



FBE

Radial fan with high overall efficiency





Radial fan with high overall efficiency

FUMEX FBE - an energy-efficient fan designed for industrial environments which can be installed both indoors and outdoors. For expelling non-explosive gases, fumes and lighter particles with an airflow of up to 27 000 m³/h (7500 l/s). The impeller has curved blades and is made from welded galvanised sheet metal.

The fan complies with the ErP Directive and is optimised for use in conjunction with the Fumex fume extraction and automatic control range. A number of accessories are available for the FBE series, designed to make installation and use easier and more efficient.

Version

Total sound power¹

(Hz)	dB (A)
63	49
125	70
250	72
500	71
1000	73
2000	66
4000	63
8000	61
Lwt dB (A)	78

¹ Data measured at energy-optimal operating point.



FBE 037

Technical data (1-phase/3-phase)

Weight: 23 kg

Voltage: 230 V 1N~/230 V 3~/400 V 3~

Frequency: 50 Hz

Power: 0,37 kW

Rated current: 2,9/1,7/0,96 A

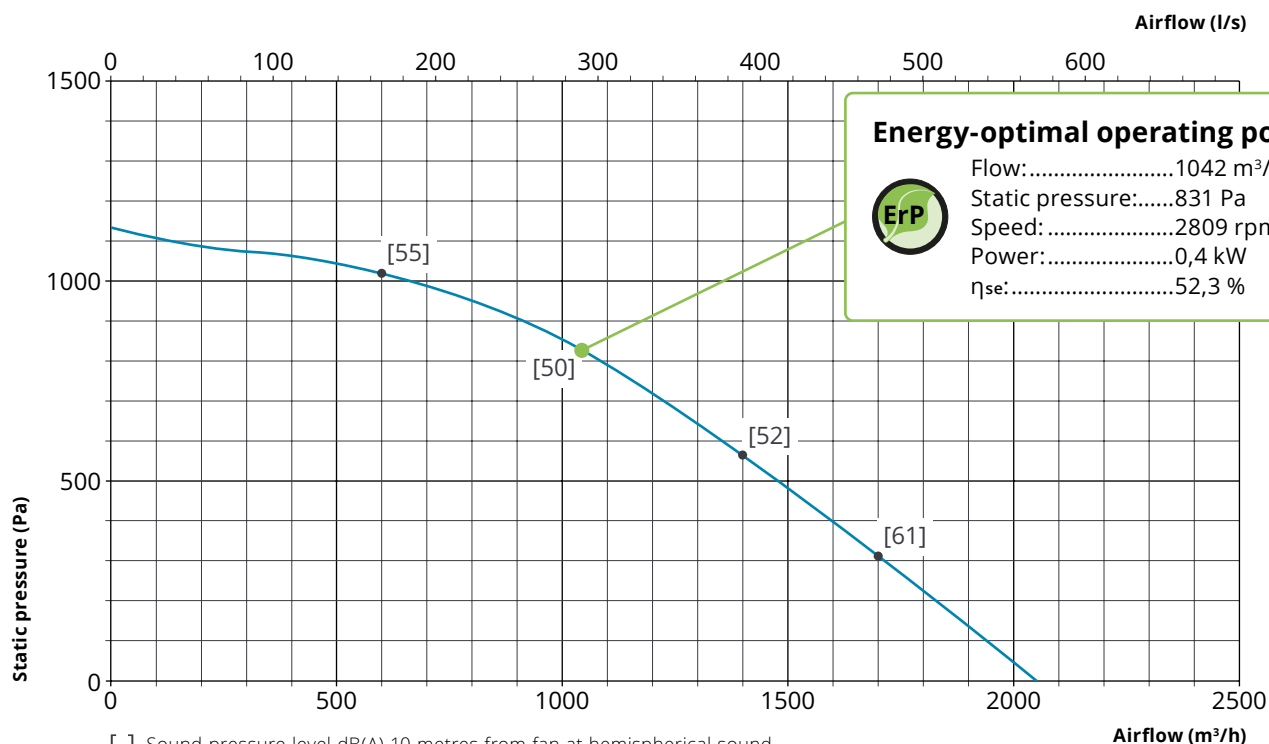
Speed: 2755 rpm

Enclosure class: IP55

Max. operating temperature: .. 80 °C

Ambient temperature: -20 °C to +40 °C

Sound pressure level²: 70 dB(A)



[] Sound pressure level dB(A) 10 metres from fan at hemispherical sound propagation in free field with ducted inlet and free-blowing outlet side.

² Sound pressure level at energy-optimal operating point one meter from fan at hemispherical sound propagation in free field.



FBE 075

Technical data (1-phase/3-phase)

Weight: 30 kg

Voltage: 230 V 1N~/230 V 3~/400 V 3~

Frequency:..... 50 Hz

Power: 0,75 kW

Rated current: 5,8/3,3/1,9 A

Speed: 2890 rpm

Enclosure class: IP55

Max. operating temperature:.. 80 °C

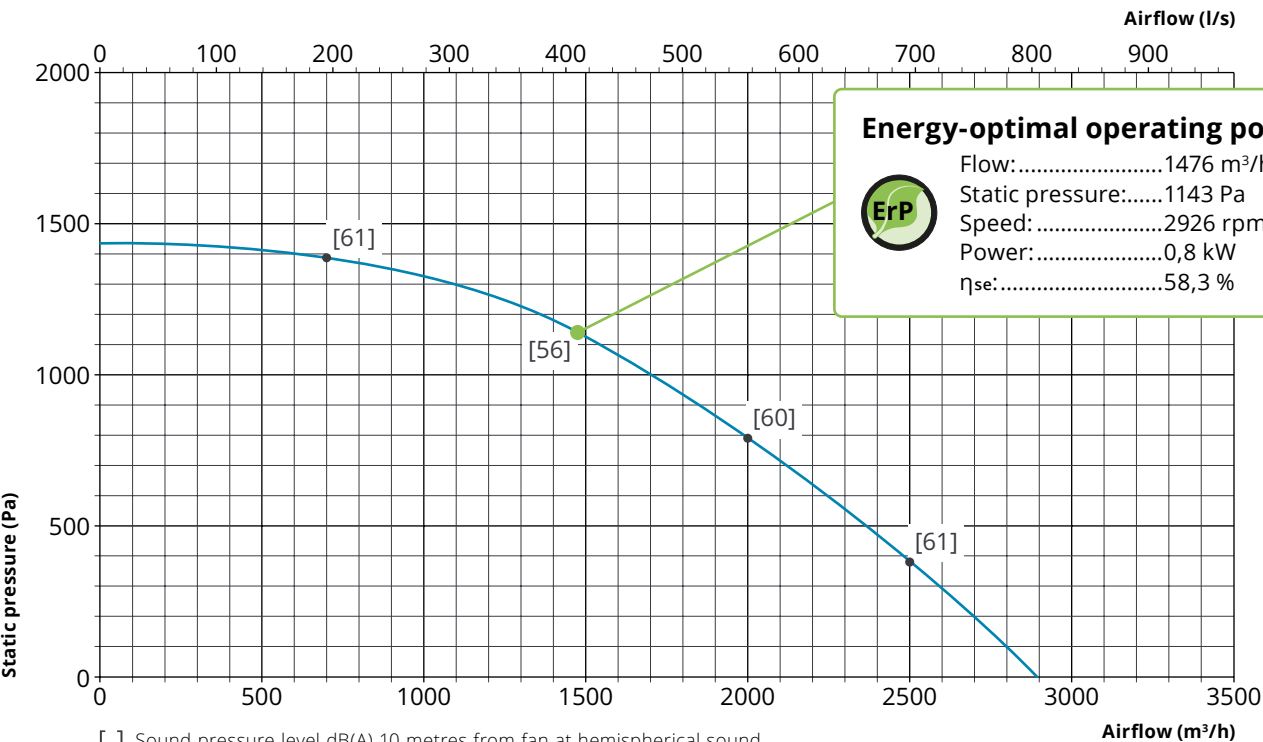
Ambient temperature:..... -20 °C to +40 °C

Sound pressure level²:..... 76 dB(A)

Total sound power¹

(Hz)	dB (A)
63	54
125	70
250	77
500	80
1000	82
2000	77
4000	73
8000	67
Lwt dB (A)	86

¹ Data measured at energy-optimal operating point.



[] Sound pressure level dB(A) 10 metres from fan at hemispherical sound propagation in free field with ducted inlet and free-blowing outlet side.

² Sound pressure level at energy-optimal operating point one meter from fan at hemispherical sound propagation in free field.

Total sound power¹

(Hz)	dB (A)
63	54
125	70
250	77
500	80
1000	82
2000	77
4000	73
8000	67
Lwt dB (A)	86

¹ Data measured at energy-optimal operating point.

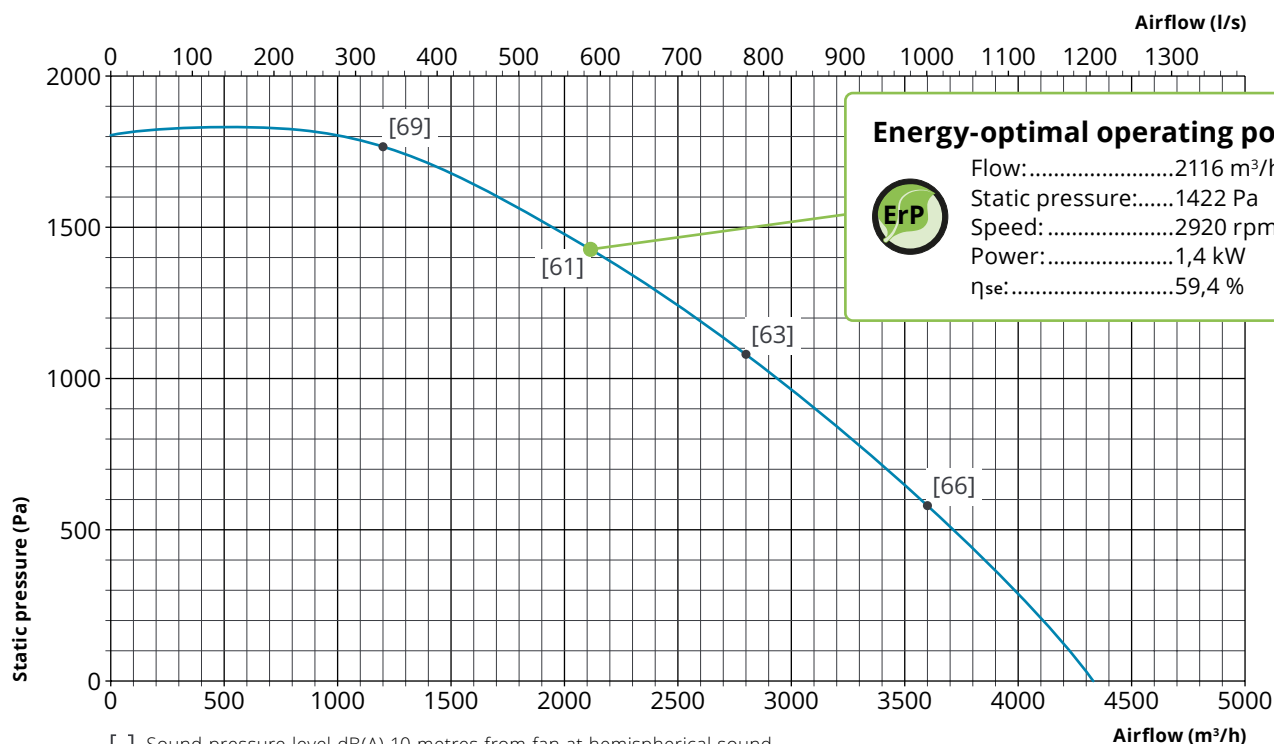


FBE 150

Technical data

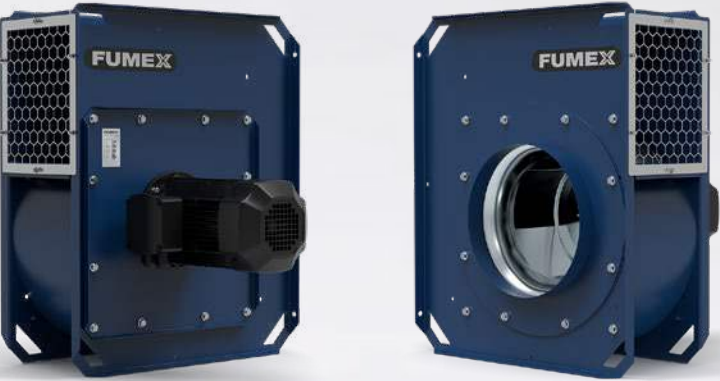
Weight: 40 kg
 Voltage: 230/400 V 3~
 Frequency: 50 Hz
 Power: 1,5 kW
 Rated current: 5,3/3,1 A

Speed: 2890 rpm
 Enclosure class: IP55
 Max. operating temperature: .. 80 °C
 Ambient temperature: -20 °C to +40 °C
 Sound pressure level²: 81 dB(A)



[] Sound pressure level dB(A) 10 metres from fan at hemispherical sound propagation in free field with ducted inlet and free-blowing outlet side.

² Sound pressure level at energy-optimal operating point one meter from fan at hemispherical sound propagation in free field.



FBE 220

Technical data

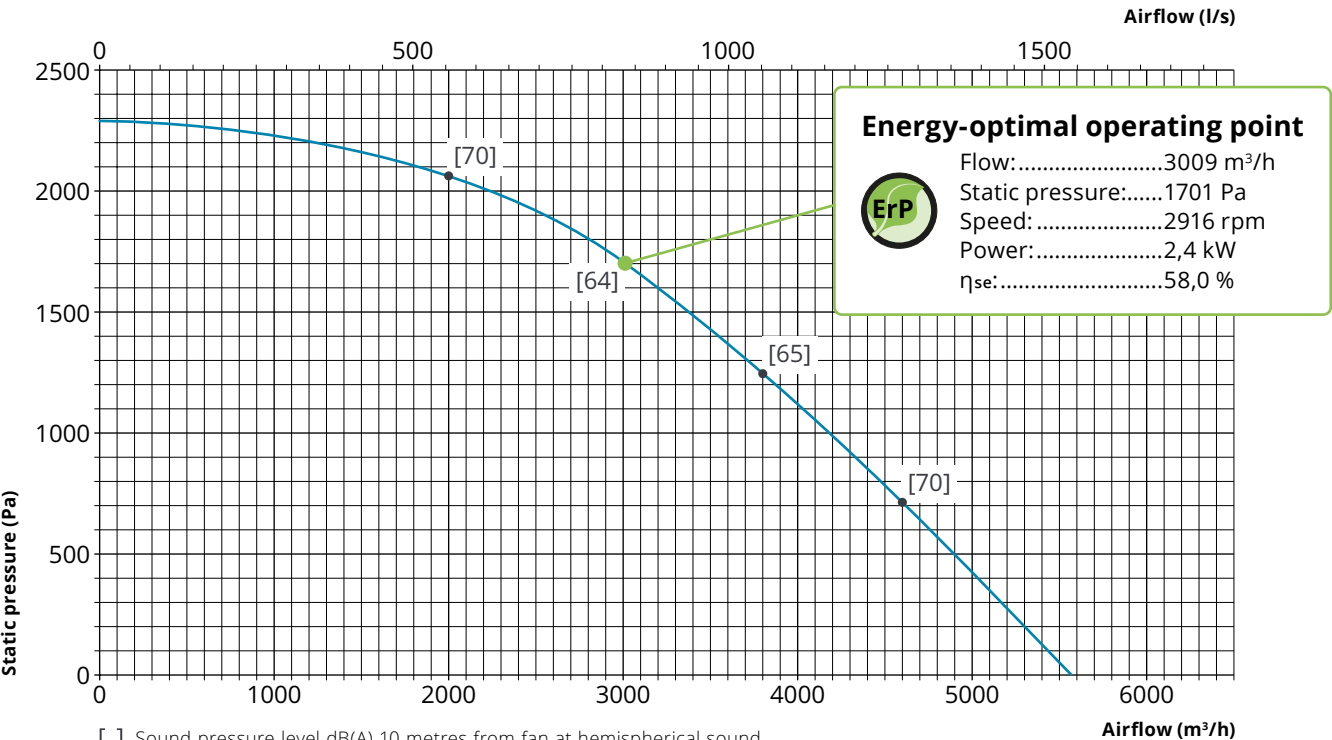
Weight: 58 kg
Voltage: 230/400 V 3~
Frequency: 50 Hz
Power: 2,2 kW
Rated current: 7,6/4,3 A

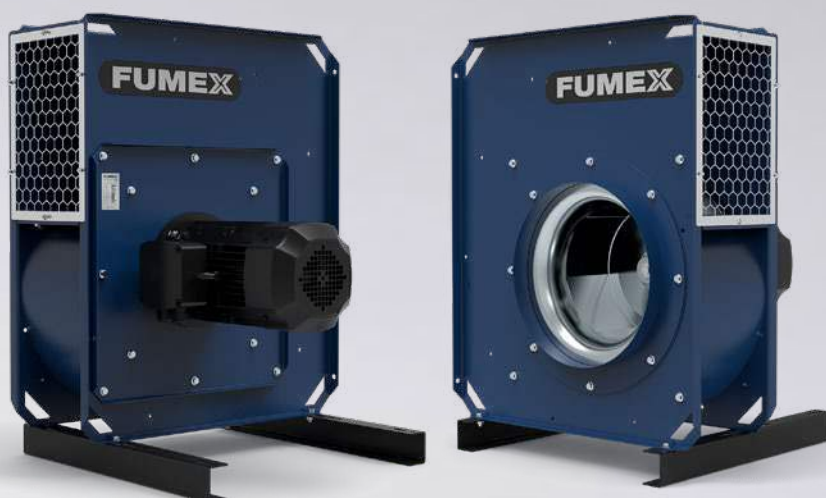
Speed: 2890 rpm
Enclosure class: IP55
Max. operating temperature:.. 80 °C
Ambient temperature: -20 °C to +40 °C
Sound pressure level²: 84 dB(A)

Total sound power¹

(Hz)	dB (A)
63	54
125	70
250	77
500	80
1000	82
2000	77
4000	73
8000	67
Lwt dB (A)	86

¹ Data measured at energy-optimal operating point.





FBE 400

Technical data

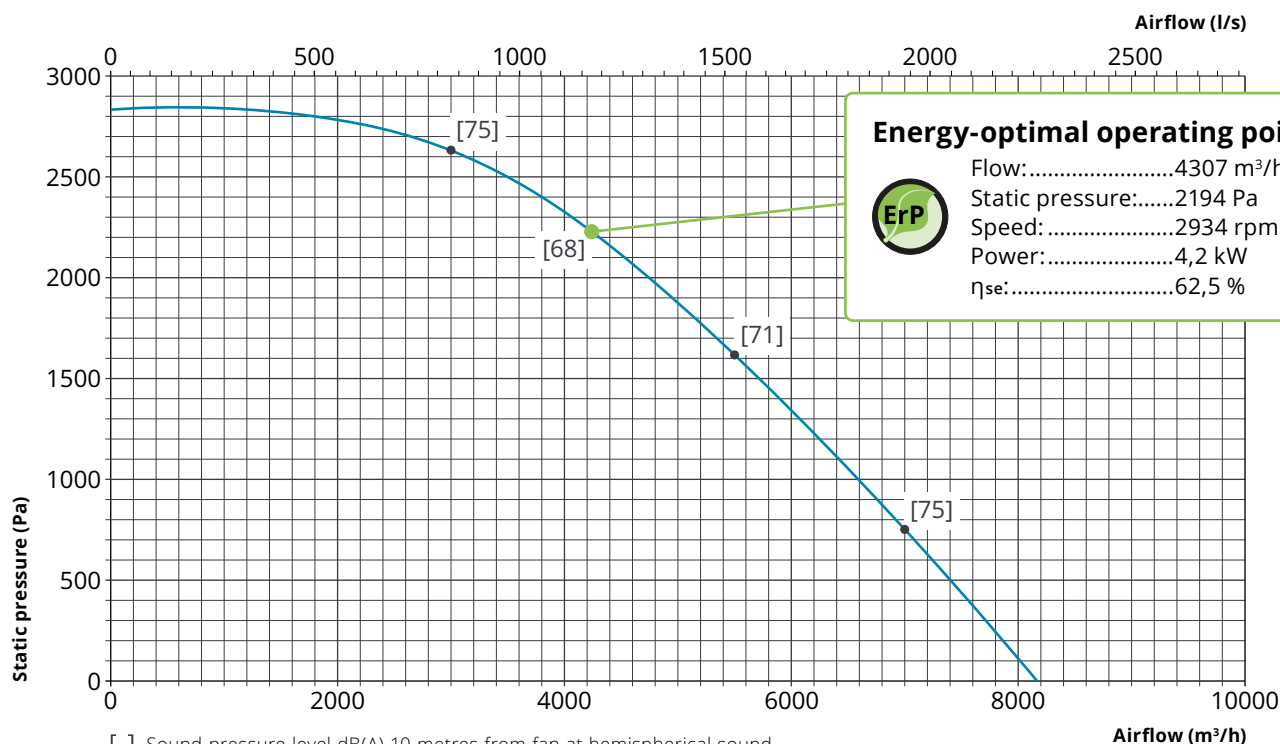
Weight: 94 kg
 Voltage: 400/690 V 3~
 Frequency: 50 Hz
 Power: 4,0 kW
 Rated current: 7,4/4,3 A

Speed: 2910 rpm
 Enclosure class: IP55
 Max. operating temperature: .. 80 °C
 Ambient temperature: -20 °C to +40 °C
 Sound pressure level²: 88 dB(A)

Total sound power¹

(Hz)	dB (A)
63	54
125	70
250	77
500	80
1000	82
2000	77
4000	73
8000	67
Lwt dB (A)	86

¹ Data measured at energy-optimal operating point.





Total sound power¹

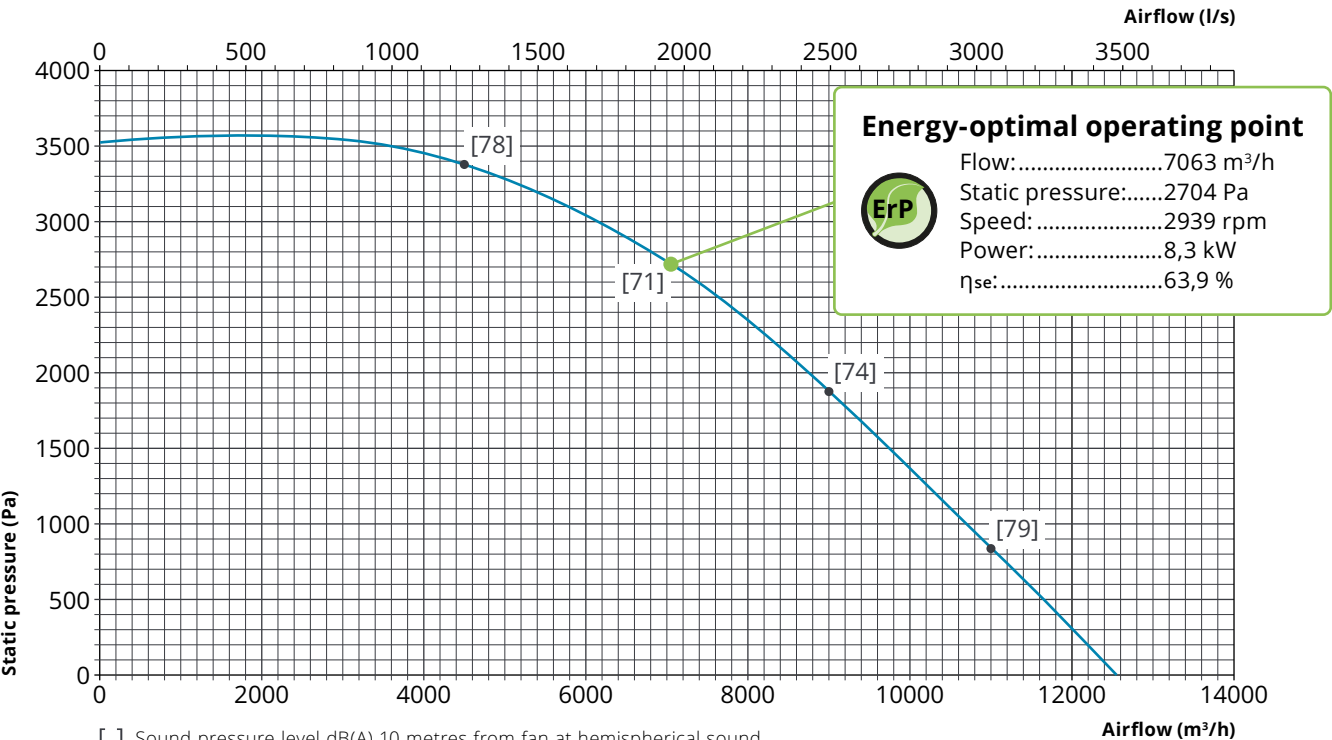
(Hz)	dB (A)
63	54
125	70
250	77
500	80
1000	82
2000	77
4000	73
8000	67
Lwt dB (A)	86

¹ Data measured at energy-optimal operating point.

FBE 750

Technical data

Weight:	136 kg	Speed:	2940 rpm
Voltage:	400/690 V 3~	Enclosure class:	IP55
Frequency:	50 Hz	Max. operating temperature: ..	80 °C
Power:	7,5 kW	Ambient temperature:	-20 °C to +40 °C
Rated current:	13,5/7,8 A	Sound pressure level ² :	91 dB(A)



Total sound power¹

(Hz)	dB (A)
63	54
125	70
250	77
500	80
1000	82
2000	77
4000	73
8000	67
Lwt dB (A)	86

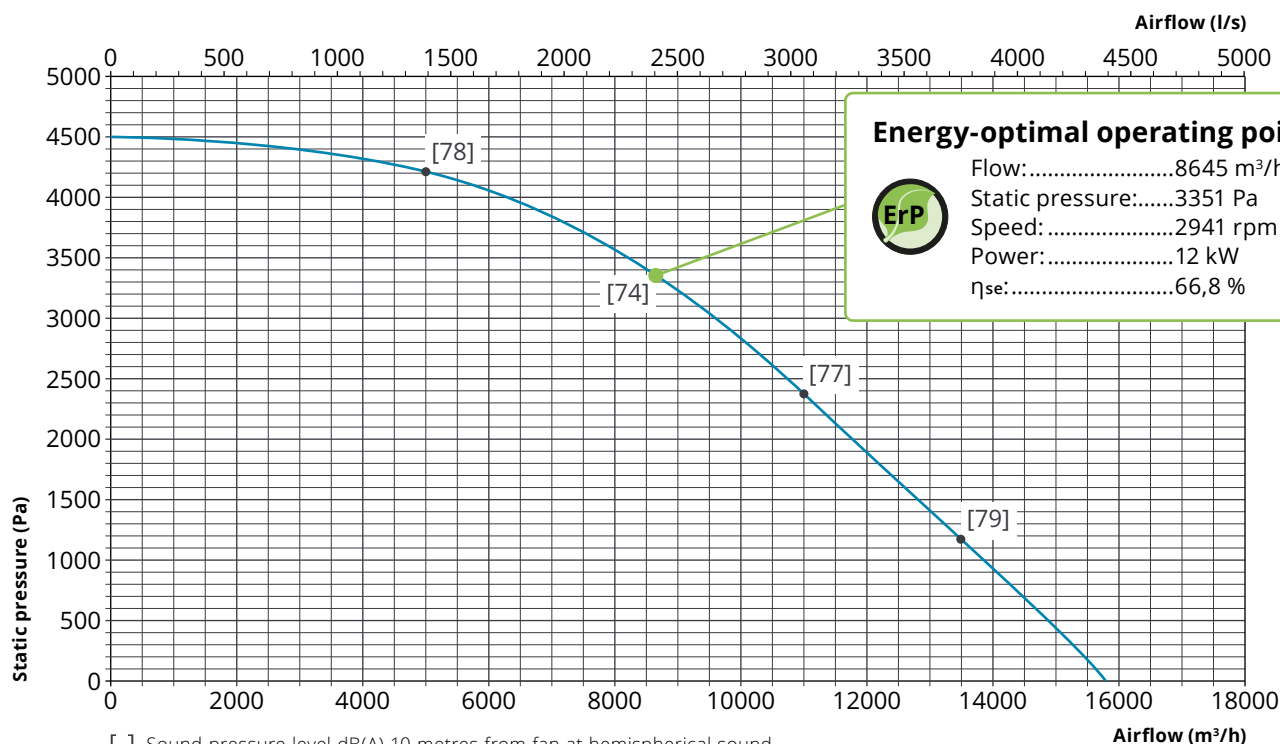
¹ Data measured at energy-optimal operating point.

FBE 1100

Technical data

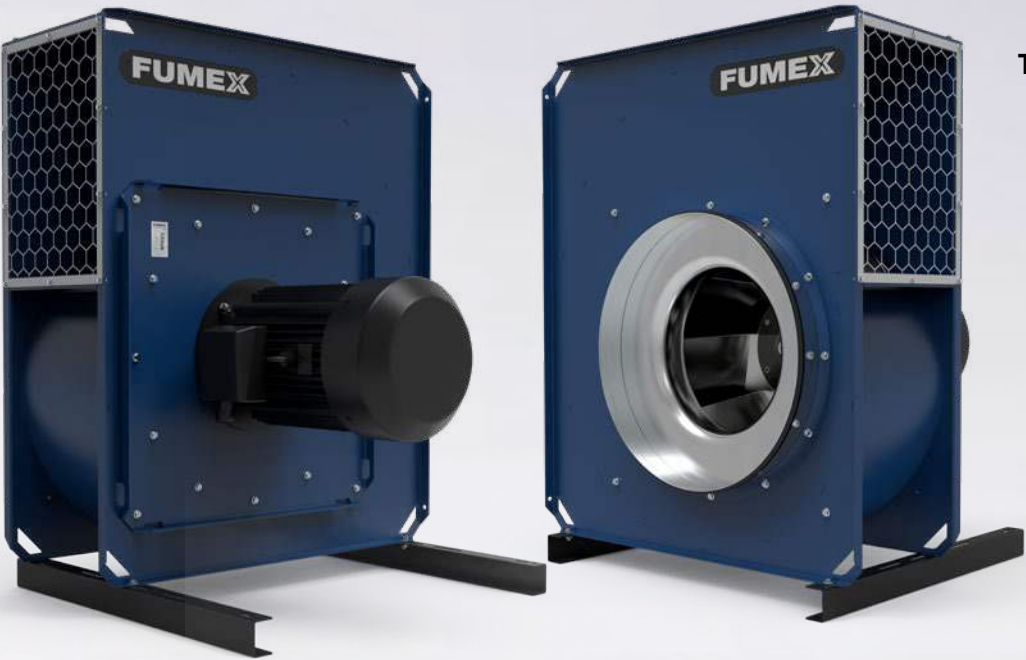
Weight: 162 kg
 Voltage: 400/690 V 3~
 Frequency: 50 Hz
 Power: 11,0 kW
 Rated current: 19,6/11,3 A

Speed: 2950 rpm
 Enclosure class: IP55
 Max. operating temperature: .. 80 °C
 Ambient temperature: -20 °C to +40 °C
 Sound pressure level²: 94 dB(A)



[] Sound pressure level dB(A) 10 metres from fan at hemispherical sound propagation in free field with ducted inlet and free-blowing outlet side.

² Sound pressure level at energy-optimal operating point one meter from fan at hemispherical sound propagation in free field.



Total sound power¹

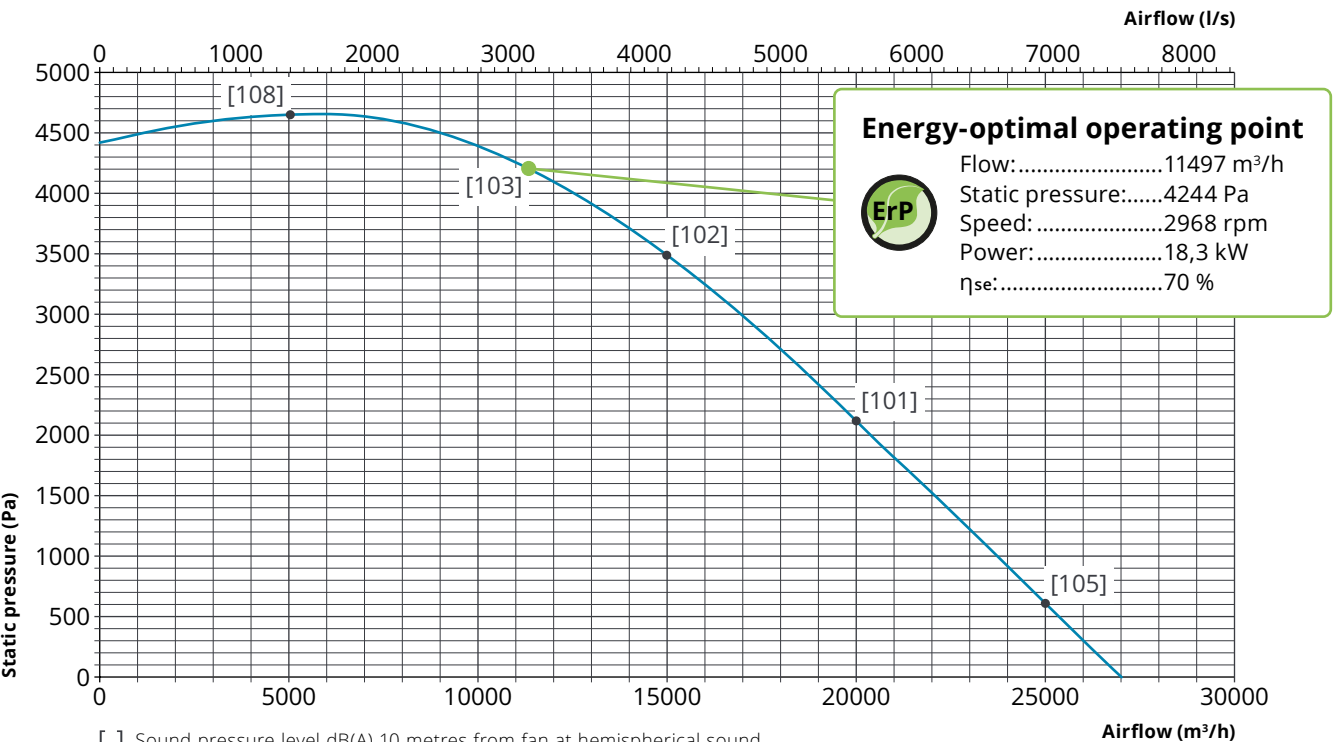
(Hz)	dB (A)
63	54
125	70
250	77
500	80
1000	82
2000	77
4000	73
8000	67
Lwt dB (A)	86

¹ Data measured at energy-optimal operating point.

FBE 1950

Technical data

Weight:	239 kg	Speed:	2950 rpm
Voltage:	400/690 V 3~	Enclosure class:	IP55
Frequency:	50 Hz	Max. operating temperature: ..	80 °C
Power:	19,4 kW	Ambient temperature:	-20 °C to +40 °C
Rated current:	33,3/19,3 A	Sound pressure level ² :	103 dB(A)

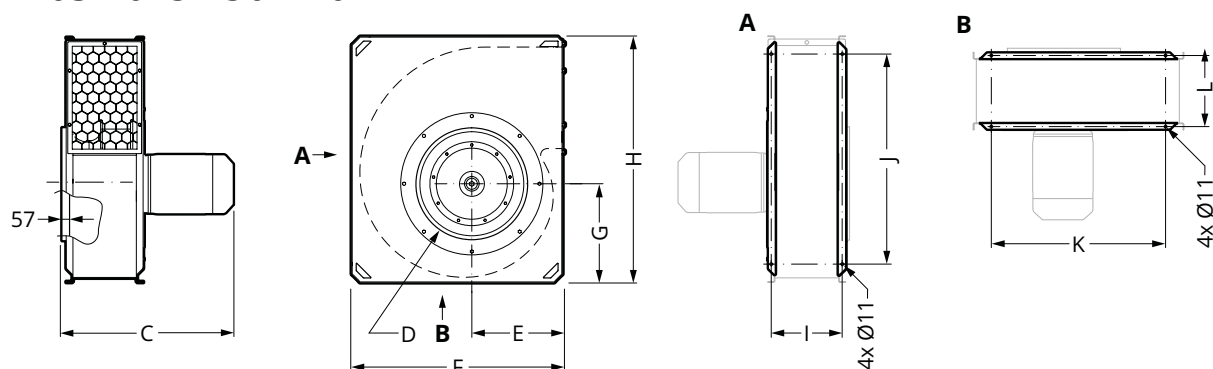


[] Sound pressure level dB(A) 10 metres from fan at hemispherical sound propagation in free field with ducted inlet and free-blowing outlet side.

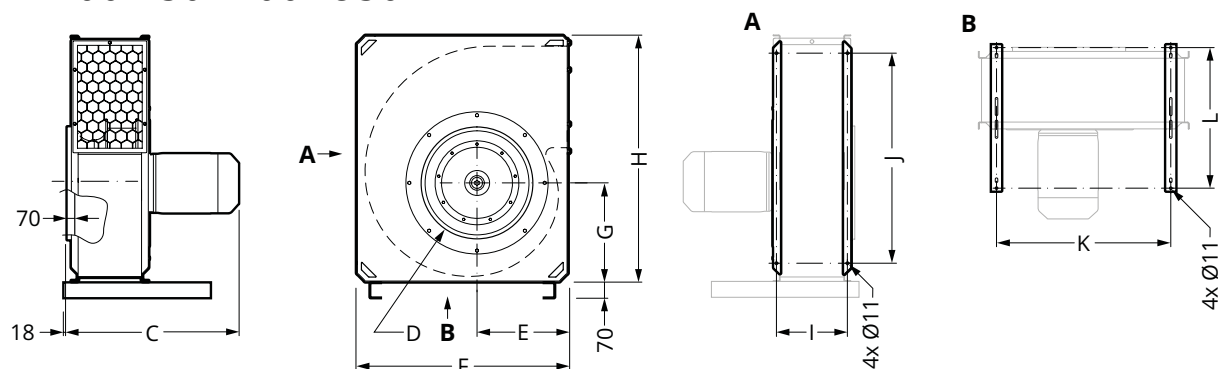
² Sound pressure level at energy-optimal operating point one meter from fan at hemispherical sound propagation in free field.

Dimensional drawing (mm)

FBE 037/075/150/220



FBE 400/750/1100/1950



Version	Dimensions (mm)									
	C	D	E	F	G	H	I	J	K	L
FBE 037	435	Ø248	183	430	212	520	183	360	270	183
FBE 075	492	Ø248	205	475	239	580	201	420	315	201
FBE 150	526	Ø313	230	535	265	645	235	485	375	235
FBE 220	606	Ø313	258	600	301	730	245	570	440	245
FBE 400	722	Ø398	297	720	249	880	267	720	560	620
FBE 750	783	Ø498	330	805	385	970	310	810	645	620
FBE 1100	809	Ø498	400	930	435	1085	313	925	770	620
FBE 1950	969	Ø628	430	1015	484	1210	382	1050	855	820

Sound pressure L_p dB (A)

Measures of the sound pressure presented in the diagrams are tested in accordance with ISO 3746, at a distance of 10 meters from the fan. Guidance for sound pressure regarding other distances, see table to the right.

Distance from fan	Sound pressure level
5 meters	+ 6dB
20 meters	-6 dB
40 meters	-12 dB
50 meters	-14 dB

For selection of silencer

For the FUMEX FBE fan range, 250 Hz is always the determining frequency band for selection of silencer in the duct system. For reference, see tables under "Sound power level" for each fan model (page 3-9).

Accessories



Flexible Duct FDS

For connection to the inlet side, including 2 mounting clamps.



Mounting Rail FBEK

For easy and safe installation. (FBEK included as standard on FBE 400-1950).



Transition FBO

Transition on outlet side to round connection.



Vibration Damper Kit FBV M10

Kit with four vibration dampers in natural rubber with hardness 60° IRH.



Safety Switch SSB/SSB EMC

With lockable toggle. Two M25 bushings included. SSB EMC is copper-sheathed.



Contactor SKO

3-pin contactor with over-current relay for manual reset. The over-current relay has phase loss protection. Used together with external switches or control.



Motor Protection Switch SMB

3-pin motor protection switch with thermal magnetic release equipped with phase fault protection. Designed for operating and protecting fan motors.

Specifications

Delivery version

The fan is delivered as standard in version LG 90. Can be adapted on installation to the customer's needs in the LG versions.



LG 0



LG 90



LG 180



LG 270



Standardised delivery version

Surface finish

Sheet metal parts: Stainless steel, powder-coated or electro-galvanised.

Production

The FBE range of fans is manufactured in accordance with the following directives and standards:

- Machinery Directive 2006/42/EC
- EMC Directive 2014/30/EU
- EN ISO 12100:2010
- EN 60204-1
- ErP2015 2009/125/EC

EXTRACTION ARMS · VEHICLE EXHAUST EXTRACTORS · FANS · FILTERS · CURTAINS · CONTROLS

FUMEX

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