

Biflow SB - Conical

Features & Benefits



The Biflow SB is a quality range of bifurcated axial fans with a conical casing, specially developed for handling more hostile air movement applications. The Biflow SB is designed so that air throughput totally by-passes the motor, keeping the motor out of the airstream in a cooler environment.

- 4 standard sizes from 250mm to 500mm.
- Air volume flow rates of up to 3.80 m³/sec.
- Static pressures of up to 600 Pa.
- Motors are foot mounted totally enclosed metric, protected to IP55.
- Motor out of the air stream - Ideal for high temperature applications.
- Impellers are highly efficient aluminium aerofoil bladed section, retained in an aluminium hub and balanced to Grade G6.3.
- Robust, hot dipped galvanised steel casing.
- Extensive stock range available.
- Ideal for external or internal mounting.
- Wide range of ancillaries.
- Suitable for ambient operating temperatures of up to 200°C.

Features & Benefits

Casing design – The conically profiled fan casing is designed to maximize the available space and size of drive motor for a given impeller diameter, without causing any undue restriction of airflow.

Motor protection – As the motor is out of the air stream, when the fan is operating at temperatures of up to 200° C, this keeps the air, dust and other contaminants away from the motor, which is an important benefit.

Impeller design – Adjustable pitch aerofoil section impellers with blades made from high quality pressure die cast aluminium. Hubs are pressure die cast aluminium.

Material strength - SB bifurcated axial fans have a robust, heavy duty construction for added strength and durability. Fan casings are heavy gauge, sheet steel, roll formed and welded and hot dipped galvanised after fabrication to BS 729.

Motor accessibility – Foot mounted motors are easily accessible, which means where there is a requirement to change motors, this can be done relatively easily.

Cost effective – The high efficiency impellers make this a very economical method of moving high volumes of air at low to medium pressures.

Choice – A range of 4 sizes from 250mm to 500mm diameter, this means wider performance and greater choice for the engineer.

Availability – The SB range of bifurcated fans is available immediately from stock.

Flexible performance – Adjustable pitch impellers mean the pitch angle of the impeller can be adjusted on site (within limits) if a commissioning problem were to occur.

Integral Flanges – Casings have integral spun flanges for a smooth airflow.

Tested to the very latest standards – SB units are tested to ISO 5801:1997 (airside performance) and to BS 848 Pt 2:1985 (sound performance) at Elta Fans own test facility, meaning accurate, up to date information on performance and noise data that can be relied upon.

Quality assurance – All units are designed and manufactured with procedures as defined in BS EN ISO 9001: 2000.

Full range of ancillaries – Mounting feet, Anti-Vibration mounts, matching flanges, flexible connectors, silencers, bell mouth inlets, non return dampers and wire guards.

Warranty – Each SB has a 12 month warranty.

Applications

Kitchen extract, spray booths, hot gas situations, corrosive atmospheres, boiler houses, heavy industrial.

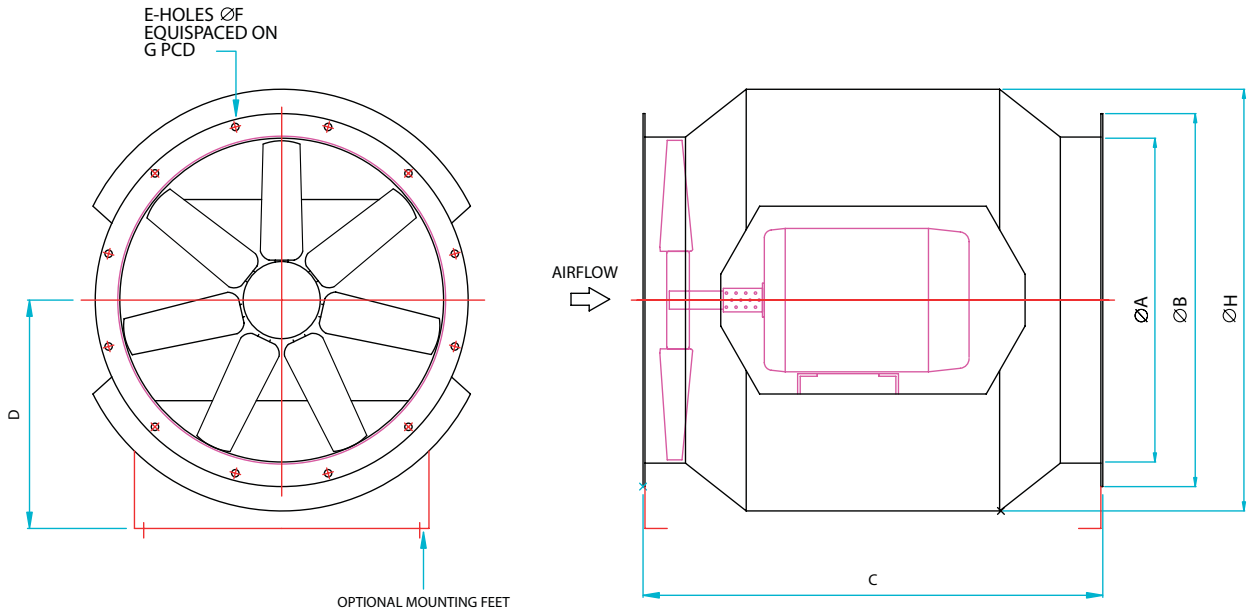
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Dimensional Data



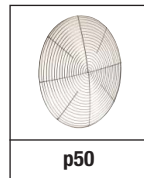
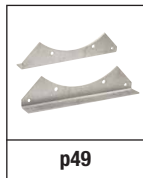
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AXIAL FLOW



Product Code	A	B	C	D	E	F	G	H	Weight kg
SB250-CON4-1	250	325	460	220	8	10	299	400	23
SB250-CON4-3	250	325	460	220	8	10	299	400	23
SB250-CON2-3	250	325	460	220	8	10	299	400	23
SB315-CON4-1	315	380	500	250	8	10	355	460	30
SB315-CON4-3	315	380	500	250	8	10	355	460	30
SB315-CON2-3	315	380	500	250	8	10	355	460	31
SB400-CON2-3	400	485	650	305	8	12	450	570	49
SB500-CON2-3	500	585	710	370	12	12	560	700	86

Accessories



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Performance & Electrical Data



SINGLE Phase - 220V-240V / 50Hz

Product Code	Speed r/min	Airflow m ³ /s @ Static Pressure Pa.												Motor Electrical Data			A.V. Mounts	dBA @ 3m			
		0	25	50	75	100	150	200	250	300	400	500	600	FLC Amps	SC Amps	Output kW					
SB250-CON4-1	1450	0.28	0.22	0.15	0.03												1.13	3.73	0.12	S1G	48
SB315-CON4-1	1370	0.52	0.48	0.43	0.38	0.23											1.13	3.73	0.12	S2B	51

Sound levels are average spherical free field values at 50% peak pressure for comparative purposes only.

THREE Phase - 380V-415V / 50Hz

Product Code	Speed r/min	Airflow m ³ /s @ Static Pressure Pa.												Motor Electrical Data			A.V. Mounts	dBA @ 3m			
		0	25	50	75	100	150	200	250	300	400	500	600	FLC Amps	SC Amps	Output kW					
SB250-CON4-3	1370	0.27	0.21	0.14	0.04												0.48	2.40	0.12	S1G	48
SB250-CON2-3	2780	0.57	0.53	0.50	0.47	0.44	0.36	0.28	0.20								0.68	3.06	0.25	S1G	61
SB315-CON4-3	1370	0.52	0.48	0.43	0.37	0.25											0.48	2.40	0.12	S2B	51
SB315-CON2-3	2800	0.93	0.92	0.91	0.90	0.88	0.84	0.80	0.76	0.71	0.55						1.18	6.14	0.55	S2B	64
SB400-CON2-3	2840	2.08	2.07	2.05	2.02	2.00	1.96	1.92	1.86	1.82	1.70	1.53					4.56	27.4	2.2	S2G	70
SB500-CON2-3	2900	3.80	3.78	3.76	3.73	3.71	3.66	3.60	3.54	3.46	3.30	3.15	2.90				7.55	57.4	4.0	S2	80

Sound levels are average spherical free field values at 50% peak pressure for comparative purposes only.

Silencer Data - SINGLE Phase

Product Code	dBA Attenuation		ΔP (Pa)	dBA Attenuation		ΔP (Pa)
	1DENP	1DEP		2DENP	2DEP	
SB250-CON4-1	-9	-11	11	-14	-16	16
SB315-CON4-1	-8	-11	8	-13	-15	12

For explanation of silencer data see p20.

Silencer Data - THREE Phase

Product Code	dBA Attenuation		ΔP (Pa)	dBA Attenuation		ΔP (Pa)
	1DENP	1DEP		2DENP	2DEP	
SB250-CON4-3	-8	-11	8	-14	-16	16
SB250-CON2-3	-9	-12	25	-15	-15	40
SB315-CON4-3	-8	-11	8	-13	-15	12
SB315-CON2-3	-9	-14	28	-16	-15	44
SB400-CON2-3	-9	-11	64	-14	-15	103
SB500-CON2-3	-9	-16	81	-14	-19	130

For explanation of silencer data see p20.