

FG 8 CENTRIFUGAL INLINE FAN

Item no. 40408

Document type: **Product card**
Document date: **2018-06-15**
Generated by: **Systemair Online Catalogue**



Description

- Speed-controllable
- Built-in thermal overload protection with automatic reset
- Can be installed in any position and outdoors
- Maintenance-free and reliable
- Mounting bracket and hardware included
- Five-year factory warranty

Application

The FG Series is designed for installation in ducts.

Design

The housing is manufactured from a two-piece stamped galvanized construction. The two halves are joined using Fantech's unique folded seam closure, which gives the fan the first in class, air tight seal. Duct connected outdoor and wet room applications of the fan are possible due to the air tight casing.

FG fans are equipped with backward-curved impeller blades and external rotor motors. With the motor in the airstream the fan provides the constant dissipation of heat buildup thus giving the fan first in class of longevity and reliability.

Motor protection

To protect the motor from overheating the fan is impedance protected. The fans can be controlled via a solid state speed controller.

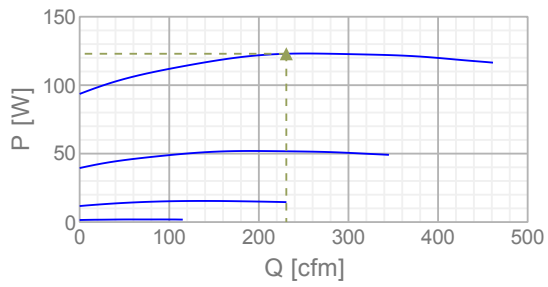
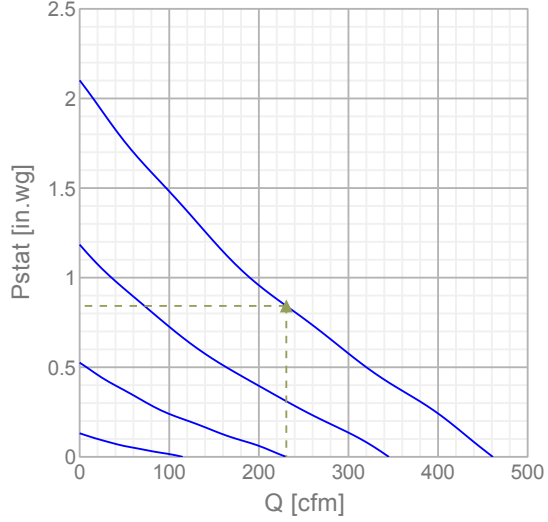


Technical parameters

| Nominal data | |
|-------------------------------------|-------------|
| Voltage | 120 V |
| Frequency | 60 Hz |
| Phase | 1 ~ |
| Input power (P1) | 116 W |
| Current | 0,99 A |
| Max. airflow | 462 cfm |
| Fan impeller speed | 2618 r.p.m. |
| Weight | 8,2 lbs. |
| Temperature data | |
| Max. temperature of transported air | 140 °F |
| Protection / Classification | |
| Insulation class | B |
| Enclosure class, motor | IP44 |

Performance

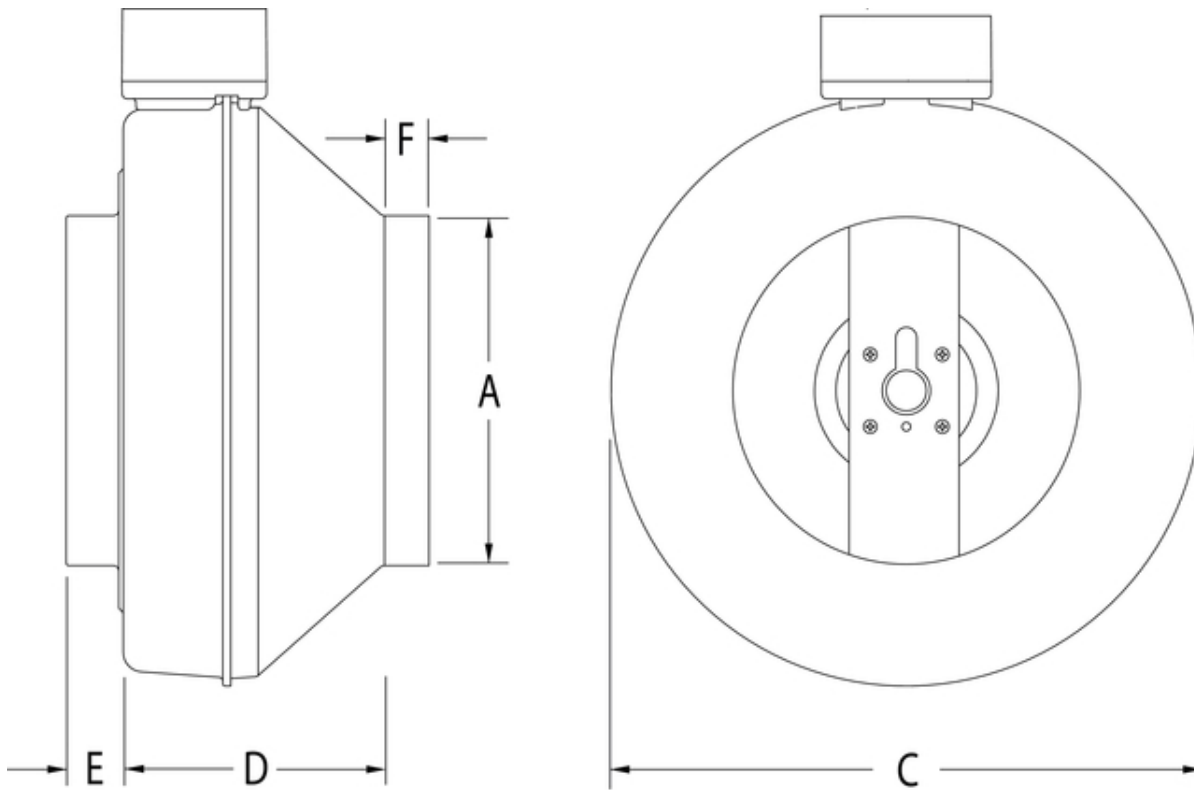
Diagrams



Max efficiency

| Hydraulic data | |
|---------------------------|---------------|
| ▲ Working air flow | 231 cfm |
| ▲ Working static pressure | 0,842 in.wg |
| ▲ Power | 123 W |
| Speed | 2323 r.p.m. |
| Current | - A |
| SFP | 0,533 W/(cfm) |
| Voltage | 120 V |

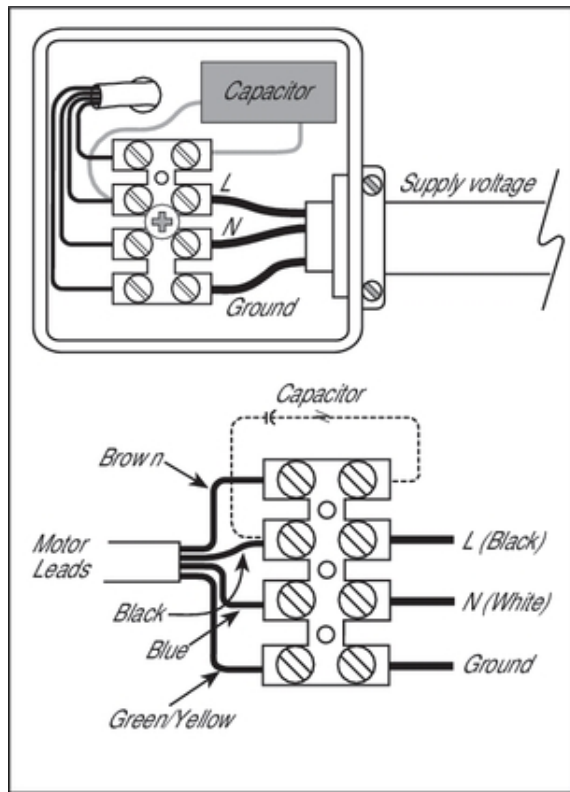
Dimensions



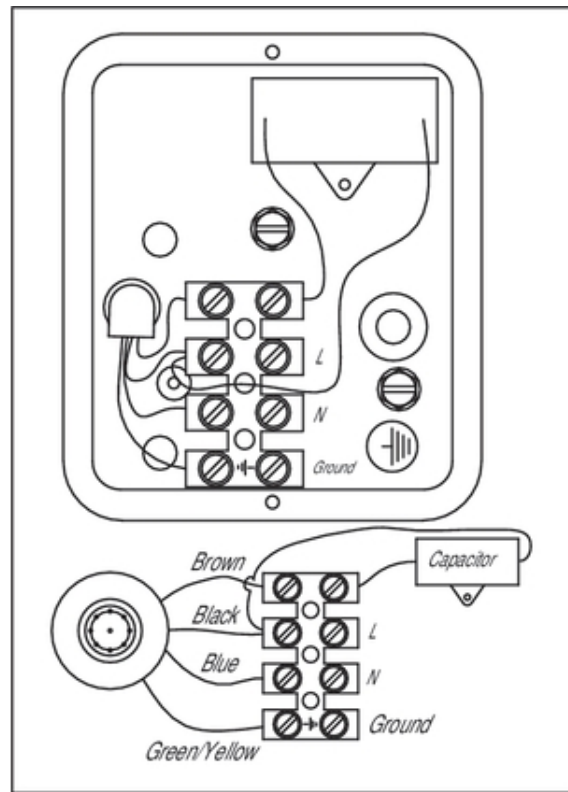
| Model | A | C | D | E | F |
|-----------------|----------|--------------|---------------|------------|------------|
| 4 | 4 (101) | 8 1/2 (216) | 6 1/2 (165) | 1 (25) | 1 (25) |
| 4XL | 4 (101) | 9 3/4 (248) | 6 15/16 | 1 (25) | 1 (25) |
| 5 | 5 (127) | 8 5/8 (219) | 6 1/2 (165) | 1 (25) | 1 (25) |
| 5XL | 5 (127) | 9 3/4 (248) | 6 (152) | 1 1/8 (29) | 1 1/8 (29) |
| 6 | 6 (152) | 11 3/8 (289) | 6 1/4 (159) | 1 (25) | 7/8 (22) |
| 6XL | 6 (152) | 13 1/8 (333) | 7 (178) | 1 (25) | 1 (25) |
| 6M | 6 (152) | 13 1/8 (333) | 7 (178) | 1 (25) | 1 (25) |
| 8, 8XL | 8 (203) | 13 1/4 (337) | 6 (152) | 1 1/8 (29) | 1 (25) |
| 10 | 10 (254) | 13 1/4 (337) | 4 3/4 (121) | 1 1/8 (29) | 1 (25) |
| 10XL | 10 (254) | 13 1/4 (337) | 4 13/16 (122) | 1 1/4 (32) | 1 (25) |
| 12, 12XL | 12 (305) | 16 (406) | 6 11/16 (170) | 1 1/2 (38) | 1 (25) |

Dimensions are in inches (mm).

Wiring



3 wire motor



4 wire motor

Accessories

Electric accessories


- [FD60EM Electronic Timer Switch \(411386\)](#)
- [WC 15 Speed Control \(411102\)](#)
- [VT20A Pgrm Fan Aux Ctrl \(45385\)](#)
- [VT20M Pgrm Fan Main Ctrl \(45386\)](#)


Accessories

- [MGS 6 Metal Supply Grill \(411242\)](#)
- [MGS 8 Metal Supply Grill \(411243\)](#)
- [MGE 8 Metal Exhaust Grill \(411244\)](#)
- [FC 8 Mounting Clamps \(411121\)](#)
- [LD 8 Silencer \(411125\)](#)
- [IG 8 Inlet Guard \(411127\)](#)
- [PBV4 Bath Fan Grill \(412260\)](#)
- [PBV6 Bath Fan Grill \(412261\)](#)
- [PBH4 Bath Fan Grill w/ Hal \(412262\)](#)
- [IR 8 Iris Damper \(411237\)](#)
- [RSK 8 Backdraft Damper \(411115\)](#)
- [PBL74 Bath Fan Grill w/ LED \(44951\)](#)
- [PBL104 Bath Fan Grill w/ LED \(44952\)](#)
- [FML 8 Metal Hood Supply Air \(45148\)](#)
- [HL 42 Kitchen Hood Liner \(56046\)](#)
- [HL 36 Kitchen Hood Liner \(56047\)](#)
- [HL 30 Kitchen Hood Liner \(56048\)](#)

Documentation

 400017 FG OIPM EN FR ES.pdf (821,31kB)

 40408.dxf (558,55kB)

 450369 FG Submittal Sheet EN.pdf (125,58kB)

Specification text

Description

A centrifugal type exhaust/supply fan specifically designed for moderate size ventilation applications. The fan can be mounted at any angle in any point along the duct work and straight-through air flow design allows easy installation. By using FC type mounting clamps, fan can be easily removed from duct work for service. Fans are constructed in accordance with standard dimensions for spiral duct eliminating the need for transition pieces. Fan motors are capable of operating in air stream temperatures up to 140o F. Motor bearings are a permanently sealed, self lubricating ball type. All fans are 100% speed controllable through a decrease in the voltage by using a solid state or transformer type control. All FG Series fans are backed by Fantech's Five Year Warranty.

Guide Specifications for Model FG Inline Duct Fans

Supply, exhaust or return air inline fans shall be of the centrifugal, direct driven type.

Housing:

- Fan housing shall be constructed of heavy gauge galvanized sheet metal
- Fan shall be supplied with externally mounted electrical terminal box with pre-wired terminal strip connections
- Capacitor shall be located within electric terminal box

Motor:

- Motorized impeller shall be an external rotor type, class B insulation, enclosed with permanent split capacitor
- Motor shall be a permanently sealed self lubricating ball bearing type
- Motor shall be quipped with automatic reset thermal overload protection
- Motor shall be acceptable for continuous duty

Wheel:

- Fan wheel shall be of the backward inclined centrifugal type with a well designed inlet venturi for maximum performance
- Motorized impeller shall be both statically and dynamically balanced as one integral unit to provide for vibration free performance
- Impellers shall be molded of high impact polypropylene

Performance:

- Fan air flow performance shall be based on tests conducted in accordance with AMCA Standard 211 and shall be licensed to bear the AMCA Certified Ratings label

Code Approval:

- Fan shall be tested and approved by UL and CSA (or equals) for safety

FG Series shall be manufactured under the authority of Fantech, Inc., Lenexa, KS