

FILTER FAN

FF 018 | 14 - 69 CFM



Enclosure ventilation using a filter fan and exhaust filter

- > 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.













| Axial fan, ball bearing | service life min. 50,000 h at 77 $^{\circ}\text{F}$ (25 $^{\circ}\text{C}) and 65 %RH aluminum fan body, plastic rotor$ |
|---|---|
| Connection | 2 wires w/ cage clamps, AWG 14 (2.5 mm²), length 4" (100 mm) |
| 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) |
| | |

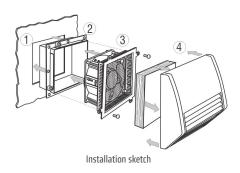
Special features

- > 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 ¹ | 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 ¹ | 32 cfm (55 m ³ /h) | 25 cfm (42 m ³ /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 m ³ /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 ¹ | 60 cfm (102 m ³ /h) | 40 cfm (68 m ³ /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 m ³ /h) | 180 mA | 15 W | 39 dB (A) | 3.4" (86 mm) | 6.9 x 6.9" | 2.9 lbs. (1.3 kg) |

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





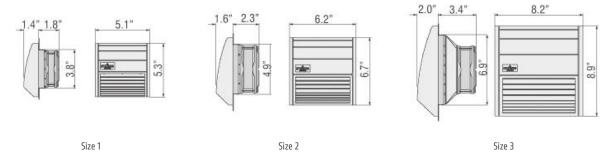
Time-saving assembly and maintenance

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

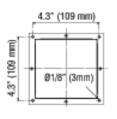
- 1.) Make cut-out in the cabinet wall. The cut edge of the cabinet opening should be free of dirt, filings and grease. A template for the enclosure cut-out is included with the filter fan.
- 2.) Remove protective film from the sealing strips on the mounting frame. Press mounting frame into the cabinet 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.

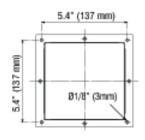
To change the filter mat, simply remove the filter hood, insert the new mat and snap the hood back again. No tools are required. Maintenance of the fan can easily be performed without removing the mounting frame (2).

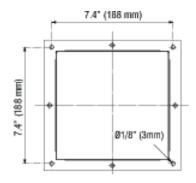
TECHNICAL DRAWINGS



DRILLING TEMPLATE FOR MOUNTING FRAME







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 ² |
| 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 ² |
| 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 ² |

² according to VDE

FILTER MATS FM 086 / FFM 086

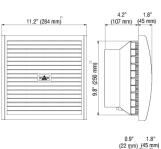
| Filter mat | 3.5 x 3.5" (89 x 89 mm) | 4.6 x 4.6" (118 x 118 mm) | 6.6 x 6.6" (168 x 168 mm) |
|------------------------------|-------------------------|---------------------------|---------------------------|
| G4 (1 packing unit = 3 pcs.) | Part No. 08600.0-00 | Part No. 08601.0-00 | Part No. 08602.0-00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

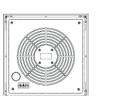


FILTER FAN

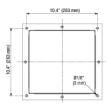
FF 018 | 373 CFM











View from rear

Drilling template for mounting frame

- > 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. 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 $^{\circ}\text{F}$ (25 $^{\circ}\text{C}) and 65 %RH aluminum fan body, metal rotor$ |
|---|---|
| Connection | 3-pole clamp, AWG 14 (2.5 mm²), clamping torque 0.8 Nm max. |
| Housing (filter fan and exhaust filter) | plastic, UL 94V-O, 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 ¹ | 324 cfm (550 m ³ /h) | 177 cfm (300 m ³ /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 m ³ /h) | 203 cfm (345 m ³ /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 ² |

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