

# FSD SERIES

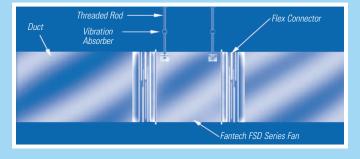
# SQUARE INLINE MIXED FLOW CENTRIFUGAL FANS

Fantech FSD mixed flow centrifugal type exhaust/supply fans for moderate size ventilation applications were specifically designed to provide the high flow of axial designs plus the higher pressure, non-overloading characteristics of backward curved impellers. Fan motors are capable of operating in air stream temperatures up to 140°F. Motor bearings are a permanently sealed, self lubricating ball type.

The square design provides a larger discharge area than tubular centrifugal or vane axial fans, so outlet velocitites are reduced for quieter operation. 100% speed controllable through voltage reduction allowing for on-demand ventilation or precision balancing of systems.

#### **Total control for optimum results:**

System balancing is achieved by measuring the system flow or pressure and adjusting the fan performance by "dialing in" or setting the fan speed using inexpensive solid state speed controls. Direct drive eliminates the need for continuous belt alignment, tension adjustment and ongoing maintenance.







Fanteh, Inc. certifies that the FSD Series shown herein is licensed to bear the AMC/S. Seal. The ratings shown are based on tests and proce dures performed in accordance with AMCA Publication 311 and comply with the requirements of the AMC/S Certified Ratins Program.





#### EXTERNAL ROTOR MOTORS

All FSD Series fans utilize our unique external rotor motors. The motor's enclosed design allows the fan to operate in high moisture, lint and dust laden air. The motors are a permanent split capacitor type, with automatic reset thermal overload protection and sealed ball bearings.

These features ensure long life and maintenance free operation. All motors and impellers are designed as one integral unit, allowing for excellent motor heat dissipation, even at a low RPM.

## FSD FANS ARE TROUBLE-FREE HERE'S WHY:

- Lightweight square design provides a larger discharge area and quieter operation
- Straight-through airflow design allows easy installation; no installation extras required. Can be mounted at any angle, anywhere along ductwork
- Galvanized steel housing features baked powdercoat finish
- Permanently lubricated sealed ball bearings
- 100% speed controllable
- Airflow up to 6993 CFM
- 18" to 26" square duct dimensions

- External rotor motor
- Automatic reset thermal overload protection
- Excellent heat dissipation, ensuring long motor life
- Terminal box with pre-wired electrical strip
- Mixed flow impeller design incorporates high flow with higher pressure, non-overloading characteristics and automatic reset thermal overload protection
- Suitable for airstream temperatures of up to 140° F
- UL Listed
- Three-year warranty

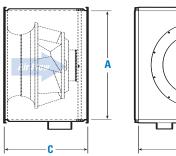
# **FSD SERIES**

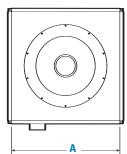
### INLINE CENTRIFUGAL FANS FOR SQUARE DUCT





#### DIMENSIONAL DATA





| Model  | Α   | C   |  |
|--------|-----|-----|--|
| FSD 18 | 17% | 15¾ |  |
| FSD 20 | 19¾ | 17¾ |  |
| FSD 22 | 21½ | 19  |  |
| FSD 26 | 26  | 20  |  |

All dimensions in inches.

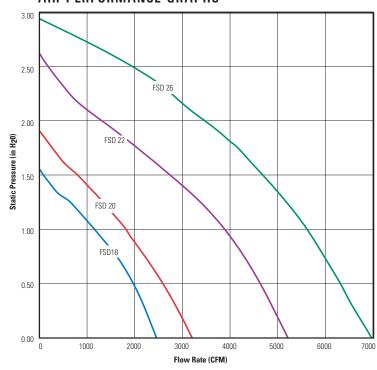
Note: Flanges extend 7/8" beyond the A dimension.



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### AIR PERFORMANCE GRAPHS



### PERFORMANCE DATA (For sound performance data refer to publication #FSD-0607)

| Fan    | DDM/ | \/altaga | Rated Max. | Max.              | Static Pressure in Inches W.G. |        |       |        |      |       |      |       |      | Max. | Duct | Canaat |       |                    |
|--------|------|----------|------------|-------------------|--------------------------------|--------|-------|--------|------|-------|------|-------|------|------|------|--------|-------|--------------------|
| Model  | RPM  | Voltage  | Watts      | Amps              | 0"                             | 0.125" | 0.25" | 0.375" | 0.5" | 0.75" | 1.0" | 1.25" | 1.5" | 2.0" | 2.5" | Ps     | Dim.* | Sones <sup>†</sup> |
| FSD 18 | 1700 | 115      | 517        | 4.80 <sup>2</sup> | 2463                           | 2349   | 2237  | 2126   | 1987 | 1644  | 1180 | 658   | -    | -    | -    | 1.57"  | 18"   | 12.4               |
| FSD 20 | 1600 | 115      | 753        | 6.36 <sup>2</sup> | 3225                           | 3073   | 2921  | 2766   | 2605 | 2241  | 1829 | 1341  | 815  | -    | -    | 1.92"  | 20"   | 14.1               |
| FSD 22 | 1600 | 115      | 1554       | 15.00³            | 5223                           | 5070   | 4918  | 4766   | 4605 | 4282  | 3865 | 3337  | 2716 | 1308 | 235  | 2.62"  | 22"   | 21.0               |
| FSD 26 | 1700 | 460/3    | 2328       | 3.82 <sup>2</sup> | 6993                           | 6818   | 6644  | 6473   | 6317 | 5981  | 5608 | 5177  | 4681 | 3469 | 1937 | 2.94"  | 26"   | 27.0 <sup>‡</sup>  |

Performance certified is for installation type A - Free inlet, free outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories).

<sup>&</sup>lt;sup>3</sup> Recommended speed control rating 15A.



<sup>\*</sup>FSD Fans are square and duct dimensions are the same for width and height.

<sup>†</sup> The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) in hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: free inlet fan sone levels. All sone values are calculated at 0.5" (static pressure in inches W.G.).

<sup>\*</sup> Sone Value at 0.75" (static pressure in inches W.G.).

Note: Three phase motors are wound for 230/460 volt. Motors are prewired for 460 volts but may be delivered as 230 volt or may be rewired in the field.

<sup>&</sup>lt;sup>2</sup> Recommended speed control rating 10A.