

# Filterfans 4.0™ Trust in the Original

## Filterfans 4.0™

As a result of over 50 years of experience and continuous development, Pfannenberg's Filterfans® have superior features. With our flow optimized fins and rotor blades the Filterfans® reach a particularly high airflow and at the same time provide an IP 55, Type 12 system of protection. The flat-profile, uni-colored design matches modern machines and plants perfectly.

Pfannenberg's patented click mechanism on our Filterfans® have a unique patented 4-corner fastening system enabling safe and quick, tool-free installation allowing the filter medium to be replaced in seconds.

The flow characteristics of the Filterfans® were optimized during more than 1,000 tests in our modern test laboratory. The result: modern louvers which enable maximal airflow, hold back dust and water particles, protect the filter medium from damage and can be integrated into the design of the applications. All in all, the Filterfans® contain 11 well-thought out patent protected features.

Using a combination of Filterfans® with thermostats and hygrometers from the FLZ series (see page 166), you can additionally achieve savings on energy, materials and time plus a significantly longer life span. This results in an optimized environmental balance as well as greater reliability of your production process.

## NEW! Filterfans 4.0™

Otto Pfannenbergs invention of the Filterfan® in 1958 was a milestone in the area of industrial thermal management. Today Pfannenbergs provides a wide range of different solutions for industrial thermal management and is thus one of the few specialists that can provide the appropriate devices for virtually all industrial requirements – worldwide.

### REDUCED ENERGY CONSUMPTION

More air, less power consumption

### NEMA TYPE PROTECTION

Closed frame prevents unfiltered air from penetrating

### PATENTED TOOL-LESS 4 CORNER FASTENING SYSTEM

Possible to install in seconds

### AESTHETICALLY PLEASING DESIGN USING NEUTRAL COLORS

Perfect harmony of colors with modern machines and plants (black is optional)

### HIGHEST SYSTEM AIRFLOW IN INDUSTRY

Via optimized louvres

### 300% LONGER SERVICE TIME VIA PATENTED FLUTED FILTER MAT

This saves time and money



## Performance, Installation & Maintenance - YOUR ADVANTAGE

Pfannenbergs Filterfans® offer an enormous degree of service, mounting and maintenance-friendliness due to:



### Sets Industry Standard

Filterfans® can be seamlessly integrated into industry standard enclosure cut-outs.



### Reduced Installation Costs

The patented 4-corner fastening system allows a tool-free installation in seconds and guarantees a secure hold.



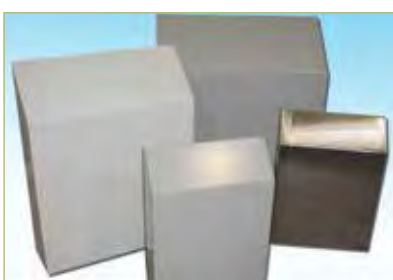
### Easy Maintenance

The design cover's fastening system with grill supporting hinge requires only a single hand to replace the filter mat in seconds.



### Optimized Air Flow

Airflow optimized fins and rotor blades guarantee maximal airflow with minimal energy consumption using high performance louvres and more surface area on fluted filter mats.



### Additional Accessories

Filterfans® can be used with thermostats to reduce energy & maintenance costs. NEMA 3R rainhoods are also available in steel and stainless steel for outdoor and some wash down applications.



### Extended Lifetime

With our fluted filter mats, Filterfans® reach NEMA Type 12 protection. Additionally, the fluted mats extend service life by 300% requiring less frequent replacements.

## Filterfans 4.0™

Type	Air flow rate <sup>1</sup>	Rated voltage	Cut-out dimensions (HxW) <sup>3</sup> inches (mm)	Approvals					Page
	CFM2 (Type 12 / IP 55)			UL	cUL	GOST	CSA	CE	
<b>PF Series Filterfans 4.0™</b>									
PF 11000	17	115 V / 230 V AC	3.62 x 3.62 (92 x 92)	●	●	●	●	●	149
		12 V / 24 V / 48 V DC		●	●	●	●	●	
PF 22000	38	115 V / 230 V AC	4.92 x 4.92 (125 x 125)	●	●	●	●	●	151
		12 V / 24 V / 48 V DC		●	●	●	●	●	
PF 32000	65	115 V / 230 V AC	6.97 x 6.97 (177 x 177)	●	●	●	●	●	153
		12 V / 24 V / 48 V DC		●	●	●	●	●	
PF 42500	94	115 V / 230 V AC	8.78 x 8.78 (223 x 223)	●	●	●	●	●	157
		12 V / 24 V / 48 V DC		●	●	●	●	●	
PF 43000	169	115 V / 230 V AC	8.78 x 8.78 (223 x 223)	●	●	●	●	●	159
		12 V / 24 V / 48 V DC		●	●	●	●	●	
PF 65000	297	115 V / 230 V AC	11.46 x 11.46 (291 x 291)	●	●	●	●	●	161
PF 66000	462	400 V / 460 V 3 Ø	11.46 x 11.46 (291 x 291)	●	●	●	●	●	163
		115 V / 230 V AC		●	●	●	●	●	
PF 67000	560	400 V / 460 V 3 Ø	11.46 x 11.46 (291 x 291)	●	●	●	●	●	165
		115 V / 230 V AC		●	●	●	●	●	
<b>PFA Series exhaust filters</b>									
PFA 10000	N/A	N/A	3.62 x 3.62 (92 x 92)	●	●	●	●	●	149
PFA 20000			4.92 x 4.92 (125 x 125)	●	●	●	●	●	151
PFA 30000			6.97 x 6.97 (177 x 177)	●	●	●	●	●	153
PFA 40000			8.78 x 8.78 (223 x 223)	●	●	●	●	●	157
PFA 60000			11.46 x 11.46 (291 x 291)	●	●	●	●	●	161
<b>PF Slim Line Filterfans 4.0™</b>									
PF 33000 SL	152	115 V / 230 V AC	6.97 x 6.97 (177 x 177)	○	○			●	155
PF 65000 SL	325	115 V / 230 V AC	11.46 x 11.46 (291 x 291)	●	●		●	●	167
PF 67000 SL	427	400 V / 460 V 3 Ø	11.46 x 11.46 (291 x 291)	●	●		●	●	169
		115 V / 230 V AC		●	●		●	●	
<b>PF Series EMC Filterfans 4.0™</b>									
PF 11000 EMC	as for PF series	as for PF series	3.66 x 3.66 (93 x 93)	●	●	●		●	149
PF 22000 EMC			4.96 x 4.96 (126 x 126)	●	●	●		●	151
PF 32000 EMC			7.01 x 7.01 (178 x 178)	●	●	●		●	153
PF 42500 EMC			8.82 x 8.82 (224 x 224)	●	●	●		●	157
PF 43000 EMC			8.82 x 8.82 (224 x 224)	●	●	●		●	159
PF 65000 EMC			11.50 x 11.50 (292 x 292)	●	●	●		●	161
PF 66000 EMC			11.50 x 11.50 (292 x 292)	●	●	●		●	163
PF 67000 EMC			11.50 x 11.50 (292 x 292)	●	●	●		●	165
<b>PFA series EMC exhaust filters</b>									
PFA 10000 EMC	N/A	N/A	3.66 x 3.66 (93 x 93)	●	●	●		●	150
PFA 20000 EMC			4.96 x 4.96 (126 x 126)	●	●	●		●	152
PFA 30000 EMC			7.01 x 7.01 (178 x 178)	●	●	●		●	154
PFA 40000 EMC			8.82 x 8.82 (224 x 224)	●	●	●		●	158
PFA 60000 EMC			11.50 x 11.50 (292 x 292)	●	●	●		●	162
<b>PTF Series Top-Mounted Filterfans 4.0™</b>									
PTF 60500	206 (350)	115 V / 230 V AC	11.46 x 11.46 (291 x 291)	●	●	●		●	173
PTF 60700	324 (550)	115 V / 230 V AC	11.46 x 11.46 (291 x 291)	●	●	●		●	173
PTF 61000	441 (749)	115 V / 230 V AC	11.46 x 11.46 (291 x 291)	●	●	●		●	173
<b>PTFA Series Top Exhaust Filters</b>									
PTFA 60000	N/A	N/A	11.46 x 11.46 (291 x 291)	●	●	●		●	173

<sup>1</sup> free-blowing

<sup>3</sup> for material thicknesses up to .08" (2 mm)

● available  
○ pending

**PF 11000**

Filterfans 4.0™

**PFA 10000**

Exhaust filter



- Installation size 1, air flow rate up to 17 CFM
- System of protection IP 54, NEMA type 12
- UL, cUL to NITW2 Category and CE approved, CSA pending
- Cut-out compatible with installation size 1 from the 3<sup>rd</sup> Generation (see page 159)

Data	PF 11000			Unit	
<b>Part number</b>	RAL 7035 (Lt. Gray Grill)	11611101055	11611151055	11611801055	
	RAL 9011 (Black Grill)	11611101050	11611151050	11611801050	
		AC 50 Hz / 60 Hz		DC	
<b>Rated voltage ± 10 %</b>		230	115	24	V
<b>Unimpeded airflow</b>		17 (29)			CFM (m <sup>3</sup> /h)
<b>Air flow rate in combination (PF + PFA 10000)</b>		11 (18)			
<b>Power consumption</b>		12 / 11	12 / 11	2.4	W
<b>Current consumption</b>		0.07 / 0.06	0.15 / 0.15	0.1	A
<b>Noise level (according to EN ISO 3741)</b>		33			dB(A)
<b>Weight</b>		1.2 (0.55)		.35 (0.16)	lb (kg)
<b>Type of connection</b>		cable, 2-core, length 310 mm			
<b>Fuse</b>		6			A
<b>System of protection according to EN 60529 / UL 50</b>		NEMA type 12 - standard filter			
<b>Filtration efficiency</b>		88			%
<b>Filter mat quality class<sup>1</sup></b>		G 3			
<b>Duty cycle</b>		100			%
<b>Bearing type</b>		sleeve bearing		ball bearing	
<b>Service life L<sub>10</sub> (+ 40 °C)<sup>2</sup></b>		52500	55000	70000	h
<b>Temperature range</b>		+ 5 ... + 131 / - 15 ... + 55			°F / °C
<b>Material Protection Rating</b>		made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO			

Accessories	Piece	Part number	Information on page	
<b>Exhaust filter PFA 10000</b>	RAL 9011 (Black Grill)	1	11710001050	171
	RAL 7035 (Lt. Gray Grill)	1	11710001055	171
<b>Thermostat FLZ 530° F</b>		1	17111000000	186

<sup>1</sup> according to DIN EN 779

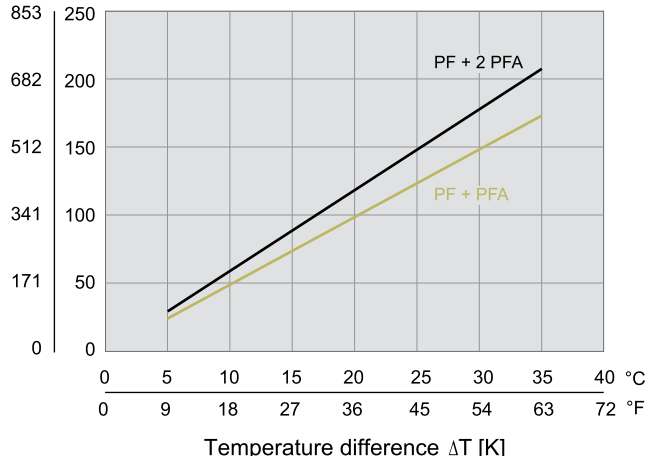
<sup>2</sup> fan failure is defined as being when the current and speed deviate or the operating noises are out of the ordinary  
Approvals see page 148

### Cooling Capacity Performance Curves

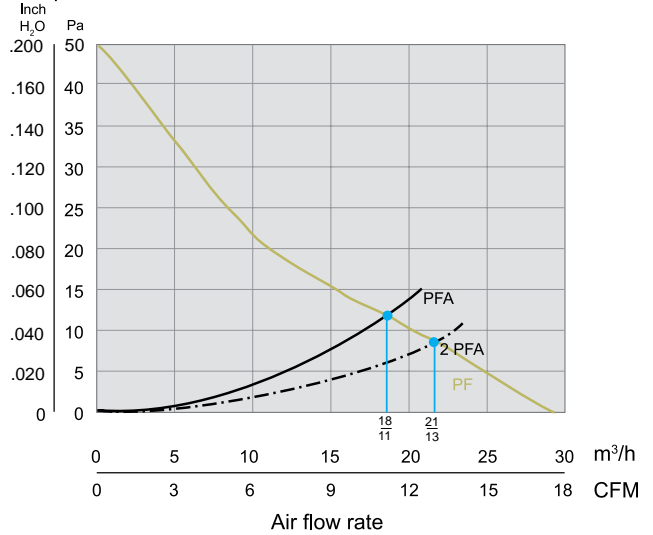
#### PF 11000

Cooling capacity

BTU W

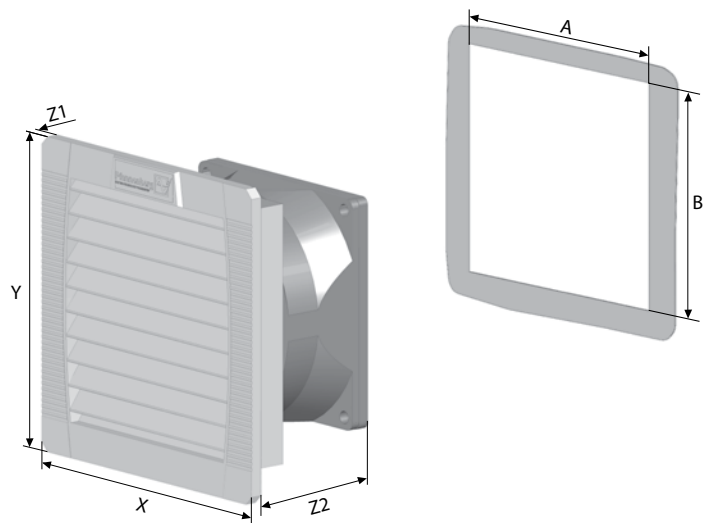


Static pressure



### Dimensions

inches (mm)	PF 11000		PFA 10000
	AC	DC	Exhaust
<b>X</b>	4.29 (109)	4.29 (109)	4.29 (109)
<b>Y</b>	4.29 (109)	4.29 (109)	4.29 (109)
<b>Z1</b>	.16 (4)	.16 (4)	.16 (4)
<b>Z2</b>	2.44 (62)	1.93 (49)	.75 (19)
<b>A'</b>	3.62 (92)	3.62 (92)	3.62 (92)
<b>B'</b>	3.62 (92)	3.62 (92)	3.62 (92)



**PF 22000**

Filterfans 4.0™

**PFA 20000****Exhaust filter**

- Installation size 2, air flow rate up to 38 CFM
- System of protection IP 55, NEMA Type 12
- UL, cUL to NITW2 Category and CE approved, CSA pending
- Cut-out compatible with installation size 2 from the 3<sup>rd</sup> Generation (see page 159)

**Options:**

- **UV-resistance / EMC, consult factory for part numbers**

Data	PF 22000						Unit
<b>Part number</b>	RAL 9011 (Black Grill)	11622104050	11622154050	11622854050	11622804050	11622704050	
	RAL 7035 (Lt. Gray Grill)	11622104055	11622154055	11622854055	11622804055	11622704055	
	AC 50 Hz / 60 Hz			DC			
<b>Rated voltage ± 10 %</b>	230	115	12	24	48		V
<b>Unimpeded airflow (CFM2)</b>	38 (64)						CFM (m <sup>3</sup> /h)
<b>Air flow rate in combination (PF + PFA 20000) (CFM3)</b>	28 (46)						
<b>Power consumption</b>	19 / 18	20 / 20	5	5	5		W
<b>Current consumption</b>	0.12 / 0.18	0.24 / 0.23	0.42	0.21	0.1		A
<b>Noise level (according to EN ISO 3741)</b>	44 / 44			44			
<b>Weight</b>	1.5 (0.7)			.97 (0.44)			lb (kg)
<b>Type of connection</b>	terminal strip			cable, 2-core, length 310 mm			
<b>Fuse (maximum)</b>	6						A
<b>System of protection according to EN 60529 / UL 50</b>	NEMA Type 12 - fluted filter / IP 55						
<b>Filtration efficiency</b>	91						%
<b>Filter mat quality class<sup>1</sup></b>	G 4						
<b>Duty cycle</b>	100						%
<b>Bearing type</b>	sleeve bearing			ball bearing			
<b>Service life L<sub>10</sub> (+ 40 °C)<sup>2</sup></b>	37500	40000	62500				h
<b>Temperature range</b>	+ 5 ... + 131 / - 15 ... + 55						°F / °C
<b>Material Protection Rating</b>	made of injection-molded thermoplastic, self-extinguishing, UL 94 VO, UV-resistant optional						

Accessories	Piece	Part number	Information on page	
<b>Exhaust filter PFA 20000</b>	RAL 9011 (Black Grill)	1	11720004050	171
	RAL 7035 (Lt. Gray Grill)	1	11720004055	171
<b>Thermostat FLZ 530° F</b>	1	17121000010		186

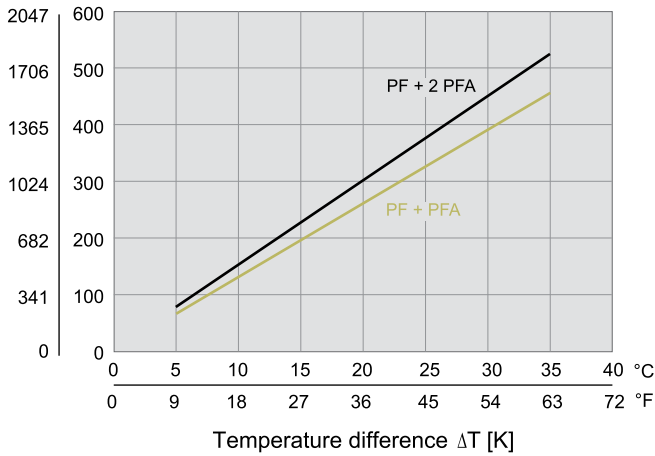
<sup>1</sup> according to DIN EN 779

<sup>2</sup> fan failure is defined as being when the current and speed deviate or the operating noises are out of the ordinary  
Approvals see page 148

Cooling Capacity Performance Curves	Static Pressure Performance Curves
PF 22000 T12/IP 55 (& UV option)	PF 22000 T12/IP 55 (& UV option)

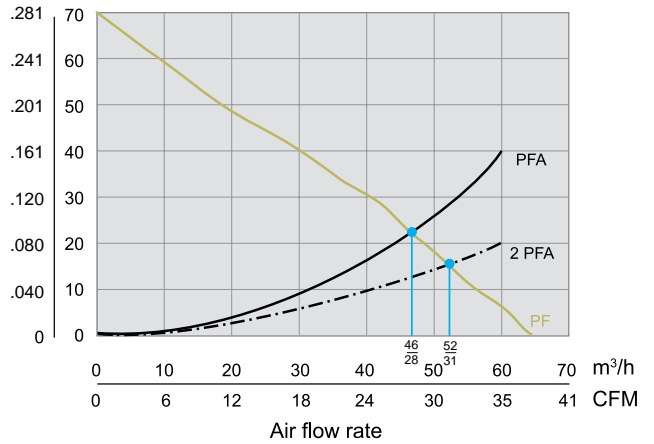
Cooling capacity

BTU W



Static pressure

Inch H<sub>2</sub>O Pa

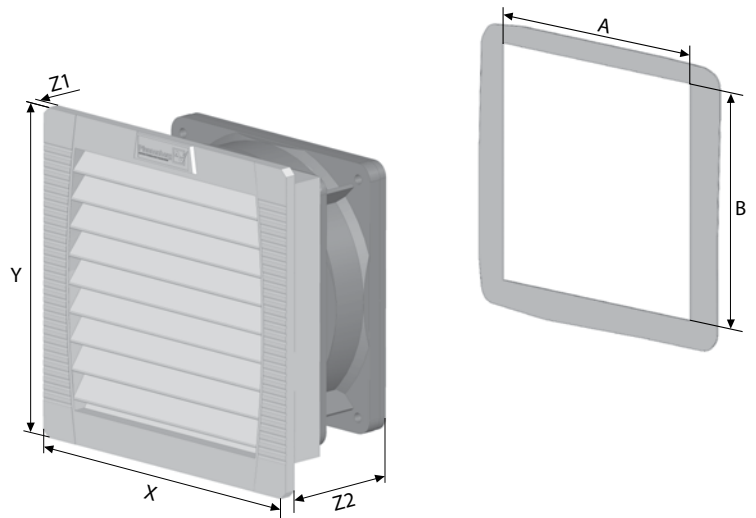


**Dimensions**

inches (mm)	PF 22000		PFA 20000
	AC	DC	Exhaust
<b>X</b>	5.71 (145)	5.71 (145)	5.71 (145)
<b>Y</b>	5.71 (145)	5.71 (145)	5.71 (145)
<b>Z1</b>	.2 (5)	.2 (5)	.2 (5)
<b>Z2</b>	2.76 (70)	2.52 (64)	1.02 (26)
<b>A<sup>1</sup></b>	4.92 (125) <sup>2</sup>	4.92 (125) <sup>2</sup>	4.92 (125) <sup>2</sup>
<b>B<sup>1</sup></b>	4.92 (125) <sup>2</sup>	4.92 (125) <sup>2</sup>	4.92 (125) <sup>2</sup>

<sup>1</sup> for material thicknesses up to .07" (2 mm)  
+1 mm for thickness of material > .07" (2 mm) ≤ .12" (3 mm)

<sup>2</sup> add .039" (1 mm) for EMC version



Filterfans 4.0™

**PF 32000**

Filterfans 4.0™

**PFA 30000**

Exhaust filter



- Installation size 3, air flow rate up to 65 CFM
- System of protection IP 54 and IP 55, NEMA type 12
- UL, cUL to NITW2 Category and CE approved, CSA pending

**Options:**

- **UV-resistance / EMC, consult factory for part numbers**

Data		PF32000			Unit
Part number	RAL 9011 (Black Grill)	11632104050	11632154050	11632804050	
	RAL 7035 (Lt. Gray Grill)	11632104055	11632154055	11632804055	
		AC 50 Hz / 60 Hz		DC	
Rated voltage ± 10 %		230	115	24	V
Unimpeded airflow (CFM2)		65 (110)			CFM (m³/h)
Air flow rate in combination (PF + PFA 30000) (CFM3)		38 (64)			
Power consumption		19 / 18	20 / 20	5	W
Current consumption		0.12 / 0.18	0.24 / 0.23	0.21	A
Noise level (according to EN ISO 3741)		40			
Weight		1.9 (0.87)		1.3 (0.61)	lb (kg)
Type of connection		terminal strip		cable, 2-core, length 310 mm	
Fuse (maximum)		6			A
System of protection according to EN 60529 / UL 50		NEMA Type 12 - fluted filter / IP 55			
Filtration efficiency		91			%
Filter mat quality class <sup>1</sup>		G 4			
Duty cycle		100			%
Bearing type		ball bearing			
Service life L <sub>10</sub> (+ 40 °C) <sup>2</sup>		37500	40000	62500	h
Temperature range		+ 5 ... + 131 / - 15 ... + 55			°F / °C
Material Protection Rating		made of injection-molded thermoplastic, self-extinguishing, UL 94 VO, UV-resistant optional			

Accessories	Piece	Part number	Information on page
Exhaust filter PFA 30000 RAL 9011 (Black Grill)	1	11730004050	171
Exhaust filter PFA 30000 RAL 7035 (Lt. Gray Grill)	1	11730004055	171
Thermostat FLZ 530° F	1	17121000010	186

<sup>1</sup> according to DIN EN 779

<sup>2</sup> fan failure is defined as being when the current and speed deviate or the operating noises are out of the ordinary

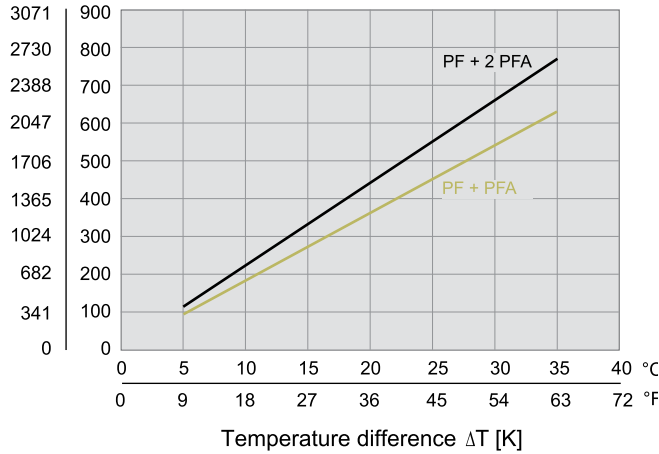
Approvals see page 148



Cooling Capacity Performance Curves	Static Pressure Performance Curves
PF 32000 T12 / IP 55 (& UV option)	PF 32000 T12 / IP 55 (& UV option)

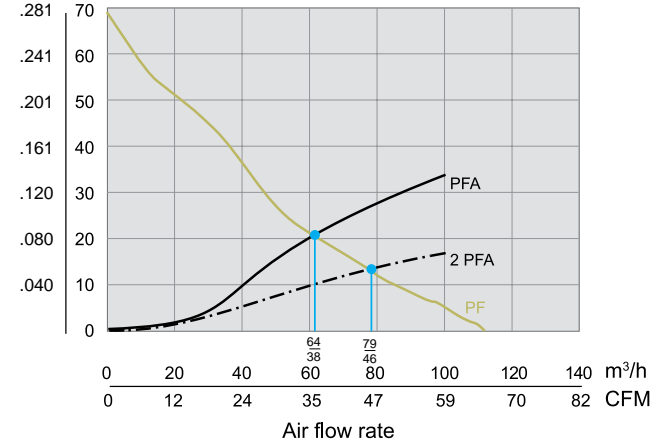
Cooling capacity

BTU W



Static pressure

Inch H<sub>2</sub>O Pa

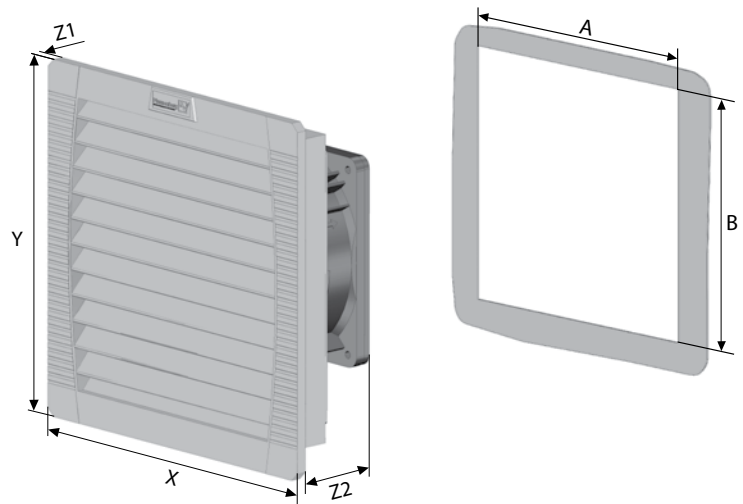


**Dimensions**

inches (mm)	PF 32000		PFA 30000
	AC	DC	Exhaust
<b>X</b>	7.95 (202)	7.95 (202)	7.95 (202)
<b>Y</b>	7.95 (202)	7.95 (202)	7.95 (202)
<b>Z1</b>	.24 (6)	.24 (6)	.24 (6)
<b>Z2</b>	3.43 (87)	3.19 (81)	1.34 (34)
<b>A<sup>1</sup></b>	6.97 (177) <sup>2</sup>	6.97 (177) <sup>2</sup>	6.97 (177) <sup>2</sup>
<b>B<sup>1</sup></b>	6.97 (177) <sup>2</sup>	6.97 (177) <sup>2</sup>	6.97 (177) <sup>2</sup>

<sup>1</sup> for material thicknesses up to .07" (2 mm)  
+1 mm for thickness of material > .07" (2 mm) ≤ 1.2" (3 mm)

<sup>2</sup> add .039" (1 mm) for EMC version



## PF 33000 SL

### Slim Line Filterfans 4.0™

Pfannenberg Filterfans® with low installation depth

- Installation size 3, air flow rate up to 115 CFM
- System of protection IP 55, NEMA 12
- UL, cUL to NITW2 Category and CE approved, CSA pending



Data	PF33000 SL			Unit	
Part number	RAL 9011 (Black Grill)	11633106050	11633156050	11633806050	
	RAL 7035 (Lt. Gray Grill)	11633106055	11633156055	11633806055	
	AC 50 Hz / 60 Hz		DC		
Rated voltage ± 10 %	230	115	24	V	
Unimpeded airflow (CFM2)	152 (258)			CFM (m³/h)	
Air flow rate in combination (PF + PFA 30000) (CFM3)	115 (196)				
Power consumption	19 / 18	20 / 20	5	W	
Current consumption	0.12 / 0.18	0.24 / 0.23	0.21	A	
Noise level (according to EN ISO 3741)	40				
Weight	1.9 (0.87)		1.3 (0.61)	lb (kg)	
Type of connection	terminal strip		cable, 2-core, length 310 mm		
Fuse (maximum)	6			A	
System of protection according to EN 60529 / UL 50	NEMA 12 - fluted filter / IP 55				
Filtration efficiency	91			%	
Filter mat quality class <sup>1</sup>	G 4				
Duty cycle	100			%	
Bearing type	sleeve bearing		ball bearing		
Service life L <sub>10</sub> (+ 40 °C) <sup>2</sup>	37500	40000	62500	h	
Temperature range	+ 5 ... + 131 / - 15 ... + 55			°F / °C	
Material Protection Rating	made of injection-molded thermoplastic, self-extinguishing, UL 94 VO, UV-resistant optional				

Accessories	Piece	Part number	Information on page
Exhaust filter PFA 30000	RAL 9011 (Black Grill)	11730004050	171
	RAL 7035 (Lt. Gray Grill)	11730004055	171
Thermostat FLZ 530° F	1	17121000010	186

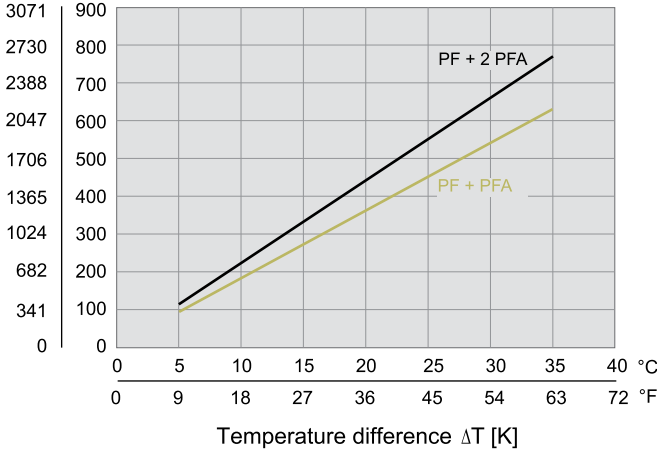
<sup>1</sup> according to DIN EN 779

<sup>2</sup> fan failure is defined as being when the current and speed deviate or the operating noises are out of the ordinary

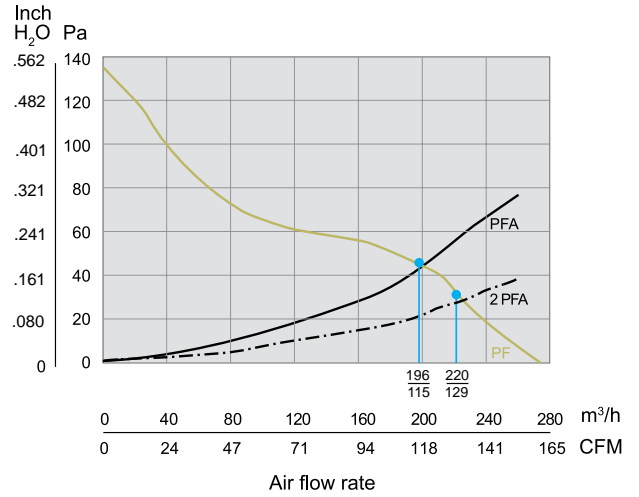
Approvals see page 148

Cooling Capacity Performance Curves	Static Pressure Performance Curves
PF 33000 SL	PF 33000 SL

Cooling capacity  
BTU W



Static pressure

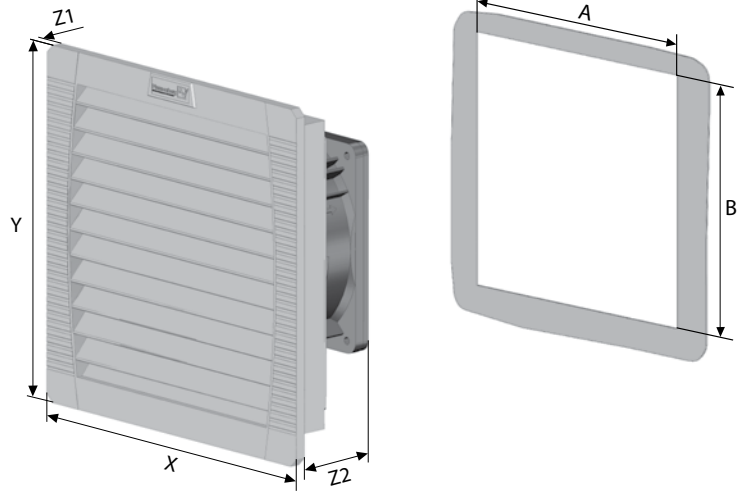


**Dimensions**

inches (mm)	PF 33000 SL		PFA 30000
	AC	DC	Exhaust
<b>X</b>	7.95 (202)	7.95 (202)	7.95 (202)
<b>Y</b>	7.95 (202)	7.95 (202)	7.95 (202)
<b>Z1</b>	.24 (6)	.24 (6)	.24 (6)
<b>Z2</b>	3.43 (87)	3.19 (81)	1.34 (34)
<b>A¹</b>	6.97 (177)²	6.97 (177)²	6.97 (177)²
<b>B¹</b>	6.97 (177)²	6.97 (177)²	6.97 (177)²

<sup>1</sup> for material thicknesses up to .07" (2 mm)  
+1 mm for thickness of material > .07" (2 mm) ≤ 1.2" (3 mm)

<sup>2</sup> add .039" (1 mm) for EMC version



**PF 42500**

Filterfans 4.0™

**PFA 40000**

Exhaust filter



- Installation size 4, air flow rate up to 94 CFM
- Two performance classes, cut-out compatible
- System of protection IP 54 and IP 55, NEMA type 12
- UL, cUL to NITW2 Category and CE approved, CSA pending
- Cut-out compatible with installation size 4 from the 3<sup>rd</sup> Generation (see page 159)

Data		PF 42500			Unit
Part number	RAL 9011 (Black Grill)	11642104050	11642154050	11642804050	
	RAL 7035 (Lt. Gray Grill)	11642104055	11642154055	11642804055	
		AC 50 Hz / 60 Hz		DC	
Rated voltage ± 10 %		230	115	24	V
Unimpeded airflow (CFM2)		94 (160)			CFM (m <sup>3</sup> /h)
Air flow rate in combination (PF + PFA 40000) (CFM3)		74 (126)			
Power consumption		18 / 17	18 / 17	4.7	W
Current consumption		0.12 / 0.1	0.25 / 0.25	0.2	A
Noise level (according to EN ISO 3741)		40 / 43		40	dB(A)
Weight		3 (1.18)		2 (0.92)	lb (kg)
Type of connection		spring-type terminal			
Fuse (maximum)		6			A
System of protection according to EN 60529 / UL 50		NEMA Type 12 - fluted filter / IP 55			
Filtration efficiency		91			%
Filter mat quality class <sup>1</sup>		G 4			
Duty cycle		100			%
Bearing type		ball bearing			
Service life L <sub>10</sub> (+ 40 °C) <sup>2</sup>		40000	42500	70000	h
Temperature range		+ 5 ... + 131 / - 15 ... + 55			°F / °C
Material Protection Rating		made of injection-molded thermoplastic, self-extinguishing, UL 94 VO, UV-resistant optional			

Accessories	Piece	Part number	Information on page	
Exhaust filter PFA 40000	RAL 9011 (Black Grill)	1	11740004050	171
	RAL 7035 (Lt. Gray Grill)	1	11740004055	171
Thermostat FLZ 530° F		1	17121000010	186

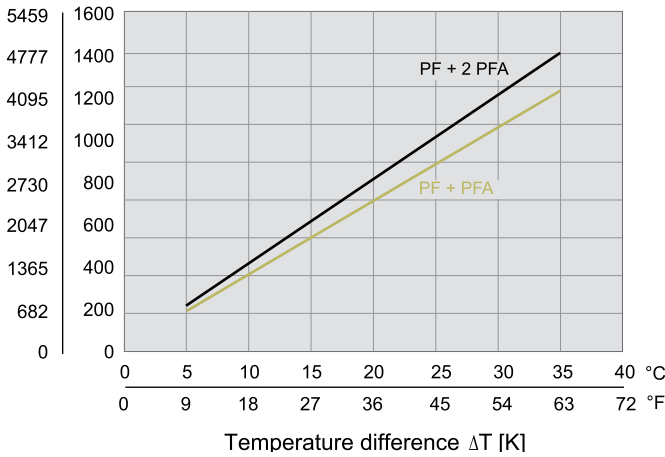
<sup>1</sup> according to DIN EN 779

<sup>2</sup> fan failure is defined as being when the current and speed deviate or the operating noises are out of the ordinary  
Approvals see page 148

Cooling Capacity Performance Curves	Static Pressure Performance Curves
PF 42500 T12 / IP 55 (& UV option)	PF 42500 T12 / IP 55 (& UV option)

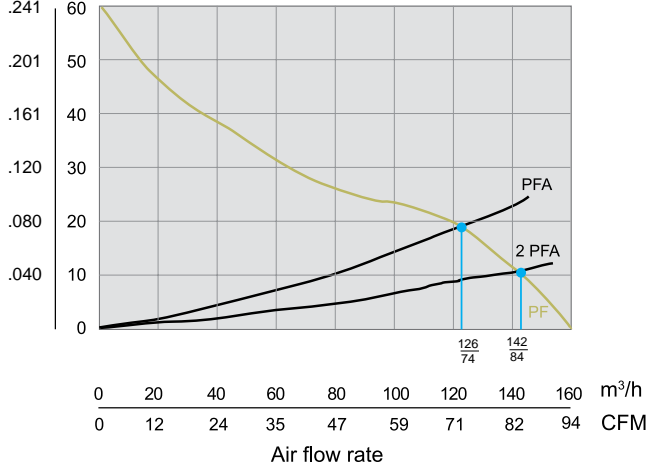
Cooling capacity

BTU W



Static pressure

Inch H<sub>2</sub>O Pa

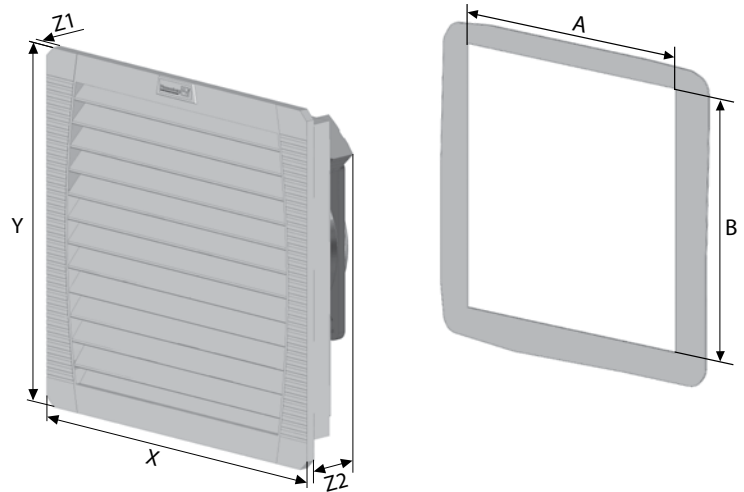


**Dimensions**

inches (mm)	PF 42500	PFA 40000
<b>X</b>	9.92 (252)	9.92 (252)
<b>Y</b>	9.92 (252)	9.92 (252)
<b>Z1</b>	.24 (6)	.24 (6)
<b>Z2</b>	3.82 (97)	1.5 (38)
<b>A<sup>1</sup></b>	8.78 (223) <sup>2</sup>	8.78 (223) <sup>2</sup>
<b>B<sup>1</sup></b>	8.78 (223) <sup>2</sup>	8.78 (223) <sup>2</sup>

<sup>1</sup> for material thicknesses up to .08" (2 mm)  
+.039" (+1 mm) for thickness of material > .08" (2 mm) ≤ .19" (3 mm)

<sup>2</sup> add .039" (1 mm) for EMC version



# PF 43000

## Filterfans 4.0™

# PFA 40000

## Exhaust filter



- Installation size 4, air flow rate up to 169 CFM
- Two performance classes, cut-out compatible
- System of protection IP 54 and IP 55, NEMA type 12
- UL, cUL to NITW2 Category and CE approved, CSA pending
- Cut-out compatible with installation size 4 from the 3<sup>rd</sup> Generation (see page 159)

### Options:

- **UV-resistance / EMC, consult factory for part numbers**

Data		PF 43000			Unit
Part number	RAL 9011 (Black Grill)	11643104050	11643154050	11643804050	
	RAL 7035 (Lt. Gray Grill)	11643104055	11643154055	11643804055	
		AC 50 Hz / 60 Hz		DC	
Rated voltage ± 10 %		230	115	24	V
Unimpeded airflow (CFM2)	IP 55	155 (265)			CFM (m <sup>3</sup> /h)
Air flow rate in combination (PF + PFA 40000) (CFM3)	IP 55	122 (207)			
Power consumption		45 / 39	40 / 40	12	W
Current consumption		0.32 / 0.26	0.5 / 0.5	0.5	A
Noise level (according to EN ISO 3741)	IP 55	42 / 46		42	dB(A)
Weight		3.68 (1.67)		3.33 (1.51)	lb (kg)
Type of connection		spring-type terminal			
Fuse (maximum)		6			A
System of protection according to EN 60529 / UL 50	IP 55	NEMA Type 12 - fluted filter / IP 55			
Filtration efficiency	IP 55	91			%
Filter mat quality class <sup>1</sup>	IP 55	G 4			
Duty cycle		100			%
Bearing type		ball bearing			
Service life L <sub>10</sub> (+ 40 °C) <sup>2</sup>		40000		80000	h
Temperature range		+ 5 ... + 131 / - 15 ... + 55			°F / °C
Material Protection Rating		made of injection-molded thermoplastic, self-extinguishing, UL 94 VO, UV-resistant optional			

Accessories	Piece	Part number	Information on page	
Exhaust filter PFA 40000	RAL 9011 (Black Grill)	1	11740004050	171
	RAL 7035 (Lt. Gray Grill)	1	11740004055	171
Thermostat FLZ 530° F	1	17121000010	186	

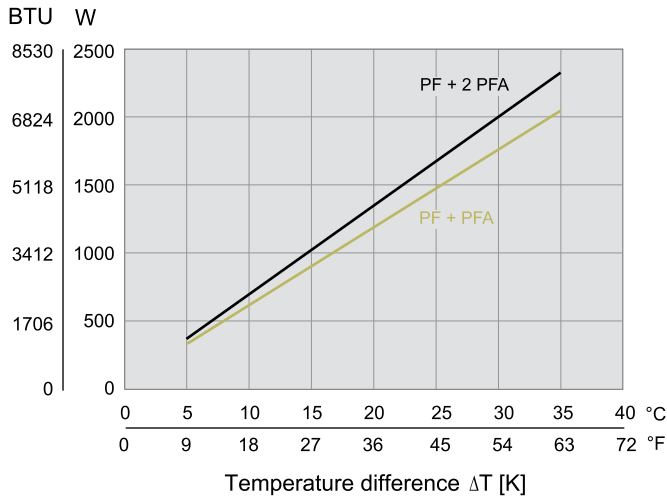
<sup>1</sup> according to DIN EN 779

<sup>2</sup> fan failure is defined as being when the current and speed deviate or the operating noises are out of the ordinary

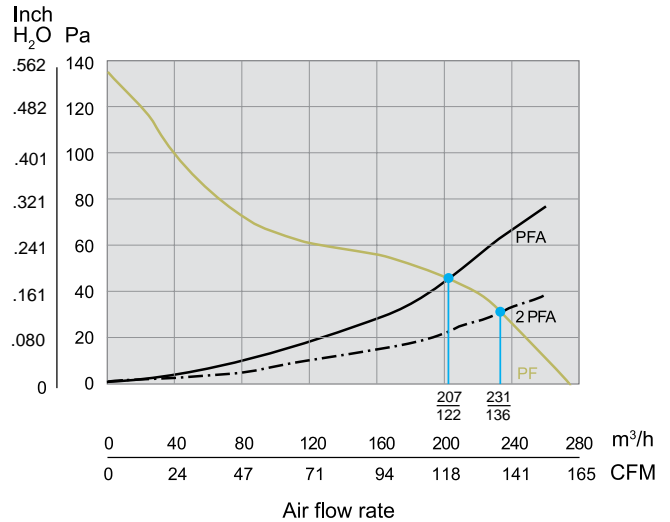
Approvals see page 148

Cooling Capacity Performance Curves	Static Pressure Performance Curves
PF 43000 T12 / IP 55 (& UV option)	PF 43000 T12 / IP 55 (& UV option)

Cooling capacity



Static pressure

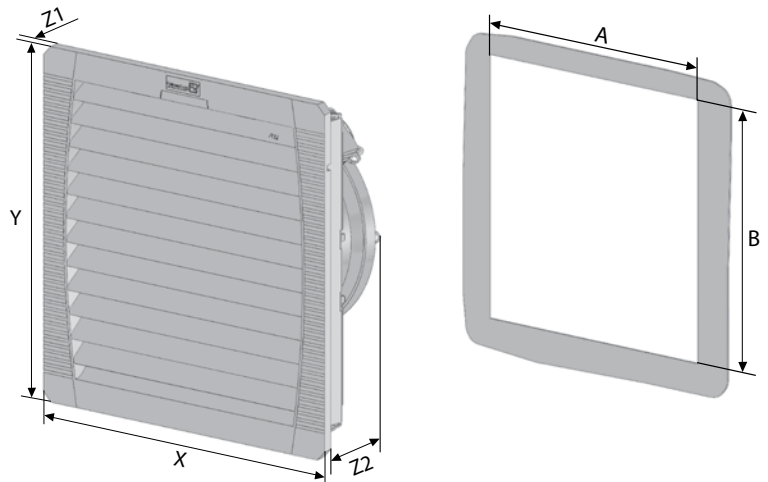


### Dimensions

inches (mm)	43000		PFA 40000
	AC	DC	Exhaust
<b>X</b>	9.92 (252)	9.92 (252)	9.92 (252)
<b>Y</b>	9.92 (252)	9.92 (252)	9.92 (252)
<b>Z1</b>	.24 (6)	.24 (6)	.24 (6)
<b>Z2</b>	4.45 (113)	3.82 (97)	1.5 (38)
<b>A<sup>1</sup></b>	8.78 (223) <sup>2</sup>	8.78 (223) <sup>2</sup>	8.78 (223) <sup>2</sup>
<b>B<sup>1</sup></b>	8.78 (223) <sup>2</sup>	8.78 (223) <sup>2</sup>	8.78 (223) <sup>2</sup>

<sup>1</sup> for material thicknesses up to .08" (2 mm)  
+.039" (+1 mm) for thickness of material > .08" (2 mm) ≤ .19" (3 mm)

<sup>2</sup> add .039" (1 mm) for EMC version



**PF 65000****Filterfans 4.0™****PFA 60000****Exhaust filter**

- Installation size 6, air flow rate up to 297 CFM
- Three performance classes, cut-out compatible
- System of protection IP 54 and IP 55, NEMA type 12
- UL, cUL to NITW2 Category and CE approved, CSA pending
- Cut-out compatible with installation size 6 from the 3<sup>rd</sup> Generation (see page 159)

**Options:**

- **UV-resistance / EMC, consult factory for part numbers**

Data		PF 65000		Unit
Part number	RAL 9011 (Black Grill)	11665104050	11665154050	
	RAL 7035 (Lt. Gray Grill)	11665104055	11665154055	
AC 50 Hz / 60 Hz				
Rated voltage ± 10 %		230	115	V
Unimpeded airflow (CFM2)		297 (505)		CFM (m <sup>3</sup> /h)
Air flow rate in combination (PF + PFA 60000) (CFM3)		224 (380)		
Power consumption		65 / 80	75 / 90	W
Current consumption		0.3 / 0.36	0.66 / 0.8	A
Noise level (according to EN ISO 3741)		54 / 52		dB(A)
Weight		7 (3.2)		lb (kg)
Type of connection		spring-type terminal		
Fuse (maximum)		6		A
System of protection according to EN 60529 / UL 50	IP 55	NEMA Type 12 - fluted filter / IP55		
Filtration efficiency	IP 55	91		%
Filter mat quality class <sup>1</sup>	IP 55	G 4		
Duty cycle		100		%
Bearing type		ball bearing		
Service life L <sub>10</sub> (+ 40 °C) <sup>2</sup>		40000		h
Temperature range		+ 5 ... + 131 / - 15 ... + 55		°F / °C
Material Protection Rating		made of injection-molded thermoplastic, self-extinguishing, UL 94 VO, UV-resistant optional		

Accessories		Piece	Part number	Information on page
Exhaust filter PFA 60000	RAL 9011 (Black Grill)	1	11760004050	171
	RAL 7035 (Lt. Gray Grill)	1	11760004055	171
Thermostat FLZ 530° F		1	17121000010	186

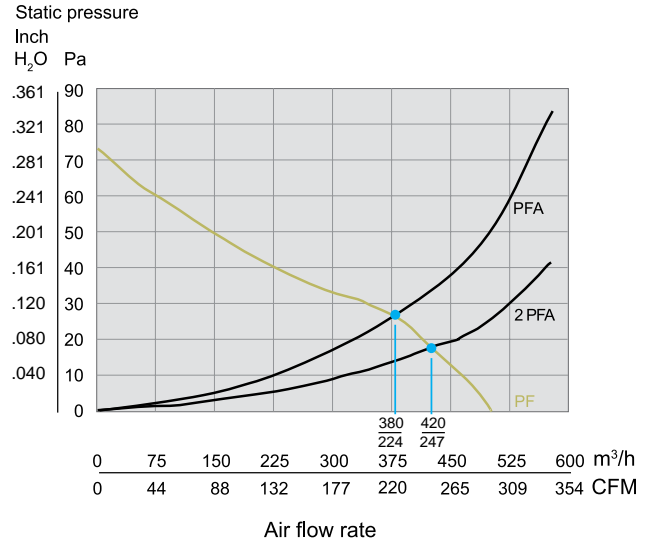
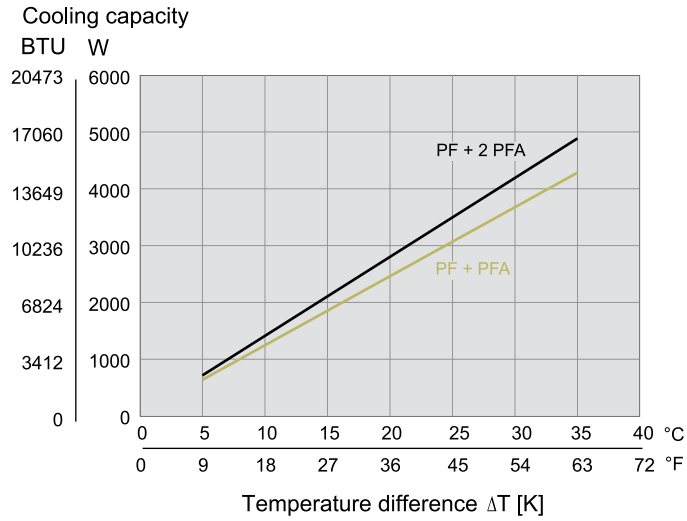
<sup>1</sup> according to DIN EN 779

<sup>2</sup> fan failure is defined as being when the current and speed deviate or the operating noises are out of the ordinary

Approvals see page 148



Cooling Capacity Performance Curves	Static Pressure Performance Curves
PF 65000 T12 / IP 55 (& UV option)	PF 65000 T12 / IP 55 (& UV option)

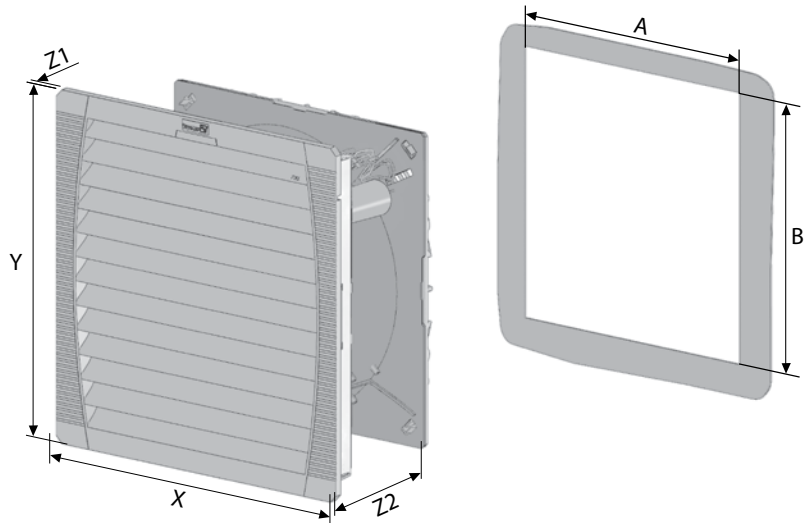


### Dimensions

inches (mm)	PF 65000	PFA 60000
<b>X</b>	12.6 (320)	12.6 (320)
<b>Y</b>	12.6 (320)	12.6 (320)
<b>Z1</b>	.28 (7)	.28 (7)
<b>Z2</b>	5.91 (150)	1.54 (39)
<b>A<sup>1</sup></b>	11.46 (291) <sup>2</sup>	11.46 (291) <sup>2</sup>
<b>B<sup>1</sup></b>	11.46 (291) <sup>2</sup>	11.46 (291) <sup>2</sup>

<sup>1</sup> for material thicknesses up to .08" (2 mm)  
+.039" (+1 mm) for thickness of material > .08" (2 mm) ≤ .19" (3 mm)

<sup>2</sup> add .039" (1 mm) for EMC version



**PF 66000**  
**Filterfans 4.0™**  
**PFA 60000**  
**Exhaust filter**



- Installation size 6, air flow rate up to 462 CFM
- Three performance classes, cut-out compatible
- System of protection IP 54 and IP 55, NEMA type 12
- UL, cUL to NITW2 Category and CE approved, CSA pending
- Cut-out compatible with installation size 6 from the 3<sup>rd</sup> Generation (see page 159)

**Options:**

- **UV-resistance / EMC, consult factory for part numbers**

Data		PF 66000			Unit
Part number	RAL 9011 (Black Grill)	11666024050	11666104050	11666154050	
	RAL 7035 (Lt. Gray Grill)	11666024055	11666104055	11666154055	
		AC 50 Hz / 60 Hz			
Rated voltage ± 10 %	400 / 460	230	115		V
Unimpeded airflow (CFM2)	462 (785)				CFM (m <sup>3</sup> /h)
Air flow rate in combination (PF + PFA 60000) (CFM3)	295 (501)				CFM (m <sup>3</sup> /h)
Power consumption	120 / 155	115 / 150	110 / 160		W
Current consumption	0.26 / 0.25	0.51 / 0.66	0.96 / 1.4		A
Noise level (according to EN ISO 3741)	63 / 64				dB(A)
Weight	7 (3.2)				lb (kg)
Type of connection	spring-type terminal				
Fuse (maximum)	6				A
System of protection according to EN 60529 / UL 50	NEMA Type 12 - standard filter / IP55				
Filtration efficiency	91				%
Filter mat quality class <sup>1</sup>	G 4				
Duty cycle	100				%
Bearing type	ball bearing				
Service life L <sub>10</sub> (+ 40 °C) <sup>2</sup>	40000				h
Temperature range	+ 5 ... + 131 / - 15 ... + 55				°C / °F
Material Protection Rating	made of injection-molded thermoplastic, self-extinguishing, UL 94 VO, UV-resistant optional				

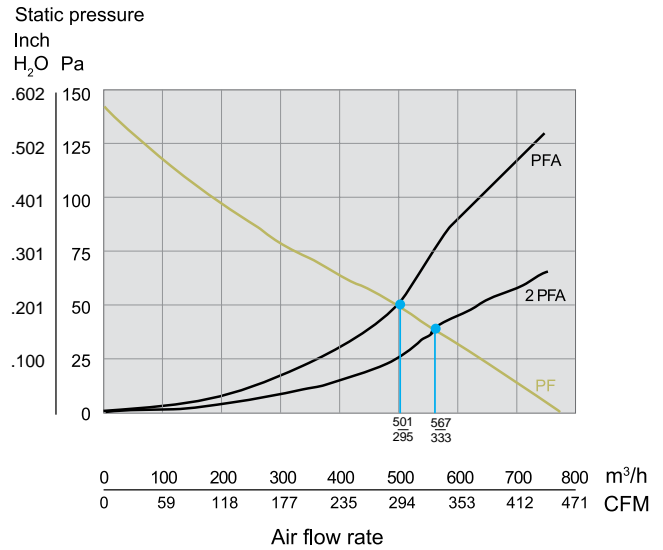
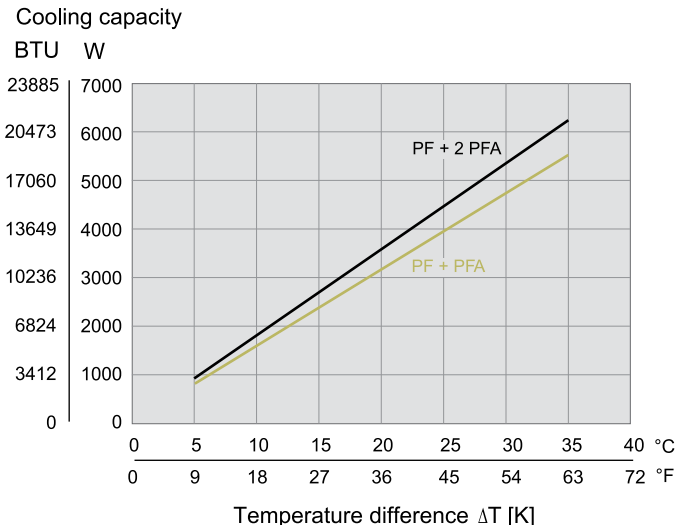
Accessories	Piece	Part number	Information on page	
Exhaust filter PFA 60000	RAL 9011 (Black Grill)	1	11760004050	171
	RAL 7035 (Lt. Gray Grill)	1	11760004055	171
Thermostat FLZ 530° F	1	17121000010	186	

<sup>1</sup> according to DIN EN 779

<sup>2</sup> fan failure is defined as being when the current and speed deviate or the operating noises are out of the ordinary

Approvals see page 148

Cooling Capacity Performance Curves	Static Pressure Performance Curves
PF 66000 T12 / IP 55 (& UV option)	PF 66000 T12 / IP 55 (& UV option)

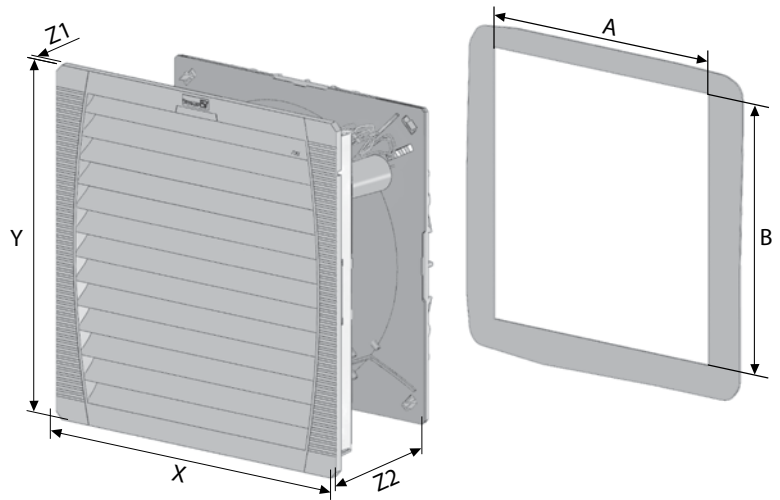


**Dimensions**

inches (mm)	PF 66000	PFA 60000
<b>X</b>	12.6 (320)	12.6 (320)
<b>Y</b>	12.6 (320)	12.6 (320)
<b>Z1</b>	.28 (7)	.28 (7)
<b>Z2</b>	5.91 (150)	1.54 (39)
<b>A<sup>1</sup></b>	11.46 (291) <sup>2</sup>	11.46 (291) <sup>2</sup>
<b>B<sup>1</sup></b>	11.46 (291) <sup>2</sup>	11.46 (291) <sup>2</sup>

<sup>1</sup> for material thicknesses up to .08" (2 mm)  
+.039 (+1 mm) for thickness of material > .08" (2 mm) ≤ .19" (3 mm)

<sup>2</sup> add .039" (1 mm) for EMC version



**PF 67000**

Filterfans 4.0™

**PFA 60000****Exhaust filter**

- Installation size 6, air flow rate up to 560 CFM
- Three performance classes, cut-out compatible
- System of protection IP 54 and IP 55, NEMA type 12
- UL, cUL to NITW2 Category and CE approved, CSA pending
- Cut-out compatible with installation size 6 from the 3<sup>rd</sup> Generation (see page 159)

**Options:**

- **UV-resistance / EMC, consult factory for part numbers**

Data	PF 67000			Unit
<b>Part number</b> RAL 9011 (Black Grill)	11667024050	11667104050	11667154050	
RAL 7035 (Lt. Gray Grill)	11667024055	11667104055	11667154055	
	AC 50 Hz / 60 Hz			
<b>Rated voltage ± 10 %</b>	400 / 460	230	115	V
<b>Unimpeded airflow (CFM2)</b>	560 (950)			CFM (m <sup>3</sup> /h)
<b>Air flow rate in combination (PF + PFA 60000) (CFM3)</b>	368 (625)			
<b>Power consumption</b>	140 / 170	135 / 200	140 / 195	W
<b>Current consumption</b>	0.35 / 0.43	0.59 / 0.88	1.23 / 1.71	A
<b>Noise level (according to EN ISO 3741)</b>	66 / 69			dB(A)
<b>Weight</b>	8.16 (3.7)			lb (kg)
<b>Type of connection</b>	spring-type terminal			
<b>Fuse (maximum)</b>	6			A
<b>System of protection according to EN 60529 / UL 50</b>	NEMA Type 12 - fluted filter / IP 55			
<b>Filtration efficiency</b>	91			%
<b>Filter mat quality class<sup>1</sup></b>	G 4			
<b>Duty cycle</b>	100			%
<b>Bearing type</b>	ball bearing			
<b>Service life L<sub>10</sub> (+ 40 °C)<sup>2</sup></b>	40000			h
<b>Temperature range</b>	+ 5 ... + 131 / - 15 ... + 55			°F / °C
<b>Material Protection Rating</b>	made of injection-molded thermoplastic, self-extinguishing, UL 94 VO, UV-resistant optional			

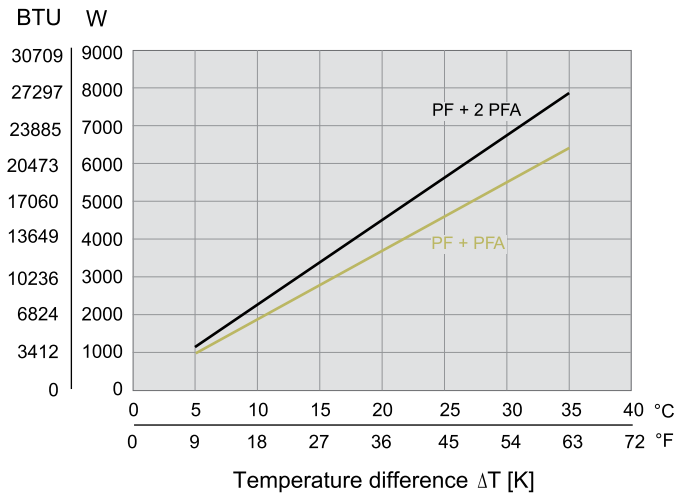
Accessories	Piece	Part number	Information on page
<b>Exhaust filter PFA 60000</b> RAL 9011 (Black Grill)	1	11760004050	171
RAL 7035 (Lt. Gray Grill)	1	11760004055	171
<b>Thermostat FLZ 530° F</b>	1	17121000010	186

<sup>1</sup> according to DIN EN 779

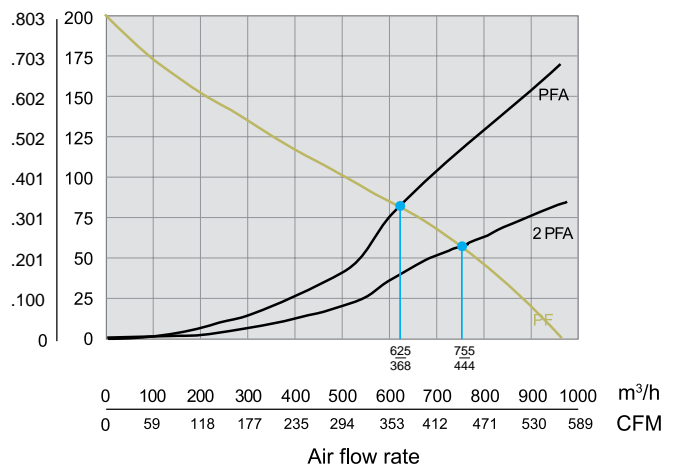
<sup>2</sup> fan failure is defined as being when the current and speed deviate or the operating noises are out of the ordinary  
Approvals see page 148

Cooling Capacity Performance Curves	Static Pressure Performance Curves
PF 67000 T12 / IP 55 (& UV option)	PF 67000 T12 / IP 55 (& UV option)

Cooling capacity



Static pressure  
Inch  
H<sub>2</sub>O Pa

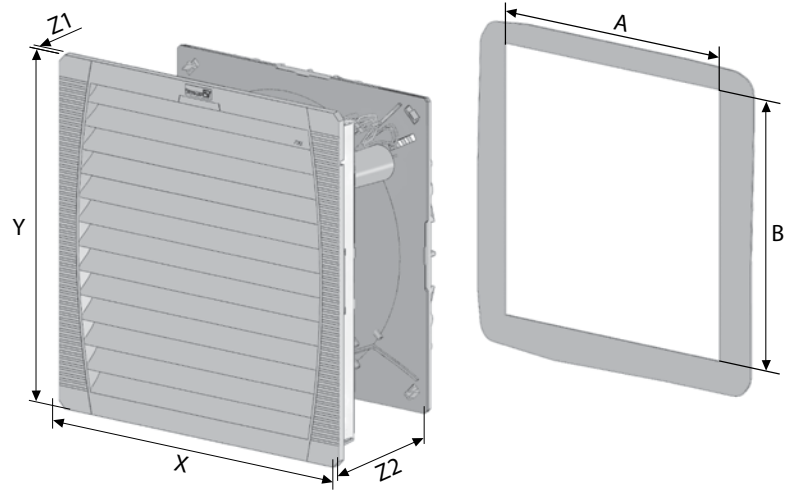


**Dimensions**

inches (mm)	PF 67000	PFA 60000
<b>X</b>	12.6 (320)	12.6 (320)
<b>Y</b>	12.6 (320)	12.6 (320)
<b>Z1</b>	.28 (7)	.28 (7)
<b>Z2</b>	5.91 (150)	1.54 (39)
<b>A<sup>1</sup></b>	11.46 (291) <sup>2</sup>	11.46 (291) <sup>2</sup>
<b>B<sup>1</sup></b>	11.46 (291) <sup>2</sup>	11.46 (291) <sup>2</sup>

<sup>1</sup> for material thicknesses up to .08" (2 mm)  
+.039 (+1 mm) for thickness of material > .08" (2 mm) ≤ .19" (3 mm)

<sup>2</sup> add .039" (1 mm) for EMC version



# PF 65000 SL

## Slim Line Filterfans 4.0™



Pfannenbergs Filterfans® with low installation depth

- Installation size 6, air flow rate up to 325 CFM
- Three performance classes, cut-out-compatible
- System of protection IP 55, NEMA Type 12
- UL, cUL to NITW2 Category and CE approved, CSA pending

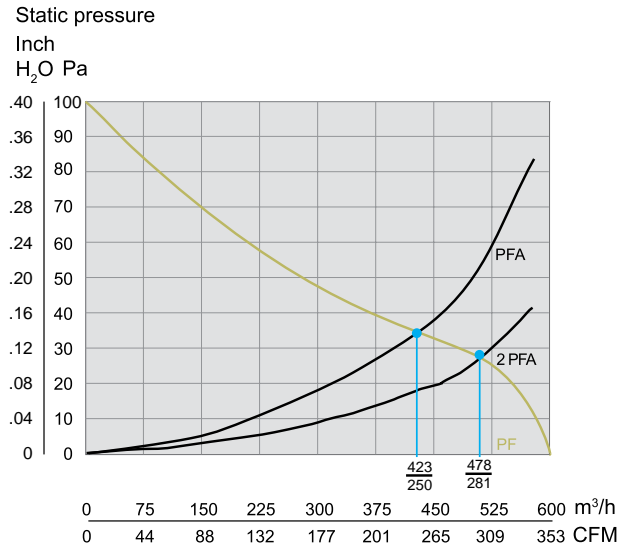
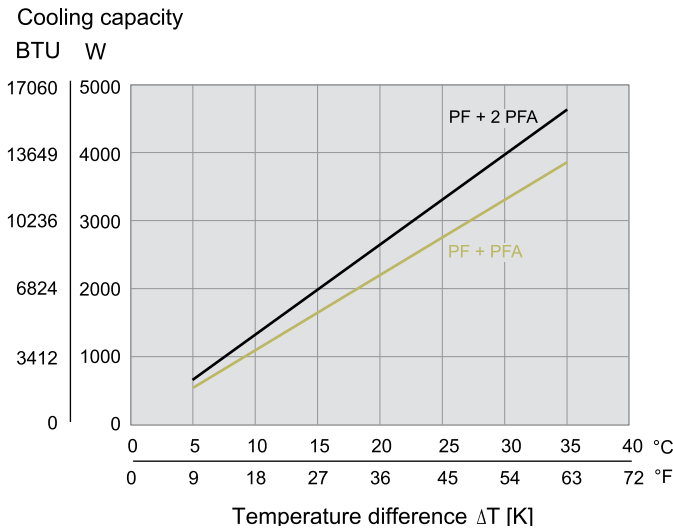
Data	PF 65000 SL		Unit	
<b>Part number</b>	RAL 9011 (Black Grill)	11675104050	11675154050	
	RAL 7035 (Lt. Gray Grill)	11675104055	11675154055	
	AC 50 Hz / 60 Hz			
<b>Rated voltage ± 10 %</b>	230	115	V	
<b>Unimpeded airflow (CFM2)</b>	325 (550)		CFM (m³/h)	
<b>Air flow rate in combination (PF + PFA 60000) (CFM3)</b>	250 (423)			
<b>Power consumption</b>	64 / 80		W	
<b>Current consumption</b>	0.29 / 0.35	0.58 / 0.70	A	
<b>Noise level (according to EN ISO 3741)</b>	54 / 52		dB(A)	
<b>Weight</b>	7 (3.3)		lb (kg)	
<b>Type of connection</b>	spring-type terminal			
<b>Fuse (maximum)</b>	6		A	
<b>System of protection according to EN 60529 / UL 50</b>	NEMA Type 12 - fluted filter / IP 55			
<b>Filtration efficiency</b>	91		%	
<b>Filter mat quality class<sup>1</sup></b>	G 4			
<b>Duty cycle</b>	100		%	
<b>Bearing type</b>	ball bearing			
<b>Service life L<sub>10</sub> (+ 40 °C)<sup>2</sup></b>	40000		h	
<b>Temperature range</b>	+ 5 ... + 131 / - 15 ... + 55		°F / °C	
<b>Material Protection Rating</b>	made of injection-molded thermoplastic, self-extinguishing, UL 94 VO, UV-resistant optional			

Accessories	Piece	Part number	Information on page	
<b>Exhaust filter PFA 60000</b>	RAL 9011 (Black Grill)	1	11760004050	171
	RAL 7035 (Lt. Gray Grill)	1	11760004055	171
<b>Thermostat FLZ 530° F</b>		1	17121000010	186

<sup>1</sup> according to DIN EN 779

<sup>2</sup> fan failure is defined as being when the current and speed deviate or the operating noises are out of the ordinary  
Approvals see page 148

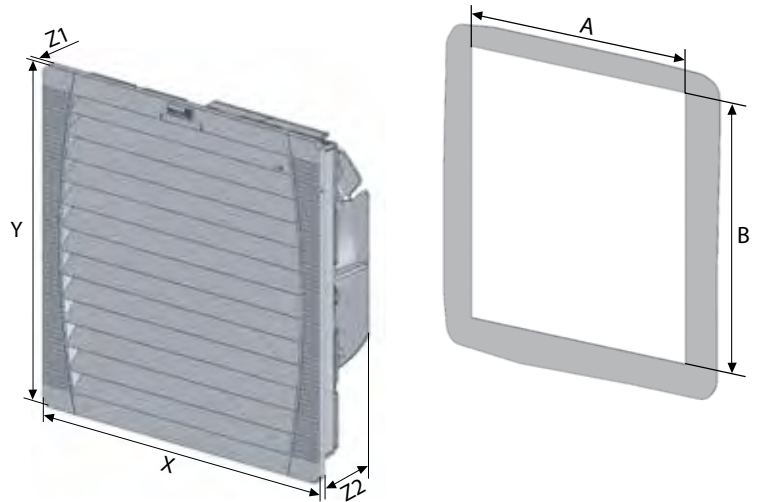
Cooling Capacity Performance Curves	Static Pressure Performance Curves
PF 65000 SL	PF 65000 SL



### Dimensions

inches (mm)	PF 65000 SL	PFA 60000
<b>X</b>	12.6 (320)	12.6 (320)
<b>Y</b>	12.6 (320)	12.6 (320)
<b>Z1</b>	.28 (7)	.28 (7)
<b>Z2</b>	4.88 (124)	1.54 (39)
<b>A'</b>	11.46 (291)	11.46 (291)
<b>B'</b>	11.46 (291)	11.46 (291)

<sup>1</sup> for material thicknesses up to .08" (2 mm)  
+.039 (+1 mm) for thickness of material > .08" (2 mm) ≤ .19" (3 mm)



# PF 67000 SL

## Slim Line Filterfans 4.0™



Pfannenbergs Filterfans® with low installation depth

- Installation size 6, air flow rate up to 427 CFM
- Three performance classes, cut-out-compatible
- System of protection IP 55, NEMA Type 12
- UL, cUL to NITW2 Category and CE approved, CSA pending

Data	PF 67000 SL			Unit
<b>Part number</b> RAL 9011 (Black Grill)	16677124050	11677104050	11677154050	
RAL 7035 (Lt. Gray Grill)	16677124055	11677104055	11677154055	
	AC 50 Hz / 60 Hz			
<b>Rated voltage ± 10 %</b>	400 / 460	230	115	V
<b>Unimpeded airflow (CFM2)</b>	427 (725)			CFM (m <sup>3</sup> /h)
<b>Air flow rate in combination (PF + PFA 60000) (CFM3)</b>	342 (580)			
<b>Power consumption</b>	110 / 165	127 / 180	120 / 165	W
<b>Current consumption</b>	0.2 / 0.23	0.56 / 0.79	1.05 / 1.45	A
<b>Noise level (according to EN ISO 3741)</b>	66 / 69			dB(A)
<b>Weight</b>	(8.49) 3.85	8.93 (4.05)	8.82 (4.00)	lb (kg)
<b>Type of connection</b>	spring-type terminal			
<b>Fuse (maximum)</b>	6			A
<b>System of protection according to EN 60529 / UL 50</b>	NEMA Type 12 - fluted filter / IP 55			
<b>Filtration efficiency</b>	91			%
<b>Filter mat quality class<sup>1</sup></b>	G4			
<b>Duty cycle</b>	100			%
<b>Bearing type</b>	ball bearing			
<b>Service life L<sub>10</sub> (+ 40 °C)<sup>2</sup></b>	40000			h
<b>Temperature range</b>	+ 5 ... + 131 / - 15 ... + 55			°F / °C
<b>Material Protection Rating</b>	made of injection-molded thermoplastic, self-extinguishing, UL 94 VO, UV-resistant optional			

Accessories	Piece	Part number	Information on page
<b>Exhaust filter PFA 60000</b> RAL 9011 (Black Grill)	1	11760004050	171
RAL 7035 (Lt. Gray Grill)	1	11760004055	171
<b>Thermostat FLZ 530° F</b>	1	17121000010	186

<sup>1</sup> according to DIN EN 779

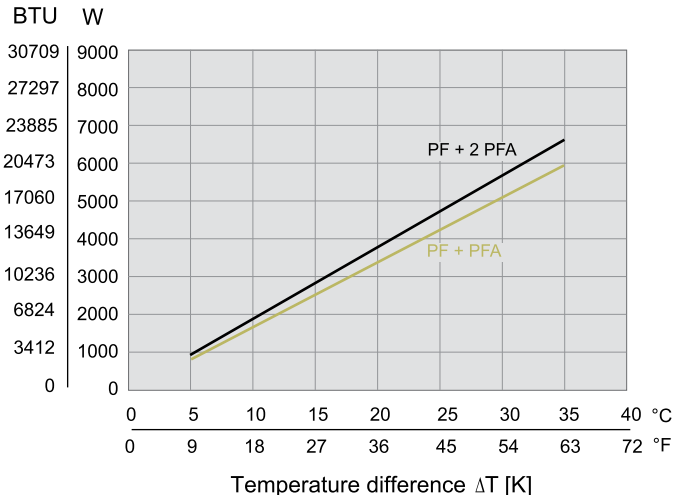
<sup>2</sup> fan failure is defined as being when the current and speed deviate or the operating noises are out of the ordinary

Approvals see page 148

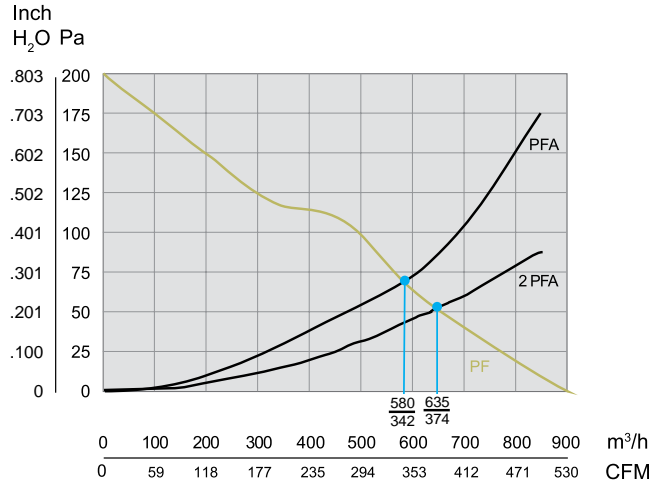


Cooling Capacity Performance Curves	Static Pressure Performance Curves
PF 67000 SL	PF 67000 SL

Cooling capacity



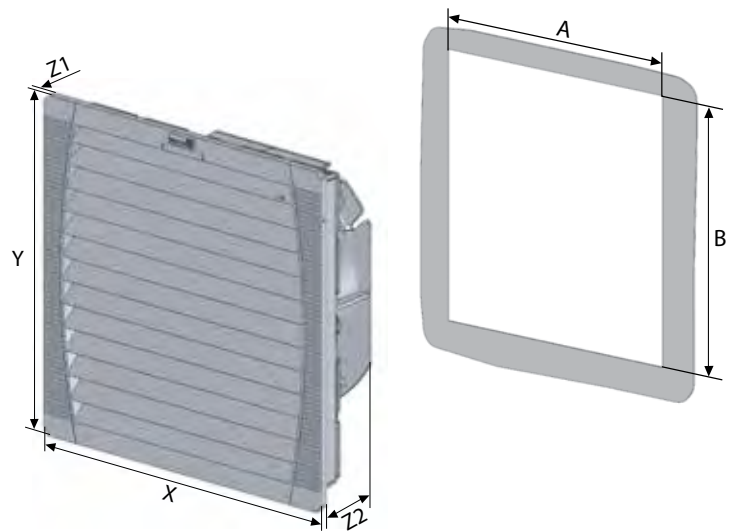
Static pressure



**Dimensions**

inches (mm)	PF 67000 SL	PFA 60000
<b>X</b>	12.6 (320)	12.6 (320)
<b>Y</b>	12.6 (320)	12.6 (320)
<b>Z1</b>	.28 (7)	.28 (7)
<b>Z2</b>	5 (127)	1.54 (39)
<b>A'</b>	11.46 (291)	11.46 (291)
<b>B'</b>	11.46 (291)	11.46 (291)

<sup>1</sup> for material thicknesses up to .08" (2 mm)  
+.039 (+1 mm) for thickness of material > .08" (2 mm) ≤ .19" (3 mm)










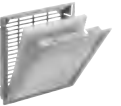
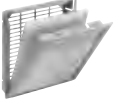


# Filterfans® 3<sup>rd</sup>/4.0

## Comparison

	Filterfans 4.0™	Installation size	Cut-out inches (mm)	Filterfans® 3 <sup>rd</sup> Generation
<b>Flat profile Filterfans® from the PF Series</b>				
	PF 11000	1	3.62 x 3.62 (92 x 92)	PF 1000
	PF 22000	2	4.92 x 4.92 (125 x 125)	PF 2000
	PF 32000	3	6.97 x 6.97 (177 x 177)	N/A
	PF 42500	4	8.78 x 8.78 (223 x 223)	PF 2500
	PF 43000			PF 3000
	PF 65000	6	11.46 x 11.46 (291 x 291)	PF 5000
	PF 66000			PF 6000
	PF 67000			PF 7000
<b>Flat profile exhaust filters from the PFA Series</b>				
	PFA 10000	1	3.62 x 3.62 (92 x 92)	PFA 1000
	PFA 20000	2	4.92 x 4.92 (125 x 125)	PFA 2000
	PFA 30000	3	6.97 x 6.97 (177 x 177)	N/A
	PFA 40000	4	8.78 x 8.78 (223 x 223)	PFA 2500
				PFA 3000
	PFA 60000	6	11.46 x 11.46 (291 x 291)	PFA 5000
				PFA 6000
				PFA 7000

# 3<sup>rd</sup> Generation Filterfans®

Type	Air flow rate CFM2	Rated voltage	Cut-out dimensions inches (mm)	Approvals					
				UL	cUL	GOST	CSA	CE	
<b>PF Series Filterfans®</b>									
PF 1000	16	115 V / 230 V AC	3.62 x 3.62 (92 x 92)	●	●	●	●	●	
		12 V / 24 V / 48 V DC							
PF 2000	38	115 V / 230 V AC	4.92 x 4.92 (125 x 125)	●	●	●	●	●	
		12 V / 24 V / 48 V DC							
PF 2500	89	115 V / 230 V AC	6.97 x 6.97 (177 x 177)	●	●	●	●	●	
		12 V / 24 V / 48 V DC							
PF 3000	169	115 V / 230 V AC	8.78 x 8.78 (223 x 223)	●	●	●	●	●	
		400 V 2 Ø¹							
		12 V / 24 V / 48 V DC							
PF 5000	324	115 V / 230 V AC	11.46 x 11.46 (291 x 291)	●	●	●	●	●	
PF 6000	410	400 V 3 Ø	11.46 x 11.46 (291 x 291)	●	●	●	●	●	
		115 V / 230 V AC							
PF 7000	506	115 V / 230 V AC	11.46 x 11.46 (291 x 291)	●	●	●	●	●	
		400 V 3 Ø							
<b>PFA Series exhaust filters</b>									
PFA 1000	N/A	N/A	3.62 x 3.62 (92 x 92)	●	●	●	●	●	
PFA 2500	N/A	N/A	4.92 x 4.92 (125 x 125)	●	●	●	●	●	
PFA 3000									
PFA 3000	N/A	N/A	8.78 x 8.78 (223 x 223)	●	●	●	●	●	
PFA 5000	N/A	N/A	11.46 x 11.46 (291 x 291)	●	●	●	●	●	
PFA 6000									
PFA 7000									

# PTF 60500

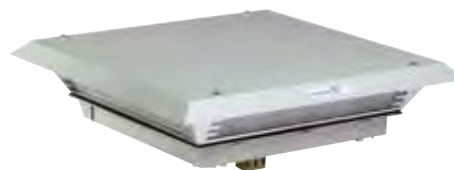
# PTF 60700

# PTF 61000

## Filterfans 4.0™ for roof mounting

# PTFA 60000

## Top exhaust filter for roof mounting



- 2 Sizes, air flow rate up to 441 CFM
- Three performance classes, all with the same cut-out
- Hardware free "Click & Fit" mounting
- NEMA 12 System protection
- Optimum passage of air and even temperature distribution (natural air convection is supported)
- Toolless mounting, patented quick fastening system
- UL, cUL to NITW2 Category and CE approved, CSA pending

Data	PTF 60500		PTF 60700		PTF 61000		Unit
<b>Part number</b> RAL 7035 (Lt. Gray Grill)	11685101055	11685151055	11687102055	11687152055	11681102055	11681152055	
	AC 50 Hz / 60 Hz						
<b>Rated voltage ± 10 %</b>	230	115	230	115	230	115	V
<b>Unimpeded airflow (CFM2)</b>	206 (350)		324 (550)		441 (750)		CFM (m³/h)
<b>Air flow rate in combination (PTF + PFA 60000) (CFM3)</b>	142 (242)		218 (370)		294 (500)		
<b>Power consumption</b>	4 x 28 / 29	4 x 29 / 24	65 / 80	75 / 90	115 / 150	110 / 160	W
<b>Current consumption</b>	4 x 0.2 / 0.2	4 x 0.3 / 0.3	0.3 / 0.36	0.66 / 0.8	0.51 / 0.66	0.96 / 1.4	A
<b>Noise level (according to EN ISO 3741)</b>	147.71 (67)		152.12 (69)		169.76 (77)		dB(A)
<b>Weight</b>	5.5		5.8		6.0		lb (kg)
<b>Type of connection</b>	terminal strip						
<b>Fuse (maximum)</b>	6						A
<b>System of protection according to EN 60529 / UL 50</b>	IP 33, IP 54						
<b>Filtration efficiency</b>	81						%
<b>Filter mat quality class<sup>1</sup></b>	G 3						
<b>Duty cycle</b>	100						%
<b>Bearing type</b>	ball bearing						
<b>Service life L<sub>10</sub> (+ 40 °C)<sup>2</sup></b>	approx. 50000 <sup>3</sup>		approx. 40000		approx. 40000		h
<b>Temperature range</b>	+ 5 ... + 131 / - 15 ... + 55						°F / °C
<b>Material Protection Rating</b>	sheet steel, cover powder-coated; snap-in housing made of injection-moulded thermoplastic (ABS-FR) self-extinguishing, UL 94 VO						

Accessories	Piece	Part number	Information on page
<b>Exhaust filter PFA 60000</b> RAL 9011 (Black Grill)	1	11760004050	171
RAL 7035 (Lt. Gray Grill)	1	11760004055	171
<b>Thermostat FLZ 530° F</b>	1	17121000010	186

<sup>1</sup> according to DIN EN 779

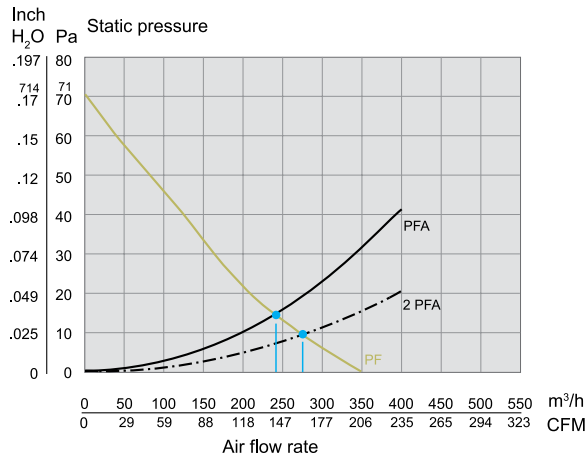
<sup>2</sup> fan failure is defined as being when the current and speed deviate or the operating noises are out of the ordinary

<sup>3</sup> L<sub>10</sub> (+25 °C)

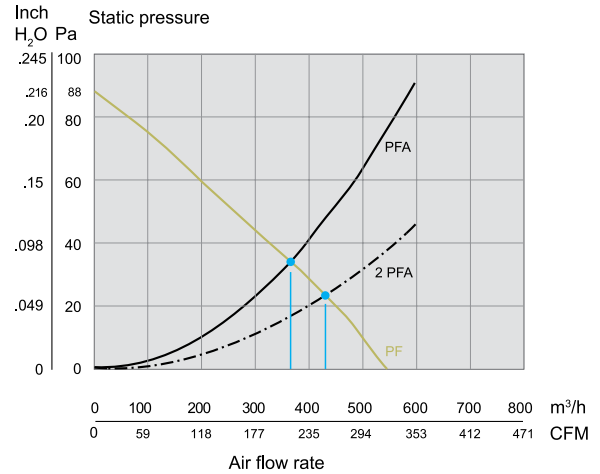
Approvals see page 148

### Static Pressure Performance Curves

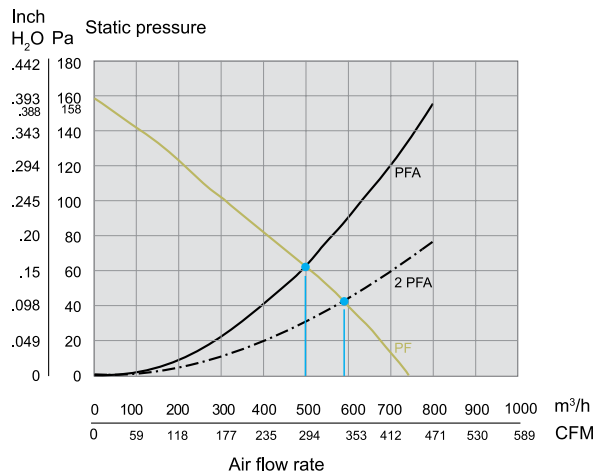
**PTF 60500 IP 54**



**PTF 60700 IP 54**



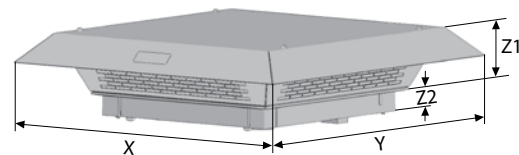
**PTF 61000 IP 54**



### Dimensions

inches (mm)	PTF 60500	PTF 60700	PTF 61000	PTFA 60000
<b>X</b>	17 (430)	18.5 (470)	18.5 (470)	18.5 (470)
<b>Y</b>	17 (430)	18.5 (470)	18.5 (470)	18.5 (470)
<b>Z1</b>	3 (75)	3.5 (90)	3.5 (90)	3.5 (90)
<b>Z2</b>	2 (50)	2 (50)	2 (50)	2 (50)
<b>A<sup>1</sup></b>	11.5 (291)	11.5 (291)	11.5 (291)	11.5 (291)
<b>B<sup>1</sup></b>	11.5 (291)	11.5 (291)	11.5 (291)	11.5 (291)

<sup>1</sup> for material thicknesses up to .08" (2 mm)  
+.039 (+1 mm) for thickness of material > .08" (2 mm) ≤ .19" (3 mm)

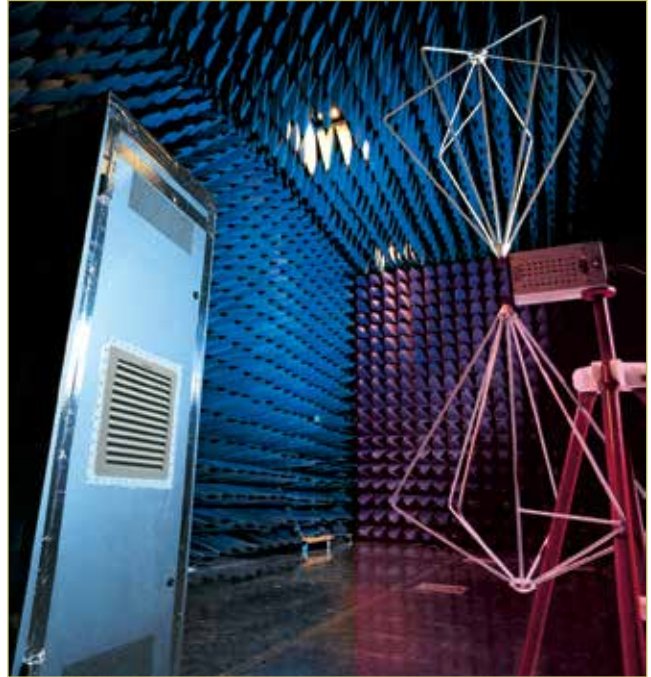


## EMC Filterfans 4.0™ (EMC series)

If Filterfans® are used for thermal management, openings must exist in the cabinet. These can allow electromagnetic radiation to pass in or out unhindered. Pfannenberg offers the widest range of EMC Filterfans® as solutions to this problem.

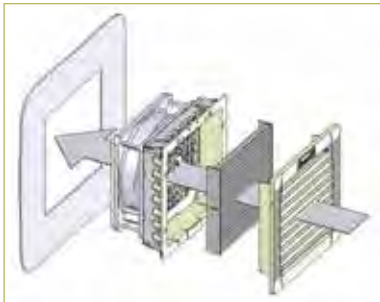
You too can find the right combination of EMC Filterfans® and exhaust filter for air flow rates from 17 to 560 CFM2

In accordance with the basic principle of our company we have dispensed with the use of metallized plastics, because these are difficult to recycle.



### New metal shielding

- unequalled worldwide: contact surfaces without beryllium-copper seal!
- contact springs



### No elaborate reworking of the cut-out

- no adhering of copper tape or similar aids
- no time-consuming scratching off of coatings in order to ensure a good contact
- contact is made via the cut edge of the cut-out for the Filterfans® or exhaust filter

## EMC – electromagnetic compatibility

In standards, electromagnetic compatibility, or 'EMC' for short, is defined as the ability of a component, device or system to function satisfactorily under the influence of electromagnetic fields in its surroundings, without influencing its surroundings, to which other electrical equipment also belongs, in an impermissible way. We guarantee that our EMC shielded Filterfans® provide protection against electromagnetic interference by ensuring continuity between the shielding part of the

fan and the metal structure of the cabinet based on the attenuation characteristics below:

**Attenuation at 30 MHz approx. 71 dB**

**Attenuation at 400 MHz approx. 57 dB**

Measured in accordance with EN 50 147-1 (1996): absorber rooms, part 1, measurement of screening attenuation.

## Options



### Exhaust filters for all PF Filterfans®

- Same design as the PF series Filterfans®
- Snap fastener developed and patented by Pfannenberg
- Door mounting without screws in accordance with VDE 0113 (EN 60204)
- Simple filter mat exchange during operation
- With integrated foam seal to enclosure

Product	Cut-out <sup>1</sup>	Part number (Black)	Part number (Lt. Gray)
<b>PFA 10000</b>	92 x 92 mm	11710001050	11710001055
<b>PFA 20000</b>	125 x 125 mm	11720004050	11720004055
<b>PFA 30000</b>	177 x 177 mm	11730004050	11730004055
<b>PFA 40000</b>	223 x 223 mm	11740004050	11740004055
<b>PFA 60000</b>	291 x 291 mm	11760004050	11760004055

<sup>1</sup> EMC version + 1 mm

Product	Cut-out	Part number (Lt. Gray)
<b>PTFA 60000</b>	291 x 291 mm	11186002054



### Thermostat and Hygrostat

In combination with thermostats and hygrometers from the FLZ series Pfannenberg Filterfans® additionally achieve savings on energy, materials and time plus a significantly longer service life. This results in an optimized environmental balance as well as greater reliability of your production process.

Suitable for all Pfannenberg Filterfans®.

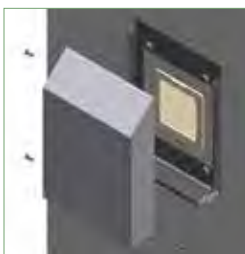
Product	Part numbers	
	0 - 60° C	32 - 140° F
<b>FLZ 530 Thermostat</b>	17121000000	17121000010
<b>FLZ 541 Dual Thermostat</b>	17141000000	17141000010
<b>FLZ 600 Hygrostat 40 ... 90 % R.H.</b>	17207000000	
<b>FLZ 610 Thermostat/Hygrostat 40 ... 90 % R.H.</b>	17218100000	17218151000



Spare filter mats for filterfans® of the 3rd and 4<sup>th</sup> Generation and top mounting filterfans®.

Suitable for ...	Part number <sup>1</sup> (3rd)	Part number <sup>1</sup> (4th)
<b>Installation size 1</b>	18611600000	18611600029
<b>Installation size 2</b>	18611600001	18611600034
<b>Installation size 3</b>	N/A	18611600035
<b>Installation size 4</b>	18611600006	18611600036
<b>Installation size 6</b>	18611600011	18611600037
<b>PTF 60500 and PTFA 60000</b>	N/A	18611600038
<b>PTF 60700 and PTFA 61000</b>	N/A	18611600039

<sup>1</sup> Set with 5 pieces



### Weather protection hoods - UL NEMA Type 3R

Weather protection hood in stainless steel or powder-coated.

Suitable for ...	Part number		
	Stainless Steel	ANSI 61 (Gray)	RAL 7035 (Lt. Gray)
<b>Installation size 1 and 2</b>	18102000014	18102000012	18102000013
<b>Installation size 3 and 4</b>	18102000017	18102000015	18102000016
<b>Installation size 6</b>	18102000020	18102000018	18102000019
<b>Mesh &amp; Snow Plug Galvanized Kits</b>			
<b>Kit for 20000</b>	18102000021		
<b>Kit for 40000</b>	18102000022		
<b>Kit for 60000</b>	18102000023		