

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.)

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

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:

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

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

Fan Kits



Filter Fan Grills

- Mounts easily with 4 screws using the template provided.
- All mounting hardware included.
- Standard 80mm/3.15" and 120mm/4.00" 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.

- Flame retardant synthetic filter supplied.
- Integral gasket on reverse of grill seals against enclosure surface.
- Available in black, 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.	H	W	Optional Compatible Fan Part No.	Size	CFM	Repl. Filter (pkg. 5)
XPFA80BK	XPFA80CG	XPFA80GY	4.13	4.13	FAN80AC115	80mm/3.15"	32	PFF1000
XPFA120BK	XPFA120CG	XPFA120GY	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"	Straight	none
DNFC48P	Fan Cord	48"	45°	2 pin 115V plug
DNFC72P	Fan Cord	72"	45°	2 pin 115V plug
DNFCDC2P	Daisy Chain	24"	2x45°, 24" apart	2 pin 115V plug
DNFCDC3P	Daisy Chain	24"	3x45°, 24" apart	2 pin 115V plug

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	100	115	DNFG	XPFA120... ¹
DNMF100AC230	120	4.70	100	230	DNFG	XPFA120... ¹
FAN150AC115	150	6.00	210	115	FAN150FG	n/a
FAN150AC230	150	6.00	210	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) or GY (ASA61 gray)

UL recognized, CSA listed, CE certified