



A FLAT PERFORMANCE CURVE FOR A MAXIMUM OF FLEXIBILITY IN VENTILATION DESIGN

# SINGLE PORT VENTILATORS

## **SPV** - the versatile fan . . . makes it easy to design an effective ventilation system

**ALDES'** Single Port Ventilators are versatile multipurpose cabinet blowers for residential and light commercial applications. The SPV has a flat performance curve resulting in exceptional airflow/pressure characteristics that make this fan ideal for a multitude of uses, and easy to design around. It supports relatively extensive duct work and is particularly adapted to multipoint ventilation applications. Because of the SPV's quiet blowers and remote mounting, their operation is extremely quiet. A quality energy efficient motor assures many years of trouble-free performance.

#### The SPV's Advantageous Design Features.....

- Forward curved centrifugal blower, factory balanced for minimal vibration and noise, in an insulated galvanized steel housing
- A flat fan curve providing a relatively constant pressure over a wide range of airflow
- Energy efficient permanent split capacitor 115 v motor, with longlife permanently sealed bearings
- Quiet operation
- Cost effective. Motors draw less power than many single bath fans. In multi-point ventilation systems, multiple fans and roof or wall vent hoods are replaced by one system
- Continuous duty rated motor
- Legendary ALDES quality. Manufactured in an ISO 9002 certified facility.

### A P P L I C A T I O N S

• Central exhaust ventilation with exhaust from multiple exhaust points such as baths, laundry rooms, exercise rooms offices, etc. in either an intermittent or continuous ventilation mode.

• Central supply ventilation with supply air to multiple supply points where pressurization is desirable. • Supply and recirculation blending ventilation with connection to forced air heating systems. The fan draws outside air and recirculates air from indoors to provide tempered air to living/ working spaces.

 Remote fan for range hood ventilation





#### Q. Why does ALDES emphasize the flat fan curve for multi-point ventilation systems? What is a flat fan curve?

A. This characteristic means it is possible to design a multi-point ventilation system and use zoning dampers or other means of varying airflow at any individual outlet without affecting airflow at other outlets. This creates a variable air volume ventilation system which is capable of meeting a low level general ventilation requirement with the reserve capacity to meet the higher rates for spot ventilation. Commonly available cabinet fans and in-line duct fans often have a steep fan curve, which is useful in situations where airflow is from a single outlet, and it is important to maintain the desired airflow, despite a poorly installed ducting system, that may cause higher static pressures than anticipated in the original design. However, such fans are

unsuitable for use in variable volume multi-point ventilation systems, when the airflows are controlled by the occupants at the grille, as with zoning dampers or closeable outlets. For these situations, it is important to maintain relatively constant duct pressures, and for small systems, a fan with a flat fan curve is the simplest and most economical solution. On the other hand a steep fan curve in such cases results in a strong increase of system pressure as soon as airflow is reduced at any grille; airflows at remaining grilles increase and noise levels will be noticeably higher at all points.



#### Supply and Recirculation Blending Ventilation, Connection to Furnace Ducting





#### **Frequently Asked Questions**

•What is the warranty period? 3 years

- •What is the approximate life of the motors? 10 to 12 years if operated continuously. Otherwise, +20 years
- •Are there precautions to be taken to prevent condensation forming in the duct work and fan housing, other than to assure that ducting through unheated spaces is insulated? In continuous operated systems, no. For intermittently operated systems, a backdraft damper must be provided where the duct penetrates the insulated envelope of the structure so as to block slow exfiltration of warm moist air during the off-cycles.



- •What is the sone rating for a SPV fan? Depending on the extensiveness and type of duct used, SPV's generally yield at the grilles sound levels from 32 to 45 dB(A). Expressed in sones, this approximates 0.5 to 1 sone. Typically such sound levels are unnoticeable.
- •What type of controls may be used? The SPV can be operated manually, automatically by programmable time-of-day timer, dehumidistat, or variable speed control.
- -What are typical limitations on duct lengths with the SPV? Depending on airflow, intake duct lengths of 40 ft. or more are possible. Increasing duct diameter will allow longer duct lengths. See product specifications and technical data for more detail.

| Electrical and Performance Data |        |       |       |      |              |              |
|---------------------------------|--------|-------|-------|------|--------------|--------------|
| Model                           | Part # | Volts | Watts | •    | RPM          |              |
|                                 |        |       |       |      | @ 0.4 in. WG | @ 0.4 in. WG |
| SPV 100                         | 99 080 | 120   | NA    | NA   | NA           | NA           |
| SPV 200                         | 99 100 | 120   | 95    | .90  | 1500         | 275          |
| SPV 300                         | 99 125 | 120   | 119   | 1.07 | 1470         | 330          |
| SPV 400                         | 99 200 | 120   | NA    | NA   | NA           | NA           |

## SPV STANDARD PACKAGES

