FILTER FAN PLUS – DC LINE
FPI/FPO 018 | up to 19.4 cfm (3.6 x 3.6")

> New air-flap outlet technology for high airflow
> Easy mounting
> Protection type/Environmental ratings by independent testing agencies

> Two optional systems for optimal airflow (FPI/FPO)
> Industry-common enclosure cut-out sizes
> Single filter mat system design

Filter fans are used to provide "cooling" by forced air-circulation in enclosures and cabinets containing eletrical/electronic and other components. The interior temperature of an enclosure can be reduced by channelling cooler, filtered outside air into the enclosure, thus expelling hot inside air. The resulting airflow prevents formation of localized hot pockets and protects electronic components from overheating.

The Filter Fan Plus series encompasses a new air-flap technology on the air outlet side, thereby reaching an unparalleled high degree of airflow. A unique ratchet mechanism is used for easy installation. It provides safe and secure mounting while guaranteeing a tight seal. Depending on the requirements, there are two optional systems available – the FPI or the FPO system (FPI = "in", FPO = "out"). The FPI system is the more commonly known installation system, where a filter fan located in the lower part of the enclosure draws cleaner, cooler air into the enclosure (airflow direction "In"). This system consists of a filter fan and exhaust filter. On opposite, with the newer FPO system, the filter fan will be located in the upper area of the enclosure to draw warmer air out of the enclosure (airflow direction "Out"). The FPO system consists of an intake filter and exhaust filter fan. The Filter Fan Plus series may also be used outdoors with appropriate protective measures or when equipped with weather proof accessories, e.g. Hose-proof Hood FFH 086.
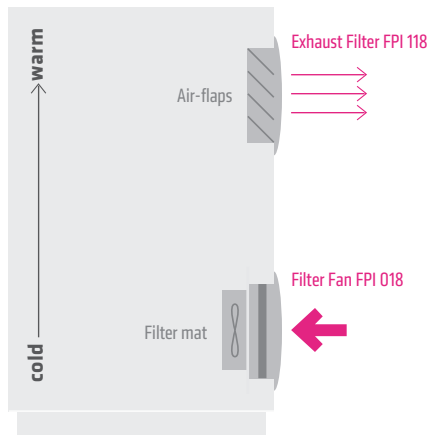
CE cULus DVE EAC RoHS 3 UV

TECHNICAL DATA

Axial fan, ball bearing	service life L10 at +104 °F (+40 °C): min. 70,000 h plastic
Connection	2 stranded wires, 11.8" (300 mm) long
Housing, hood, flaps	plastic UL 94V-0, light grey; UV light resistant according to UL 746C (f1)
Enclosure cut-out	3.6 x 3.6$^{+0.04}$ inches (92 x 92^{+1} mm)
Mounting frame	4 built-in ratchet push levers for mounting (6 ratchet stops to accommodate for wall thicknesses Gauge 9 to 19 or 1-4 mm). Additional screw mounting possible if needed[1].
Filter mat	ISO coarse 55% acc. to ISO 16890 (G3), init. grav. arrestance 57%
Filter material	synthetic mesh with progressive construction, temperature resistant to +212 °F (+100 °C), self-extinguishing class F1, moisture resistant to 100 % RH, reusable
Operating temperature	-4 to +158 °F (-20 to +70 °C)
Storage temperature	-40 to +158 °F (-40 to +70 °C)
Operating/Storage humidity	max. 90 % RH (non-condensing)
Protection type/Protection class	IP54 / II (double insulated)
Environmental rating UL/NEMA	UL TYPE 12 / NEMA 12
Approvals	UL File No. E234324, VDE, EAC
Note	other voltages on request

[1] Drilling hole markings for screw mounting are indicated on mounting frame.

SYSTEM FPI

warm

Exhaust Filter FPI 118
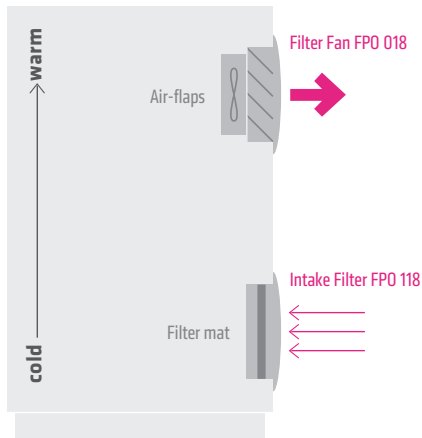
Air-flaps

Filter Fan FPI 018

Filter mat

cold

AIRFLOW DIRECTION "IN": FILTER FAN FPI 018

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	Weight (approx.)	Filter mat
01870.2-30	DC 24 V	12.9 cfm (22 m³/h)	9.4 cfm (16 m³/h)	113 mA	2.7 W	49 dB (A)	2.3" (59 mm)	0.7 lbs. (0.3 kg)	G3
01870.1-30	DC 48 V	13.5 cfm (23 m³/h)	10 cfm (17 m³/h)	63 mA	3.0 W	51 dB (A)	2.3" (59 mm)	0.7 lbs. (0.3 kg)	G3

AIRFLOW DIRECTION "IN": EXHAUST FILTER FPI 118

Part No.	Mounting depth	Weight (approx.)	Air outlet
11870.0-00	1.1" (29 mm)	0.4 lbs. (0.2 kg)	air-flap outlet technology

SYSTEM FPO

warm

Filter Fan FPO 018

Air-flaps

Intake Filter FPO 118

Filter mat

cold

AIRFLOW DIRECTION "OUT": FILTER FAN FPO 018

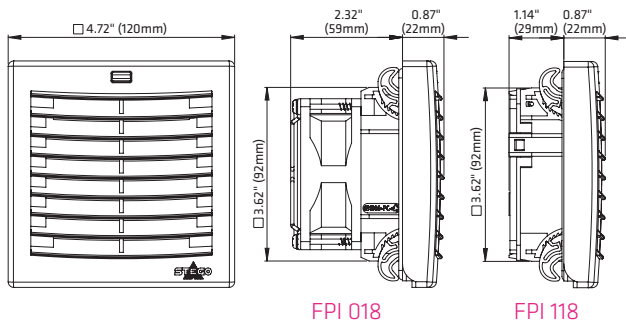| Part No.	Operating voltage	Air volume, free blowing	Air volume with intake filter	Current consumption	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Weight (approx.)	Air outlet
01880.2-00	DC 24 V	18.2 cfm (31 m³/h)	10 cfm (17 m³/h)	113 mA	2.7 W	48 dB (A)	2.6" (66 mm)	0.7 lbs. (0.3 kg)	air-flaps
01880.1-00	DC 48 V	19.4 cfm (33 m³/h)	10.6 cfm (18 m³/h)	63 mA	3.0 W	49 dB (A)	2.6" (66 mm)	0.7 lbs. (0.3 kg)	air-flaps

AIRFLOW DIRECTION "OUT": INTAKE FILTER FPO 118

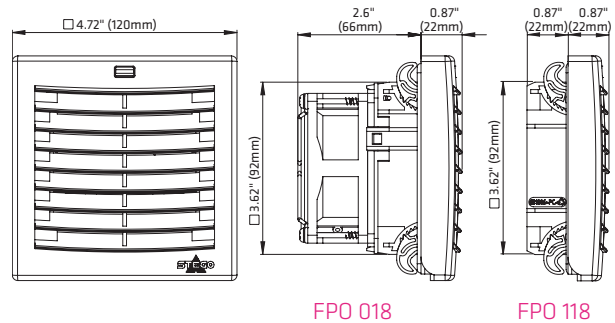| Part No.	Mounting depth	Weight (approx.)	Filter mat
11880.0-30	0.9" (22 mm)	0.4 lbs. (0.2 kg)	ISO coarse 55 % acc. to ISO 16890 (G3), initial gravimetric arrestance 57 %

FILTER MAT FM 086

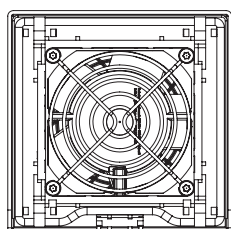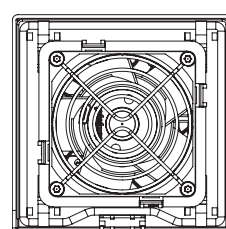| Filter class	3.31 x 3.31" (84 x 84 mm)	Initial gravimetric arrestance	1 packing unit
ISO coarse 55% acc. to ISO 16890 (G3)	Part No. 08633.0-00	57 %	5 pieces

DIMENSIONED DRAWINGS

FPI 018

FPI 118

FPO 018

FPO 118

ENCLOSURE CUT-OUT

ENCLOSURE CUT-OUT

www.stegousa.com

28.07.2020 | Specifications are subject to change without notice. Suitability of this product for its intended use and any associated risks must be determined by the end customer/buyer in its final application.