



## DBF Box Fans

### FEATURES

Mixed-flow impellers are used in OST DBF Box Fan, which offers the airflow of an axial fan, and the static pressure of a centrifugal fan. Another characteristic of mixed-flow fans is the low noise operation. To meet today's low noise specifications, DBF is further attenuated with noise insulation panels. The galvanised sheet steel construction of DBF offers years of durability with anti-corrosion benefits at low cost. The box design is lightweight and has easy installation in mind, which bolts up to standard ductwork with minimal effort, integrating into the duct system.

### ADVANTAGES

The resulting advantages are :

- \*Straight airflow
- \*Easy installation and maintenance
- \*Low noise
- \*Non-overloading and medium pressure stability
- \*High efficiency
- \*Light weight

### MOTOR

The fan is driven by an external rotor motor, fitted with sealed ball bearing and are tropicalized. Thermal overloading protection with automatic reset is a standard feature for all motors.

All motors are 100% speed controllable using speed regulators; Model PE5 or KBWC 25 K

### FAN UNIT

Light-weight aluminium (plastic for 350mm size) impellers, which has non-overloading characteristic are used in construction of DBF. The impeller consists of 9 diagonal blades, held together with a cover and backing disc. Its aerodynamics are optimised to ensure adequate motor cooling, by means of a secondary airflow incorporated into the backing disc. The fan and impeller as a whole, is statically and dynamically balanced to ensure a vibration free operation.

WE ARE:

**DESIGNERS** with form and function in mind, and excel in efficiency

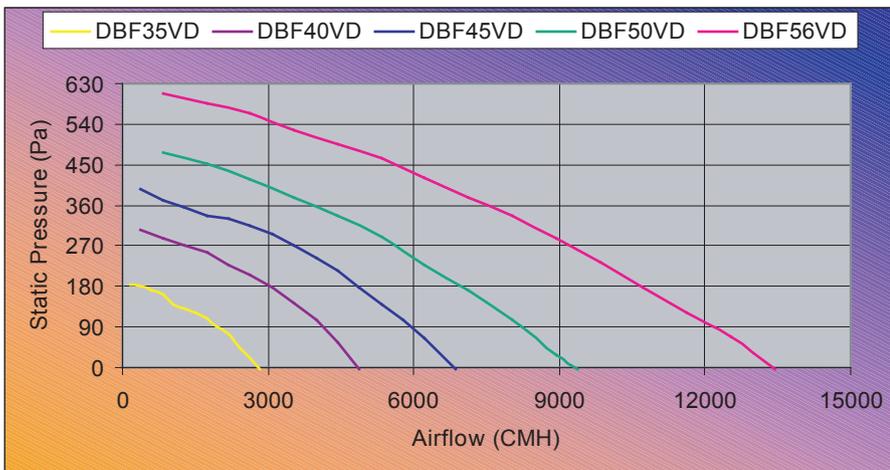
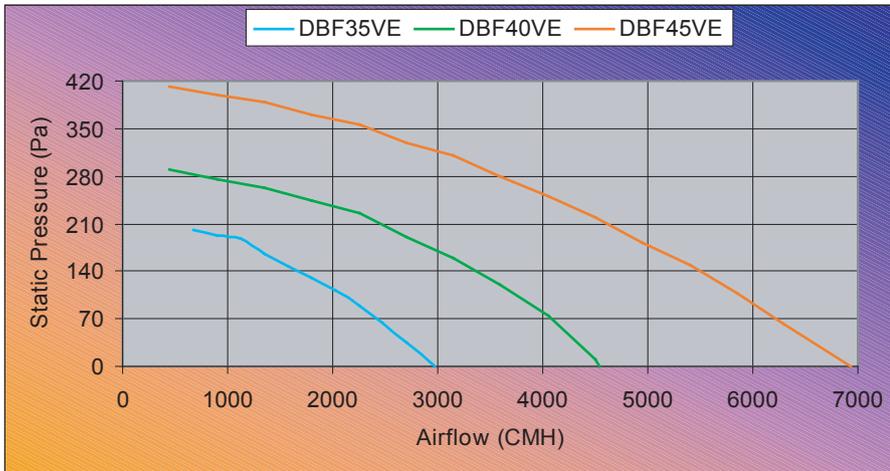
**MANUFACTURERS** offering a high standard of quality, utilising economical premium materials

**TESTERS** with fully accredited superior in-house facilities to attain high levels of accuracy and an aptitude for investigative knowledge

With 20 years of experience behind us, we pride ourselves in technology with service and support

## DBF Box fans

### FAN PERFORMANCE CURVE

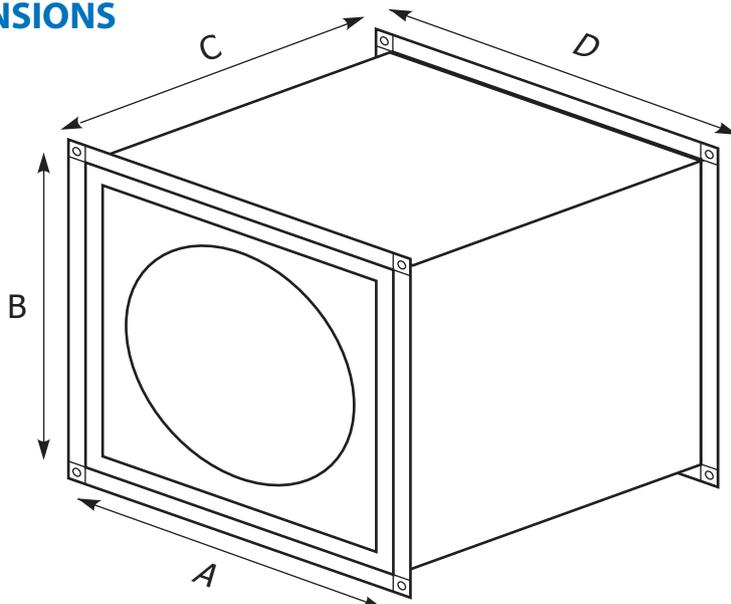


MODEL	RPM (min <sup>-1</sup> )	1 Phase		WEIGHT (kg)	SPL* (dBA @ 3.0m)
		CURRENT (A)	POWER INPUT (kW)		
DBF35VE	1390	1.35	0.31	17	54
DBF40VE	1280	2.20	0.52	23	57
DBF45VE	1330	4.30	0.96	35	58

MODEL	RPM (min <sup>-1</sup> )	3 Phase		WEIGHT (kg)	SPL* (dBA @ 3.0m)
		CURRENT (A)	POWER INPUT (kW)		
DBF35VD	1330	0.48	0.25	17	54
DBF40VD	1330	1.10	0.52	23	57
DBF45VD	1330	1.65	0.89	35	58
DBF50VD	1320	2.40	1.35	63	60
DBF56VD	1350	4.30	2.40	72	69

\* The noise level must be taken only as a guide as site conditions, directivity, absorption and reflectiveness of adjacent surface can combine to affect the overall resultant noise level.

### DIMENSIONS



#### 25mm insulation

MODEL	A	B	C	D
DBF35	550	550	550	610
DBF40	610	610	610	670
DBF45	680	680	680	740
DBF50	760	760	760	820
DBF56	850	850	850	910

#### 50mm insulation

MODEL	A	B	C	D
DBF35	600	600	600	660
DBF40	660	660	660	720
DBF45	730	730	730	790
DBF50	810	810	810	870
DBF56	900	900	900	960