

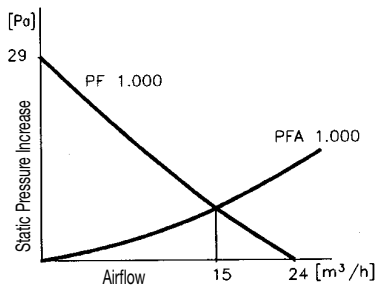


Filter Fan PF 1.000



PF 1.000

For versatile incorporation into equipment construction in the medical industry, in EDP equipment, warning and control enclosures and also for low power applications.



Airflow Data:

Type	PF 1.000
Filter Material (Standard Grade)	150 g/m ²
Unhindered Airflow	24 m ³ /h; 50 Hz / 28 m ³ /h; 60 Hz
Fan and Exhaust Filter Airflow	15 m ³ /h; 50 Hz / 17 m ³ /h; 60 Hz (PF 1.000 + PFA 1.000)
Max. Static Pressure (Airflow= 0 m ³ /h)	29 Pa
Filtration Efficiency	67%
Filter Material Grade (DIN 24 185)	EU 2
Noise Level (DIN 45 635)	39 dB(A)
Duty Rating	100%

Electrical Data:

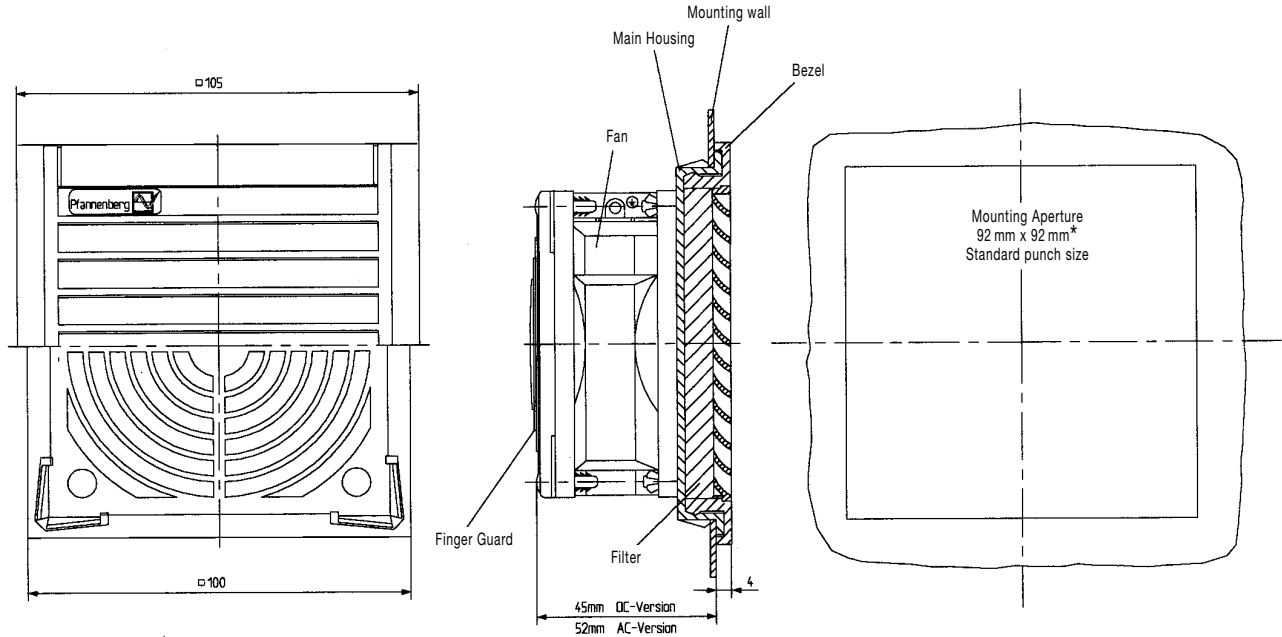
AC 50 Hz/60 Hz

Nominal Voltage	Electrical Data	Type PF 1.000
230 V	Operating Range Power Consumption	187 V...253 V 12 VA
115 V	Operating Range Power Consumption	97 V...127 V 12 VA

DC

Nominal Voltage	Electrical Data	Type PF 1.000
12 V	Operating Range Power Consumption	7 V...15 V 2.4 W
24 V	Operating Range Power Consumption	14 V...28 V 2.4 W
48 V	Operating Range Power Consumption	36 V...56 V 3.6 W

Mechanical Data:



Type	PF 1.000	
	AC	DC
Outside Dimensions in mm (Height x Width x Installation Depth)	105 x 105 x 52	105 x 105 x 45
Bearing Type	Sleeved Bearings	Ball Bearings
Installation Orientation	Any, horizontal airflow preferred	
Construction	Housing and Guard from sprayed thermoplastic (PC-FR) self-extinguishing, similar to UL94 VO	
Service Life	min. 30 000 h	min. 50 000 h
Weight	0.55 kg	0.25 kg
Safety Protection	In accordance with DIN 31 001	
Colour	Similar to RAL 7032 (Lt. Grey) or Black; other colours on request	
Connections	2 wires, 310 mm long	

Additional Information:

Climatic Data	AC	DC
Operating Temperature	-10 °C to +60 °C	-20 °C to +60 °C
Storage Temperature	-20 °C to +70 °C	
Max. Rel. Humidity	90%	
Protection Rating	IP 43 (EN 60 529), when installed as specified, not for outdoor-application!	
Basic Parts Kit	Standard Filter, Mounting- and User Manuel	
Accessories	Radiant Heater, Fan Heater, Thermostat, Rubber Seal	
Approvals	German Lloyd (GL)	
Ordering Example	Filter Fan PF 1.000 + Exhaust Filter Unit PFA 1.000 Standard Filter Standard Filter 230 V/50 Hz	
Further Catalogue Information	Installation Instructions see Page 46 Selection Diagram see Page 4 and 5 Accessories see Page 46	
* Tolerance Installation cutout	92 $\pm$ 1 -0	

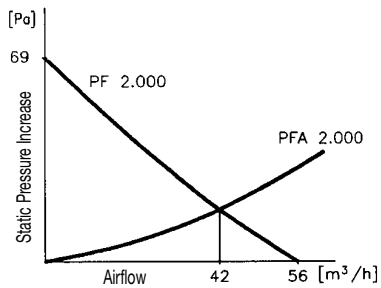


Filter Fan PF 2.000



PF 2.000

For a broad range of applications in electronics as well as conventional switchgear installations; a wide range of operating voltages ensures universal usability.



Airflow Data:

Type	PF 2.000
Filter Material*)	350 g/m²
Unhindered Airflow	56 m³/h; 50 Hz / 65 m³/h; 60 Hz
Fan and Exhaust Filter Airflow	42 m³/h; 50 Hz / 48 m³/h; 60 Hz (PF 2.000 + PFA 2.000)
Max. Static Pressure (Airflow = 0 m³/h)	69 Pa
Filtration Efficiency	83%
Filter Material Grade (DIN 24 185)	EU 3
Noise Level (DIN 45 635)	49 dB(A)
Duty Rating	100%
*) Standard Filter 350 g/m² (alternative filters in 150 g/m² and 500 g/m²)	

Electrical Data:

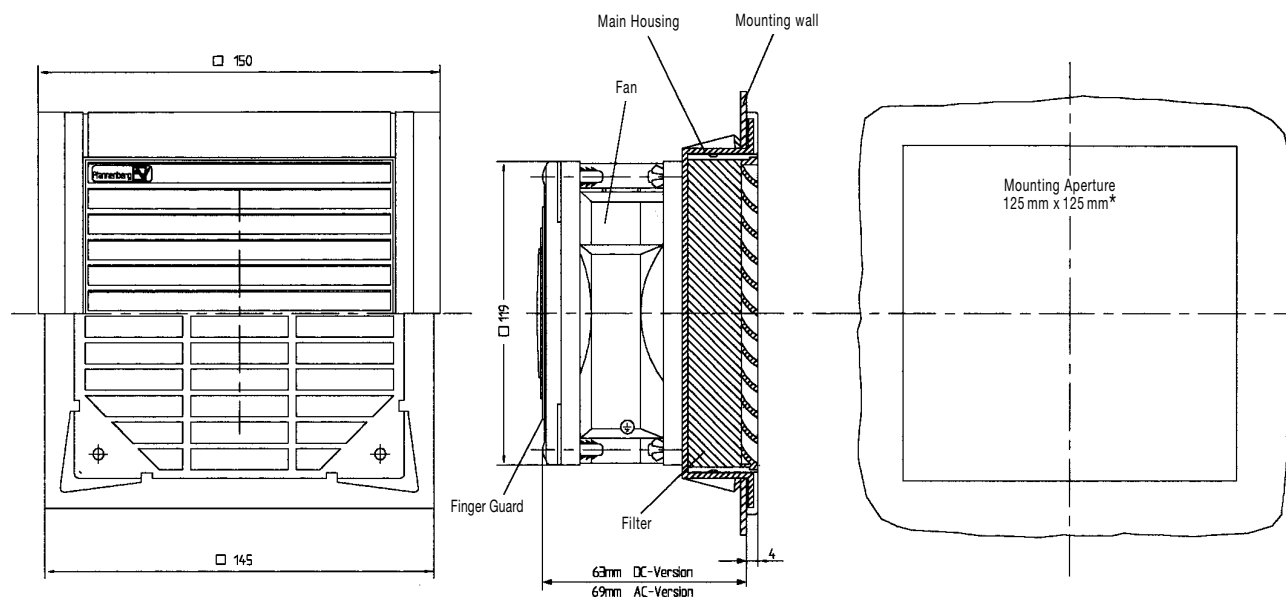
AC 50Hz/60Hz

Nominal Voltage	Electrical Data	Type PF 2.000
230 V	Operating Range Power Consumption	187 V... 253 V 19 VA
115 V	Operating Range Power Consumption	97 V... 127 V 19 VA

DC

Nominal Voltage	Electrical Data	Type PF 2.000
12 V	Operating Range Power Consumption	6 V... 14 V 5 W
24 V	Operating Range Power Consumption	18 V... 30 V 5 W
48 V	Operating Range Power Consumption	36 V... 56 V 5 W

Mechanical Data:



Type	PF 2.000	
	AC	DC
Outside Dimensions in mm (Height x Width x Installation Depth)	150 x 150 x 69	150 x 150 x 63
Bearing Type	Sleeved Bearings	Ball Bearings
Installation Orientation	Any, horizontal airflow preferred	
Construction	Housing and Guard from sprayed thermoplastic (ABS-FR) self-extinguishing, similar to UL 94 VO	
Service Life	min. 30 000 h	min. 40 000 h
Weight	0.735 kg	0.385 kg
Safety Protection	In accordance with DIN 31 001	
Colour	Similar to RAL 7032 (Lt. Grey) or Black; other colours on request	
Connections	Terminal strip	2 wires, 310 mm long

Further Information:

Climatic Data	AC	DC
Operating Temperature	-10 °C to +55 °C	-20 °C to +55 °C
Storage Temperature	-20 °C to +70 °C	
Max. Rel. Humidity	90%	
Protection Rating	IP 54 (EN 60 529), when installed as specified, not for outdoor-application!	
Basic Parts Kit	Standard Filter, Mounting- and User Manuel	
Accessories	Radiant Heater, Fan Heater, Thermostat, Rubber Seals	
Ordering Example	Filter Fan PF 2.000 + Exhaust Filter Unit PFA2.000 Standard Filter Standard Filter 230 V/50 Hz	
Further Catalogue Information	Installation Instructions see Page 46 Selection diagram see Page 4 and 5 Accessories see Page 46	
* Tolerance Installation cutout	125 $\begin{smallmatrix} +1 \\ -0 \end{smallmatrix}$	



Filter Fan PF 2.500, PF 3.000



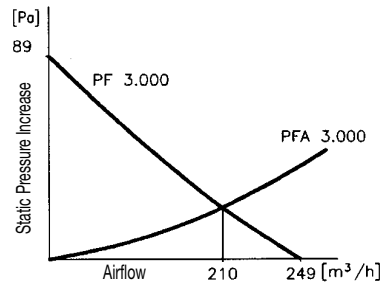
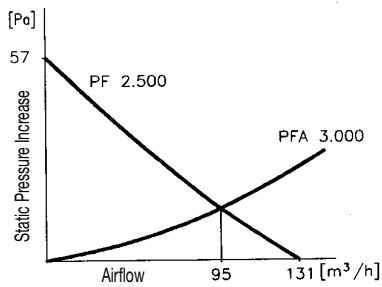
PF 2.500

For medium range applications in plant and machine equipment.



PF 3.000

The same size PF 2.500 but with a more powerful fan.



Airflow Data:

Type	PF 2.500	PF 3.000
Filter Material*)	350 g/m²	350 g/m²
Unhindered Airflow	131 m³/h; 50 Hz / 150 m³/h; 60 Hz	249 m³/h; 50 Hz / 286 m³/h; 60 Hz
Combined Airflow (Filter Fan and Exhaust Filter)	95 m³/h; 50 Hz / 109 m³/h; 60 Hz (PF 2.500 + PFA 3.000)	210 m³/h; 50 Hz / 242 m³/h; 60 Hz (PF 3.000 + PFA 3.000)
Max. Static Pressure (Airflow = 0 m³/h)	57 Pa	89 Pa
Filtration Efficiency	83%	
Filter Material Grade (DIN 24 185)	EU 3	
Noise Level (DIN 45 635)	53 dB (A)	55 dB (A)
Duty Rating	100%	
*) Standard Filter Material 350 g/m² (alternating Filters in 150 g/m², 500 g/m²)		

Electrical Data:

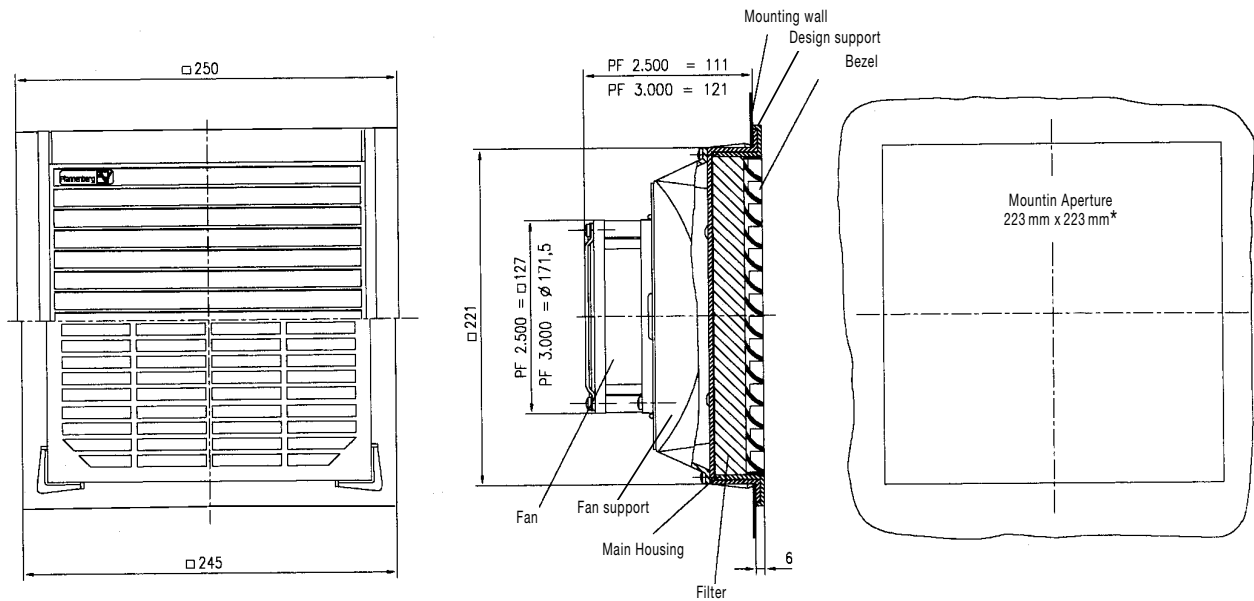
AC 50 Hz/60 Hz

Nominal Voltage	Electrical Data	Type	
		PF 2.500	PF 3.000
230 V	Operating Range Power Consumption	187 V...253 V 18 VA	187 V...253 V 48 VA
115 V	Operating Range Power Consumption	97 V...127 V 18 VA	97 V...127 V 43 VA

DC

Nominal Voltage	Electrical Data	Type	
		PF 2.500	PF 3.000
12 V	Operating Range Power Consumption	8 V...14 V 4.5 W	8 V...15 V 12 W
24 V	Operating Range Power Consumption	18 V...30 V 4.7 W	18 V...30 V 12 W
48 V	Operating Range Power Consumption	–	36 V...56 V 12 W

Mechanical Data:



Type	PF2.500	PF3.000	
	AC/DC	AC	DC
Outside Dimensions in mm (Height x Width x Installation Depth)	250 x 250 x 111	250 x 250 x 121	
Bearing Type	Ball Bearings		
Installation Orientation	Any, horizontal airflow preferred		
Construction	Housing and Guard from sprayed thermoplastic (ABS-FR) self-extinguishing, similar to UL 94 VO		
Service Life	min. 30 000 h	min. 30 000 h	min. 40 000 h
Weight	1.75 kg	1.75 kg	1.50 kg
Safety Protection	In accordance with DIN 31 001		
Colour	Similar to RAL 7032 (Lt. Grey) or Black; other colours on request		
Connections	Terminal Strip		

Further Information:

Climatic Data	AC	DC (only PF 3.000)
Operating Temperature	-10 °C to +55 °C	-20 °C to +55 °C
Storage Temperature	-20 °C to +70 °C	
Max. Rel. Humidity	90%	
Protection Rating	IP 54 (EN 60 529), when installed as specified, not for outdoor-application!	
Basic Parts Kit	Standard Filter, Mounting- and User Manuel	
Accessories	Radiant Heater, Fan Heater, Thermostat, Rubber Seal	
Approvals	PF 3.000 German Lloyd (GL), special execution: Underwriters Laboratories (UL)	
Ordering Example	Filter Fan PF 2.500 + Exhaust Filter Unit PFA3.000 Standard Filter Standard Filter 230 V/50 Hz	
Further Catalogue Information	Installation Instructions see Page 46 Selection Diagram see Page 4 and 5 Accessories see Page 46	
* Tolerance Installation cutout	223 $\pm$ 1 -0	



Filter Fan PF 5.000, PF 6.000



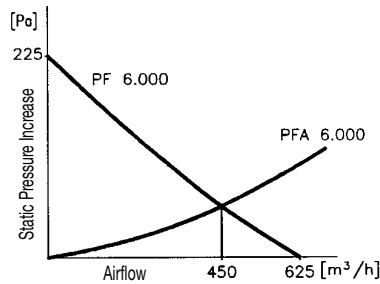
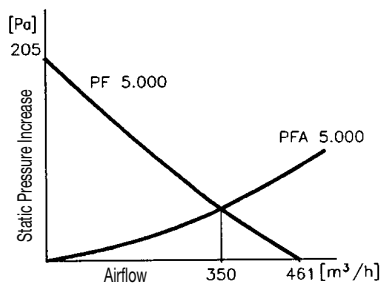
PF 5.000

For larger switchgear installation with higher demands of heat extraction.



PF 6.000

For larger switchgear installations where extreme heat extraction is needed whilst maintaining the required I.P. protection rating.



Airflow Data:

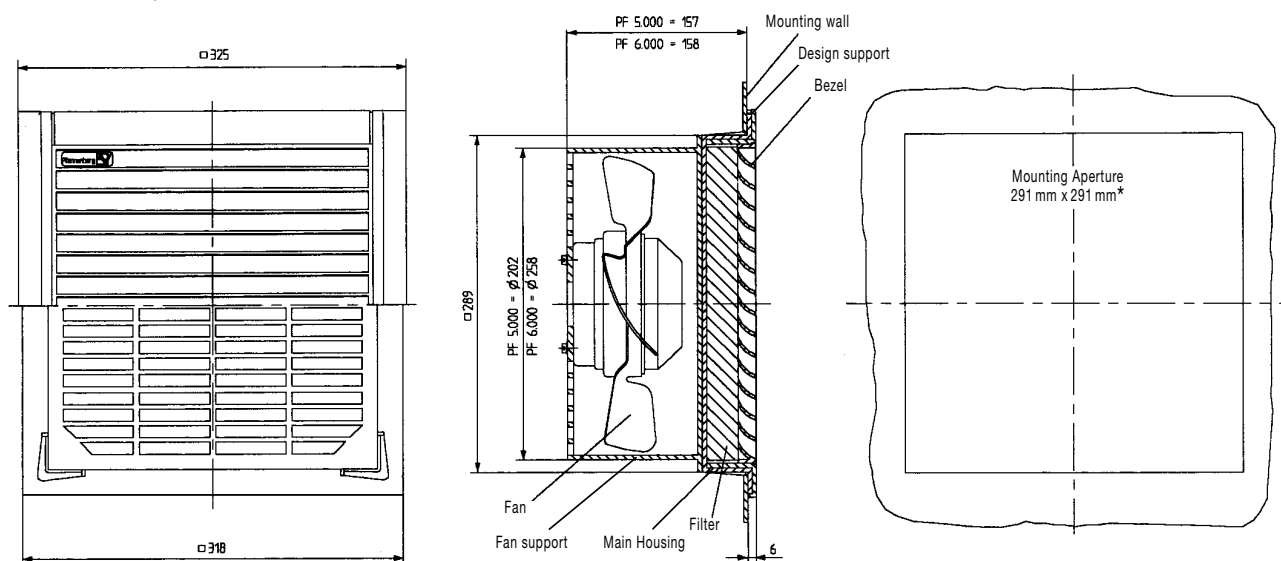
Type	PF 5.000	PF 6.000
Filtermaterial*)	350 g/m²	350 g/m²
Unhindered Airflow	461 m³/h; 50 Hz / 530 m³/h; 60 Hz	625 m³/h; 50 Hz / 720 m³/h; 60 Hz
Combined Airflow (Filter Fan and Exhaust Filter)	350 m³/h; 50 Hz / 403 m³/h; 60 Hz (PF 5.000 + PF 6.000)	450 m³/h; 50 Hz / 518 m³/h; 60 Hz (PF 6.00 + PFA 6.000)
Max. Static Pressure (Airflow = 0 m³/h)	205 Pa	225 Pa
Filtration Efficiency	83%	
Filter Material Grade (DIN 24 185)	EU 3	
Noise Level (DIN 45 635)	69 dB (A)	71 dB (A)
Duty Rating	100%	
*) Standard Filter Material 350 g/m² (alternative Filters in 150 g/m² and 500 g/m²)		

Electrical Data:

AC 50Hz/60Hz

Nominal Volume	Electrical Data	Type	
		PF 5.000	PF 6.000
400 V 3 Phasen	Operating Range Power Consumption	–	320 V... 420 V 122 VA
230 V	Operating Range Power Consumption	190 V... 253 V 63 VA	190 V... 253 V 122 VA
115 V	Operating Range Power Consumption	103 V... 127 V 63 VA	98 V... 127 V 122 VA

Mechanical Data:



Type	PF 5.000	PF 6.000
Outside Dimensions in mm (Height x Width x Installation Depth)	325 x 325 x 157	325 x 325 x 158
Bearing Type	Ball Bearings	
Installation Orientation	Any, horizontal airflow preferred	
Construction	Housing and Guard from sprayed thermoplastic (ABS-FR) self-extinguishing, similar to UL 94 VO	
Service Life	min. 40 000 h	min. 25 000 h
Weight	3.0 kg	3.5 kg
Safety Protection	In accordance with DIN 31 001	
Colour	Similar to RAL 7032 (Lt. Grey), other colours on request	
Connections	Terminal Strip	

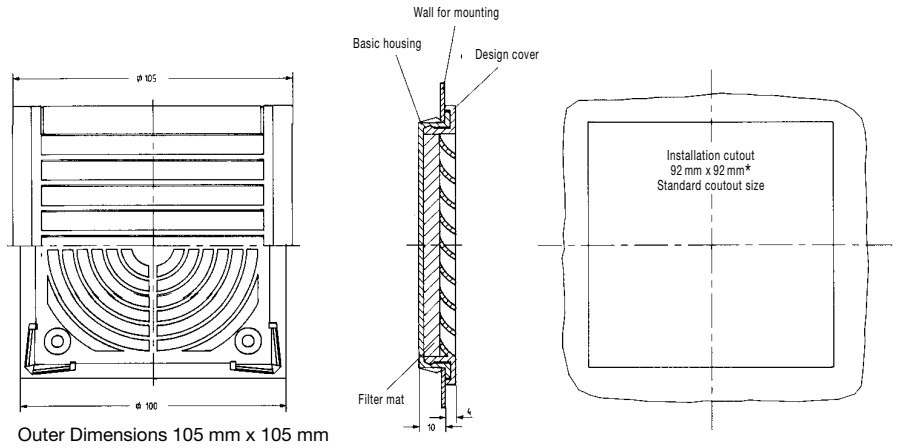
Further Information:

Climatic Data	PF 5.000	PF 6.000
Operating Temperature	- 10 °C to + 55 °C	
Storage Temperature	- 20 °C to + 70 °C	
Max. Rel. Humidity	90%	
Protection Rating	IP 54 (EN 60 529), when installed as specified, not for outdoor-application!	
Basic Parts Kit	Standard Filter, Mounting- and User Manuel	
Accessories	Radiant Heater, Fan Heater, Thermostat, Rubber Seal	
Ordering Example	Filter Fan PF 5.000 + Exhaust Filter PFA 5.000 Standard Filter Standard Filter 230 V / 50 Hz	
Further Catalogue Information	Installation Instructions see Page 46 Selection Diagram see Page 4 and 5 Accessories see Page 46	
* Tolerance Installation cutout	291 ⁺¹ ₋₀	

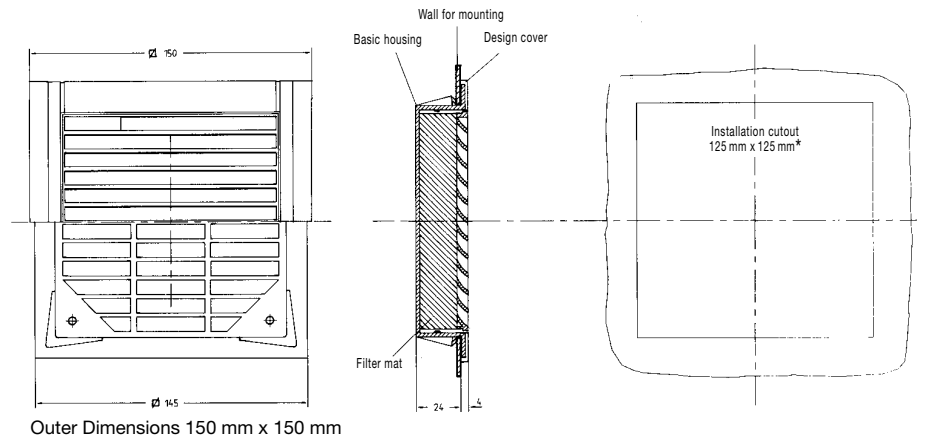
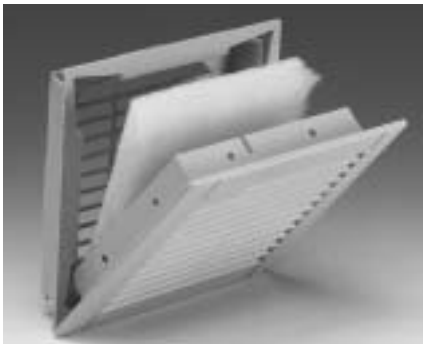


Series PFA Exhaust Filters

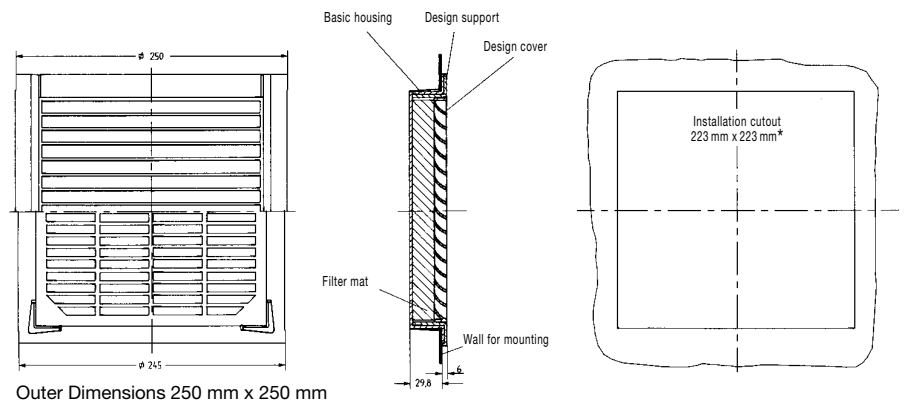
PFA 1.000



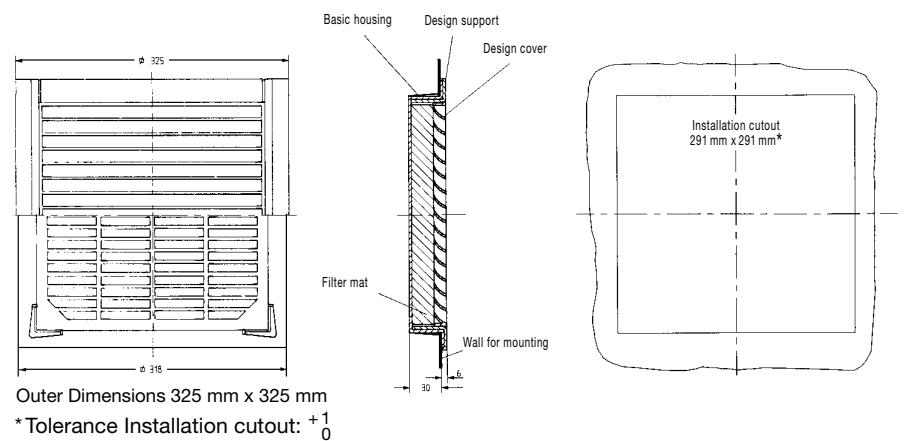
PFA 2.000



PFA 3.000



PFA 6.000



“... click and fit!”

- the same perfect design as the Filter Fans
- Pfannenber developed and patented snap-fastening “... click and fit”
- no more screw fixing
- max. outside protrusion of 6 mm
- also for door mounting in accordance with VDE 0113 (EN 60 204) without screws
- easy Filter exchange during use

Airflow Data:

Type	PFA 1.000	PFA 2.000	PFA 3.000	PFA 6.000
Filter material*)	only 150 g/m ²	Standard Filter	350 g/m ²	
Filtration Efficiency	67%		83%	
Filter Material Grade (DIN 24 185)	EU 2		EU 3	
*) Standard Filter 350 g/m ² (alternative filters in 150 g/m ² and 500 g/m ²)				

Mechanical Data:

Outside dimensions in mm (Height x Width x Installation Depth)	105 x 105 x 10	150 x 150 x 24	250 x 250 x 29,8	325 x 325 x 30
Material	sprayed thermoplastic, self-extinguishing, similar to UL 94 VO (PC-FR) (ABS-FR)			
Weight	0.050 kg	0.126 kg	0.460 kg	0.755 kg
Colour	Similar to RAL 7032 (Lt. Grey) or Black; other colours on request			

Additional Information:

Climatic Data		
Operating Temperature	- 20 °C to + 70 °C	
Storage Temperature	- 20 °C to + 70 °C	
Relative Humidity	90%	
Protection Rating	IP 43	IP 54
Basic Parts Kit	Standard Filter, Mounting- and User Manuel	
Accessories	Radiant Heater, Fan Heater, Thermostat, Rubber Seal	
Approvals	PF 1.000 German Lloyd (GL) PF 3.000 German Lloyd (GL)	
Ordering Example	PFA 2.500 + Standard filter	