



FBE

Centrifugal fan with high overall efficiency





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MOVEX FBE - an energy-efficient fan designed for industrial environments which can be installed both indoors and outdoors. For extraction of non-explosive gases, fumes, lighter particles and with an airflow of up to 7400 cfm. The backward curved blade impeller is made of aluminum for the FBE 076 / 156 / 206 / 406 models, and welded galvanized sheet metal for the FBE 556 / 1006 / 1506 models.

The fan is optimized for use together with the Movex fume extraction and automatic control range. All versions are tested according to ISO 5801 measurement category C. FEI (Fan Energy Index) are shown in the fan charts. Several accessories are available for the FBE series, designed to make installation and operation easier and more efficient.



Sound power level¹

(Hz)	Lw dB(A)
63	55
125	59
250	73
500	76
1000	72
2000	68
4000	73
8000	63
Lwt dB(A)	81

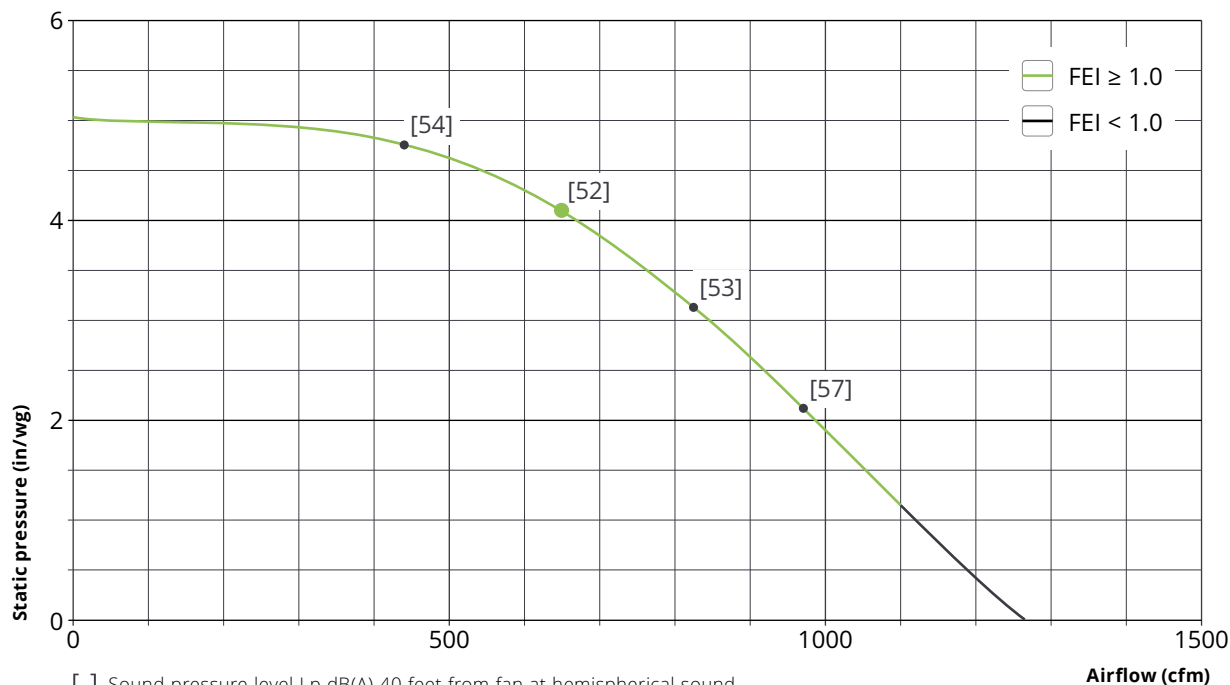
¹ Data measured at energy-optimal operating point.

FBE 076

Technical data (1-phase/3-phase)

Weight: 48/45 lb
 Voltage: 115 V 1N~/208-230 V 3~/460 V 3~
 Frequency: 60 Hz
 Power: 0.75 Hp
 Rated current: 6.8/2.43-2.46/1.23 A

Speed: 3430/3470/3470 rpm
 Enclosure class: IP55
 Max. operating temperature: . 176 °F
 Ambient temperature: -4 °F to +104 °F



[] Sound pressure level Lp dB(A) 40 feet from fan at hemispherical sound propagation in free field with ducted inlet and free-blowing outlet side.

● Energy-optimal operating point

Sound power level¹

(Hz)	Lw dB(A)
63	69
125	70
250	80
500	86
1000	82
2000	79
4000	77
8000	67
Lwt dB(A)	89

¹ Data measured at energy-optimal operating point.

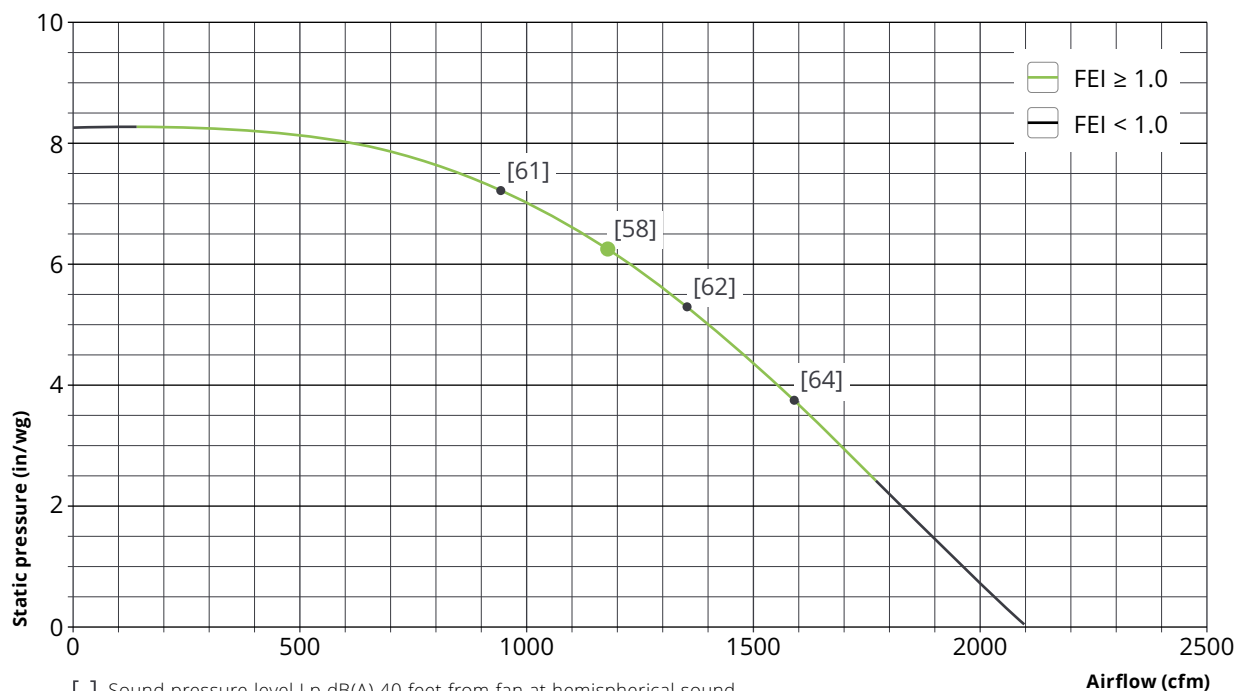


FBE 206

Technical data (3-phase)

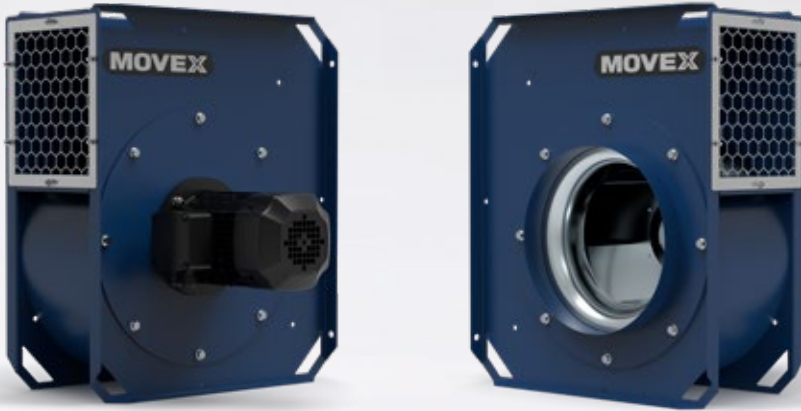
Weight: 69 lb
 Voltage: 208-230/460 V 3~
 Frequency: 60 Hz
 Power: 2.0 Hp
 Rated current: 6.16-5.57/2.79 A

Speed: 3520 rpm
 Enclosure class: IP55
 Max. operating temperature: . 176 °F
 Ambient temperature: -4 °F to +104 °F



[] Sound pressure level Lp dB(A) 40 feet from fan at hemispherical sound propagation in free field with ducted inlet and free-blowing outlet side.

● Energy-optimal operating point



Sound power level¹

(Hz)	Lw dB(A)
63	69
125	80
250	81
500	85
1000	85
2000	82
4000	80
8000	80
Lwt dB(A)	90

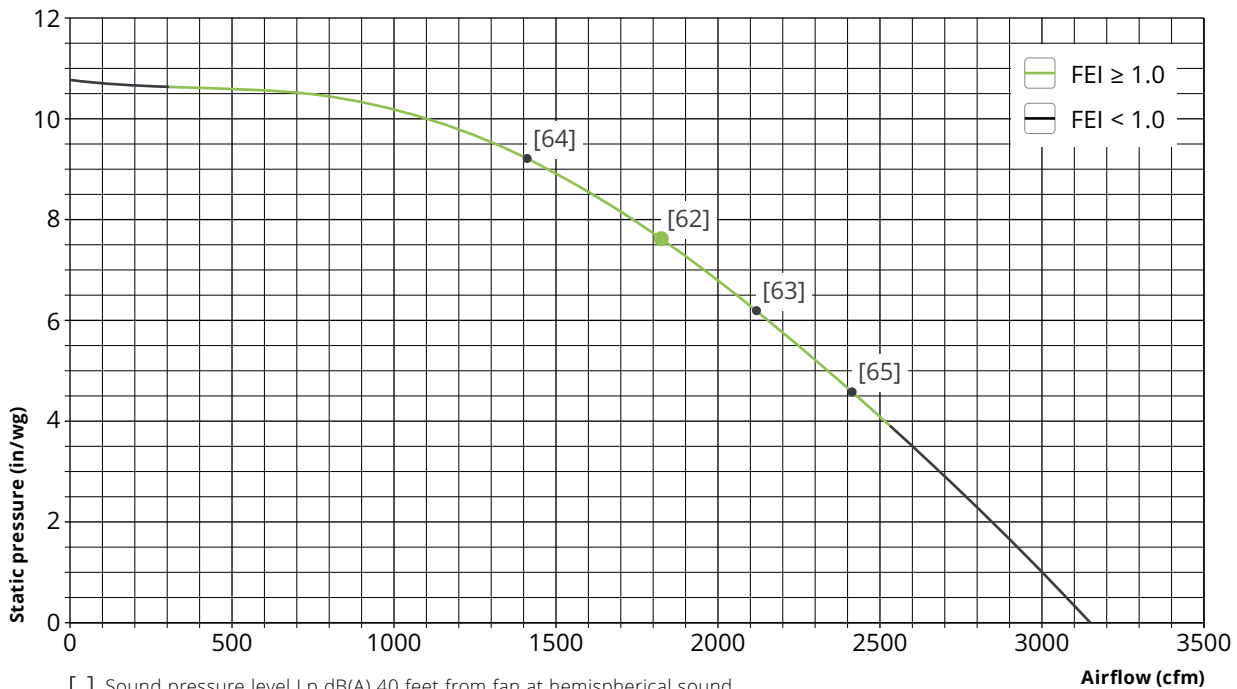
¹ Data measured at energy-optimal operating point.

FBE 406

Technical data (3-phase)

Weight: 91 lb
 Voltage: 208-230/460 V 3~
 Frequency: 60 Hz
 Power: 4.0 Hp
 Rated current: 10.7-9.89/4.95 A

Speed: 3500 rpm
 Enclosure class: IP55
 Max. operating temperature: . 176 °F
 Ambient temperature: -4 °F to +104 °F



[] Sound pressure level Lp dB(A) 40 feet from fan at hemispherical sound propagation in free field with ducted inlet and free-blowing outlet side.

● Energy-optimal operating point



Sound power level¹

(Hz)	Lw dB(A)
63	67
125	78
250	86
500	91
1000	89
2000	88
4000	82
8000	75
Lwt dB(A)	95

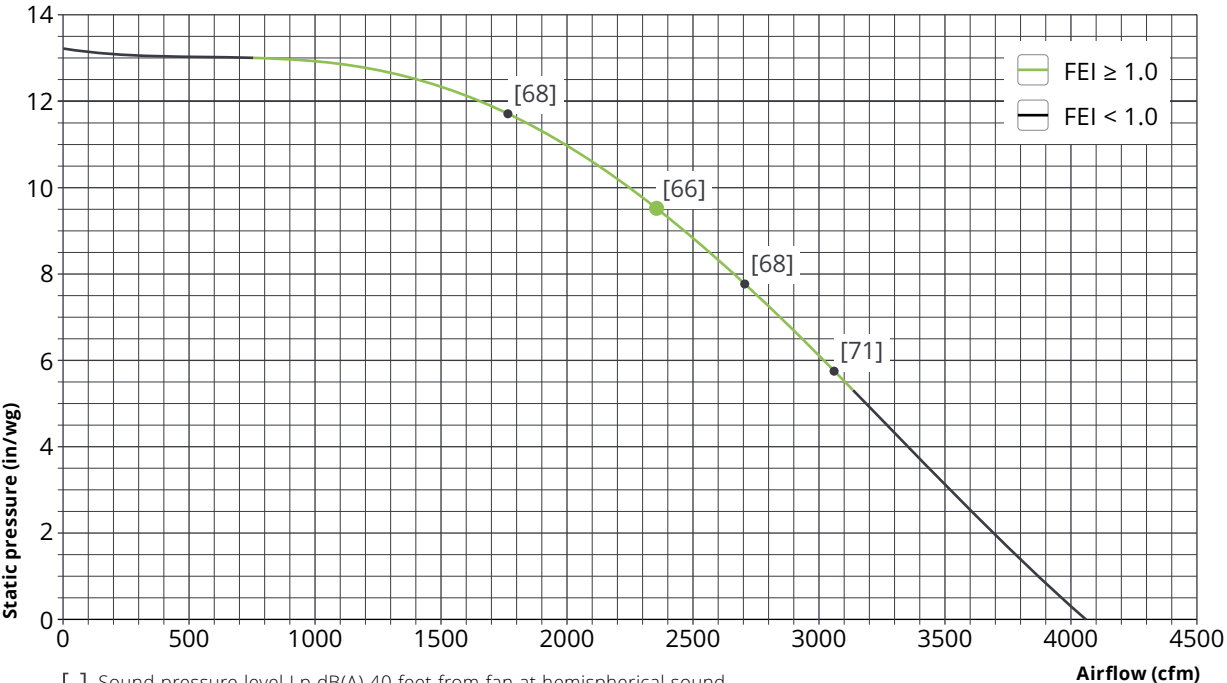
¹ Data measured at energy-optimal operating point.

FBE 556

Technical data (3-phase)

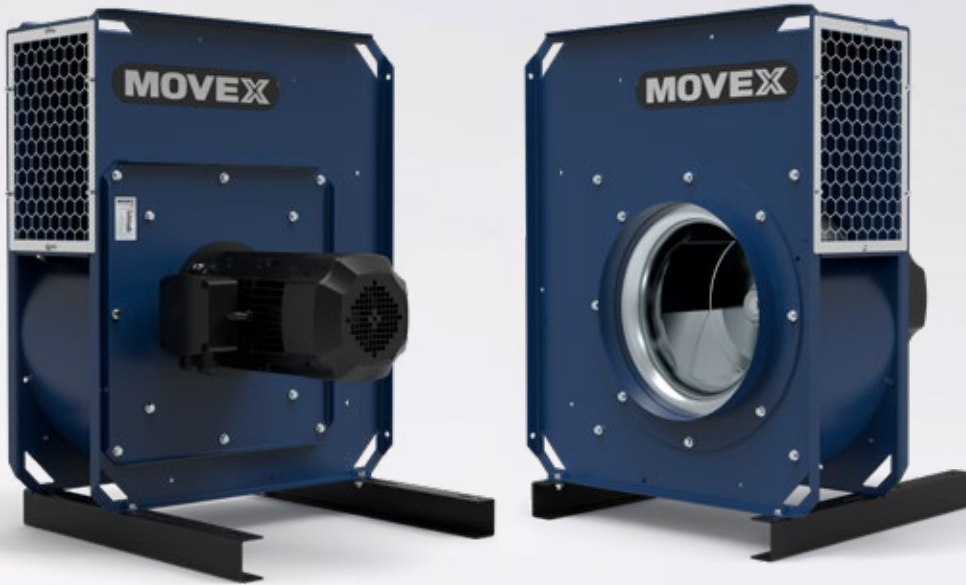
Weight:..... 164 lb
 Voltage:..... 208-230/460 V 3~
 Frequency:..... 60 Hz
 Power:..... 5.5 Hp
 Rated current:..... 13.6-12.6/6.3 A

Speed:..... 3510 rpm
 Enclosure class:..... IP55
 Max. operating temperature:.. 176 °F
 Ambient temperature:..... -4 °F to +104 °F



[] Sound pressure level Lp dB(A) 40 feet from fan at hemispherical sound propagation in free field with ducted inlet and free-blowing outlet side.

● Energy-optimal operating point



Sound power level¹

(Hz)	Lw dB(A)
63	77
125	78
250	89
500	94
1000	93
2000	92
4000	85
8000	78
Lwt dB(A)	99

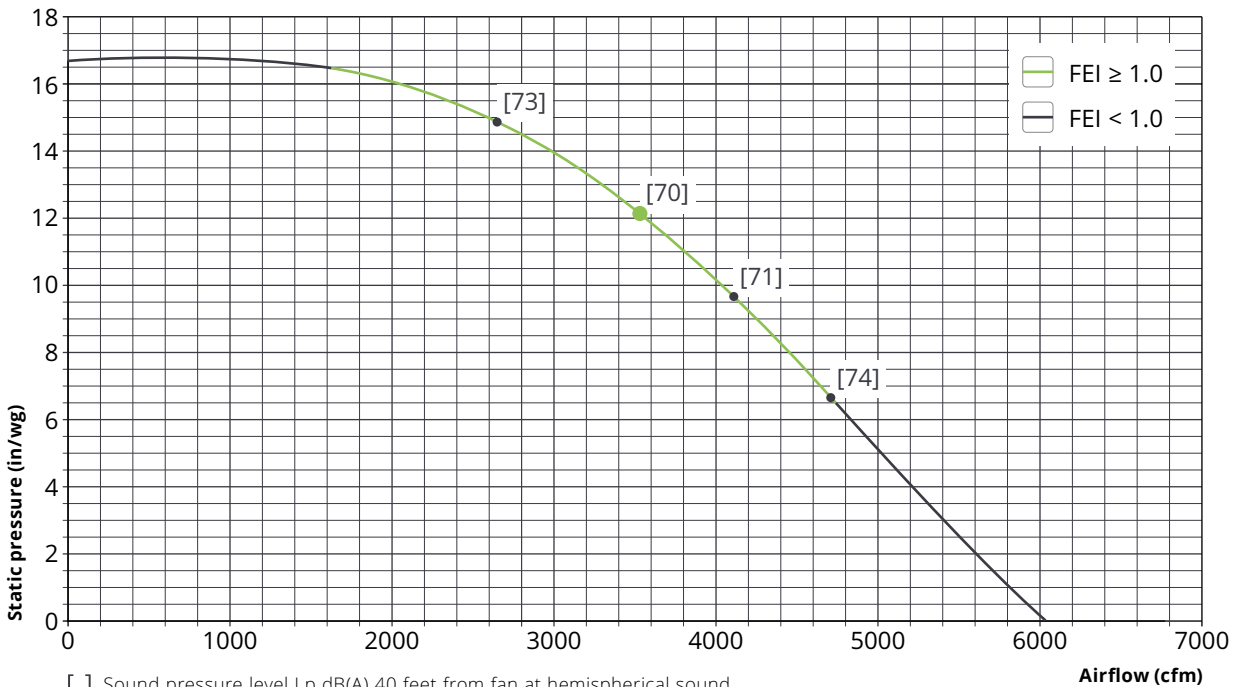
¹ Data measured at energy-optimal operating point.

FBE 1006

Technical data (3-phase)

Weight: 262 lb
 Voltage: 208-230/460 V 3~
 Frequency: 60 Hz
 Power: 10.0 Hp
 Rated current: 25.8-22.6/11.3 A

Speed: 3520 rpm
 Enclosure class: IP55
 Max. operating temperature: . 176 °F
 Ambient temperature: -4 °F to +104 °F



[] Sound pressure level Lp dB(A) 40 feet from fan at hemispherical sound propagation in free field with ducted inlet and free-blowing outlet side.

● Energy-optimal operating point



Sound power level¹

(Hz)	Lw dB(A)
63	79
125	80
250	91
500	97
1000	95
2000	93
4000	87
8000	80
Lwt dB(A)	101

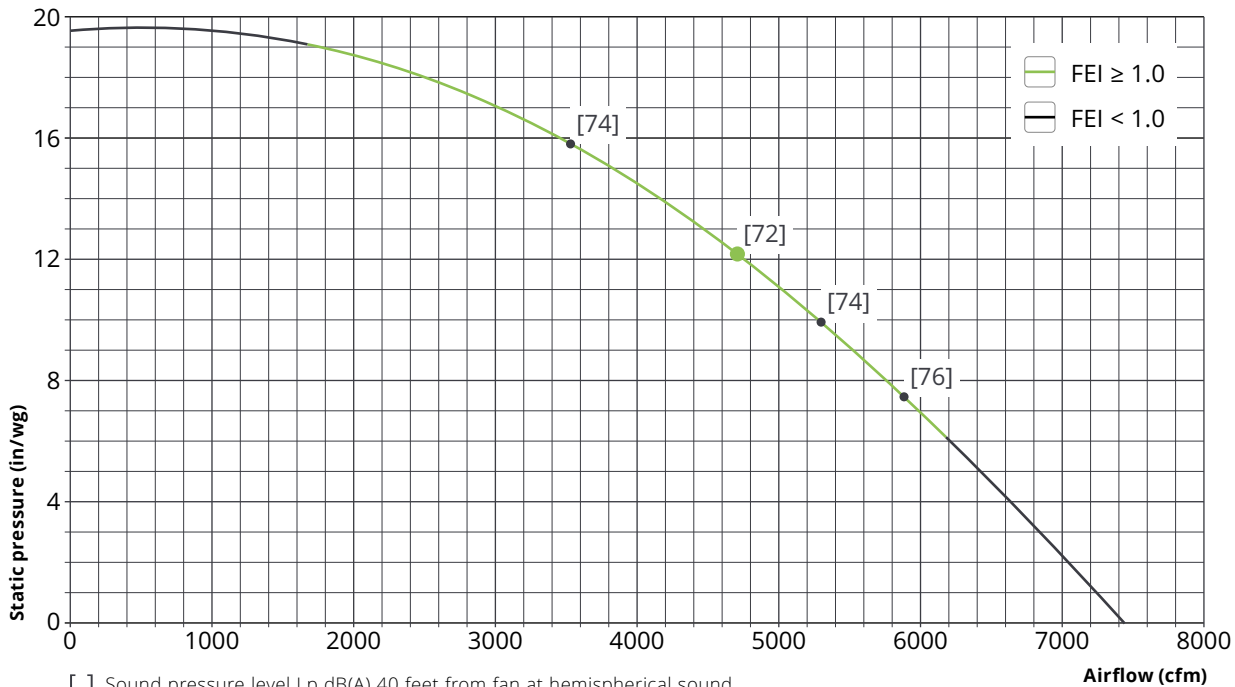
¹ Data measured at energy-optimal operating point.

FBE 1506

Technical data (3-phase)

Weight: 336 lb
 Voltage: 208-230/460 V 3~
 Frequency: 60 Hz
 Power: 15.0 Hp
 Rated current: 35.6-33.0/16.5 A

Speed: 3530 rpm
 Enclosure class: IP55
 Max. operating temperature: . 176 °F
 Ambient temperature: -4 °F to +104 °F



[] Sound pressure level Lp dB(A) 40 feet from fan at hemispherical sound propagation in free field with ducted inlet and free-blowing outlet side.

● Energy-optimal operating point

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 40 feet from the fan. Guidance for sound pressure regarding other distances, see table to the right.

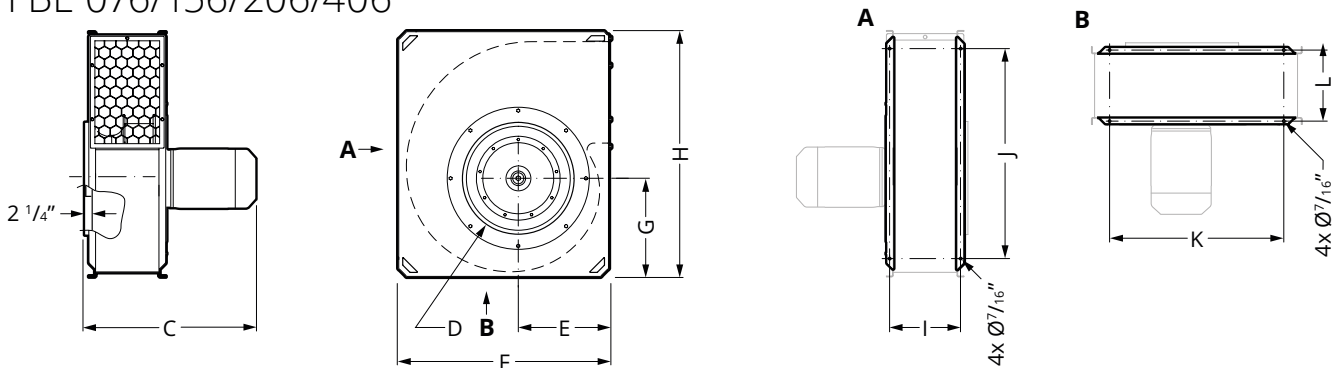
Distance from fan	Sound pressure level
20 feet	+7 dB
80 feet	-6 dB
100 feet	-8 dB
150 feet	-12 dB

For selection of silencer

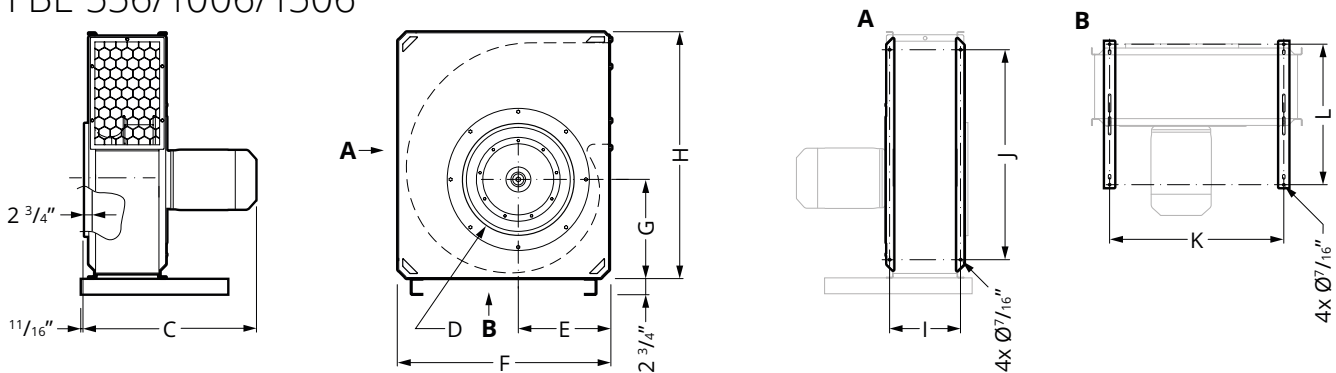
For the MOVEX FBE fan range, 250 Hz is always the determining frequency band for selection of silencer in the duct system. For reference, see tables under "Sound power level" for each fan model (page 3-9).

Dimensional drawing (in)

FBE 076/156/206/406



FBE 556/1006/1506



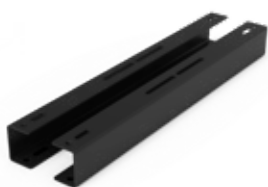
Version	Dimensions (in)									
	C	D	E	F	G	H	I	J	K	L
FBE 076	16 ¹⁵ / ₁₆	Ø9 ³ / ₄	7 ³ / ₁₆	16 ¹⁵ / ₁₆	8 ³ / ₈	20 ¹ / ₂	7 ³ / ₁₆	14 ³ / ₁₆	10 ⁵ / ₈	7 ³ / ₁₆
FBE 156	18 ¹ / ₈	Ø9 ³ / ₄	7 ³ / ₁₆	16 ¹⁵ / ₁₆	8 ³ / ₈	20 ¹ / ₂	7 ³ / ₁₆	14 ³ / ₁₆	10 ⁵ / ₈	7 ³ / ₁₆
FBE 206	18 ¹¹ / ₁₆	Ø9 ³ / ₄	8 ¹ / ₁₆	18 ¹¹ / ₁₆	9 ⁷ / ₁₆	22 ¹³ / ₁₆	7 ¹⁵ / ₁₆	16 ⁹ / ₁₆	12 ³ / ₈	7 ¹⁵ / ₁₆
FBE 406	22 ¹ / ₄	Ø12 ⁵ / ₁₆	9 ¹ / ₁₆	21 ¹ / ₁₆	10 ⁷ / ₁₆	25 ³ / ₈	9 ¹ / ₄	19 ¹ / ₈	14 ³ / ₄	9 ¹ / ₄
FBE 556	25 ⁹ / ₁₆	Ø12 ⁵ / ₁₆	10 ³ / ₁₆	23 ⁵ / ₈	11 ⁷ / ₈	28 ³ / ₄	9 ⁵ / ₈	22 ⁷ / ₁₆	17 ⁵ / ₁₆	9 ⁵ / ₈
FBE 1006	27 ³ / ₄	Ø15 ¹¹ / ₁₆	11 ¹¹ / ₁₆	28 ³ / ₈	9 ¹³ / ₁₆	34 ⁵ / ₈	10 ¹ / ₂	28 ³ / ₈	22 ¹ / ₁₆	24 ⁷ / ₁₆
FBE 1506	30 ⁷ / ₈	Ø19 ⁵ / ₈	13	31 ¹¹ / ₁₆	15 ³ / ₁₆	38 ³ / ₁₆	12 ³ / ₁₆	31 ⁷ / ₈	25 ³ / ₈	24 ⁷ / ₁₆

Accessories



FDS

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



FBEK

Mounting Rail
For easy and safe installation. (FBEK included as standard on FBE 556-1506).



FBO

Transition
Transition on outlet side to round connection.



FBV M10

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



SSB/SSB EMC

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



SKO

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



SMB

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

The right version for the right accessories

When ordering accessories for your MOVEX fan, it is important that you specify your fan model at the time of order. Talk to your dealer or directly with Movex sales staff to ensure the best service.

To meet the requirements of the CE standard, the fan must be equipped with safety switches and overcurrent protection. For speed control, see the separate product sheet for control units.

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-galvanized.

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