# FILTER FAN FF 018 | 14 - 69 cfm



> Very low noise

- > Minimal mounting depth
- > Functional design

> Time-saving installation> UV resistant plastic

Filter fans are used to provide an optimum climate in enclosures. The interior temperature of an enclosure can be reduced by channeling cooler filtered outside air into the enclosure thus expelling heated internal air. The resulting air flow prevents formation of localized heat pockets and protects the electronic components from overheating. The plastic used for the hood of this filter fan series is impact and UV light resistant. These filter fans are intended for indoor use.



### TECHNICAL DATA

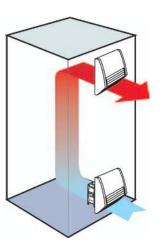
Axial fan, ball bearing	service life min. 50,000 h at 77 °F (25 °C) and 65 %RH aluminum fan body, plastic rotor
Connection	2 wires w/ cage clamps, AWG 14 (2.5 $\rm mm^2),$ length 4" (100 $\rm mm)$
Housing (filter fan and exhaust filter)	plastic, UL 94V-0, light grey
Hood (filter fan and exhaust filter)	plastic, UL 94V-O, light grey; UV light resistant according to UL 746C (f1)
Mounting frame	with double-sided industrial adhesive for mounting to the outside of enclosure; certain operating circumstances may make the additional use of screws necessary; cut-out template included
Filter media rating	G4 acc. to DIN EN 779, filtering degree 94%
Filter material	synthetic fiber with progressive construction, temperature resistant to 212 °F, self-extinguishing class F1; moisture resistant to 100 %RH, reusable - can be cleaned by washing or vacuuming
Operating / Storage temperature	+14 to +158 °F (-10 to +70 °C ) / -40 to +158 °F (-40 to +70 °C)
Operating / Storage humidity	max. 90 %RH (non-condensing)
Protection class / Protection type	I (grounded) / IP55 (according to VDE), UL Type 12
Approvals	UL File No. E234324 (all), GOST TR (all), VDE (AC 230 V only)

### Special features

- > The **self-adhesive seal** of the mounting frame prevents dust and water from entering the cabinet.
- > Functional design of the intake and exhaust fan hoods very effectively prevents direct infiltration of falling water and dust. The advantage is that the filter mat does not rapidly become contaminated with dirtand therefore does not need to be exchanged as often.
- > The air channeling makes the filter fan particularly quiet in operation.
- > The direction of air flow can easily be switched by reversing the axial fan.
- > EMC versions and other voltages are available upon request.

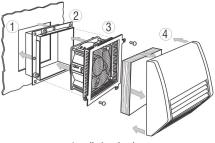
Part No.	Operating voltage	Air volume, free blowing	Air volume with exhaust filter	Current consumption	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Enclosure cut-out	Weight (approx.)
01800.0-00	AC 230 V, 50 Hz <sup>1</sup>	12 cfm (21 m³/h)	9 cfm (16 m³/h)	80 mA	13 W	31 dB (A)	1.8" (45 mm)	3.8 x 3.8"	1.3 lbs. (0.6 kg)
01800.0-01	AC 120 V, 60 Hz	14 cfm (24 m³/h)	11 cfm (18 m³/h)	160 mA	13 W	31 dB (A)	1.8" (45 mm)	3.8 x 3.8"	1.3 lbs. (0.6 kg)
01801.0-00	AC 230 V, 50 Hz <sup>1</sup>	32 cfm (55 m³/h)	25 cfm (42 m³/h)	100 mA	15 W	40 dB (A)	2.3" (58 mm)	4.9 x 4.9"	2.2 lbs. (1.0 kg)
01801.0-01	AC 120 V, 60 Hz	37 cfm (63 m³/h)	28 cfm (48 m³/h)	180 mA	15 W	40 dB (A)	2.3" (58 mm)	4.9 x 4.9"	2.2 lbs. (1.0 kg)
01802.0-00	AC 230 V, 50 Hz <sup>1</sup>	60 cfm (102 m <sup>3</sup> /h)	40 cfm (68 m³/h)	100 mA	15 W	39 dB (A)	3.4" (86 mm)	6.9 x 6.9"	2.9 lbs. (1.3 kg)
01802.0-01	AC 120 V, 60 Hz	69 cfm (117 m³/h)	46 cfm (78 m³/h)	180 mA	15 W	39 dB (A)	3.4" (86 mm)	6.9 x 6.9"	2.9 lbs. (1.3 kg)

<sup>1</sup> air volume increases by 15% when operating AC 230 V filter fans at 60 Hz









Installation sketch

#### Time-saving assembly and maintenance

STEGO's filter fans are easily installed by one person from outside the cabinet.

1.) Make cut-out in the cabinet wall. The cut edge of the cabinet opening should be free of dirt, filings and grease. A template for the enclosure cut-out is included with the filter fan.

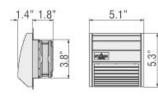
2.) Remove protective film from the sealing strips on the mounting frame. Press mounting frame into the cabinet opening. The frame stays permanently in the cabinet.

3.) Electrically connect the axial fan using the cage clamp connectors. Push the unit into the mounting frame. Affix using screws if necessary.

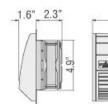
4.) Insert the filter mat in the hood. Clip on. Finished.

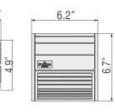
To change the filter mat, simply remove the filter hood, insert the new mat and snap the hood back again. No tools are required. Maintenance of the fan can easily be performed without removing the mounting frame (2).

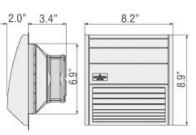
### **TECHNICAL DRAWINGS**



Size 1

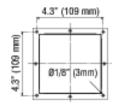


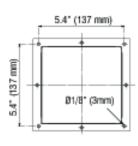




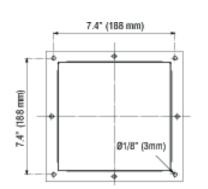
Size 3

#### DRILLING TEMPLATE FOR MOUNTING FRAME





Size 2



#### **EXHAUST FILTER EF 118**

Part No.	Mounting depth	Enclosure cut-out	Weight (approx.)	Filter mat	Protection type
11800.0-00	0.6" (16 mm)	3.8 x 3.8"	0.6 lbs. (0.3 kg)	G4 acc. to DIN EN 779, filtering degree 94%	IP55 <sup>2</sup>
11801.0-00	0.6" (16 mm)	4.9 x 4.9"	0.8 lbs. (0.4 kg)	G4 acc. to DIN EN 779, filtering degree 94%	IP55 <sup>2</sup>
11802.0-00	0.6" (16 mm)	6.9 x 6.9"	1.3 lbs. (0.6 kg)	G4 acc. to DIN EN 779, filtering degree 94%	IP55 <sup>2</sup>

### <sup>2</sup> according to VDE

### FILTER MATS FM 086 / FFM 086

Filter mat	3.5 x 3.5" (89 x 89 mm)	4.6 x 4.6" (118 x 118 mm)	6.6 x 6.6" (168 x 168 mm)
G4 (1 packing unit = 3 pcs.)	Part No. 08600.0-00	Part No. 08601.0-00	Part No. 08602.0-00
F5 (1 packing unit = 3 pcs.)	Part No. 08603.0-00	Part No. 08604.0-00	Part No. 08605.0-00

2.6"

1.8"

(65 mm) (45 mm)

0.9" 1.8" (22 mm) (45 mm)

9.8" (250 mm)<sup>-1</sup>

Exhaust filter

9.8° (250 mm)

## FILTER FAN FF 018 | 202 cfm

11.2" (284 mm)

-

4x Axial fans



- > Minimal mounting depth
- > High air volume
- > Functional design

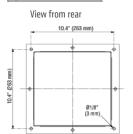
> Time-saving installation> UV resistant plastic

Filter fans are used to provide an optimum climate in enclosures. The interior temperature of an enclosure can be reduced by channeling cooler filtered outside air into the enclosure thus expelling heated internal air. The resulting air flow prevents formation of localized heat pockets and protects the electronic components from overheating. **Four integrated axial fans** provide a particularly high and uniform air circulation which contributes to higher reliability. The plastic used for the hood of this filter fan series is UV light resistant. These filter fans are intended for indoor use.



### TECHNICAL DATA

Axial fan, ball bearing	service life min. 50,000 h at 77 °F (25 °C) and 65 %RH aluminum fan body, plastic rotor
Connection	3-pole clamp, AWG 14 (2.5 mm²), clamping torque 0.8 Nm max.
Housing (filter fan and exhaust filter)	plastic, UL 94V-0, light grey
Hood (filter fan and exhaust filter)	plastic, UL 94V-0, light grey; UV light resistant according to UL 746C (f1)
Mounting frame	with double-sided industrial adhesive for mounting to the outside of enclosure; certain operating circumstances may make the additional use of screws necessary; cut-out template included
Filter media rating	G4 acc. to DIN EN 779, filtering degree 94%
Filter material	synthetic fiber with progressive construction, temperature resistant to 212 °F, self-extinguishing class F1; moisture resistant to 100 %RH, reusable - can be cleaned by washing or vacuuming
Operating / Storage temperature	+14 to +158 °F (-10 to +70 °C) / -40 to +158 °F (-40 to +70 °C)
Operating / Storage humidity	max. 90 %RH (non-condensing)
Protection class / Protection type	I (grounded) / IP55 (according to VDE), UL Type 12
Approvals	UL File No. E234324 (all), GOST TR (all), VDE (AC 230 V only)



Drilling template for mounting frame

Part No.	Operating voltage	Air volume, free blowing	Air volume with exhaust filter	Current consumption	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Enclosure cut-out	Weight (approx.)
01803.0-00	AC 230 V, 50 Hz <sup>1</sup>	177 cfm (300 m <sup>3</sup> /h)	135 cfm (230 m³/h)	400 mA	68 W	56 dB (A)	2.6" (65 mm)	9.8 x 9.8"	7.3 lbs. (3.3 kg)
01803.0-01	AC 120 V, 60 Hz	202 cfm (345 m <sup>3</sup> /h)	156 cfm (265 m <sup>3</sup> /h)	800 mA	68 W	56 dB (A)	2.6" (65 mm)	9.8 x 9.8"	7.3 lbs. (3.3 kg)

#### **EXHAUST FILTER EF 118**

Part. No.	Mounting depth	Enclosure cut-out	Weight (approx.)	Filter mat	Protection type
11803.0-00	0.9" (22 mm)	9.8 x 9.8"	2.2 lbs. (1.0 kg)	G4 acc. to DIN EN 779, filtering degree 94%	IP55 <sup>2</sup>

### FILTER MATS FM 086

Filter mat	9.7 x 9.7" (247 x 247 mm)
G4 (1 packing unit = 3 pcs.)	Part No. 08608.0-00
F5 (1 packing unit = 3 pcs.)	Part No. 08609.0-00

# **FILTER FAN** FF 018 | 136 CFM



Filter fan

### > High air volume > Functional design

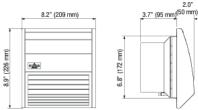
**TECHNICAL DATA** 

> Time-saving installation > UV resistant plastic

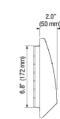
Filter fans are used to provide an optimum climate in enclosures. The interior temperature of an enclosure can be reduced by channeling cooler filtered outside air into the enclosure thus expelling heated internal air. The resulting air flow prevents formation of localized heat pockets and protects the electronic components from overheating. The plastic used for the hood of this filter fan series is impact and UV light resistant. These filter fans are intended for indoor use.



UL File No. E234324 (all), GOST TR (all), VDE (AC 230 V only)

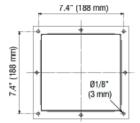






Exhaust filter

View from rear



Drilling template for mounting frame

Axial fan, ball bearing	service life min. 50,000 h at 77 °F (25 °C) and 65 %RH aluminum fan body, metal rotor
Connection	3-pole clamp, AWG 14 (2.5 mm <sup>2</sup> ), clamping torque 0.8 Nm ma
Housing (filter fan and exhaust filter)	plastic, UL 94V-0, light grey
Hood (filter fan and exhaust filter)	plastic, UL 94V-0, light grey; UV light resistant according to UL 746C (f1)
Mounting frame	with double-sided industrial adhesive for mounting to the outside of enclosure; certain operating circumstances may make the additional use of screws necessary; cut-out template included
Filter media rating	G4 acc. to DIN EN 779, filtering degree 94%
Filter material	synthetic fiber with progressive construction, temperature resistant to 212 °F, self-extinguishing class F1; moisture resistant to 100 %RH, reusable - can be cleaned by washing or vacuuming
Operating / Storage temperature	AC 120 V: -13 to +140 °F (-25 to +60 °C) AC 230 V: -13 to +122 °F (-25 to +50 °C)
Operating / Storage humidity	max. 90 %RH (non-condensing)
Protection class / Protection type	I (grounded) / IP55 (according to VDE), UL Type 12

Approvals

Part. No.	Operating voltage	Air volume, free blowing	Air volume with exhaust filter	Current consumption	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Enclosure cut-out	Weight (approx.)
01804.0-00	AC 230 V, 50 Hz <sup>1</sup>	118 cfm (200 m³/h)	74 cfm (125 m³/h)	320 mA	45 W	52 dB (A)	3.7" (95 mm)	6.9 x 6.9"	3.7 lbs. (1.7 kg)
01804.0-01	AC 120 V, 60 Hz	136 cfm (230 m³/h)	84 cfm (143 m³/h)	470 mA	39 W	52 dB (A)	3.7" (95 mm)	6.9 x 6.9"	3.7 lbs. (1.7 kg)

### **EXHAUST FILTER EF 118**

Part. No.	Mounting depth	Enclosure cut-out	Weight (approx.)	Filter mat	Protection type
11802.0-00	0.6" (16 mm)	6.9 x 6.9"	1.3 lbs. (0.6 kg)	G4 acc. to DIN EN 779, filtering degree 94%	IP55 <sup>2</sup>

### FILTER MATS FM 086

Part. No.	Mounting depth	Enclosure cut-out Weight (approx.)		Filter mat	Protection type
11802.0-00	0.6" (16 mm)	6.9 x 6.9"	1.3 lbs. (0.6 kg)	G4 acc. to DIN EN 779, filtering degree 94%	IP55 <sup>2</sup>

<sup>1</sup> air volume increases by 15% when operating AC 230 V filter fans at 60 Hz, <sup>2</sup> according to VDE

# FILTER FAN FF 018 | 373 cfm



Filter fan



TECHNICAL DATA

- <u>> Functional</u> design
- > Time-saving installation

> UV resistant plastic

Filter fans are used to provide an optimum climate in enclosures. The interior temperature of an enclosure can be reduced by channeling cooler filtered outside air into the enclosure thus expelling heated internal air. The resulting air flow prevents formation of localized heat pockets and protects the electronic components from overheating. The plastic used for the hood of this filter fan series is UV light resistant. These filter fans are intended for indoor use.



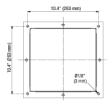
service life min. 50.000 h at 77 °F (25 °C) and 65 %RH

11.2" (284 mm)	1	4.2" 1.8" (107 mm) (45 mn
	9.8" (250 mm)	and the second se





View from rear Exhaust filter



Drilling template for mounting frame

	aluminum fan body, metal rotor
Connection	3-pole clamp, AWG 14 (2.5 mm²), clamping torque 0.8 Nm max
Housing (filter fan and exhaust filter)	plastic, UL 94V-0, light grey
Hood (filter fan and exhaust filter)	plastic, UL 94V-0, light grey; UV light resistant according to UL 746C (f1)
Mounting frame	with double-sided industrial adhesive for mounting to the outside of enclosure; certain operating circumstances may make the additional use of screws necessary; cut-out template included
Filter media rating	G4 acc. to DIN EN 779, filtering degree 94%
Filter material	synthetic fiber with progressive construction, temperature resistant to 212 °F, self-extinguishing class F1; moisture resistant to 100 %RH, reusable - can be cleaned by washing or vacuuming
Operating / Storage temperature	-13 to +158 °F (-25 to +70 °C)
Operating / Storage humidity	max. 90 %RH (non-condensing)
Protection class / Protection type	I (grounded) / IP55 (according to VDE), UL Type 12
Approvals	UL File No. E234324 (all), GOST TR (all), VDE (AC 230 V only)

Part No.	Operating voltage	Air volume, free blowing	Air volume with exhaust filter	Current consumption	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Enclosure cut-out	Weight (approx.)
01805.0-00	AC 230 V, 50 Hz <sup>1</sup>	324 cfm (550 m <sup>3</sup> /h)	177 cfm (300 m <sup>3</sup> /h)	300 mA	64 W	65 dB (A)	4.2" (107 mm)	9.8 x 9.8"	5.9 lbs. (2.7 kg)
01805.0-01	AC 120 V, 60 Hz	372 cfm (632 m³/h)	203 cfm (345 m³/h)	780 mA	85 W	65 dB (A)	4.2" (107 mm)	9.8 x 9.8"	5.9 lbs. (2.7 kg)

### EXHAUST FILTER EF 118

Part. No.	Mounting depth	Enclosure cut-out	Weight (approx.)	Filter mat	Protection type
11803.0-00	0.9" (22 mm)	9.8 x 9.8"	2.2 lbs. (1.0 kg)	G4 acc. to DIN EN 779, filtering degree 94%	IP55 <sup>2</sup>

### FILTER MATS FM 086

Filter mat	9.7 x 9.7" (247 x 247 mm)
G4 (1 packing unit = 3 pcs.)	Part No. 08608.0-00
F5 (1 packing unit = 3 pcs.)	Part No. 08609.0-00

 $^{\rm 1}$  air volume increases by 15% when operating AC 230 V filter fans at 60 Hz,  $^{\rm 2}$  according to VDE

# OUTDOOR FILTER FAN FF 018 | 14 cfm





Outdoor filter fan

- > Quick and easy filter change
- > Lockable outer door
- > Impact resistant

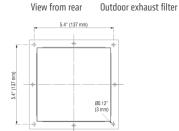
**TECHNICAL DATA** 

> Weather and UV resistant

This filter fan can be used in outdoor enclosures where warm air has to be dissipated. To clean and exchange the filter mat, it is only necessary to open the lockable door of the outdoor hood eliminating the need to allow interior access to the enclosure. A protection type of IP55 is achieved due to the special design of the hood and the use of fine filter mats. The plastic used for the hood of this filter fan is highly weather and UV light resistant.



#### 6.5" (165 mm) 100 22" (65 mm) 100 20" (8 mm) 100 20" (



Drilling template for mounting frame

Axial fan, ball bearing	service life min. 50,000 h at 77 °F (25 °C) and 65 %RH aluminum fan body, plastic rotor
Connection	2 wires w/ cage clamps, AWG 14 (2.5 mm²), length 4" (100 mm)
Filter fan and exhaust filter housing	plastic according to UL 94V-0, light grey; weather and UV light resistant according to UL 746C (f1)
Mounting frame	with double-sided industrial adhesive for mounting to the outside of enclosure; certain operating circumstances may make the additional use of screws necessary; cut-out template included
Filter media rating	F5 acc. to DIN EN 779, filtering degree 98%
Filter material	synthetic fiber with progressive construction, temperature resistant to 212 °F, self-extinguishing class F1; moisture resistant to 100 %RH
Operating / Storage temperature	+14 to +158 °F (-10 to +70 °C) / -40 to +158 °F (-40 to +70 °C)
Operating / Storage humidity	max. 90 %RH (non-condensing)
Protection class / Protection type	I (grounded) / IP55
Approvals	UL File No. E234324, VDE, GOST TR

**Note:** The hood is attached permanently to the enclosure from the inside using provided screws. Filter mats can be easily changed from outside the enclosure through the lockable door in the hood.

Part No.	Operating voltage	Air volume, free blowing	Current consumption	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Enclosure cut-out	Weight (approx.)
01821.0-00	AC 230 V, 50 Hz <sup>1</sup>	12 cfm (20 m³/h)	100 mA	15 W	40 dB (A)	2.4" (62 mm)	4.9 x 4.9"	2.6 lbs. (1.2 kg)
01821.0-02	AC 120 V, 60 Hz	14 cfm (23 m³/h)	180 mA	15 W	40 dB (A)	2.4" (62 mm)	4.9 x 4.9"	2.6 lbs. (1.2 kg)

<sup>1</sup> air volume increases by 15% when operating AC 230 V filter fans at 60 Hz

### EXHAUST FILTER EF 11821

Part No.	Mounting depth	Enclosure cut-out	Weight (approx.)	Filter mat	Protection type
11821.0-00	0.6" (16 mm)	4.9 x 4.9"	1.6 lbs. (0.6 kg)	F5 acc. to DIN EN 779, filtering degree 98%	IP55

### FILTER MAT FM 086

Filter mat	4.6 x 4.6" (118 x 118 mm)
F5 (1 packing unit = 3 pcs.)	Part No. 08604.0-00
· - (· F===, - F==,	