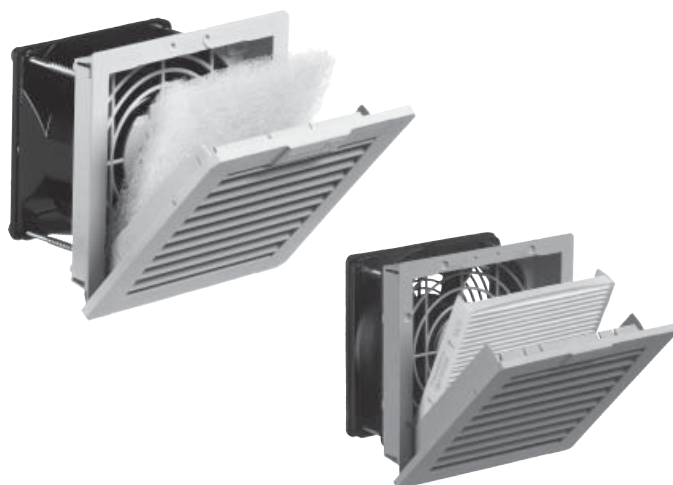


Filterfan PF 11000-22000 / Exhaust Filter PFA 10000-20000



Features

- Maintains a UL Tested NEMA Type 12 seal against enclosure
- UL Recognized to UL 508a, category NITW2/8, UL File #E175229
- CSA #246217
- Patented "Click & Fit" design provides a hardware-free installation!
- Plastic made from strong, heat resistant (ABS-FR), UL 94 VO fire approved material
- Options: Black grills

Part Number	Voltage	Power	Mating Exhaust Filter	Ship Wt. lbs.
PF11000T12LG	115V	11W	PFA10000LG	1.5
PF11000T12LG230	230V	11W	PFA10000LG	1.5
PF11000T12LG24	24V* DC	2W	PFA10000LG	1.5
PF22000T12LG	115V	20W	PFA20000LG	2
PF22000T12LG230	230V	18W	PFA20000LG	2
PF22000T12LG24	24V* DC	5W	PFA20000LG	2

Airflow data	PF 11000	PF 22000	PFA 10000	PFA20000
Filter material	Type 12 synthetic filter mat	Type 12 fluted filter mat	Type 12 synthetic filter mat	Type 12 fluted filter mat
Unimpeded airflow	17 CFM	38 CFM	-	-
Cooling Dissipation (W) / °T	10 W/K	21 W/K	-	-
Airflow in combination	11 CFM	28 CFM	-	-
(Filterfan + Exhaust Filter)	(PF 11000 + PFA 10000)	(PF 22000 + PFA 20000)	-	-
Capacity in combination	6 W/K	15 W/K	-	-
(Filterfan + Exhaust Filter)	(PF 11000 + PFA 10000)	(PF 22000 + PFA 20000)	-	-
Max. static pressure (Airflow = 0 m3/h)	38 Pa	57 Pa	-	-
Filtration efficiency	88%	91%	88/91%	88/91%
Filter material grade	G 3 (DIN EN 779)	G 4 (DIN EN 779)	G3/ G4 (DIN EN 779)	G3/ G4 (DIN EN 779)
Duty cycle	100%	100%	-	-

Technical data	PF 11000 AC	PF 11000 DC	PF 22000 AC	PF 22000 DC	PFA 10000 PFA 20000
Outside dimensions in mm (height x width x installation depth)	109 x 109 x 62	109 x 109 x 49	145 x 145 x 70	145 x 145 x 64	109 x 109 x 26/ 145 x 145 x 26
Bearing type	sleeve bearings	ball bearings	sleeve bearings	ball bearings	-
Fitting position	vertical	any	vertical	any	-
Construction	housing and guard of sprayed thermoplastic, self-extinguishing, UL 94 VO				
Weight	0.55 kg	0.16 kg	0.7 kg	0.44 kg	0.06 kg / 0.12 kg
Safety protection	in accordance with DIN 31 001				
Color	RAL 7035, Light Grey				
Connection	2 wires, 310 mm long	terminal strip			

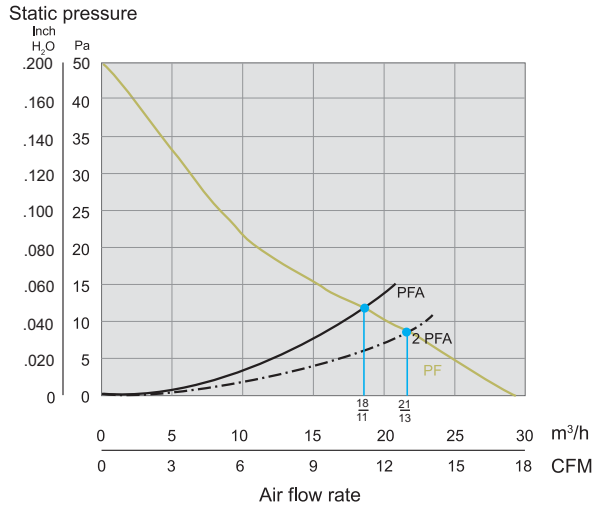
Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

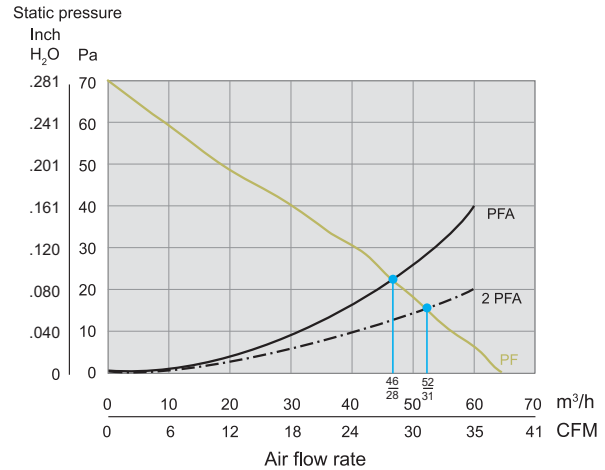
Filterfan PF 11000-22000 / Exhaust Filter PFA 10000-20000

Airflow Data:

PF 11.000 IP54 / PFA 10.000 IP54

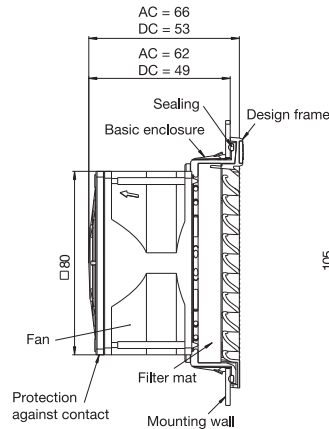


PF 22.000 IP55 / PFA 20.000 IP55

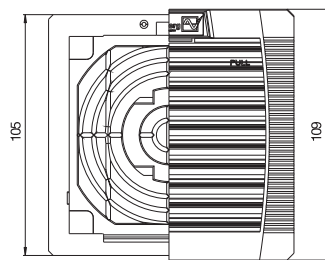


Mechanical Data:

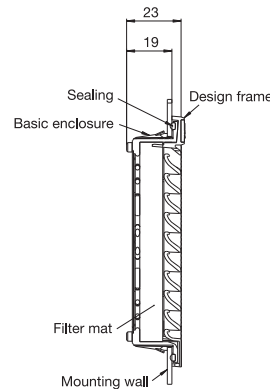
PF 11000



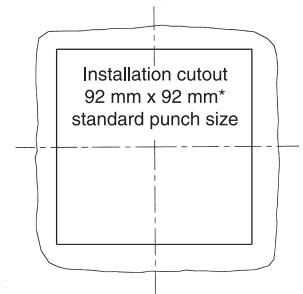
PF 11000 + PFA 10000



PFA 10000



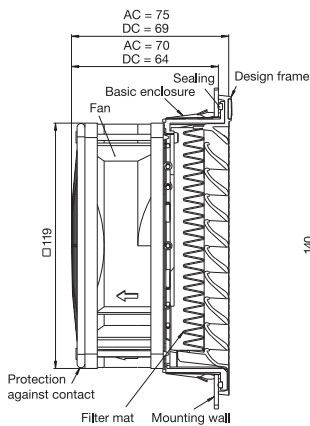
Cutout



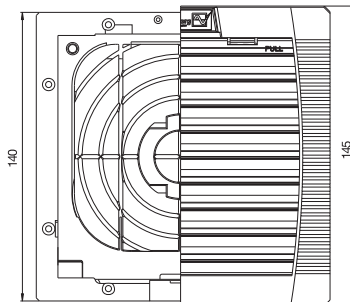
Climate Control

Mechanical Data:

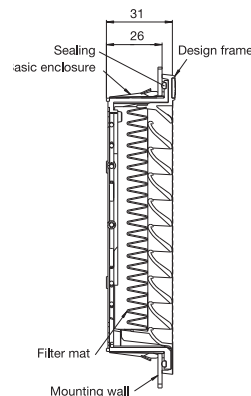
PF 22000



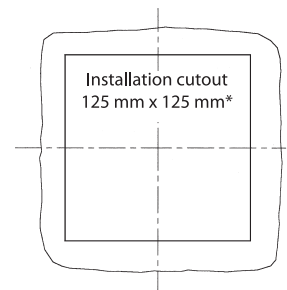
PF 22000 + PFA 20000



PFA 20000



Cutout



Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

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Filterfan PF 32000 / Exhaust Filter PFA 30000



Features

- Maintains a UL Tested NEMA Type 12 seal against enclosure
- UL Recognized to UL 508a, category NITW2/8, UL File #E175229
- CSA #246217
- Patented "Click & Fit" design provides a hardware free installation!
- Plastic made from strong, heat resistant (ABS-FR), UL 94 VO fire approved material
- Options: Black Grills

Part Number	Voltage	Power	Mating Exhaust Filter	Ship Wt. lbs.
PF32000T12LG	115V	20W	PFA30000LG	3
PF32000T12LG230	230V	18W	PFA30000LG	3
PF32000T12LG24	24V* DC	5W	PFA30000LG	3

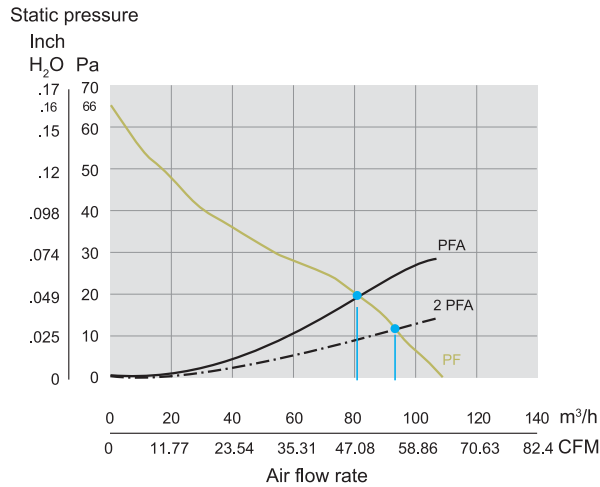
Airflow data	PF 32000	PFA 30000
Filter material	Type 12 filter mat	Type 12 filter mat
Unimpeded airflow	65 CFM	-
Cooling Dissipation (W)/°T	37 W/K	-
Airflow in combination	38 CFM	-
(Filterfan + Exhaust Filter)	(PF 32000 + PFA 30000)	-
Capacity in combination	21 W/K	-
(Filterfan + Exhaust Filter)	(PF 32000 + PFA 30000)	-
Max. static pressure (Airflow = 0 m3/h)	61 Pa	-
Filtration efficiency	91%	91%
Filter material grade	G 4 (DIN EN 779)	G 4 (DIN EN 779)
Duty cycle	100%	-

Technical data	PF 32000 AC	PF 32000 DC	PFA 30000
Outside dimensions in mm (height x width x installation depth)	202 x 202 x 87	202 x 202 x 81	202 x 202 x 34
Bearing type	sleeve bearings	ball bearings	-
Fitting position	vertical	any	any
Construction	housing and guard of sprayed thermoplastic, self-extinguishing, UL 94 VO		
Weight	0.87 kg	0.61 kg	0.26 kg
Safety protection	in accordance with DIN 31 001		
Color	RAL 7035, Light Grey		
Connections	terminal strip	cage clamp	-
Approval	NEMA Type 12, IP 55 (EN 60 529), when installed as specified		

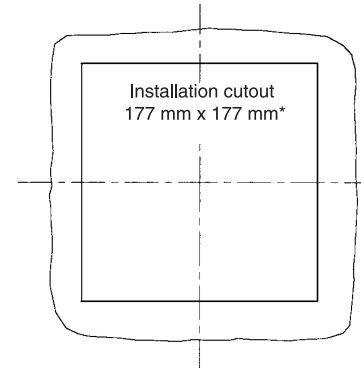
Filterfan PF 32000 / Exhaust Filter PFA 30000

Airflow Data:

PF 32.000 IP54 / PFA 30.000 IP54

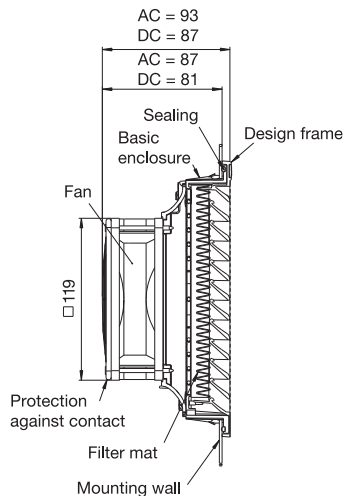


PF 32000 + PFA 30000

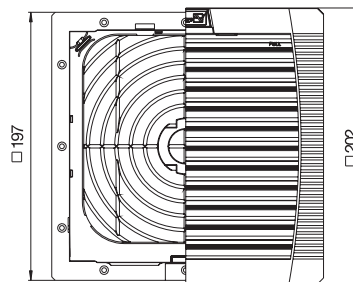


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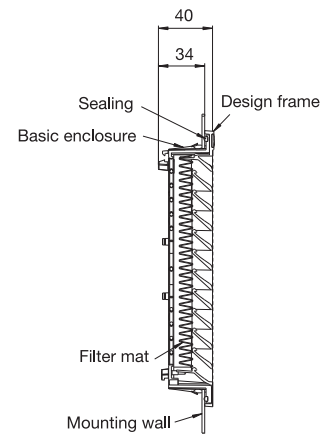
PF 32000



PF 32000 + PFA 30000



PFA 30000



Climate Control

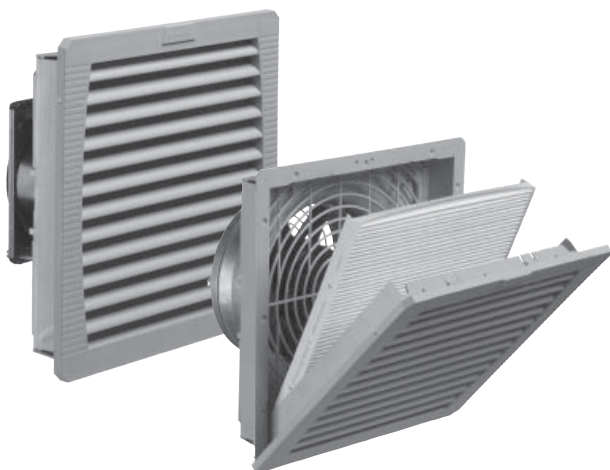
Supplementary data	PF 32000 AC	PF 32000 DC	PFA 30000
Operating temperature	- 15 °C (- 5 °F) to / bis + 55 °C (+ 131 °F)		
Storage temperature	- 20 °C (- 4 °F) to / bis + 70 °C (+ 158 °F)		
Max. relative humidity	90%		
System of protection	NEMA Type 12, IP 55 (EN 60 529), when installed as specified		
Basic Accessories	parts kit filter mat, user manual radiant heater, fan heater, thermostat, hygrostat		
* Tolerance installation cutout	177 + 1/-0 thickness of material to 2 mm		
	178 + 1/-0 thickness of material > 2 mm < 3 mm		

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

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Filterfan PF 42500-43000 / Exhaust Filter PFA 40000



Features

- Maintains a UL Tested NEMA Type 12 seal against enclosure
- UL Recognized to UL 508a, category NITW2/8, UL File #E175229
- CSA #246217
- Patented "Click & Fit" design provides a hardware free installation!
- Plastic made from strong, heat resistant (ABS-FR), UL 94 VO fire approved material
- Options: Black Grills

Part Number	Voltage	Power	Mating Exhaust Filter	Ship Wt. lbs.
PF42500T12LG	115V	20W	PFA40000LG	4
PF42500T12LG230	230V	18W	PFA40000LG	4
PF42500T12LG24	24V* DC	5W	PFA40000LG	4
PF43000T12LG	115V	40W	PFA40000LG	5
PF43000T12LG230	230V	39W	PFA40000LG	5
PF43000T12LG24	24V* DC	12W	PFA40000LG	5

Airflow data	PF 42500	PF 43000	PFA 40000
Filter material	NEMA Type 12 Filtermat	NEMA Type 12 Filtermat	NEMA Type 12 Filtermat
Unimpeded airflow	94 CFM	169 CFM	-
Cooling Dissipation (W)/°T	53 W/K	188 W/K	-
Airflow in combination	67 CFM	142 CFM	-
(Filterfan + Exhaust Filter)	(PF 42500 + PFA 40000)	(PF 43000 + PFA 40000)	
Capacity in combination	38 W/K	69 W/K	-
(Filterfan + Exhaust Filter)	(PF 43000 + PFA 40000)	(PF 43000 + PFA 40000)	
Max. static pressure (Airflow = 0 m3/h)	49 Pa	112 Pa	-
Filtration efficiency	91%	91%	91%
Filter material grade	G 4 (DIN EN 779)	G 4 (DIN EN 779)	G 4 (DIN EN 779)
Duty cycle	100%	100%	-

Technical data	PF 42500 AC / DC	PF 43000 AC / DC	PFA 40000
Outside dimensions in mm (height x width x installation depth)	252 x 252 x 97	252 x 252 x 113	252 x 252 x 38
Bearing type	ball bearings	ball bearings	-
Fitting position	any, horizontal airflow preferred		any
Construction	housing and guard of sprayed thermoplastic, self-extinguishing, UL 94 VO		
Weight	1.18 kg	1.67 kg	0.46 kg
Safety protection	in accordance with DIN 31 001		
Color	RAL 7035, Light Grey		
Connections	cage clamp	cage clamp	
Approval	NEMA Type 12, IP 55 (EN 60 529), when installed as specified		

Technical references and CAD downloads available at www.hammondmfg.com

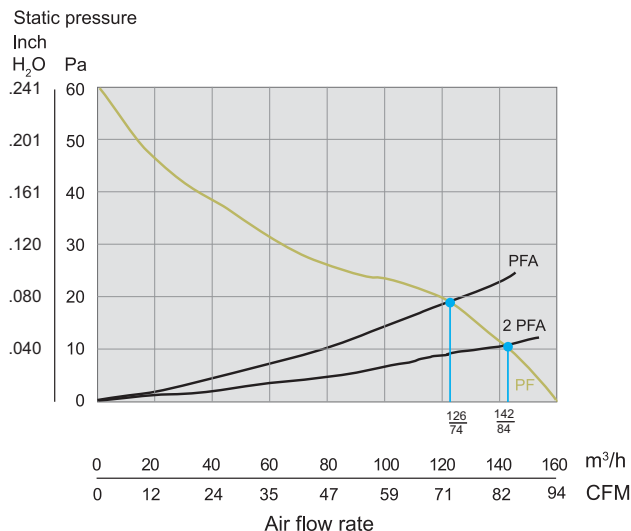
All dimensions in inches unless specified otherwise

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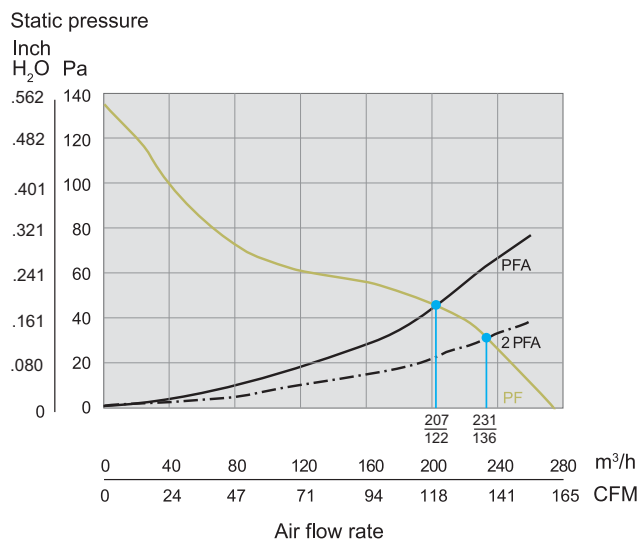
Filterfan PF 42500-43000 / Exhaust Filter PFA 40000

Airflow Data:

PF 42.500 IP55 / PFA 40.000 IP55

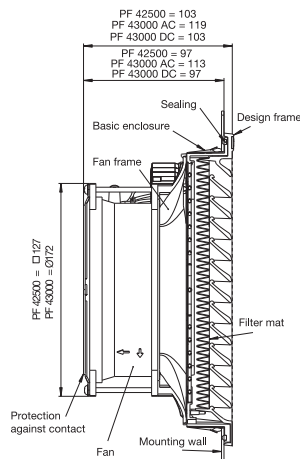


PF 43.000 IP55 / PFA 40.000 IP55

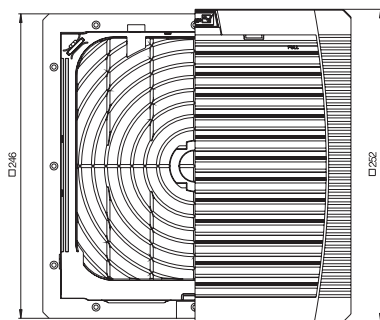


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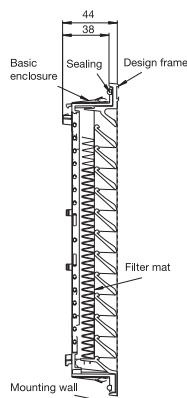
PF 42500, PF 43000



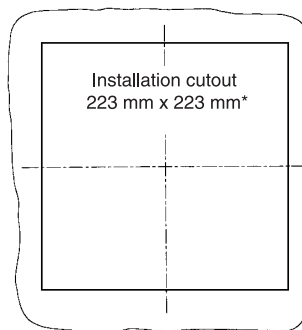
PF 42500 PF 43000, PFA 40000



PFA 40000



PF 42500, PF 43000 + PFA 40000



Climate Control

Supplementary data	PF 42500	PF 43000	PFA 40000
Operating temperature	- 15 °C (- 5 °F) to / bis + 55 °C (+ 131 °F)		
Storage temperature	- 20 °C (- 4 °F) to / bis + 70 °C (+ 158 °F)		
Max. relative humidity	90%		
System of protection	NEMA Type 12, IP 55 (EN 60 529), when installed as specified		
Basic Accessories	parts kit filter mat, user manual radiant heater, fan heater, thermostat, hygostat		
* Tolerance installation cutout	177 + 1/-0 thickness of material to 2 mm		
	178 + 1/-0 thickness of material > 2 mm < 3 mm		

Filterfan PF 65000, 66000, 67000 / Exhaust Filter PFA 60000



Features

- Maintains a UL Tested NEMA Type 12 seal against enclosure
- UL Recognized to UL 508a, category NITW2/8, UL File #E175229
- CSA #246217
- Patented "Click & Fit" design provides a hardware free installation!
- Plastic made from strong, heat resistant (ABS-FR), UL 94 VO fire approved material
- Options: Black Grills
Reverse Flow Exhaust

Climate Control

Part Number	Voltage	Power	Mating Exhaust Filter	Ship Wt. lbs.
PF65000T12LG	115V	90W	PFA60000LG	7.5
PF65000T12LG230	230V	150W	PFA60000LG	7.5
PF66000T12LG	115V	160W	PFA60000LG	8
PF66000T12LG230	230V	150W	PFA60000LG	8
PF67000T12LG	115V	95W	PFA60000LG	8
PF67000T12LG230	230V	214W	PFA60000LG	8

Airflow data	PF 65000	PF 66000	PF 67000	PFA 60000
Filter material	Type 12 Filtermat	Type 12 Filtermat	Type 12 Filtermat	Type 12 Filtermat
Unimpeded airflow	297 CFM	462 CFM	560 CFM	-
Cooling Dissipation (W)/°T	168 W/K / 168 W/K	257 W/K / 262 W/K	308 W/K / 317 W/K	-
Airflow in combination	224 CFM	295 CFM	368 CFM	-
(Filterfan + Exhaust Filter)	(PF 65000 + PFA 60000)	(PF 66000 + PFA 60000)	(PF 67000 + PFA 60000)	-
Capacity in combination	127 W/K	167 W/K	208 W/K	-
(Filterfan + Exhaust Filter)	(PF 65000 + PFA 60000)	(PF 66000 + PFA 60000)	(PF 67000 + PFA 60000)	-
Max. static pressure (Airflow = 0)	74 Pa	134 Pa	187 Pa	-
Filtration efficiency	91%	91%	91%	91%
Filter material grade	G 4 (DIN EN 779)	G 4 (DIN EN 779)	G 4 (DIN EN 779)	G 4 (DIN EN 779)
Duty cycle	100%	100%	100%	-

Technical data	PF 65000	PF 66000	PF 67000	PFA 60000
Outside dimensions in mm (height x width x installation depth)	320 x 320 x 150	320 x 320 x 150	320 x 320 x 150	320 x 320 x 39
Bearing type	ball bearings	ball bearings	ball bearings	-
Fitting position	any, horizontal airflow preferred	any	any	-
Construction	housing and guard of sprayed thermoplastic, self-extinguishing, UL 94 VO			
Weight	3.2 kg	3.2 kg	3.7 kg	0.7 kg
Safety protection	in accordance with DIN 31 001			
Color	RAL 7035, Light Grey			
Connections	cage clamp	cage clamp	cage clamp	-
Approval	NEMA Type 12, IP 55 (EN 60 529), when installed as specified			

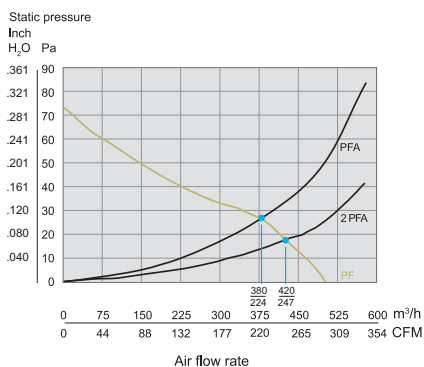
Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

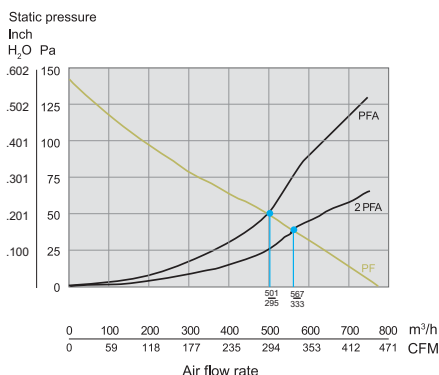
Filterfan PF 65000, 66000, 67000 / Exhaust Filter PFA 60000

Airflow Data:

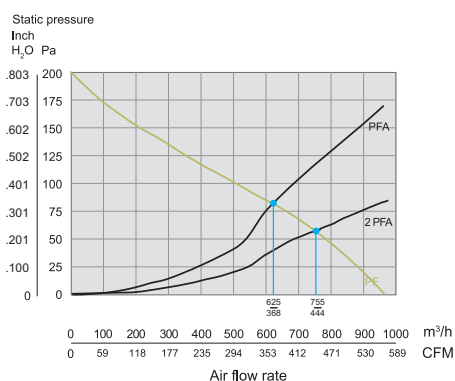
PF 65.000 IP55 / PFA 60.000 IP55



PF 66.000 IP55 / PFA 60.000 IP55

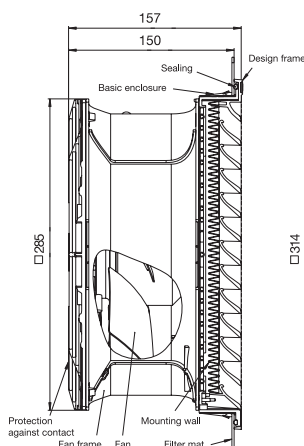


PF 67.000 IP55 / PFA 60.000 IP55

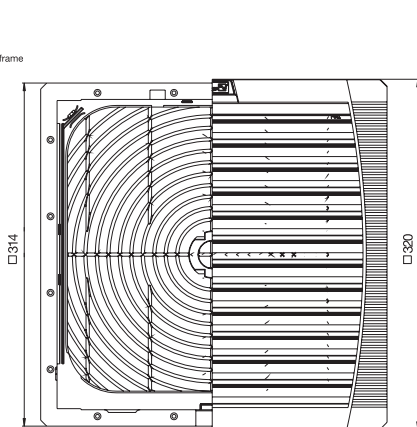


Mechanical Data:

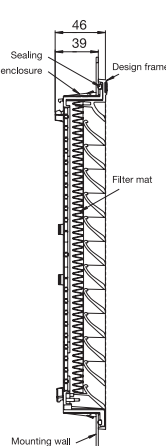
**PF 65000, PF 66000,
PF 67000**



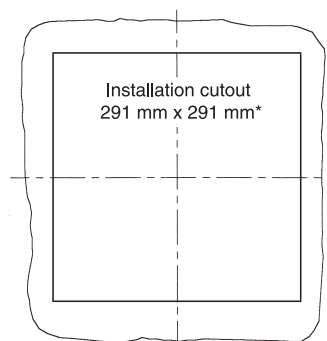
**PF 65000, PF 66000,
PF 67000 + PFA 60000**



PFA 60000



**PF 65000, PF 66000,
PF 67000 + PFA 60000**



Climate Control

Supplementary data	PF 65000	PF 66000	PF 67000
Operating temperature	- 15 °C (- 5 °F) to / bis + 55 °C (+ 131 °F)		
Storage temperature	- 20 °C (- 4 °F) to / bis + 70 °C (+ 158 °F)		
Max. relative humidity	90%		
System of protection	NEMA Type 12, IP 55 (EN 60 529), when installed as specified		
Basic Accessories	parts kit filter mat, user manual radiant heater, fan heater, thermostat, hygostat		
* Tolerance installation cutout	177 + 1/-0 thickness of material to 2 mm		
	178 + 1/-0 thickness of material > 2 mm < 3 mm		

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

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Filterfan PTF 60500, 60700, 61000 / Exhaust Filter PTFA 60000



Features

- Maintains a NEMA 12 seal against enclosure
- UL Recognized to UL 508a, category NITW2/8, UL File #E175229
- Patented “Click & Fit” design provides a hardware-free installation!
- Metal Pagoda Cover for rugged environments, easily painted to match machine color
- Fan Motor is CSA Approved

Part Number	Voltage	Power	Mating Exhaust Filter	Ship Wt. lbs.
PTF60500LG	115V	24W	PFA60000LG	14
PTF60500LG230	230V	24W	PFA60000LG	14
PTF60700LG	115V	90W	PFA60000LG	14
PTF60700LG230	230V	80W	PFA60000LG	14
PTF61000LG	115V	170W	PFA60000LG	15
PTF61000LG230	230V	150W	PFA60000LG	15

Airflow data	PTF 60500	PTF 60700	PTF 61000	PTFA 60000
Filter material	NEMA 12 Filtermat	NEMA 12 Filtermat	NEMA 12 Filtermat	NEMA 12 Filtermat
Unimpeded airflow	226 CFM	356 CFM	485 CFM	-
Cooling Dissipation (W)/°T	113 W/K	177 W/K	242 W/K	-
Airflow in combination	149 CFM	227 CFM	304 CFM	-
(Filterfan + Exhaust Filter)	(PTF 60500 + PFA 60000)	(PTF 60700 + PFA 60000)	(PTF 61000 + PFA 60000)	
Capacity in combination	74 W/K	113 W/K	152 W/K	-
(Filterfan + Exhaust Filter)	(PTF 60500 + PFA 60000)	(PTF 60700 + PFA 60000)	(PTF 61000 + PFA 60000)	
Max. static pressure (Airflow = 0)	71 Pa	88 Pa	158 Pa	-
Filtration efficiency	81%	81%	81%	
Filter material grade	G 3 (DIN EN 779)	G 3 (DIN EN 779)	G 3 (DIN EN 779)	
Duty cycle	100%	100%	100%	-

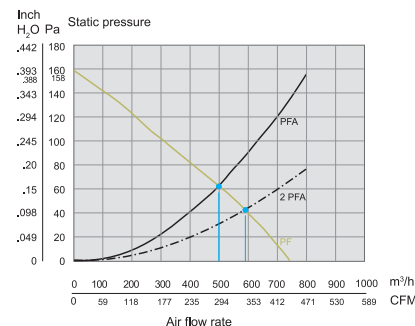
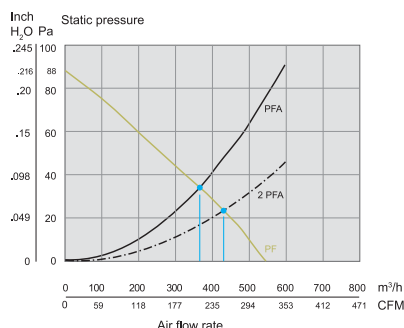
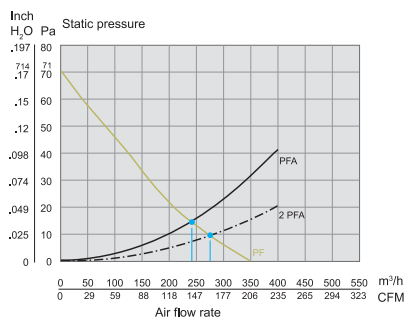
Technical data	PTF 60500	PTF 60700	PTF 61000	PTFA 60000
Outside dimensions in mm (height x width x installation depth)	125 x 430 x 430 x 50	140 x 470 x 470 x 50	140 x 470 x 470 x 50	-
Bearing type	ball bearings	ball bearings	ball bearings	-
Fitting position	horizontal	horizontal	horizontal	any
Construction	metal chassis cover powder coated, snap-in plastic housing			
Weight	5.5 kg	5.8 kg	6.0 kg	3.1 kg
Safety protection	in accordance with DIN 31 001			
Color	RAL 7035, Light Grey			
Connections	terminal strip	terminal strip	terminal strip	-
Approval	NEMA Type 12, IP 55 (EN 60 529), when installed as specified			

Technical references and CAD downloads available at www.hammondmfg.com

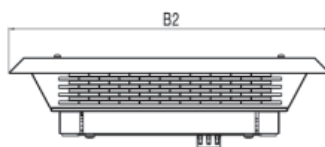
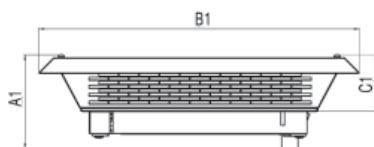
All dimensions in inches unless specified otherwise

Filterfan PTF 60500, 60700, 61000 / Exhaust Filter PTFA 60000

Airflow Data:

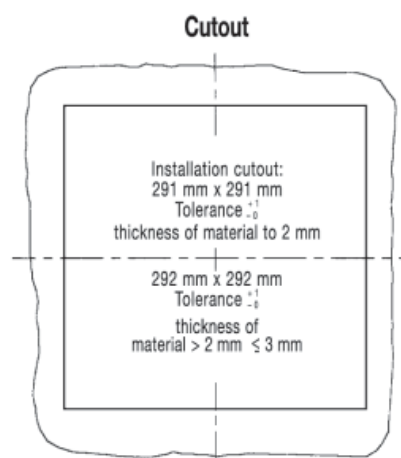


Mechanical Data:



	PTF 60500	PTF 60700	PTF 61000	PTFA 60000
A1	125	140	140	110*
B1/B2	430	470	470	430
C1	75	90	90	75

Airflow data:	PTFA 60000
Filter material	P 300
Filtration efficiency	81%
Filter material grade (DIN EN 779)	G 3



Climate Control

Technical data:	PTFA 60000
Outside dimensions in mm (Height x Width x Depth x Installation depth)	110 x 430 x 430 x 35
Construction	metal chassis, cover powder-coated; snap-in body of sprayed thermoplastic (ABS-FR) self-extinguishing, UL 94 VO
Weight	3.1 kg
Safety protection	in accordance with DIN 31 001
Color	RAL 7035, RAL 7032, other colors on request

Supplementary data:	PTFA 60000
Operating temperature	-10 C (+14 F) to +55 C (+131 F)
Storage temperature	-20 C (-4 F) to +70 C (+158 F)
Max. relative humidity	90%
System of protection	IP 33, IP 54 (EN 60 529), when installed as specified
Accessories	radiant heater, fan heater, thermostat, see Thermal Management
Tolerance installation cutout	291 thickness of material to 2 mm, 292 thickness of material > 2 mm < 3mm

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

Quality Products. Service Excellence.

Slimline Filterfan PF 33000, 65000, 67000 SL



Features

- Low installation depth
- Maintains a UL Tested NEMA Type 12 seal against enclosure
- UL Recognized to UL 508a, category NITW2/8, UL File #E175229
- CSA #246217
- Patented "Click & Fit" design provides a hardware free installation!
- Plastic made from strong, heat resistant (ABS-FR), UL 94 VO fire approved material
- Options: Black Grills
Reverse Flow Exhaust

Part Number	Voltage	Power	Mating Exhaust Filter	Ship Wt. lbs.
PF33000T12LGSL	115V	20W	PFA30000LG	4
PF33000T12LGSL2	230V	19W	PFA30000LG	4
PF330DCT12LGSL2	24V DC	5W	PFA30000LG	4
PF65000T12LGSL	115V	80W	PFA60000LG	8
PF65000T12LGSL2	230V	80W	PFA60000LG	8
PF67000T12LGSL	115V	120W	PFA60000LG	10
PF67000T12LGSL2	230V	127W	PFA60000LG	10
PF67000T12LGSL4	400V/460V	110W	PFA60000LG	10

Airflow data	PF 33000 SL	PF 65000 SL	PF 67000 SL
Filter material	Type 12 Filtermat	Type 12 Filtermat	Type 12 Filtermat
Unimpeded airflow	297 CFM	462 CFM	560 CFM
Cooling Dissipation (W)/°T	168 W/K	262 W/K	317 W/K
Airflow in combination	230 CFM	295 CFM	368 CFM
(Filterfan + Exhaust Filter)	(PF 33000 + PFA 30000)	(PF 65000 + PFA 60000)	(PF 67000 + PFA 60000)
Capacity in combination	127 W/K	167 W/K	208 W/K
(Filterfan + Exhaust Filter)	(PF 33000 + PFA 30000)	(PF 65000 + PFA 60000)	(PF 67000 + PFA 60000)
Max. static pressure (Airflow = 0)	74 Pa	134 Pa	187 Pa
Filtration efficiency	91%	91%	91%
Filter material grade	G 4 (DIN EN 779)	G 4 (DIN EN 779)	G 4 (DIN EN 779)
Duty cycle	100%	100%	100%

Technical data	PF 33000SL	PF 65000SL	PF 67000SL
Outside dimensions in mm (height x width x installation depth)	202 x 202 x 87	320 x 320 x 124	320 x 320 x 127
Cut Out Dimension	177 x 177	291 x 291	291 x 291
Bearing type	ball bearings	ball bearings	ball bearings
Fitting position	any, horizontal airflow preferred		any
Construction	housing and guard of sprayed thermoplastic, self-extinguishing, UL 94 VO		
Weight	3.2 kg	3.2 kg	3.7 kg
Safety protection	in accordance with DIN 31 001		
Color	RAL 7035, Light Grey		
Connections	cage clamp	cage clamp	cage clamp
Approval	NEMA Type 12, IP 55 (EN 60 529), when installed as specified		

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

Quality Products. Service Excellence.

Filterfan Accessories

Exhaust Filters:



Part Number	Filtration Efficiency %
PFA10000LG*	88%
PFA20000LG	91%
PFA30000LG	91%
PFA40000LG	91%
PFA60000LG	91%

* Standard grill color: RAL 7035 Light Grey



Features

- Maintains a UL Tested NEMA Type 12 seal against enclosure
- UL Recognized to UL 508a, category NITW2/8, UL File #E175229
- CSA #246217
- Patented "Click & Fit" design provides a hardware free installation!
- Plastic made from strong, heat resistant (ABS-FR) UL 94 VO fire approved material

Replacement Filters:



Part Number	Use with 4th Gen FF
PFF10000*	PF/PFA 1XXXX
PFF20000	PF/PFA 2XXXX
PFF30000	PF/PFA 3XXXX
PFF40000	PF/PFA 4XXXX
PFF60000	PF/PFA 6XXXX

* Standard synthetic fiber filter.

Features

- Special patent pending fluted filter design increases the time between maintenance by 3X.
- Allows for greater CFM in dirty environments
- Sold in Packs of 5.

Climate Control

PF Filter Fans



PF3000 and PF2000

Description

- This line of fans provides innovative technology for fan cooling and pressurizing of industrial cabinets. A high quality filter fan provides an economical method of ensuring your enclosure does not overheat.
- Filtered passive ventilation can be provided by an exhaust filter for either convection cooling or in combination with a fan in forced air cooling.
- The slim-line design of this fan line is unique, when installed, the front louvered grill protrudes less than one quarter inch. The attractive grill maintains the sleek aesthetics of an enclosure system.

Standards

- UR, CUR and CE.
- Built to IP54 standards (except PF1000/PFA1000 - IP43 standards).
- Maintains NEMA 12 integrity of enclosure.
- Fan CSA Listed.

Features

- Available in 115V and 230V versions
- High performance fan motors with finger guards.
- ABS-FR grills (except PF1000 Series which is polystyrene FR).
- Durable, reusable filter mat.
- Grills are black allowing for a complementary match to all cabinet colors.
- Integral gasket to seal against enclosure. (except PF1000 - use PFG1000)

Easy Installation

- The patented "Click and Fit" system allows for rapid filter fan and exhaust filter installation without screws.
- After using the convenient cutout template (provided with every unit), the fan and/or exhaust filter just snaps into the opening.

Options

- Reverse flow (exhaust) available on 5,6,7000 models

Accessories

- Exhaust filters...see page 385
- Replacement grills...see page 385
- Replacement filters...see page 385

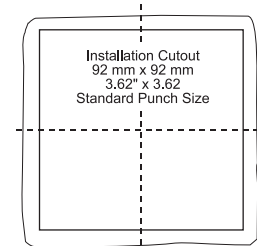
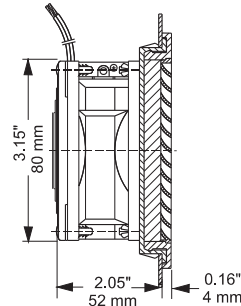
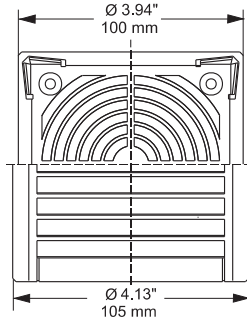
Part No.	Voltage	Free Flow Air Delivery (CFM)	Air Delivery w/Exhaust (CFM)	Max. Static Pressure (Pa)	Filter Density (g/m ²)	Filtering Level	Sound Level (dB)	Connector Type	Ambient Temp. °F Max/Min	Comparable IP Standard	Ship Wt. lbs
PF1000	115	16	10	29	150	73%	39	2 - 12" wires	140/14	IP43	1.5
PF2000	115	38	28	69	150	73%	49	terminal strip	122/14	IP54	2
PF2500	115	89	62	57	150	73%	55	terminal strip	122/14	IP54	4
PF3000	115	169	142	89	150	73%	55	terminal strip	122/14	IP54	4
PF5000	115	324	249	205	150	73%	69	terminal strip	122/14	IP54	7
PF6000	115	410	295	225	150	73%	71	terminal strip	122/14	IP54	8
PF7000	115	506	368	158	150	73%	72	terminal strip	122/14	IP54	8
PF1000230	230	16	10	29	150	73%	39	2 - 12" wires	140/14	IP43	1.5
PF2000230	230	38	28	69	150	73%	49	terminal strip	122/14	IP54	2
PF2500230	230	89	62	57	150	73%	55	terminal strip	122/14	IP54	4
PF3000230	230	169	142	89	150	73%	55	terminal strip	122/14	IP54	4
PF5000230	230	324	249	205	150	73%	69	terminal strip	122/14	IP54	7
PF6000230	230	410	295	225	150	73%	71	terminal strip	122/14	IP54	8
PF7000230	230	506	368	158	150	73%	72	terminal strip	122/14	IP54	8

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

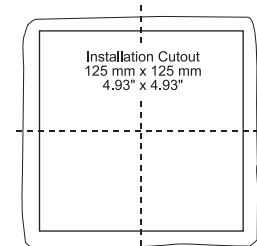
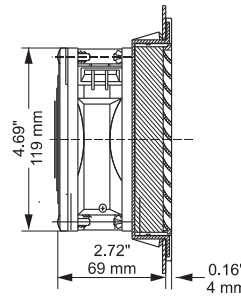
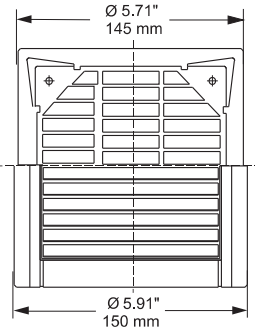
PF Filter Fans

Mechanical Data: PF 1000



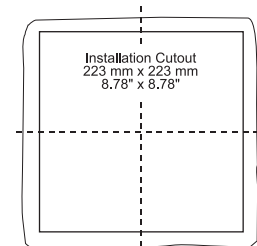
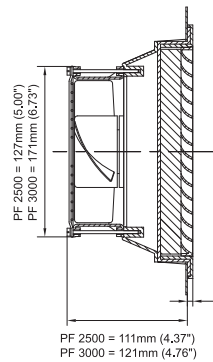
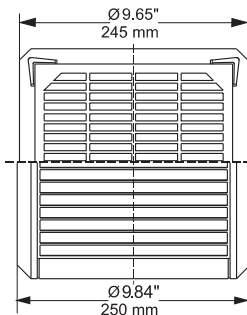
Installation Cutout

PF 2000



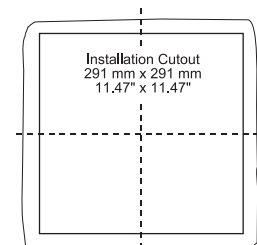
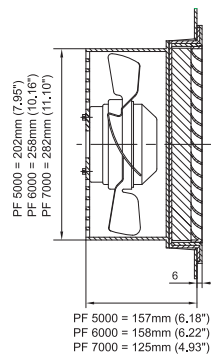
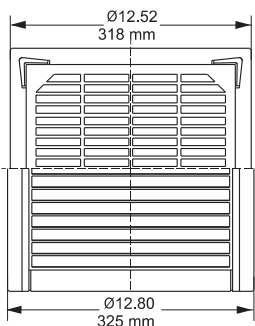
Installation Cutout

PF 2500 & 3000



Installation Cutout

PF 5000, 6000 & 7000



Installation Cutout

Note: All cutout tolerances +1/- 0 mm

Climate Control

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

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Fan Accessories



Exhaust Filters

- Built to IP54 standards (except PFA1000 - IP43 standards).
- ABS-FR grills (except PF1000 Series which is polystyrene FR).
- Grills are black to complement all cabinet colors.
- Grills also available (see below)
- Integral gasket seals against enclosure.

Part No.	Filter Density (g/m ²)	Filtering Level	Comparable IP Standard
PFA1000	150	73%	IP43
PFA2000	150	73%	IP54
PFA3000	150	73%	IP54
PFA5000	150	73%	IP54



Replacement Grill

- Packaged individually.
- Consists of replacement grill only.

Black Part No.	RAL7032 Beige Part No.	Use With Filter Fan	Use With Exhaust Filter
PG1BK	PG1RAL	PF1000	PFA1000
PG2BK	PG2RAL	PF2000	PFA2000
PG3BK	PG3RAL	PF2500/PF3000	PFA3000
PG5BK	PG5RAL	PF5000/PF6000/PF7000	PFA5000



Replacement Filters

- Packaged in quantities of 5.

Part No.	Dimensions			Use With Filter Fan	Filter Density (g/m ²)
		A	B		
PFF1000	inch	3.40	3.40	PF1000	150
	mm	85	85		
PFF2000	inch	4.50	4.50	PF2000	350
	mm	115	115		
PFF3000	inch	8.30	8.30	PF2500/PF3000	350
	mm	210	210		
PFF5000	inch	11.00	11.00	PF5000/PF6000/PF7000	350
	mm	280	280		

Call Hammond for other Cooling Solutions....

- Integral Door Air Conditioners
- Air/Water Heat Exchangers
- Custom Air/Air Heat Exchangers
- EMC Filter Fans
- other customer cooling solutions

Filterfan Rainhoods - NEMA 3R



Application

- Type 3R / Outdoor Rainhoods
- Protection against rain and snow or large airborne debris
- Sold individually

Features

- Easy installation
- Covers many external mounted Fans & Grills
- Fits PF2000/PF22000 thru PF5/6/7000 series Filterfans
- Tamperproof hardware and sealing gasket provided

Standards

- UL -50 type 3R file # E65324
- CSA C22.2 #94 file # LR21001

Finish

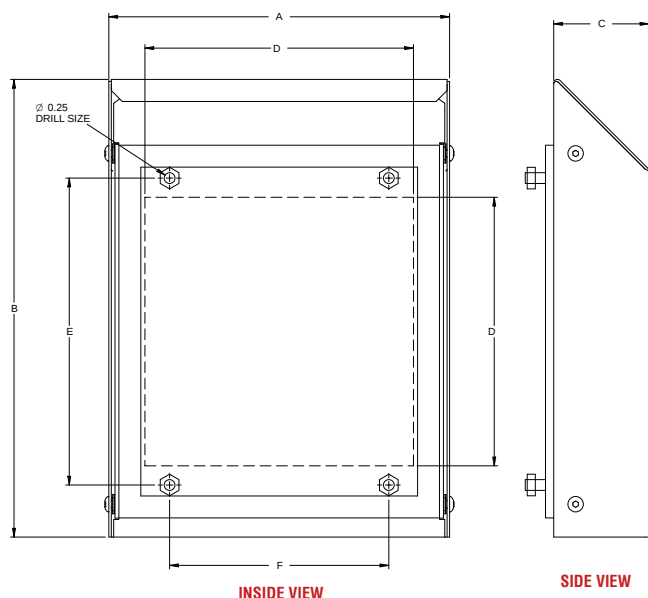
- Cover offered in ANSI61 gray or RAL7035 light gray powder coated finish on mild steel. Type 304 SS on stainless models.
- Base in Galvanized sheet steel

Accessories

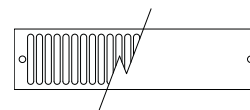
- Grill/Solid Cover Kit (see below)



Part Number	Use with	Finish
RH20000GY	PF2000/PF22000 Series	ANSI 61 Gray
RH20000LG	PF2000/PF22000 Series	RAL7035
RH20000SS	PF2000/PF22000 Series	Stainless Steel
RH40000GY	PF25, 30, 32, 43000 Series	ANSI 61 Gray
RH40000LG	PF25, 30, 32, 43000 Series	RAL7035
RH40000SS	PF25, 30, 32, 43000 Series	Stainless Steel
RH60000GY	PF5,6,7000, 65, 67000 Series	ANSI 61 Gray
RH60000LG	PF5,6,7000, 65, 67000 Series	RAL7035
RH60000SS	PF5,6,7000, 65, 67000 Series	Stainless Steel



Grill/Solid Cover Kit



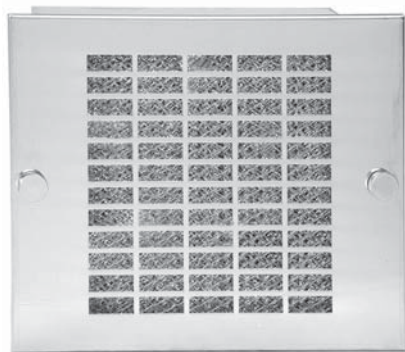
Features

- Can be installed in bottom opening of rain hood
- Grill allows ventilation while preventing unwanted entry of large contaminants
- Solid cover allows sealing of opening when fan/filter not in use

Part Number	Use With	Finish
RHA20000G	RH20000GY,LG,SS	Galvanized Steel
RHA40000G	RH40000GY, LG, SS	Galvanized Steel
RHA60000G	RH60000GY,LG, SS	Galvanized Steel

Series	Overall Dimensions			Cut-out		Bolt Pattern	
	A	B	C	D	E	F	
RH20000	7.77	10.44	2.17	6.12	7.00	5.00	
RH40000	11.71	14.57	3.35	10.12	11.00	9.00	
RH60000	14.66	15.88	4.33	13.00	13.88	12.00	

Filtered Fan Boxes and Filter Grills



Filtered Fan Box



Filter Grill

Description

- In a typical cooling arrangement, the filtered fan box pulls air into the enclosures and the filter grill is used as an air outlet.
- The washable aluminum filter grill and the air filter are easily accessible and can be removed for cleaning.
- The filtered fan boxes are available in either 115 VAC or 230 VAC, 50/60 Hz.
- Filtered passive ventilation can be provided by an exhaust filter for either convection cooling or in combination with a fan in forced air cooling.

Standards

- UL recognized, CSA certified, CE approved fans/motors

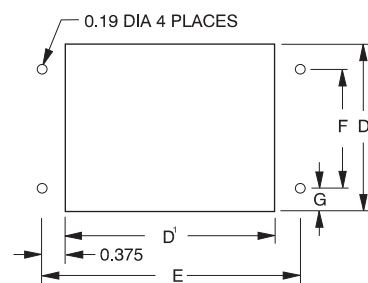
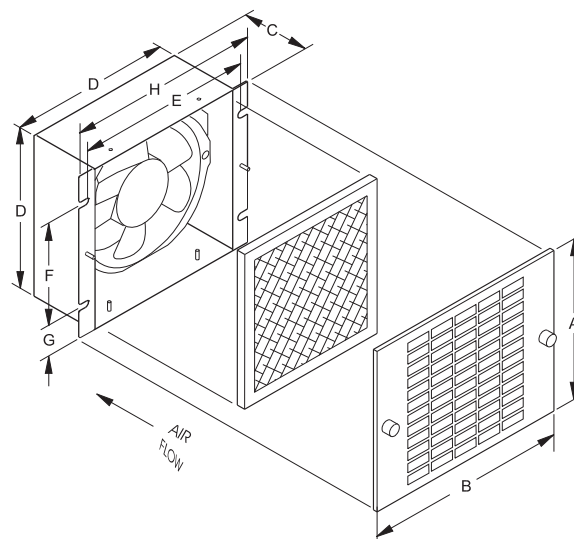
Features

- 115 VAC or 230 VAC, 50/60 Hz.
- 10" lead wires.
- Exceptionally quiet operation.
- Versatile mounting and adaptability.
- Heavy-gauge steel construction.
- Attractive stainless steel grills.
- Shipped with air flow to pressurize. Can be user modified to exhaust.
- Aluminum filter is coated with adhesive baffle surfaces for dust and dirt collection. Can be recoated after cleaning for optimum performance.
- Drilling template included.
- NOTE: One grill and filter are included with each fan package. Normally, an additional exhaust grill and filter are required for each installation and must be ordered separately.

Accessories

- Filter coat...see page **388**
- Replacement Filter...see page **388**

Filtered Fan Boxes and Filter Grills



Cutout Detail

Filtered Fan Boxes

Part No.	Free Flow Air Delivery CFM	Volts	RPM Nominal	Running Amps	Watts	A	B	C	D	D ¹	E	F	G	H	Ship Wt. lbs
XF4115	105	115	3000	0.24	22	6.13	7.38	2.38	5.63	5.75	6.5	4.13	0.81	7.0	5
XF4230	105	230	3000	0.13	21	6.13	7.38	2.38	5.63	5.75	6.5	4.13	0.81	7.0	5
XF6115	220	115	3400	0.54	42	7.63	8.88	3.00	7.13	7.25	8.0	4.50	1.34	8.5	6
XF6230	220	230	3400	0.28	46	7.63	8.88	3.00	7.13	7.25	8.0	4.50	1.34	8.5	6
XF10115	550	115	1650	0.24	33	11.63	13.00	4.56	11.13	11.25	12.0	6.88	2.16	12.5	12
XF10230	550	230	1650	0.14	33	11.63	13.00	4.56	11.13	11.25	12.0	6.88	2.16	12.5	12

Exhaust Grill and Filters

Part No	A	B	D	E ¹	F ¹	H ¹
XFG4	6.13	7.38	5.63	6.38	4.13	7.00
XFG6	7.63	8.88	7.13	7.88	4.50	8.50
XFG10	11.63	13.00	11.13	11.88	6.88	12.50

Replacement Filters

Part No	Pkg. Qty.
XFF4	3
XFF6	3
XFF10	3

¹ Dimension for mounting and cabinet cutout. Secure sheet metal with #8 hardware.



Filter Coat

- Provides a filter adhesive with a grease-like consistency which absorbs and traps dust particles.
- 10 oz. bottle with environmentally friendly trigger spray.

Part No. **1475Q**

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

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Blowers and Fans

General Selection Considerations

General Specifications

All Hammond blowers and filter fans are engineered for performance and built for reliability. This versatile line includes a blower, fan tray and filter fans.

Blowers and fans use forced convection cooling, which means ambient air flows through a filter into the enclosure to cool heated components. Both blowers and fans are sized in CFM (cubic feet per minute).

It is recommended that an exhaust filter be used in combination with the blower or filter fan to act both as an exhaust point for the hot internal air plus aid in the pressurization of the enclosure, reducing the chance of unfiltered air entering the enclosure. Whenever possible, the blower or filter fan should be located in the bottom third of the enclosure and the filtered exhaust grill placed as high as possible on the opposing side. Performance levels can be further increased by adding a second exhaust filter.

Sizing Blowers and Fans

To determine the CFM (cubic feet per minute) required in any standard situation, use the following calculation, (non-standard situations would consist of high air density - significantly more than 0.075 lbs per cubic foot.)

$$\text{CFM} = \frac{\text{Power to be dissipated (Watts)} \times 3.17}{\text{Maximum Allowable Internal Temperature (°F)} - \text{Maximum Ambient Temperature (°F)}}$$

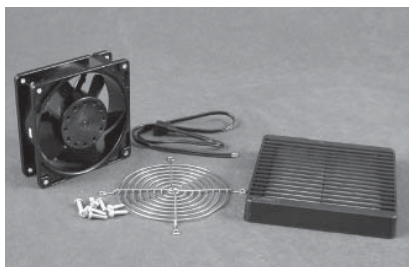
Note - The calculation above is exact, but adding an additional 25% to the CFM level is a standard safety factor.

If the air density is high (significantly more than 0.075 lbs per cubic foot), use the number calculated above in the following formula:

$$\frac{\text{CFM} \times (0.075)}{\text{Non-standard Air Density (lbs per cubic foot)}}$$

Note: Ambient Temperature must be lower than maximum internal temperature for fan/blower to be effective.

Filter Fan Kits



- Easy to order kit - one part number (save time & cost)
- Kit includes: Fan, plastic filter grill, filter, metal grill, cord & mounting hardware (as shown).
- Flame retardant, ABS plastic filter fan grill is molded in a choice of four colors to match our racks & accessories. "BK" (Black), "CG" (Gray/Beige - RAL7032), "GY" (ANSI 61 Gray) or "LG" (Light Gray - RAL7035).

115 VAC (50/60 Hz)

Part Number	Fan Size	Fan CFM	Cord	Filter Grill Color
DNFF080BK115	3.15" (80mm)	32	11" leads	Black
DNFF080CG115	3.15" (80mm)	32	11" leads	Gray/Beige
DNFF080GY115	3.15" (80mm)	32	11" leads	ANSI Gray
DNFF080LG115	3.15" (80mm)	32	11" leads	Light Gray
DNFF120BK115	4.7" (120mm)	105	24" cord	Black
DNFF120CG115	4.7" (120mm)	105	24" cord	Gray/Beige
DNFF120GY115	4.7" (120mm)	105	24" cord	ANSI Gray
DNFF120LG115	4.7" (120mm)	105	24" cord	Light Gray

230 VAC (50/60 Hz)

Part Number	Fan Size	Fan CFM	Cord	Filter Grill Color
DNFF080BK230	3.15" (80mm)	32	11" leads	Black
DNFF080CG230	3.15" (80mm)	32	11" leads	Gray/Beige
DNFF080GY230	3.15" (80mm)	32	11" leads	ANSI Gray
DNFF080LG230	3.15" (80mm)	32	11" leads	Light Gray
DNFF120BK230	4.7" (120mm)	105	24" cord	Black
DNFF120CG230	4.7" (120mm)	105	24" cord	Gray/Beige
DNFF120GY230	4.7" (120mm)	105	24" cord	ANSI Gray
DNFF120LG230	4.7" (120mm)	105	24" cord	Light Gray

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

Fan Kits



Filter Fan Grills

- Mounts easily with 4 screws using the template provided.
- All mounting hardware included.
- Standard 80mm/3.15" and 120mm/4.70" fans can be attached with hardware provided to make a filter fan.
- Can be used alone as an enclosure exhaust.
- Moulded in flame retardant ABS.
- Synthetic filter supplied.
- Integral gasket on reverse of grill seals against enclosure surface.
- Available in black, RAL7035 light gray, RAL7032 beige and ASA61/ RAL7011 gray to match enclosures.

Accessories

- Spare hardware kit, Part No. **1421F4**

Black Part No.	Beige Part No.	Gray Part No.	Light Gray Part No.	H	W	Optional Compatible Fan Part No.	Size	CFM	Repl. Filter (pkg. 5)
XPFA80BK	XPFA80CG	XPFA80GY	XPFA80LG	4.13	4.13	FAN80AC115	80mm/3.15"	32	PFF1000
XPFA120BK	XPFA120CG	XPFA120GY	XPFA120LG	5.91	5.91	DNMF100AC115	120mm/4.70"	102	PFF2000

AC Fans and Guards



Fan Cords and Daisy Chains (10 amp, 115V)

Part No.	Description	Lead Length (In)	Connector	Fan End Termination
DNMFC	Fan Cord	24"	45°	none
DNFC48P	Fan Cord	48"	45°	2 pin 115V plug
DNFC72P	Fan Cord	72"	45°	none
DNFCDC2P	Daisy Chain	24"	2x45°, 12" apart	2 pin 115V plug
DNFCDC3P	Daisy Chain	24"	3x45°, 12" apart	none

Part No.	Size(mm)	Size (In.)	CFM	AC Voltage	Use Fan Guard	Use Filter Fan Grill
FAN80AC115	80	3.15	32	115	FAN80FG	XPFA80... ¹
FAN80AC230	80	3.15	32	230	FAN80FG	XPFA80... ¹
DNMF100AC115	120	4.70	105	115	DNFG	XPFA120... ¹
DNMF100AC230	120	4.70	105	230	DNFG	XPFA120... ¹
FAN150AC115	150	6.00	220	115	FAN150FG	n/a
FAN150AC230	150	6.00	220	230	FAN150FG	n/a
FAN10A115	255	10.00	550	115	FAN10FG	n/a
FAN10A220	255	10.00	550	230	FAN10FG	n/a

¹"..." specify color - BK (black), CG (RAL 7032), LG (RAL 7035) or GY (ASA61 gray)

UL recognized, CSA listed, CE certified

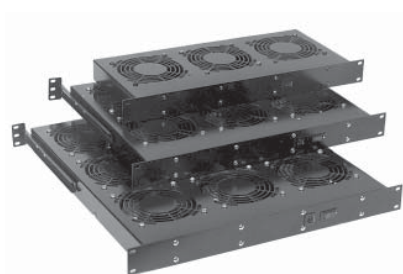
Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

Quality Products. Service Excellence.

Fan Tray

300, 600 and 900 CFM



Description

- Rack mount fan trays provide a compact, economical solution for cooling in electronic cabinets.
- Fan trays can be positioned at the bottom of an enclosure to force air through the cabinet, at the top to exhaust air out of the cabinet or below specific pieces of equipment for spot cooling.

Standards

- cULus recognized.

Features

- 300, 600 and 900 CFM sizes.
- 115VAC, 50/60Hz.
- 19" panel width mounting.
- Low profile 1.75" (1U) height.
- 600 and 900 CFM units include removable rear support brackets.
- Circuit breaker protected.
- 6 foot 14/3 SJTW cord with molded 3 prong plug.
- Thermally protected, ball bearing fans.
- Integral finger guards above and below fans.
- Shipped fully assembled.
- Available with or without ON/OFF switch.

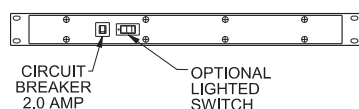
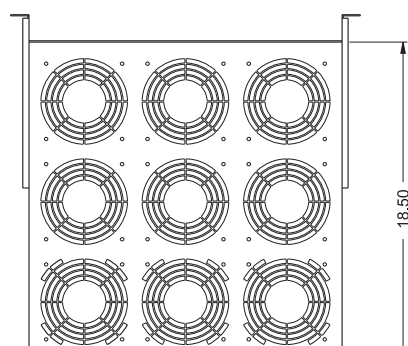
Finish

- Stocked in textured, black body finish.
- Textured black face panel.

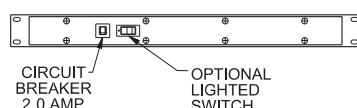
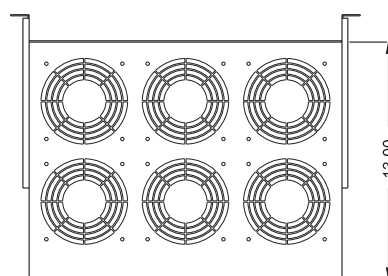
Options

- Contact Hammond for information on:
 - 24" panel width mounting.
 - 230 V version (with IEC 320-C14 INLET).
 - 15 foot cord
 - Optional colors

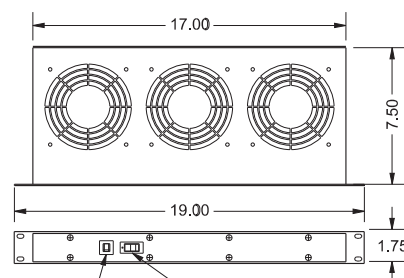
Climate Control



FT900HA1BK



FT600HA1BK

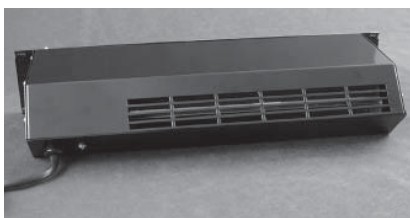


FT300HA1BK

Note: All cad drawings are shown with optional lighted switch. All units are also available without switch - see chart below.

Without Switch Part No.	With Lighted Switch Part No.	CFM	Running Amps	Watts	Panel Width	Case Width	Case Depth	Rear Bracket Depth	
								Min.	Max.
FT300TA1BK	FT300HA1BK	300	0.55	45	19	17.00	7.50	n/a	n/a
FT600TA1BK	FT600HA1BK	600	1.10	90	19	17.00	13.00	2.40	19.20
FT900TA1BK	FT900HA1BK	900	1.70	140	19	17.00	18.50	7.90	24.70

Blowers and Fan Panels



Packaged Blowers - Intake

- Standard 19" rack mount
- Each unit contains a dual centrifugal blower, powered by a single precision ball-bearing motor (except HB2160A which is traverse flow).
- Air delivery from more than 50% of their 17" width
- Internal neoprene isolation mounts reduce transmission of vibration to the rack
- Air intake only, to pressurize the rack with filtered air
- Heavy steel construction
- Attractive 19" stainless steel grille included

- 115 VAC, 50/60Hz motor is UL recognized, CSA certified, ball bearing type, cooled by incoming air
- Includes permanent filter (replacement filters available below)
- Comes with 6' STJW 3- wire cord
- Control your rack temperature with our economical, compact thermostat

Accessories

- Filter coat...see page **388**

Part No.	Voltage	Frequency	Free Flow Air Delivery (CFM)	RPM Nominal	Panel Height	Mounting Width	Body Width	Overall Depth	Air Delivery Width	Replacement Filter	Ship Wt. lbs
HB2160A	115 Vac	50 / 60 Hz	145 / 125	2500 / 3000	2U - 3.50	19.00	17.10	6.75	11.75	HB2UFILTER	10
HB3250A	115 Vac	50 / 60 Hz	155 / 200	2750 / 3000	3U - 5.25	19.00	17.25	7.75	4.60 (2x)	HB3UFILTER	15
HB4500A	115 Vac	50 / 60 Hz	405 / 465	2750 / 3300	4U - 7.00	19.00	17.25	10.00	4.60 (2x)	HB4UFILTER	21



Fan Panel Assembly

- 3U 19" Rack Mount Fan Panel
- Target hot-spots
- 4.7" Fans with grill
- Includes 24" power cable
- Black powder coated

Part Number	Description
PPGPFPA	Two (2) Fans - (Total 210 CFM, 60 dBA)
FP3F115	Three (3) Fans - (Total 315 CFM, 60 dBA)