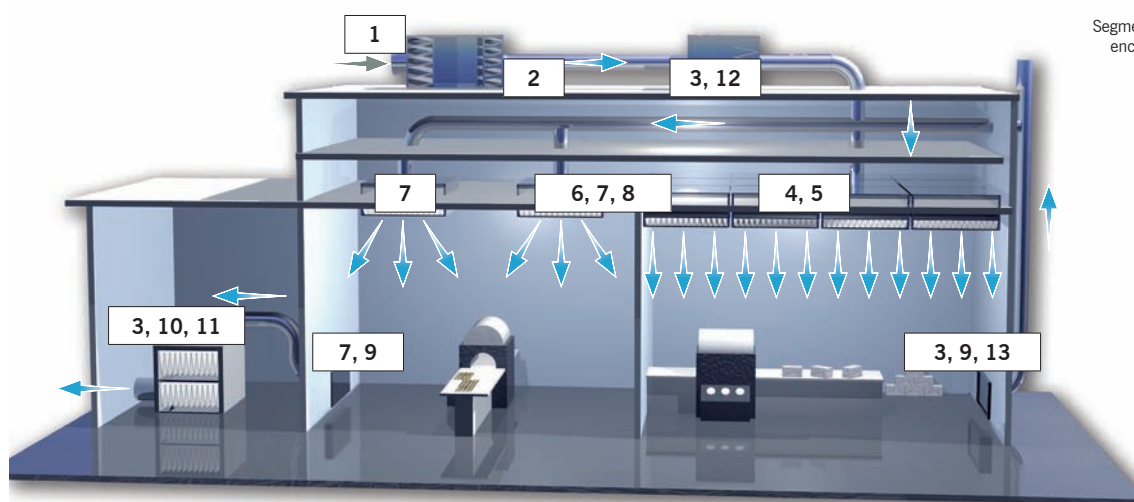
## Quick Selection Guide

	Filter Grade			Air Filter Selection		
<b>Primary Filtration</b>	Medium Efficiency	Primary Filters	ASHRAE 52.2 - 2007	MERV 2 - 4 MERV 5 - 6 MERV 7 - 9	EN 779 : 2002	<b>Primary Filters</b> <b>G2 65%</b> <b>G3 80%</b> <b>G4 90%</b> <b>EN 779:2002 Average Arrestance</b> 
<b>Filtration for Air Conditioning Systems.</b> Pre-filtration for EPA/HEPA/ULPA Filters	High Efficiency	Fine Filters 	ASHRAE 52.2 - 2007	MERV 10 MERV 11-12 MERV 13 MERV 14 MERV 15	EN 779 : 2002	<b>Fine Filters</b> <b>F5 40%</b> <b>F6 60%</b> <b>F7 80%</b> <b>F8 90%</b> <b>F9 95%</b> <b>EN 779:2002 efficiency</b> 
<b>Final Filters / Clean Room Filters</b>	Very High Efficiency	DOP 0.3um ULPA HEPA EPA IV 95% IV 99,9% IV 99,97% IV 99,99% IV 99,999%			EN 1822 : 2009	<b>MPPS (Most Penetrating Particle Size)</b> <b>E10 85%</b> <b>E11 95%</b> <b>E12 99,5%</b> <b>H13 99,95%</b> <b>H14 99,995%</b> <b>U15 99,9995%</b> <b>U16 99,99995%</b> <b>U17 99,999995%</b> 
<b>Molecular</b>				CityFlo, CitySorb, CityCarb, CamCarb		
<b>Frames, housings &amp; speciality filters</b>						<b>Filter Housings, Camseal FC Casings, Type 8 Frames</b>



## Pharmaceutical Industry

For more than forty years Camfil Farr has been a leading supplier of air filter products and services to the Bio-Pharma Industry. Many of our clients have multiple facilities located around the world. Camfil Farr is viewed by many of the largest pharmaceutical manufacturers as a partner and well positioned to support their air filtration demands on a local and global basis.



Segment brochure  
enclosed on CD



Air Filter Technology

Pre-filtration,  
Class G3 to F5

## Pharmaceutical Industry recommendations



1. 30/30



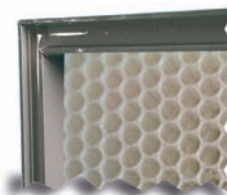
2. Hi-Flo



3. Sofilair H13



4. CamGrid



5. Megalam T "U"



6. Sofdistri



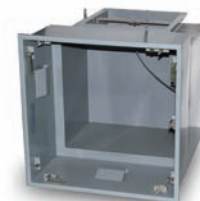
7. DC Bibo



8. Pharmaseal AP 9



9. Pharmatain



10. Pharmaseal Exhaust AP



11. Airopac/Opakair



12. FC - Filter Casing



13. Ecopleat/Airopac  
Green

Bag and Compact Filters,  
Class F5 to F9

HEPA / ULPA Filters,  
Class E10 to U17

Molecular Filtration

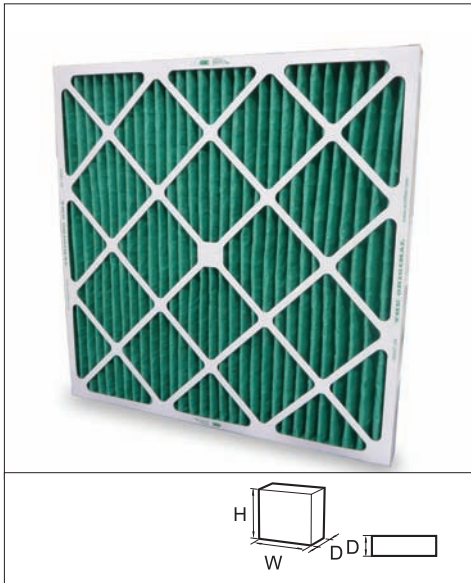
CamfilFarrAsiaPacific  
www.camfilfarr.com



Frames, housings  
and speciality filters

## Pleated Panel Filters

30/30®



## Advantages

- High mechanical strength
- Fully supported media bonded onto a wire support grid
- Rigid, water resistant cardboard frame
- Large media surface
- Media bonded into frame to eliminate air bypass
- Unique radial pleat design

**Application:** Primary filter for air conditioning systems.

**Type:** High performance disposable pleated panel filter.

**Frame:** Rigid water resistant cardboard.

**Media:** Mixture of cotton and synthetic fibre.

**EN 779:2002 filter class:** G4.

**ASHRAE 52.2:2007 filter class:** MERV 8.

**Recommended final pressure drop:** 250 Pa.

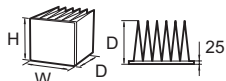
**Temperature:** 70°C maximum in continuous service.

**Holding frames:** Front and side access housings and frames are available, Type 8 and FC Housings.

**Fire rating:** UL 900.

Reference	Model	Dimensions (WxHxD) mm	Filter Classification EN 779:2002	Media area m <sup>2</sup>	Airflow / pressure drop m <sup>3</sup> / hr / Pa	Unit Weight kg	Unit Volume m <sup>3</sup>
54862001	30/30 2 20x16x1	394 x 495 x 22	G4	0.50	1326/58	0.3	0.006
54862002	30/30 2 20x20x1	495 x 495 x 22	G4	0.61	1649/58	0.4	0.007
54862003	30/30 2 25x20x1	495 x 622 x 22	G4	0.74	2066/58	0.55	0.008
54862004	30/30 2 25x16x1	394 x 622 x 22	G4	0.62	1649/58	0.42	0.007
54862005	30/30 2 24x24x1	594 x 594 x 22	G4	0.91	2380/58	0.6	0.010
54862010	30/30 2 24x12x1	289 x 594 x 22	G4	0.46	1190/58	0.3	0.005
54862011	30/30 2 24x20x1	495 x 597 x 22	G4	0.74	1981/58	0.53	0.008
49880001	30/30 2 20x16x2	394 x 495 x 44	G4	0.92	1870/78	0.44	0.011
49880002	30/30 2 20x20x2	495 x 495 x 44	G4	1.11	2363/78	0.55	0.013
49880003	30/30 2 25x20x2	495 x 622 x 44	G4	1.39	2958/78	0.7	0.017
49880004	30/30 2 25x16x2	394 x 622 x 44	G4	1.15	2363/78	0.55	0.014
49880005	30/30 2 24x24x2	594 x 594 x 44	G4	1.61	3400/78	0.78	0.019
49880006	30/30 2 24x12x2	289 x 594 x 44	G4	0.78	1700/78	0.4	0.010
49880009	30/30 2 20x14x2	343 x 495 x 44	G4	0.77	1658/78	0.25	0.010
49880012	30/30 2 24x20x2	495 x 594 x 44	G4	1.33	2839/78	0.45	0.016
49880015	30/30 2 24x18x2	444 x 594 x 44	G4	1.21	2550/78	0.45	0.014
49880017	30/30 2 24x16x2	394 x 594 x 44	G4	1.10	2270/78	0.55	0.014
59413001	30/30 2 24x24x4	594 x 594 x 95	G4	2.58	3400/68	1.45	0.039
59413002	30/30 2 24x12x4	289 x 594 x 95	G4	1.29	1700/68	0.6	0.019
59413003	30/30 2 20x20x4	492 x 492 x 95	G4	1.76	2363/68	0.3	0.027
59413004	30/30 2 20x16x4	390 x 492 x 95	G4	1.46	1870/68	0.25	0.022
59413005	30/30 2 25x16x4	390 x 619 x 95	G4	1.83	2363/68	0.25	0.027
59413006	30/30 2 25x20x4	492 x 619 x 95	G4	2.19	2958/68	0.45	0.033
59413008	30/30 2 24x20x4	492 x 594 x 95	G4	2.11	2839/68	0.45	0.031
59413010	30/30 2 25x25x4	619 x 619 x 95	G4	2.79	3689/68	0.5	0.044

## Hi-Flo® P-Series



## Advantages

- Large surface area
- Low pressure drop
- Comprehensive range of standard sizes
- Controlled media spacing (CMS)
- Certified performance

**Application:** Air conditioning applications.

**Type:** Extended surface multi pocket bag filter.

**Frame:** Galvanised steel.

**Media:** Glass Fibre.

**EN 779:2002 efficiency:** F6, F7, F8, F9.

**ASHRAE 52.2.1999 efficiency:** MERV 11, MERV 13, MERV 14, MERV 15.

**Recommended final pressure drop:** 450 Pa (suggested economical change point 250 Pa).

**Temperature:** 70°C maximum in continuous service.

**Holding frames:** Front and side access housings and frames are available, Type 8 and FC Housings.

**Fire rating:** UL 900 Class 2.

Reference	Model	Dimensions (WxHxD) mm	Filter classification EN 779:2002	Number of Pockets	Media area m <sup>2</sup>	Air flow / pressure drop m <sup>3</sup> /hr/Pa	Unit weight kg	Unit volume m <sup>3</sup>
3100009	P6	592 x 592 x 534	F6	10	6.5	3400/70	2.9	0.05
3100010	Q6	490 x 592 x 534	F6	8	5.2	2800/70	2.4	0.05
3100011	R6	287 x 592 x 534	F6	5	3.3	1700/70	1.5	0.03
3100037	P7	592 x 592 x 534	F7	10	6.5	3400/105	2.6	0.05
3100038	Q7	490 x 592 x 534	F7	8	5.2	2800/105	2.4	0.05
3100039	R7	287 x 592 x 534	F7	5	3.3	1700/105	1.6	0.03
3100065	P8	592 x 592 x 534	F8	10	6.5	3400/150	2.4	0.05
3100066	Q8	490 x 592 x 534	F8	8	5.2	2800/145	2.4	0.05
3100067	R8	287 x 592 x 534	F8	5	3.3	1700/140	1.5	0.03
3105008	P9	592 x 592 x 534	F9	10	6.5	3400/150	2.4	0.05
3105010	Q9	490 x 592 x 534	F9	8	5.2	2800/145	2.4	0.05
3105011	R9	287 x 592 x 534	F9	5	3.3	1700/140	1.5	0.03

\* 20mm header frame is available on request.

## Ecopleat Green



### Advantages

- Large surface area
- Long operating life
- Ultra compact
- High dust holding capacity
- Less frequent changes

**Application:** Air conditioning or industrial processing systems and for mini air conditioning systems, individual modules, ventilation equipment.

**Type:** High efficiency compact filter.

**Frame:** Plastic frame.

**Media:** Wet-laid glass fibre paper.

**Separator:** Hot melt glue.

**Sealant:** Polyurethane.

**EN 779:2002 filter class:** F6, F7, F8.

**ASHRAE 52.2:1999 filter class:** MERV 11, MERV 13, MERV 14.

**Recommended final pressure drop:** 350 Pa.

**Temperature:** 70°C.

**Relative humidity:** 100% RH.

Reference	Model	Dimensions (WxHxD) mm	Filter classification EN 779:2002	Media area m <sup>2</sup>	Air flow/ pressure drop m <sup>3</sup> /h/Pa	Unit weight kg	Unit volume m <sup>3</sup>
23465200C	3GPPS-12242-F6	287x592x48	F6	2.9	1500/85	2	0.01
23665400C	3GPPS-20242-F6	490x592x48	F6	4.9	2450/85	2.5	0.015
23465500C	3GPPS-24242-F6	592x592x48	F6	5.9	3000/85	3	0.02
23675200C	3GPPS-12242-F7	287x592x48	F7	2.9	1500/140	2	0.01
23675400C	3GPPS-20242-F7	490x592x48	F7	4.9	2450/140	2.5	0.015
23675500C	3GPPS-24242-F7	592x592x48	F7	5.9	3000/140	3	0.02
23685200C	3GPPS-12242-F8	287x592x48	F8	2.9	1500/195	2	0.01
23685400C	3GPPS-20242-F8	490x592x48	F8	4.9	2450/195	2.5	0.015
23485500C	3GPPS-24242-F8	592x592x48	F8	5.9	3000/195	3	0.02
23765200C	3GPPS-12244-F6	287x592x96	F6	4.8	2250/155	3	0.02
23765400C	3GPPS-20244-F6	490x592x96	F6	9.9	3700/155	3.5	0.03
23765500C	3GPPS-24244-F6	592x592x96	F6	11.9	4500/155	4	0.04
23775200C	3GPPS-12244-F7	287x592x96	F7	5.8	2250/185	3	0.02
23775400C	3GPPS-20244-F7	490x592x96	F7	9.9	3700/185	3.5	0.03
23775500C	3GPPS-24244-F7	592x592x96	F7	11.9	4500/185	4	0.04
23785200C	3GPPS-12244-F8	287x592x96	F8	5.8	2250/240	3	0.02
23785400C	3GPPS-20244-F8	490x592x96	F8	9.9	3700/240	3.5	0.03
23785500C	3GPPS-24244-F8	592x592x96	F8	11.9	4500/240	4	0.04

\*Other sizes are available on request



## Airopac® Green



## Advantages

- Low pressure drop
- Water resistant beverage board
- Large surface area
- Incinerable
- Rigid design concept
- High dust holding capacity

**Application:** Air conditioning applications and preparatory filtration in clean rooms.

**Type:** High efficiency compact filter.

**Frame:** Rigid water resistance beverage cardboard.

**Media:** Glass fibre paper.

**Separator:** Hot-melt beads.

**Sealant:** Polyurethane.

**EN 779:2002 filter class:** F6, F7, F8.

**ASHRAE 52.2:1999 filter class:** MERV 11, MERV 13, MERV 14.

**Recommended final pressure drop:** 450 Pa (suggested economical change point 250 Pa).

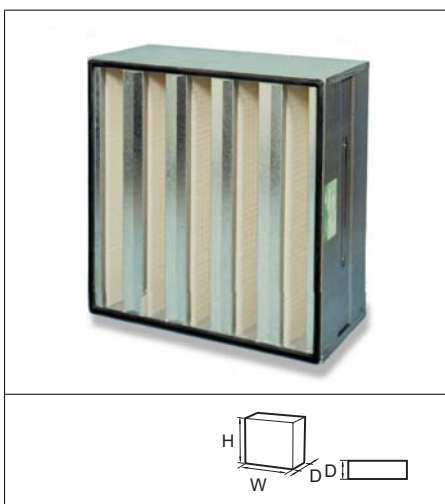
**Temperature:** 70°C maximum in continuous service.

**Mounting system:** Front and side access housing and frames are available.

**Holding frames:** Type 8 and FC Housings.

Reference	Model	Dimensions (WxHxD) mm	Filter classification EN 779:2002	Media area m <sup>2</sup>	Air Flow / pressure drop m <sup>3</sup> /hr/Pa	Unit weight kg	Unit volume m <sup>3</sup>
2700001	3GP-24244-60	594 x 594 x 95	F6	11.8	3400/71	3	0.034
2700002	3GP-20244-60	492 x 594 x 95	F6	9.7	2810/71	2.5	0.028
2700003	3GP-12244-60	289 x 594 x 95	F6	5.7	1645/84	1.6	0.016
2700004	3GP-20204-60	492 x 492 x 95	F6	8	2325/75	2.1	0.023
2700013	3GP-24244-90	594 x 594 x 95	F7	11.8	3400/134	3.1	0.034
2700014	3GP-20244-90	492 x 492 x 95	F7	9.7	2810/138	2.5	0.028
2700015	3GP-12244-90	289 x 594 x 95	F7	5.7	1645/158	1.6	0.016
2700016	3GP-20204-90	492 x 492 x 95	F7	8	2325/142	2.1	0.023
2700025	3GP-24244-95	594 x 594 x 95	F8	11.8	3400/154	3.1	0.034
2700026	3GP-20244-95	492 x 594 x 95	F8	9.7	2810/159	2.5	0.028
2700027	3GP-12244-95	289 x 594 x 95	F8	5.7	1645/179	1.6	0.016
2700028	3GP-20204-95	492 x 492 x 95	F8	8	2325/163	2.1	0.023

## Sofilair - H11, H13, H14



## Advantages

- High air flow rates, up to 5000 m<sup>3</sup>/hr
- Tested in accordance with EN 1822
- Handle to assist with filter changes
- High filter surface area offers low pressure drop for energy savings and longer life

**Application:** Very high efficiency final filtration in air conditioning systems, housings and diffusers.

**Type:** High air flow HEPA filter.

**Frame:** Galvanised steel.

**Media:** Glass fibre paper.

**Separator:** Hot-melt beads.

**Sealant:** Polyurethane.

**Gasket:** Endless polyurethane gasket.

**EN 1822 filter class:** H11, H13 and H14.

**MPPS efficiency:** H11:>95%, H13:>99.95%, H14:> 99.995%.

**DOP efficiency:** ≥ 99.9%, 99.99%, 99.999%,

**Recommended final pressure drop:** 600 Pa.

**Maximum air flow rate:** See table, use nominal values otherwise a reduction in efficiency may occur.

**Temperature:** 70°C maximum in continuous service.

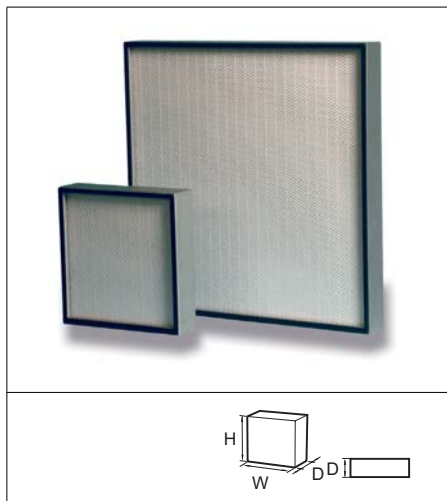
**Mounting systems:** Front and side access filter frames, FC Housings, terminal housings and safe change systems.

**Fire rating:** DIN 53438 class F1.

Reference	Model	Dimensions (WxHxD) mm	Filter classification EN 1822	Media area m <sup>2</sup>	Air flow / Pressure drop m <sup>3</sup> /hr/Pa	Unit weight kg	Unit volume m <sup>3</sup>
1700006	Micretain, 1570.01	610 x 610 x 292	H11	35	5000/250	23	0.11
1700007	Micretain, 1573.02	610 x 610 x 292	H11	21	4000/250	20	0.11
1700008	Micretain, 1575.02	305 x 610 x 292	H11	14	2000/250	14	0.05
1700009	Micretain, 1577.01	595 x 595 x 292	H11	38	4200/250	22	0.11
1700010	Micretain, 1578.01	289 x 595 x 292	H11	16	1700/250	13	0.05
1700001	Absolute, 1560.02	610 x 610 x 292	H13	40	4000/250	23	0.11
1700002	Absolute, 1560.01	610 x 610 x 292	H13	33	3400/250	20	0.11
1700003	Absolute, 1565.01	305 x 610 x 292	H13	16	1700/250	13	0.05
1700004	Absolute, 1567.01	595 x 595 x 292	H13	38	3200/250	22	0.11
1700005	Absolute, 1568.01	289 x 595 x 292	H13	16	1300/250	12	0.05
1700011	HEPA, 1560.02.06	610 x 610 x 292	H14	40	3000/250	23	0.11
1700013	HEPA, 1565.01.02	305 x 610 x 292	H14	16	1500/250	20	0.11
1700016	HEPA, 1560.02.99	610 x 610 x 292	H14	40	3400/250	23	0.11
1700018	HEPA, 1565.01.99	305 x 610 x 292	H14	16	1700/250	13	0.05

\*Other sizes, stainless steel or aluminium frames are available on request.

## Megalam MD - H13 to U15



## Advantages

- Low pressure drop
- Double faceguard
- Guaranteed performance
- Individually tested according to EN 1822

**Application:** Final or return filtration for clean rooms with turbulent flow.

**Type:** High efficiency filter panel with seal for mechanical clamping mounting systems.

**Frame:** Extruded and anodized aluminium.

**Gasket:** Endless polyurethane at inlet.

**Media:** Glass fibre paper.

**Separator:** Hot-melt beads.

**Sealant:** Polyurethane.

**Faceguard:** Expanded metal on both sides, powder coated with RAL 9016.

**EN 1822 filter class:** H13, H14, U15.

**MPPS efficiency:** H13:  $\geq 99.95\%$ , H14:  $\geq 99.995\%$ , U15:  $\geq 99.9995\%$ .

**Recommended final pressure drop:** 500 Pa.

**Maximum flow rate:** See table, use nom. values otherwise a reduction in efficiency may occur.

**Temperature:** 70°C maximum in continuous service.

**Test:** 100% individually tested according to EN 1822.

**Mounting system:** Mechanical clamping structure, Terminal housings.

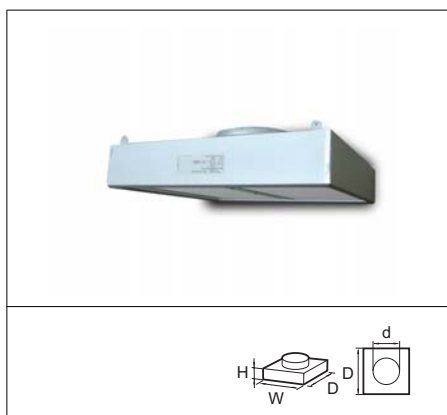
**Fire rating:** UL 900 Class 2, FM 4920 approval on request.

Reference	Model	Dimensions (WxHxD) mm	Filter classification EN 1822	Media area m <sup>2</sup>	Air flow / pressure drop m <sup>3</sup> /hr/Pa	Unit weight kg	Unit volume m <sup>3</sup>
15002001	MD13- 305*305-10/22	305 x 305 x 66	H13	2.4	151/119	1	0.01
15002002	MD13- 305*610-10/22	305 x 610 x 66	H13	4.8	301/116	2	0.02
15002003	MD13- 610*610-10/22	610 x 610 x 66	H13	9.7	603/115	4	0.03
15002004	MD13- 762*610-10/22	762 x 610 x 66	H13	12.2	753/115	5	0.04
15002005	MD13- 914*610-10/22	914 x 610 x 66	H13	14.6	903/114	6	0.05
15002006	MD13- 1219*610-10/22	1219 x 610 x 66	H13	19.5	1205/114	8	0.07
15002007	MD13- 1524*610-10/22	1524 x 610 x 66	H13	24.5	1506/114	10	0.09
15002008	MD13- 914*762-10/22	914 x 762 x 66	H13	18.4	1128/114	7.5	0.07
15002009	MD13- 1219*762-10/22	1219 x 762 x 66	H13	24.5	1505/114	10	0.09
15002010	MD13- 1524*762-10/22	1524 x 762 x 66	H13	30.7	1881/114	12.5	0.11
15002011	MD13- 914*914-10/22	914 x 914 x 66	H13	22.1	1353/113	9	0.08
15002201	MD14- 305*305-10/22	305 x 305 x 66	H14	2.4	151/145	1	0.01
15002202	MD14- 305*610-10/22	305 x 610 x 66	H14	4.8	301/142	2	0.02
15002203	MD14- 610*610-10/22	610 x 610 x 66	H14	9.7	603/141	4	0.03
15002204	MD14- 762*610-10/22	762 x 610 x 66	H14	12.2	753/140	5	0.04
15002205	MD14- 914*610-10/22	914 x 610 x 66	H14	14.6	903/140	6	0.05
15002206	MD14- 1219*610-10/22	1219 x 610 x 66	H14	19.5	1205/140	8	0.07
15002207	MD14- 1524*610-10/22	1524 x 610 x 66	H14	24.5	1506/140	10	0.09
15002208	MD14- 914*762-10/22	914 x 762 x 66	H14	18.4	1128/139	7.5	0.07
15002209	MD14- 1219*762-10/22	1219 x 762 x 66	H14	24.5	1505/139	10	0.09
15002210	MD14- 1524*762-10/22	1524 x 762 x 66	H14	30.7	1881/139	12.5	0.17
15002211	MD14- 914*914-10/22	914 x 914 x 66	H14	22.1	1353/139	9	0.08
15002401	MD15- 305*305-10/22	305 x 305 x 66	U15	2.7	151/150	1	0.01
15002402	MD15- 305*610-10/22	305 x 610 x 66	U15	5.6	301/146	2	0.02
15002403	MD15- 610*610-10/22	610 x 610 x 66	U15	11.3	603/146	4	0.03
15002404	MD15- 762*610-10/22	762 x 610 x 66	U15	14.2	753/145	5	0.04
15002405	MD15- 914*610-10/22	914 x 610 x 66	U15	17.1	903/145	6	0.05
15002406	MD15- 1219*610-10/22	1219 x 610 x 66	U15	22.7	1205/145	8	0.07
15002407	MD15- 1524*610-10/22	1524 x 610 x 66	U15	28.5	1506/144	10	0.09
15002408	MD15- 914*762-10/22	914 x 762 x 66	U15	21.4	1128/144	7.5	0.07
15002409	MD15- 1219*762-10/22	1219 x 762 x 66	U15	28.5	1505/144	10	0.09
15002410	MD15- 1524*762-10/22	1524 x 762 x 66	U15	35.7	1881/144	12.5	0.11
15002411	MD15- 914*914-10/22	914 x 914 x 66	U15	26	1353/143	9	0.08

\*Other sizes are available on request.



## Silent Hood HD - H13 to U15



### Advantages

- Compact filter-diffuser for clean room
- Ready to install
- Low noise
- Test port
- Laminarity +/- 20%
- Non-slip collar design
- Roomside adjustable diffuser disc

**Application:** Final filtration for clean rooms.

**Type:** Ready to install HEPA/ULPA filter diffuser.

**Frame:** Extruded and anodised aluminium, galvanised steel cover.

**Gasket:** Endless PU.

**Media:** Glass fibre paper.

**Separator:** Hot melt beads.

**Sealant:** Polyurethane.

**Terminal:** Collar with outer dia. 305 mm (12in) or 250 mm (10in) depending on the model.

**Diffuser disc:** Perforated GI.

**Faceguard:** Expanded metal on outlet, powder coated RAL 9016.

**EN 1822 filter class:** H13, H14, U15.

**MPPS efficiency:** H13:≥99.95%, H14:≥99.995% U15:≥99.9995%.

**Recommended final pressure drop:** 500 Pa.

**Maximum flow rate:** See table, use nominal values otherwise a reduction in efficiency may occur.

**Temperature:** 70°C maximum in continuous service.

**Test:** 100% individually scanned in accordance with EN 1822.

**Mounting system:** Integrated suspension eyes.

**Fire rating:** UL 900 Class 2, FM 4920 approval on request.

Reference	Model	Dimensions (WxHxD) mm	Filter classification EN 1822:2002	Media area m <sup>2</sup>	Air flow/nominal pressure drop m <sup>3</sup> /h/Pa	Unit weight kg	unit volume m <sup>3</sup>
15300001	MD13-HD10-610*610-01/02	610 x 610 x 110	H13	9.7	603/130	13	0.07
15300002	MD13-HD10-914*610-01/02	914 x 610 x 110	H13	14.6	903/129	16	0.11
15300003	MD13-HD10-1219*610-01/02	1219 x 610 x 110	H13	19.5	1205/129	19	0.15
15300004	MD13-HD10-600*600-01/02	600 x 600 x 110	H13	9.4	583/130	13	0.07
15300005	MD13-HD10-905*600-01/02	905 x 600 x 110	H13	14.2	880/130	16	0.11
15300006	MD13-HD10-1210*600-01/02	1210 x 600 x 110	H13	19.1	1176/129	19	0.15
15300101	MD14-HD10-610*610-01/02	610 x 610 x 110	H14	9.7	603/156	13	0.07
15300102	MD14-HD10-914*610-01/02	914 x 610 x 110	H14	14.6	903/155	16	0.11
15300103	MD14-HD10-1219*610-01/02	1219 x 610 x 110	H14	19.5	1205/155	19	0.15
15300104	MD14-HD10-600*600-01/02	600 x 600 x 110	H14	9.4	583/156	13	0.07
15300105	MD14-HD10-905*600-01/02	905 x 600 x 110	H14	14.2	880/155	16	0.11
15300106	MD14-HD10-1210*600-01/02	1210 x 600 x 110	H14	19.1	1176/155	19	0.15
15300201	MD15-HD10-610*610-01/02	610 x 610 x 110	U15	11.3	603/161	13	0.07
15300202	MD15-HD10-914*610-01/02	914 x 610 x 110	U15	17.1	903/160	16	0.11
15300203	MD15-HD10-1219*610-01/02	1219 x 610 x 110	U15	22.7	1205/160	19	0.15
15300204	MD15-HD10-600*600-01/02	600 x 600 x 110	U15	11	583/160	13	0.07
15300205	MD15-HD10-905*600-01/02	905 x 600 x 110	U15	16.6	880/160	16	0.11
15300206	MD15-HD10-1210*600-01/02	1210 x 600 x 110	U15	22.2	1176/160	19	0.15
15300401	MX14-HD10-610*610-01/02	610 x 610 x 133	H14	13.2	603/111	15	0.09
15300402	MX14-HD10-914*610-01/02	914 x 610 x 133	H14	19.9	903/110	19	0.13
15300403	MX14-HD10-1219*610-01/02	1219 x 610 x 133	H14	26.6	1205/110	22	0.18
15300404	MX14-HD10-600*600-01/02	600 x 600 x 133	H14	12.8	583/110	15	0.09

\* Other sizes are available on request.

## HEPA/ULPA Panels

Reference	Model	Dimensions (WxHxD) mm	Filter classification EN 1822:2002	Media area m <sup>2</sup>	Air flow/nominal pressure drop m <sup>3</sup> /h/Pa	Unit weight kg	unit volume m <sup>3</sup>
15300405	MX14-HD10-905*600-01/02	905 x 600 x 133	H14	19.4	880/110	19	0.13
15300406	MX14-HD10-1210*600-01/02	1210 x 600 x 133	H14	25.9	1176/110	22	0.18
15300501	MX15-HD10-610*610-01/02	610 x 610 x 133	U15	15.2	603/130	15	0.09
15300502	MX15-HD10-914*610-01/02	914 x 610 x 133	U15	22.8	903/130	19	0.13
15300503	MX15-HD10-1219*610-01/02	1219 x 610 x 133	U15	30.5	1205/130	22	0.18
15300504	MX15-HD10-600*600-01/02	600 x 600 x 133	U15	14.7	583/130	15	0.09
15300505	MX15-HD10-905*600-01/02	905 x 600 x 133	U15	22.2	880/130	19	0.13
15300506	MX15-HD10-1210*600-01/02	1210 x 600 x 133	U15	29.7	1176/130	22	0.18
15300701	MG14-HD10-610*610-01/02	610 x 610 x 155	H14	17.1	603/81	18	0.1
15300703	MG14-HD10-1219*610-01/02	1219 x 610 x 155	H14	34.7	1205/80	26	0.21
15300801	MG15-HD10-610*610-01/02	610 x 610 x 155	U15	18.3	603/100	18	0.1
15300803	MG15-HD10-1219*610-01/02	1219 x 610 x 155	U15	37.3	1205/98	26	0.21
15301001	MD13-HD12- 610*610-01/02	610 x 610 x 110	H13	9.7	603/130	13	0.07
15301002	MD13-HD12- 914*610-01/02	914 x 610 x 110	H13	14.6	903/129	16	0.11
15301003	MD13-HD12-1219* 610-01/02	1219 x 610 x 110	H13	19.5	1205/129	19	0.15
15301004	MD13-HD12- 600*600-01/02	600 x 600 x 110	H13	9.4	583/130	13	0.07
15301005	MD13-HD12- 905*600-01/02	905 x 600 x 110	H13	14.2	880/130	16	0.11
15301006	MD13-HD12-1210* 600-01/02	1210 x 600 x 110	H13	19.1	1176/129	19	0.15
15301101	MD14-HD12- 610*610-01/02	610 x 610 x 110	H14	9.7	603/156	13	0.07
15301102	MD14-HD12- 914*610-01/02	914 x 610 x 110	H14	14.6	903/155	16	0.11
15301103	MD14-HD12-1219*610-01/02	1219 x 610 x 110	H14	19.5	1205/155	19	0.15
15301104	MD14-HD12- 600*600-01/02	600 x 600 x 110	H14	9.4	583/156	13	0.07
15301105	MD14-HD12 905*600-01/02	905 x 600 x 110	H14	14.2	880/155	16	0.11
15301106	MD14-HD12-1210*600-01/02	1210 x 600 x 110	H14	19.1	1176/155	19	0.15
15301201	MD15-HD12-610*610-01/02	610 x 610 x 110	U15	11.3	603/161	13	0.07
15301202	MD15-HD12-610*610-01/02	914 x 610 x 110	U15	17.1	903/160	16	0.11
15301203	MD15-HD12-1219*610-01/02	1219 x 610 x 110	U15	22.7	1205/160	19	0.15
15301204	MD15-HD12-600*600-01/02	600 x 600 x 110	U15	11	583/160	13	0.07
15301205	MD15-HD12-905*600-01/02	905 x 600 x 110	U15	16.6	880/160	16	0.11
15301206	MD15-HD12-1210*600-01/02	1210 x 600 x 110	U15	22.2	1176/160	19	0.15
15301401	MX14-HD12 610*610-01/02	610 x 610 x 133	H14	13.2	603/111	15	0.09
15301402	MX14-HD12 914*610-01/02	914 x 610 x 133	H14	19.9	903/110	19	0.13
15301403	MX14-HD12-1219*610-01/02	1219 x 610 x 133	H14	26.6	1205/110	22	0.18
15301404	MX14-HD12 600*600-01/02	600 x 600 x 133	H14	12.8	583/110	15	0.09
15301405	MX14-HD14 905*600-01/02	905 x 600 x 133	H14	19.4	880/110	19	0.13
15301406	MX14-HD12-1210*600-01/02	1210 x 600 x 133	H14	25.9	1176/110	22	0.18
15301501	MX15-HD12-610*610-01/02	610 x 610 x 133	U15	15.2	603/130	15	0.09
15301502	MX15-HD12-914*610-01/02	914 x 610 x 133	U15	22.8	903/130	19	0.13
15301503	MX15-HD12-1219*610-01/02	1219 x 610 x 133	U15	30.5	1205/130	22	0.18
15301504	MX15-HD12-600*600-01/02	600 x 600 x 133	U15	14.7	583/130	15	0.09
15301505	MX15-HD12-905*600-01/02	905 x 600 x 133	U15	22.2	880/130	19	0.13
15301506	MX15-HD12-1210*600-01/02	1210 x 600 x 133	U15	29.7	1176/130	22	0.18
15301701	MG14-HD12-610*610-01/02	610 x 610 x 155	H14	17.1	603/81	18	0.1
15301703	MG14-HD12-1219*610-01/02	1219 x 610 x 155	H14	34.7	1205/80	26	0.21
15301801	MG15-HD12-610*610-01/02	610 x 610 x 155	U15	18.3	603/100	18	0.1
15301803	MG15-HD12-1219*610-01/02	1219 x 610 x 155	U15	37.3	1205/98	26	0.21

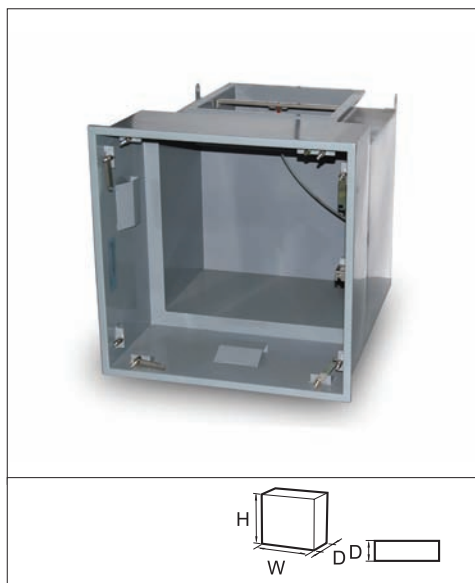
\* Other sizes are available on request.

As part of our continuous improvement, Camfil Farr reserve the right to change specifications without notice.





## Pharmaseal Exhaust AP



## Advantages

- Includes all essential functions for pharmaceutical and bio-cleanroom applications.
- In-situ efficiency 99.97% or higher is guaranteed.
- High capacity “V”-bank HEPA filter inside results in low pressure drop, low energy cost and long service life.
- Heavy duty aluminium or stainless steel fully welded to ensure the air-tight robust construction
- All ports of injection and samplings are of air tight quick-connection design.

**Application:** Exhaust/return air system for pharmaceutical and bio-cleanroom applications.  
**Type:** Wall-mount, room side operatable, efficiency tested exhaust/return air housing with Sofilair filters.

**Construction:** Aluminium or stainless steel 304 fully welded, powder coated if required.

**Filter seal:** Endless PU gasket on filter.

**Outlet connection:** Flanged rectangular duct connection.

**Damper:** Room-side adjustable butterfly damper assembly, stainless steel #304 or galvanized steel material.

**Room-side grill:** Stainless steel 304, or aluminium or carbon steel painted.

**Auxiliary test shroud:** Movable room-side, functions for upstream aerosol injection and dispersion, upstream & downstream aerosol sampling.

**Accessory:** Downstream sampling kit along with every housing supplied.

**Installation:** Side wall mounted with site-made metal brackets (instructed but not supplied by Camfil Farr).

Model	Housing size (WxHxD) mm	Flanged outlet (mm)	Filter model	Rated air flow / initial pressure drop m <sup>3</sup> / h / Pa	In-situ Efficiency 0.3µm
PWAP-670x670-*A-*-* ***_*_*_*_*	670 x 670 x 840	500 x 400	Sofilair 1560.02	4000/250	99.97%
PWAP-670x365-*A-*-* ***_*_*_*_*	670 x 365 x 690	400 x 250	Sofilair 1565.01	1700/250	99.97%
PWAP-670x670-*H-*-* ***_*_*_*_*	670 x 670 x 840	500 x 400	Sofilair 1560.02.06	3000/250	99.995%
PWAP-670x365-*H-*-* ***_*_*_*_*	670 x 365 x 690	400 x 250	Sofilair 1565.01.02	1500/250	99.995%

**Note:** Tolerance of the pressure drop data within +/- 20% as standard. Please refer to next table “Model Number System” for model selection per detail options.

## Model Number System - Wall Mount Exhaust HEPA Housing

PWAP-	670x670-	A-	A-	S-	R54-	S	1	0	O-	BS-	D-	P
1	2	3	4	5	6	7	8	9	10	11	12	13

Naming description	
1. Product:	Pharmaseal AP Wall Mount Exhaust/Return Air HEPA Housing
2. Housing standard 2 sizes: Width x Height (excl. trim) x Depth (mm)	670 x 670 x 840 (with Sofilair filter 610x610x292mm) 670 x 365 x 690 (with Sofilair filter 305x610x292mm)
3. Housing construction material:	A = Aluminium, powder coated S = Stainless Steel #304 X = Other metals, please state separately
4. Specification of filter element installed:	A = Sofilair Absolute, H13 (per EN 1822) H = Sofilair HEPA, H14 (per EN 1822) X = Other eff. grade, please state separately O = No filter required  <b>Note:</b> for required in-site efficiency ≥ 99.99% by using “hot” generated PAO/DEHS, H14 shall be selected.
5. Outlet location:	S = Side outlet (for upwards or downwards), standard B = Back outlet