FILTER FAN PLUS

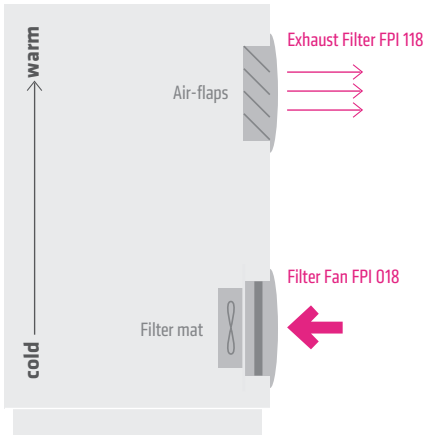
FPI/FPO 018 | up to 18.8 cfm (3.6 x 3.6")

- > New air-flap outlet technology for high airflow
- > Easy mounting
- > Protection type/Environmental ratings by independent testing agencies (VDE & UL)
- > Two optional systems for optimal airflow (FPI/FPO)
- > Industry-common enclosure cut-out sizes (5 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.

SYSTEM FPI



TECHNICAL DATA

Axial fan, ball bearing	service life L10 at +104 °F (+40 °C): min. 50,000 h fan body aluminum, metal impeller
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/Storage temperature	-40 to +158 °F (-40 to +70 °C)
Operating/Storage humidity	max. 90 % RH (non-condensing)
Protection type/Protection class	IP54 / I (grounded)
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.

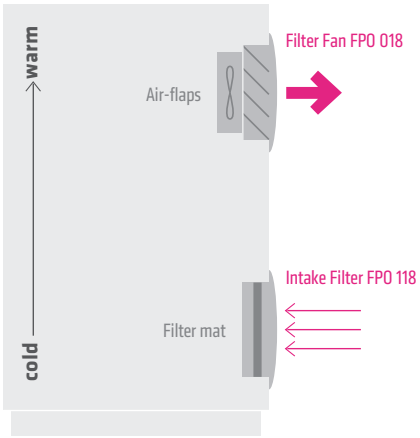
AIRFLOW DIRECTION "IN": FILTER FAN FPI 018

Part No.	Operating voltage	Air volume, free blowing	Air volume with exhaust filter	Current consumption (50/60 Hz)	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Weight (approx.)	Filter mat
01870.0-30	AC 230 V, 50/60 Hz	11.2 cfm (19 m³/h)	7.7 cfm (13 m³/h)	70 mA	12 W	39 dB (A)	2.6" (66 mm)	1.3 lbs. (0.6 kg)	G3
01870.9-30	AC 115 V, 50/60 Hz	13.5 cfm (23 m³/h)	9.4 cfm (16 m³/h)	115 mA	11 W	43 dB (A)	2.6" (66 mm)	1.3 lbs. (0.6 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



AIRFLOW DIRECTION "OUT": FILTER FAN FPO 018

Part No.	Operating voltage	Air volume, free blowing	Air volume with intake filter	Current consumption (50/60 Hz)	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Weight (approx.)	Air outlet
01880.0-00	AC 230 V, 50/60 Hz	14.1 cfm (24 m^3/h)	8.8 cfm (15 m^3/h)	70 mA	12 W	38 dB (A)	2.8" (72 mm)	1.3 lbs. (0.6 kg)	air-flaps
01880.9-00	AC 115 V, 50/60 Hz	18.8 cfm (32 m^3/h)	11.2 cfm (19 m^3/h)	115 mA	12 W	41 dB (A)	2.8" (72 mm)	1.3 lbs. (0.6 kg)	air-flaps

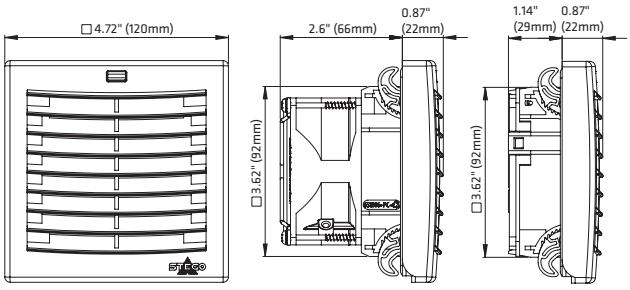
AIRFLOW DIRECTION "OUT": INTAKE FILTER FPO 118

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 %

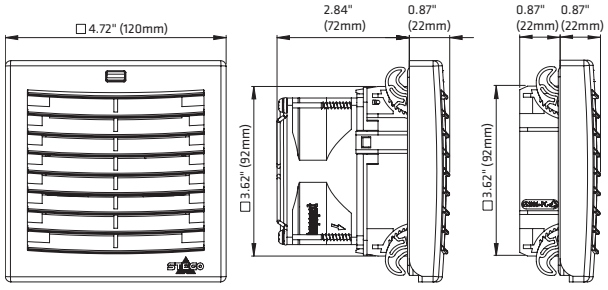
FILTER MAT FM 086

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

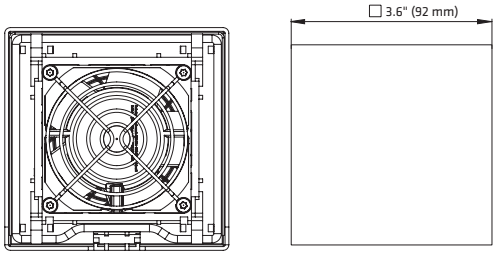
DIMENSIONED DRAWINGS



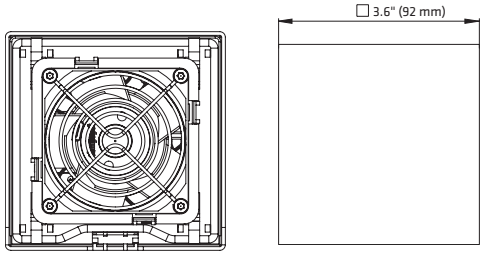
FPI 018 FPI 118



FPO 018 FPO 118



ENCLOSURE CUT-OUT



ENCLOSURE CUT-OUT

FILTER FAN PLUS

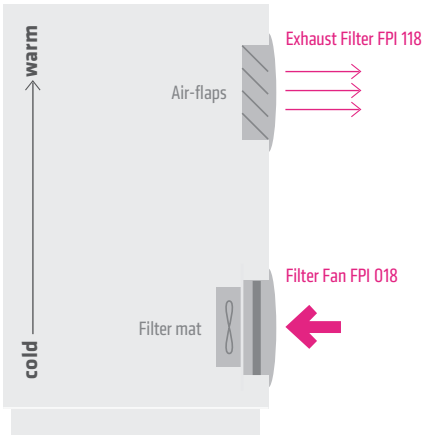
FPI/FPO 018 | up to 68.9 cfm (4.9 x 4.9")

- > New air-flap outlet technology for high airflow
- > Easy mounting
- > Protection type/Environmental ratings by independent testing agencies (VDE & UL)
- > Two optional systems for optimal airflow (FPI/FPO)
- > Industry-common enclosure cut-out sizes (5 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.

SYSTEM FPI



TECHNICAL DATA

Axial fan, ball bearing	service life L10 at +104 °F (+40 °C): min. 37,000 h fan body aluminum, metal impeller
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	4.9 x 4.9$^{+0.04}$ inches (124 x 124^{+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/Storage temperature	-40 to +158 °F (-40 to +70 °C)
Operating/Storage humidity	max. 90 % RH (non-condensing)
Protection type/Protection class	IP54 / I (grounded)
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.

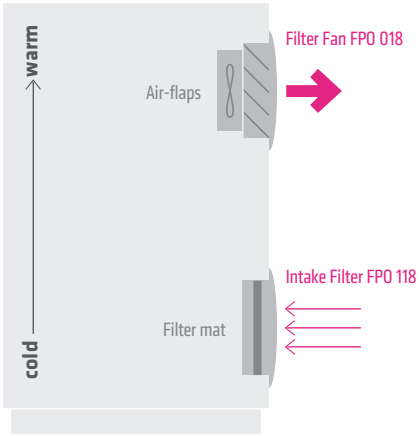
AIRFLOW DIRECTION "IN": FILTER FAN FPI 018

Part No.	Operating voltage	Air volume, free blowing	Air volume with exhaust filter	Current consumption (50/60 Hz)	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Weight (approx.)	Filter mat
01871.0-30	AC 230 V, 50/60 Hz	30.6 cfm (52 m³/h)	24.7 cfm (42 m³/h)	120 mA	19 W	49 dB (A)	2.6" (66 mm)	1.8 lbs. (0.8 kg)	G3
01871.9-30	AC 115 V, 50/60 Hz	36.5 cfm (62 m³/h)	30.0 cfm (51 m³/h)	230 mA	18 W	53 dB (A)	2.6" (66 mm)	1.8 lbs. (0.8 kg)	G3

AIRFLOW DIRECTION "IN": EXHAUST FILTER FPI 118

Part No.	Mounting depth	Weight (approx.)	Air outlet
11871.0-00	1.4" (35 mm)	0.7 lbs. (0.3 kg)	air-flap outlet technology

SYSTEM FPO



AIRFLOW DIRECTION "OUT": FILTER FAN FPO 018

Part No.	Operating voltage	Air volume, free blowing	Air volume with intake filter	Current consumption (50/60 Hz)	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Weight (approx.)	Air outlet
01881.0-00	AC 230 V, 50/60 Hz	57.1 cfm (97 m^3/h)	27.7 cfm (47 m^3/h)	120 mA	19 W	49 dB (A)	3.1" (79 mm)	2.0 lbs. (0.9 kg)	air-flaps
01881.9-00	AC 115 V, 50/60 Hz	68.9 cfm (117 m^3/h)	34.1 cfm (58 m^3/h)	230 mA	18 W	52 dB (A)	3.1" (79 mm)	2.0 lbs. (0.9 kg)	air-flaps

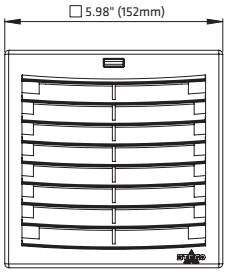
AIRFLOW DIRECTION "OUT": INTAKE FILTER FPO 118

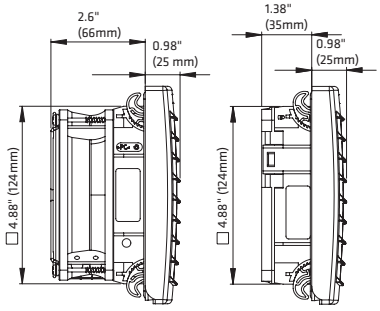
Part No.	Mounting depth	Weight (approx.)	Filter mat
11881.0-30	0.9" (22 mm)	0.4 lbs. (0.2 kg)	ISO coarse 55 % acc. to ISO 16890 (G3), initial gravimetric arrestance 57 %

FILTER MAT FM 086

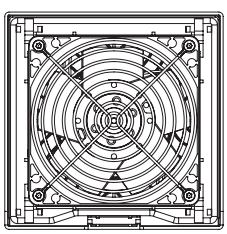
Filter class	4.65 x 4.65" (118 x 118 mm)	Initial gravimetric arrestance	1 packing unit
ISO coarse 55% acc. to ISO 16890 (G3)	Part No. 08634.0-00	57 %	5 pieces

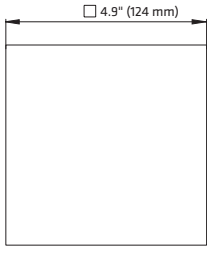
DIMENSIONED DRAWINGS



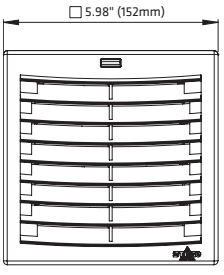


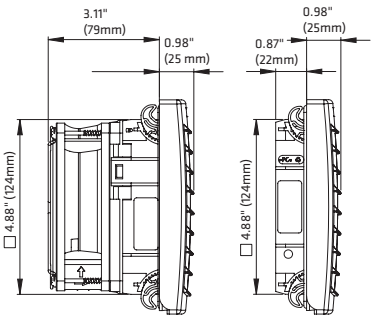
FPI 018 FPI 118



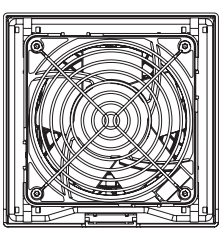


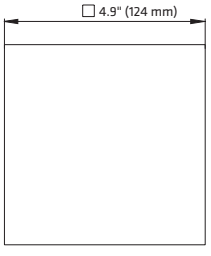
ENCLOSURE CUT-OUT





FPO 018 FPI 118





ENCLOSURE CUT-OUT

FILTER FAN PLUS

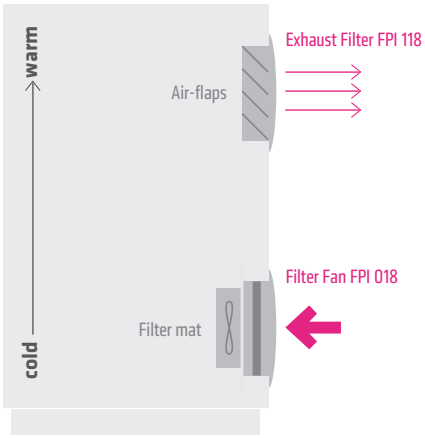
FPI/FPO 018 | up to 184.2 cfm (6.9 x 6.9")

- > New air-flap outlet technology for high airflow
- > Easy mounting
- > Protection type/Environmental ratings by independent testing agencies (VDE & UL)
- > Two optional systems for optimal airflow (FPI/FPO)
- > Industry-common enclosure cut-out sizes (5 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.

SYSTEM FPI



TECHNICAL DATA

Axial fan, ball bearing	service life L10 at +104 °F (+40 °C): min. 65,000 h fan body aluminum, metal impeller
Connection	3-pole clamp for AWG 14 (2.5 mm²), clamping torque 0.8 Nm max.
Housing, hood, flaps	plastic UL 94V-0, light grey; UV light resistant according to UL 746C (f1)
Enclosure cut-out	6.9 x 6.9$^{+0.04}$ inches (176 x 176^{+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	50 Hz: -13 to +122 °F (-25 to +50 °C) 60 Hz: -13 to +158 °F (-25 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 / I (grounded)
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.

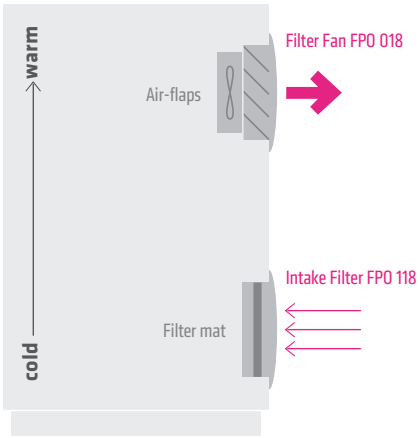
AIRFLOW DIRECTION "IN": FILTER FAN FPI 018

Part No.	Operating voltage	Air volume, free blowing	Air volume with exhaust filter	Current consumption (50/60 Hz)	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Weight (approx.)	Filter mat
01872.0-30	AC 230 V, 50/60 Hz	100 cfm (170 m³/h)	81.8 cfm (139 m³/h)	310/250 mA	45 W	55 dB (A)	4.6" (117 mm)	3.5 lbs. (1.6 kg)	G3
01872.9-30	AC 115 V, 50/60 Hz	120 cfm (204 m³/h)	110.1 cfm (187 m³/h)	560/470 mA	38 W	58 dB (A)	4.6" (117 mm)	3.5 lbs. (1.6 kg)	G3

AIRFLOW DIRECTION "IN": EXHAUST FILTER FPI 118

Part No.	Mounting depth	Weight (approx.)	Air outlet
11872.0-00	1.7" (43 mm)	0.9 lbs. (0.4 kg)	air-flap outlet technology

SYSTEM FPO



AIRFLOW DIRECTION "OUT": FILTER FAN FPO 018

Part No.	Operating voltage	Air volume, free blowing	Air volume with intake filter	Current consumption (50/60 Hz)	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Weight (approx.)	Air outlet
01882.0-00	AC 230 V, 50/60 Hz	154.8 cfm (263 m^3/h)	80.6 cfm (137 m^3/h)	310/250 mA	45 W	56 dB (A)	4.6" (117 mm)	3.5 lbs. (1.6 kg)	air-flaps
01882.9-00	AC 115 V, 50/60 Hz	184.2 cfm (313 m^3/h)	97.7 cfm (166 m^3/h)	560/470 mA	38 W	60 dB (A)	4.6" (117 mm)	3.5 lbs. (1.6 kg)	air-flaps

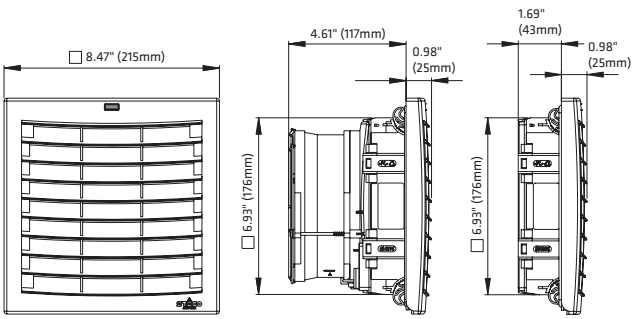
AIRFLOW DIRECTION "OUT": INTAKE FILTER FPO 118

Part No.	Mounting depth	Weight (approx.)	Filter mat
11882.0-30	1.0" (25 mm)	0.9 lbs. (0.4 kg)	ISO coarse 55 % acc. to ISO 16890 (G3), initial gravimetric arrestance 57 %

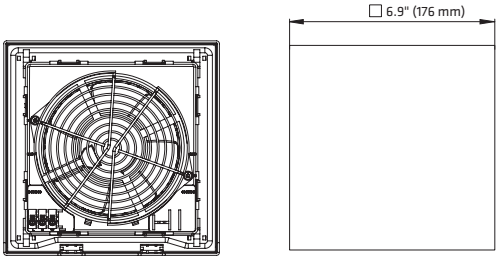
FILTER MAT FM 086

Filter class	6.61 x 6.61" (168 x 168 mm)	Initial gravimetric arrestance	1 packing unit
ISO coarse 55% acc. to ISO 16890 (G3)	Part No. 08635.0-00	57 %	5 pieces

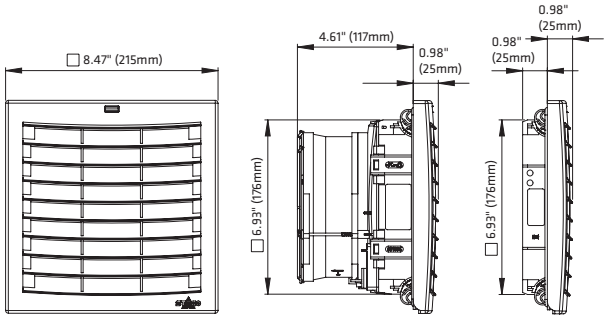
DIMENSIONED DRAWINGS



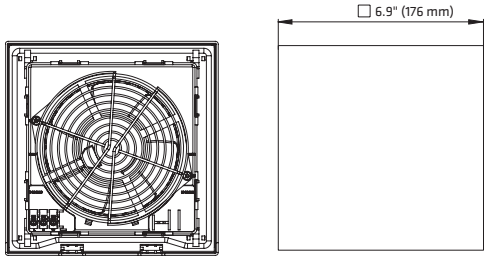
FPI 018 FPI 118



ENCLOSURE CUT-OUT



FPO 018 FPO 118



ENCLOSURE CUT-OUT

FILTER FAN PLUS

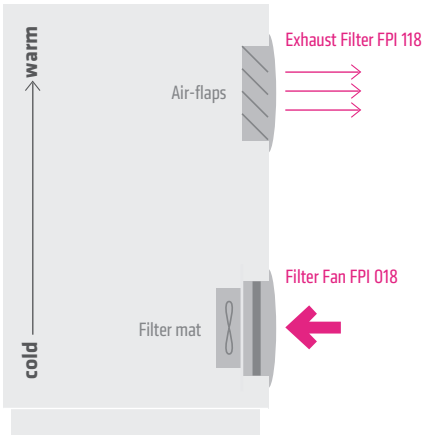
FPI/FPO 018 | up to 342 cfm (8.8 x 8.8")

- > New air-flap outlet technology for high airflow
- > Easy mounting
- > Protection type/Environmental ratings by independent testing agencies (VDE & UL)
- > Two optional systems for optimal airflow (FPI/FPO)
- > Industry-common enclosure cut-out sizes (5 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.

SYSTEM FPI



TECHNICAL DATA

Axial fan, ball bearing	service life L10 at +104 °F (+40 °C): min. 56,000 h metal impeller
Connection	3-pole clamp for AWG 14 (2.5 mm^2), clamping torque 0.8 Nm max.
Housing, hood, flaps	plastic UL 94V-0, light grey; UV light resistant according to UL 746C (f1)
Enclosure cut-out	8.8 x $8.8^{+0.04}$ inches (223 x 223^{+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	-13 to +149 °F (-25 to +65 °C)
Storage temperature	-40 to +158 °F (-40 to +70 °C)
Operating/Storage humidity	max. 75 % RH (non-condensing)
Protection type/Protection class	IP54 / I (grounded)
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.

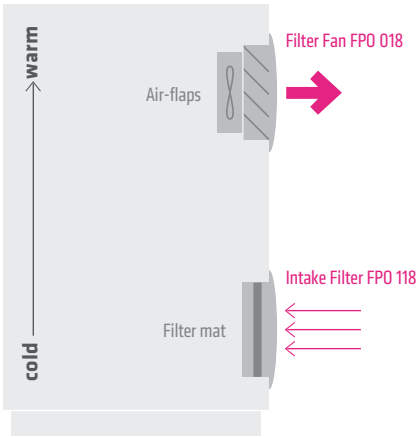
AIRFLOW DIRECTION "IN": FILTER FAN FPI 018

Part No.	Operating voltage	Air volume, free blowing	Air volume with exhaust filter	Current consumption (50/60 Hz)	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Weight (approx.)	Filter mat
01873.0-30	AC 230 V, 50/60 Hz	179.5 cfm (305 m^3/h)	159.5 cfm (271 m^3/h)	300/340 mA	64 W	64 dB (A)	5.8" (147 mm)	5.3 lbs. (2.4 kg)	G3
01873.9-30	AC 115 V, 50/60 Hz	195.4 cfm (332 m^3/h)	172.5 cfm (293 m^3/h)	600/700 mA	81 W	67 dB (A)	5.8" (147 mm)	5.3 lbs. (2.4 kg)	G3

AIRFLOW DIRECTION "IN": EXHAUST FILTER FPI 118

Part No.	Mounting depth	Weight (approx.)	Air outlet
11873.0-00	1.8" (46 mm)	1.3 lbs. (0.6 kg)	air-flap outlet technology

SYSTEM FPO



AIRFLOW DIRECTION "OUT": FILTER FAN FPO 018

Part No.	Operating voltage	Air volume, free blowing	Air volume with intake filter	Current consumption (50/60 Hz)	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Weight (approx.)	Air outlet
01883.0-00	AC 230 V, 50/60 Hz	315.5 cfm (536 m^3/h)	165.4 cfm (281 m^3/h)	300/340 mA	64 W	65 dB (A)	3.1" (147 mm)	5.3 lbs. (2.4 kg)	air-flaps
01883.9-00	AC 115 V, 50/60 Hz	342.0 cfm (581 m^3/h)	182.5 cfm (310 m^3/h)	600/700 mA	81 W	68 dB (A)	3.1" (147 mm)	5.3 lbs. (2.4 kg)	air-flaps

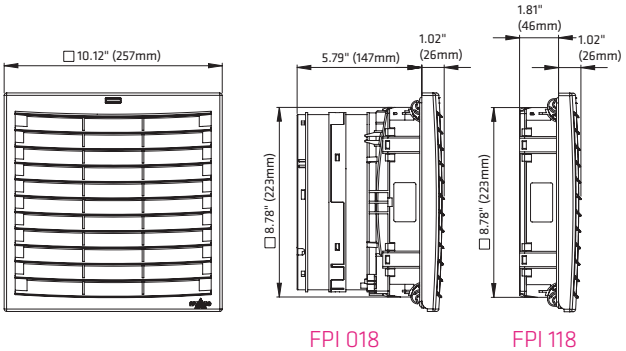
AIRFLOW DIRECTION "OUT": INTAKE FILTER FPO 118

Part No.	Mounting depth	Weight (approx.)	Filter mat
11883.0-30	1.0" (25 mm)	1.1 lbs. (0.5 kg)	ISO coarse 55 % acc. to ISO 16890 (G3), initial gravimetric arrestance 57 %

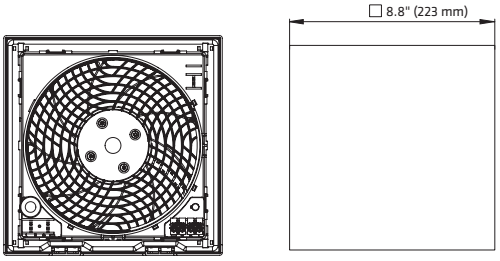
FILTER MAT FM 086

Filter class	8.46 x 8.46" (215 x 215 mm)	Initial gravimetric arrestance	1 packing unit
ISO coarse 55% acc. to ISO 16890 (G3)	Part No. 08636.0-00	57 %	5 pieces

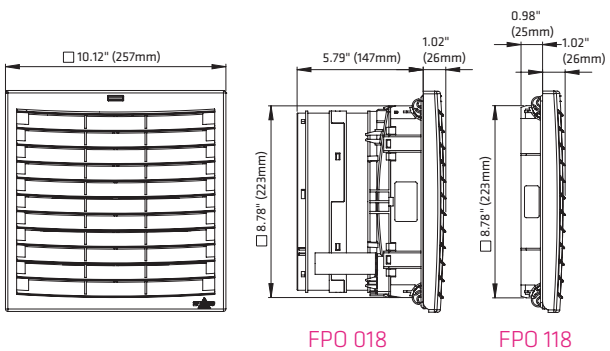
DIMENSIONED DRAWINGS



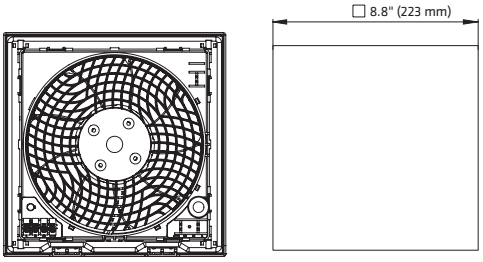
FPI 018 FPI 118



ENCLOSURE CUT-OUT



FPO 018 FPO 118



ENCLOSURE CUT-OUT

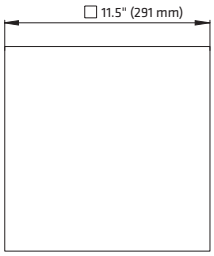
FILTER FAN PLUS

FPI/FPO 018 | up to 606.8 cfm (11.5 x 11.5")

- > New air-flap outlet technology for high airflow
- > Easy mounting
- > Protection type/Environmental ratings by independent testing agencies (VDE & UL)
- > Two optional systems for optimal airflow (FPI/FPO)
- > Industry-common enclosure cut-out sizes (5 sizes)
- > Single filter mat system design
- > Two fan speeds

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.



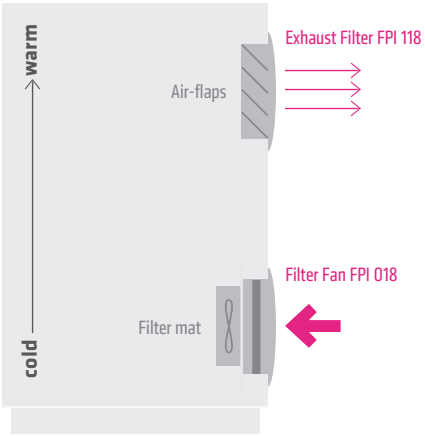
ENCLOSURE CUT-OUT

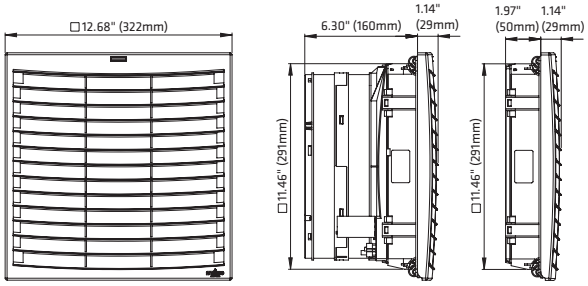
TECHNICAL DATA

Axial fan, ball bearing	fan speed 1: service life L10 at +104 °F (+40 °C): min. 76,000 h metal impeller fan speed 2: service life L10 at +104 °F (+40 °C): min. 54,000 h plastic impeller
Connection	3-pole clamp for AWG 14 (2.5 mm^2), clamping torque 0.8 Nm max.
Housing, hood, flaps	plastic UL 94V-0, light grey; UV light resistant according to UL 746C (f1)
Enclosure cut-out	11.5 x 11.5$^{+0.04}$ inches (291 x 291^{+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	fan speed 1 & 2, 50 Hz: -13 to +131 °F (-25 to +55 °C) fan speed 1, 60 Hz: -13 to +95 °F (-25 to +35 °C) fan speed 2, 60 Hz: -13 to +122 °F (-25 to +50 °C)
Storage temperature	-40 to +158 °F (-40 to +70 °C)
Operating/Storage humidity	max. 75 % RH (non-condensing)
Protection type/Protection class	IP54 / I (grounded)
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





FPI 018 FPI 118

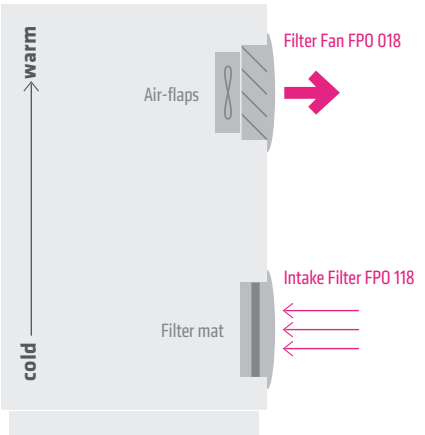
AIRFLOW DIRECTION "IN": FILTER FAN FPI 018

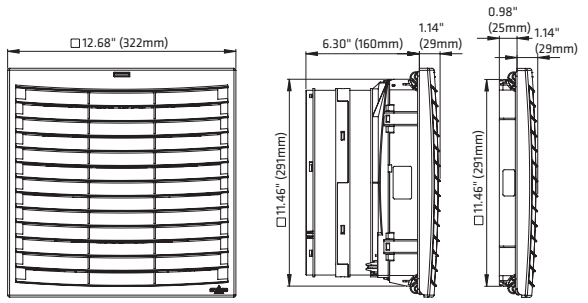
Part No.	Operating voltage	Fan speed	Air volume, free blowing	Air volume with exhaust filter	Current consumption (50/60 Hz)	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Weight (approx.)	Filter mat
01874.0-30	AC 230 V, 50/60 Hz	1	254.8 cfm (433 m^3/h)	219.5 cfm (373 m^3/h)	400/480 mA	95 W	62 dB (A)	6.3" (160 mm)	6.8 lbs. (3.1 kg)	G3
01874.0-31	AC 230 V, 50/60 Hz	2	367.3 cfm (624 m^3/h)	329.6 cfm (560 m^3/h)	550/700 mA	140 W	70 dB (A)	6.3" (160 mm)	7.3 lbs. (3.3 kg)	G3
01874.9-30	AC 115 V, 50/60 Hz	1	231.9 cfm (394 m^3/h)	199.5 cfm (339 m^3/h)	660/800 mA	90 W	61 dB (A)	6.3" (160 mm)	6.8 lbs. (3.1 kg)	G3
01874.9-31	AC 115 V, 50/60 Hz	2	391.4 cfm (665 m^3/h)	349 cfm (593 m^3/h)	1100/1450 mA	165 W	72 dB (A)	6.3" (160 mm)	7.3 lbs. (3.3 kg)	G3

AIRFLOW DIRECTION "IN": EXHAUST FILTER FPI 118

Part No.	Mounting depth	Weight (approx.)	Air outlet
11874.0-00	2.0" (50 mm)	2.2 lbs. (1.0 kg)	air-flap outlet technology

SYSTEM FPO





FPO 018 FPO 118

AIRFLOW DIRECTION "OUT": FILTER FAN FPO 018

Part No.	Operating voltage	Fan speed	Air volume, free blowing	Air volume with intake filter	Current consumption (50/60 Hz)	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Weight (approx.)	Air outlet
01884.0-00	AC 230 V, 50/60 Hz	1	427.9 cfm (727 m^3/h)	243.1 cfm (413 m^3/h)	400/480 mA	95 W	63 dB (A)	6.3" (160 mm)	7.0 lbs. (3.2 kg)	air-flaps
01884.0-01	AC 230 V, 50/60 Hz	2	594.5 cfm (1010 m^3/h)	352.6 cfm (599 m^3/h)	550/700 mA	140 W	70 dB (A)	6.3" (160 mm)	7.0 lbs. (3.2 kg)	air-flaps
01884.9-00	AC 115 V, 50/60 Hz	1	413.8 cfm (703 m^3/h)	230.1 cfm (391 m^3/h)	660/800 mA	90 W	62 dB (A)	6.3" (160 mm)	7.0 lbs. (3.2 kg)	air-flaps
01884.9-01	AC 115 V, 50/60 Hz	2	606.8 cfm (1031 m^3/h)	358.4 cfm (609 m^3/h	1100/1450 mA	165 W	71 dB (A)	6.3" (160 mm)	7.0 lbs. (3.2 kg)	air-flaps

AIRFLOW DIRECTION "OUT": INTAKE FILTER FPO 118

Part No.	Mounting depth	Weight (approx.)	Filter mat
11884.0-30	1.0" (25 mm)	1.8 lbs. (0.8 kg)	ISO coarse 55 % acc. to ISO 16890 (G3), initial gravimetric arrestance 57 %

FILTER MAT FM 086

Filter class	11.14 x 11.14" (283 x 283 mm)	Initial gravimetric arrestance	1 packing unit
ISO coarse 55% acc. to ISO 16890 (G3)	Part No. 08637.0-00	57 %	5 pieces

FILTER FAN PLUS – DC LINE

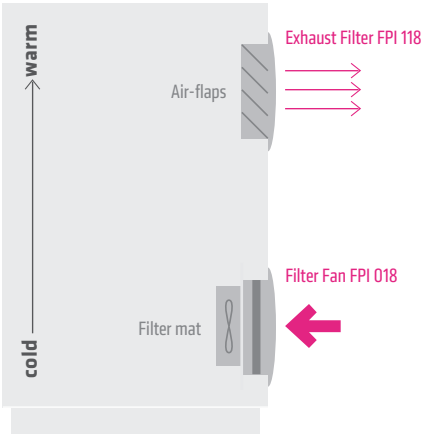
FPI/FPO 018 | up to 19.4 cfm (3.6 x 3.6")

- > 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.

SYSTEM FPI



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.

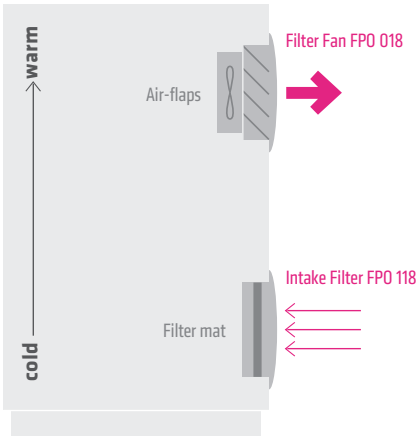
AIRFLOW DIRECTION "IN": FILTER FAN FPI 018

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



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 m^3/h)	10 cfm (17 m^3/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 m^3/h)	10.6 cfm (18 m^3/h)	63 mA	3.0 W	49 dB (A)	2.6" (66 mm)	0.7 lbs. (0.3 kg)	air-flaps

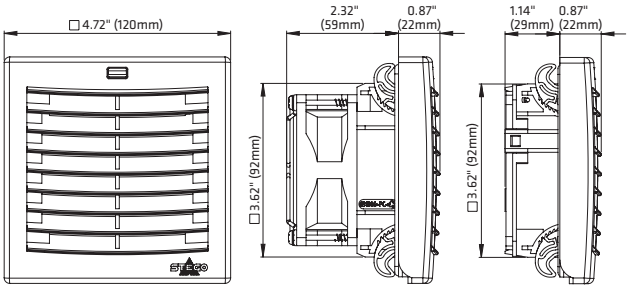
AIRFLOW DIRECTION "OUT": INTAKE FILTER FPO 118

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 %

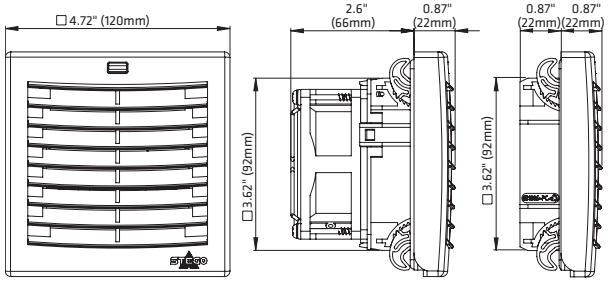
FILTER MAT FM 086

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

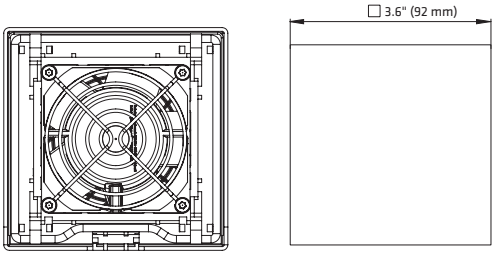
DIMENSIONED DRAWINGS



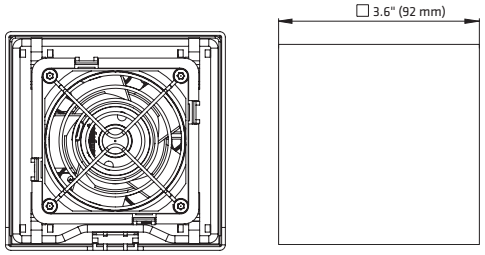
FPI 018 FPI 118



FPO 018 FPO 118



ENCLOSURE CUT-OUT



ENCLOSURE CUT-OUT

FILTER FAN PLUS – DC LINE

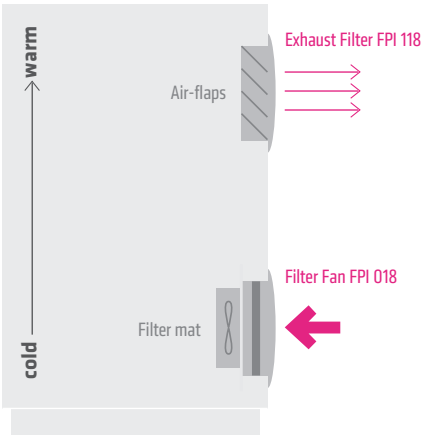
FPI/FPO 018 | up to 73.6 cfm (4.9 x 4.9")

- > 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.

SYSTEM FPI



TECHNICAL DATA

Axial fan, ball bearing	service life L10 at +104 °F (+40 °C): min. 65,000 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	4.9 x 4.9$^{+0.04}$ inches (124 x 124^{+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.

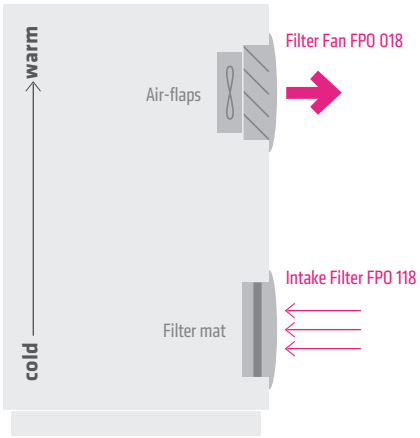
AIRFLOW DIRECTION "IN": FILTER FAN FPI 018

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
01871.2-30	DC 24 V	38.8 cfm (66 m³/h)	33 cfm (56 m³/h)	171 mA	4.1 W	58 dB (A)	2.6" (66 mm)	1.1 lbs. (0.5 kg)	G3
01871.1-30	DC 48 V	39.4 cfm (67 m³/h)	33 cfm (56 m³/h)	88 mA	4.2 W	52 dB (A)	2.6" (66 mm)	1.1 lbs. (0.5 kg)	G3

AIRFLOW DIRECTION "IN": EXHAUST FILTER FPI 118

Part No.	Mounting depth	Weight (approx.)	Air outlet
11871.0-00	1.4" (35 mm)	0.7 lbs. (0.3 kg)	air-flap outlet technology

SYSTEM FPO



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
01881.2-00	DC 24 V	69.5 cfm (118 m^3/h)	37.1 cfm (63 m^3/h)	171 mA	4.1 W	56 dB (A)	3.1" (79 mm)	1.1 lbs. (0.5 kg)	air-flaps
01881.1-00	DC 48 V	73.6 cfm (125 m^3/h)	37.1 cfm (63 m^3/h)	88 mA	4.2 W	50 dB (A)	3.1" (79 mm)	1.1 lbs. (0.5 kg)	air-flaps

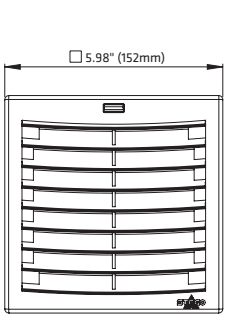
AIRFLOW DIRECTION "OUT": INTAKE FILTER FPO 118

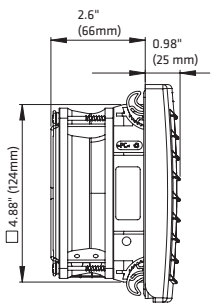
Part No.	Mounting depth	Weight (approx.)	Filter mat
11881.0-30	0.9" (22 mm)	0.4 lbs. (0.2 kg)	ISO coarse 55 % acc. to ISO 16890 (G3), initial gravimetric arrestance 57 %

FILTER MAT FM 086

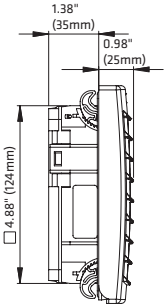
Filter class	4.65 x 4.65" (118 x 118 mm)	Initial gravimetric arrestance	1 packing unit
ISO coarse 55% acc. to ISO 16890 (G3)	Part No. 08634.0-00	57 %	5 pieces

DIMENSIONED DRAWINGS

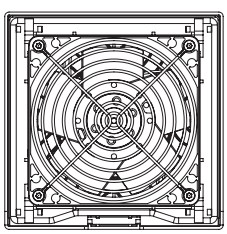


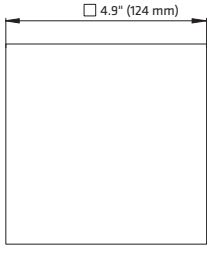


FPI 018

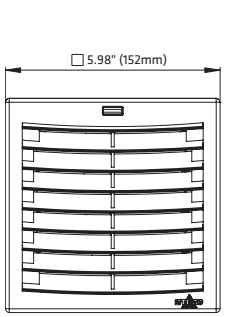


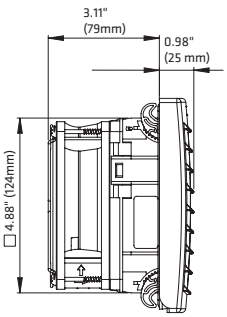
FPI 118



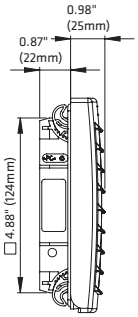


ENCLOSURE CUT-OUT

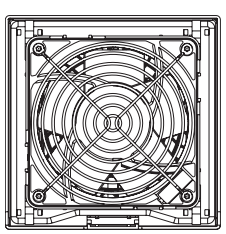


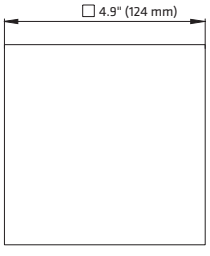


FPO 018



FPO 118





ENCLOSURE CUT-OUT

FILTER FAN PLUS – DC LINE

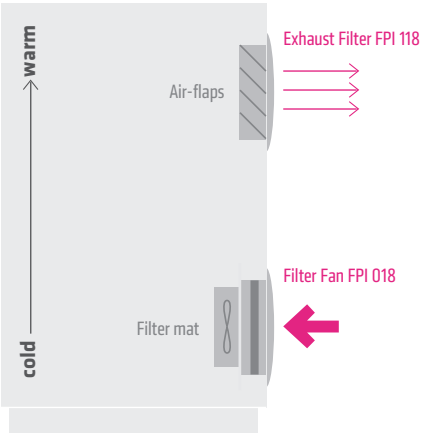
FPI/FPO 018 | up to 163 cfm (6.9 x 6.9")

- > 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.

SYSTEM FPI



TECHNICAL DATA

Axial fan, ball bearing	service life L10 at +104 °F (+40 °C): min. 80,000 h fan body aluminum, plastic impeller
Connection	3-pole clamp for AWG 14 (2.5 mm²), clamping torque 0.8 Nm max.
Housing, hood, flaps	plastic UL 94V-0, light grey; UV light resistant according to UL 746C (f1)
Enclosure cut-out	6.9 x 6.9$^{+0.04}$ inches (176 x 176^{+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	-13 to +158 °F (-25 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 / I (grounded)
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.

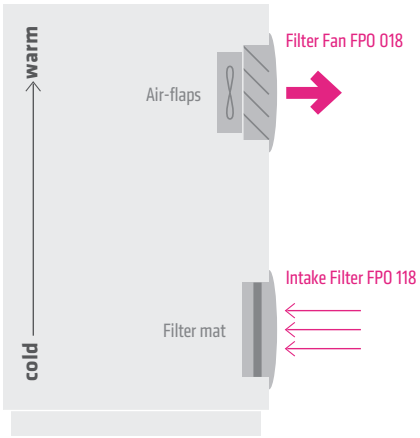
AIRFLOW DIRECTION "IN": FILTER FAN FPI 018

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
01872.2-30	DC 24 V	104.8 cfm (178 m³/h)	91.8 cfm (156 m³/h)	500 mA	12.0 W	63 dB (A)	4.6" (117 mm)	3.3 lbs. (1.5 kg)	G3
01872.1-30	DC 48 V	100.1 cfm (170 m³/h)	86.5 cfm (147 m³/h)	250 mA	12.0 W	63 dB (A)	4.6" (117 mm)	3.3 lbs. (1.5 kg)	G3

AIRFLOW DIRECTION "IN": EXHAUST FILTER FPI 118

Part No.	Mounting depth	Weight (approx.)	Air outlet
11872.0-00	1.7" (43 mm)	0.9 lbs. (0.4 kg)	air-flap outlet technology

SYSTEM FPO



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
01882.2-00	DC 24 V	158.3 cfm (269 m^3/h)	83.0 cfm (141 m^3/h)	500 mA	12.0 W	63 dB (A)	4.6" (117 mm)	3.3 lbs. (1.5 kg)	air-flaps
01882.1-00	DC 48 V	163.0 cfm (277 m^3/h)	85.9 cfm (146 m^3/h)	250 mA	12.0 W	63 dB (A)	4.6" (117 mm)	3.3 lbs. (1.5 kg)	air-flaps

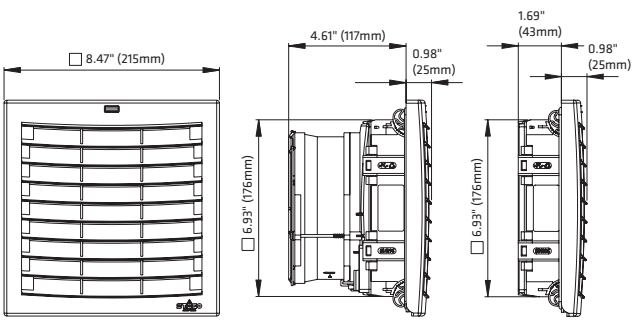
AIRFLOW DIRECTION "OUT": INTAKE FILTER FPO 118

Part No.	Mounting depth	Weight (approx.)	Filter mat
11882.0-30	1.0" (25 mm)	0.9 lbs. (0.4 kg)	ISO coarse 55 % acc. to ISO 16890 (G3), initial gravimetric arrestance 57 %

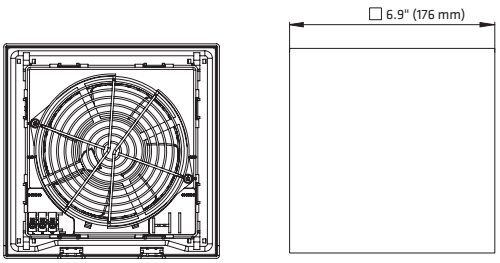
FILTER MAT FM 086

Filter class	6.61 x 6.61" (168 x 168 mm)	Initial gravimetric arrestance	1 packing unit
ISO coarse 55% acc. to ISO 16890 (G3)	Part No. 08635.0-00	57 %	5 pieces

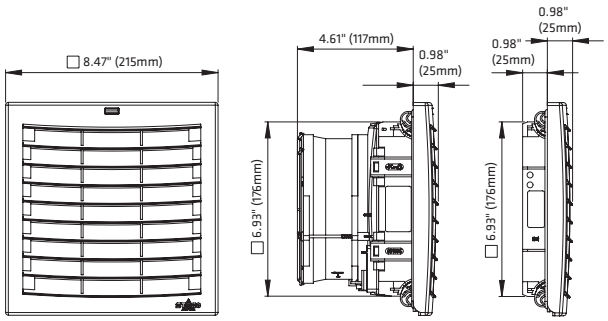
DIMENSIONED DRAWINGS



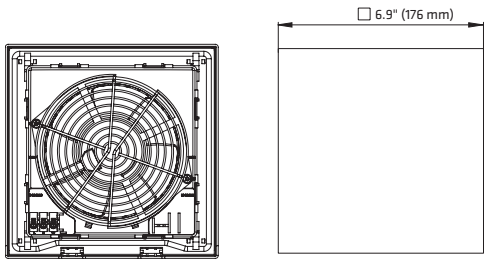
FPI 018 FPI 118



ENCLOSURE CUT-OUT



FPO 018 FPO 118



ENCLOSURE CUT-OUT