MOVEX® ME 100

The ideal extractor for light industry and laboratory environments.

With its optimal design, Ø 4 inch Movex ME has a very low pressure drop, which provides many valuable benefits.

- Low pressure drop saves energy.
- Air flow noise is reduced.
- Lower pressure drop is achieved without selecting a larger diameter extractor.
- Lower pressure drop allows the ME to be combined with additional extraction systems.

To further facilitate maneuvering of the extractor, the models 1650 and 1900 are equipped with a pulling gas spring as standard and the models 2100 and 2650 with two pulling gas springs.

An easy-to-grip handle facilitates the maneuverability of the extractor.

Unique design and stable mounting brackets make the Movex ME your best choice Support for designing an effective system can be found on page 5, and at www.movexinc.com where you will find our design tool and CAD drawings.

The Movex range also includes fans, accessories, automatic controls and filters suitable for local extraction.

LOCAL EXTRACTION
Pure advantages

MOVEX® ME 100

Always choose a low pressure drop

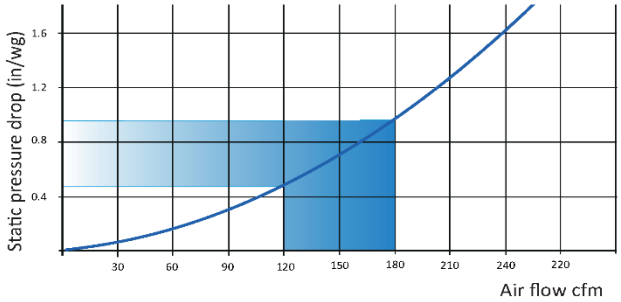
Lowest possible pressure drop is a quality aspect that always should be considered.

With its uniquely designed joint construction, Movex ME combines maximum flexibility with low pressure drop. The air passes through the joints without creating unnecessary turbulence, thus producing an energy-saving low pressure drop and a quieter working environment.

Recommended air flow

The recommended air flow for a Ø4 arm is 120-180 cfm, See table and diagram.

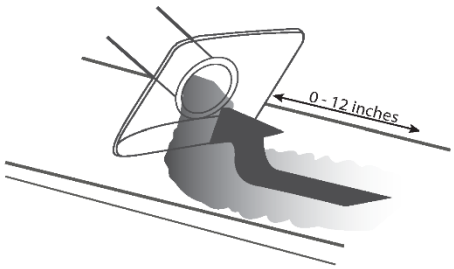
Activity	Air flow
Laboratories	120-180 cfm
Light industry	180 cfm



Static pressure drop is measured in accordance with ISO standard 5167-1.

Optimal capture

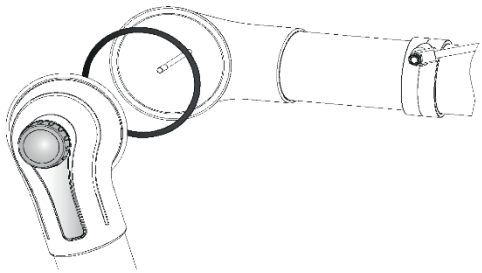
For optimum benefit from the local extractor, it is important to use the flexibility of the extractor to get as close to the contaminant as possible. A good rule of thumb would be a distance of 2–3 times the diameter of the extractor tube. At the recommended air flow, the extractor will provide high efficiency even if disturbances are generated in the surroundings.



Unique benefits

The Movex ME's joints have a patented friction design that, combined with the large joint diameter and single grip handle, provide a secure, position-stable arm with smooth adjustments. All without the need to apply excessive force or use tools on the adjusting knob.

Joints with reinforced ends and ball bearings moderate the friction and allow the arm to be moved up and down while maintaining stability and function.



Handle for easy adjustment

A steady and easily accessible handle, that provides easy adjustment, is fitted as a standard on all models of Movex ME Ø4 inch arm.

MOVEX® ME 100

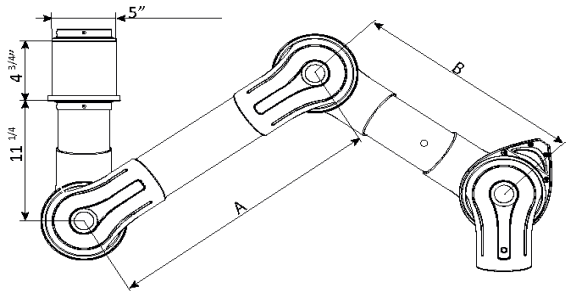
MET for ceiling and wall mounting, 3 joints

Standard	Size (inches)			Gas spring	Weight
	A	B	Ø C	pcs.	(lb)
MET 1150-100	18	14	4	0	10.8
MET 1350-100	22	18	4	0	11.9
MET 1650-100	30	22	4	1	13
MET 1900-100	40	22	4	1	14.1
MET 2100-100	40	30	4	2	15.2
MET 2650-100	52	40	4	2	16.3

PP	Size(inches)			Gas spring	Weight
	A	B	Ø C	pcs.	(lb)
MET 1150-100PP	18	14	4	0	10.8
MET 1350-100PP	22	18	4	0	11.9
MET 1650-100PP	30	22	4	1	13
MET 1900-100PP	40	22	4	1	14.1
MET 2100-100PP	40	30	4	2	15.2
MET 2650-100PP	52	40	4	2	16.3

ATEX	Size (inches)			Gas spring	Weight
	A	B	Ø C	pcs.	(lb)
MET 1150-100EX	18	14	4	0	10.8
MET 1350-100EX	22	18	4	0	11.9
MET 1650-100EX	30	22	4	1	13
MET 1900-100EX	40	22	4	1	14.1
MET 2100-100EX	40	30	4	2	15.2
MET 2650-100EX	52	40	4	2	16.3

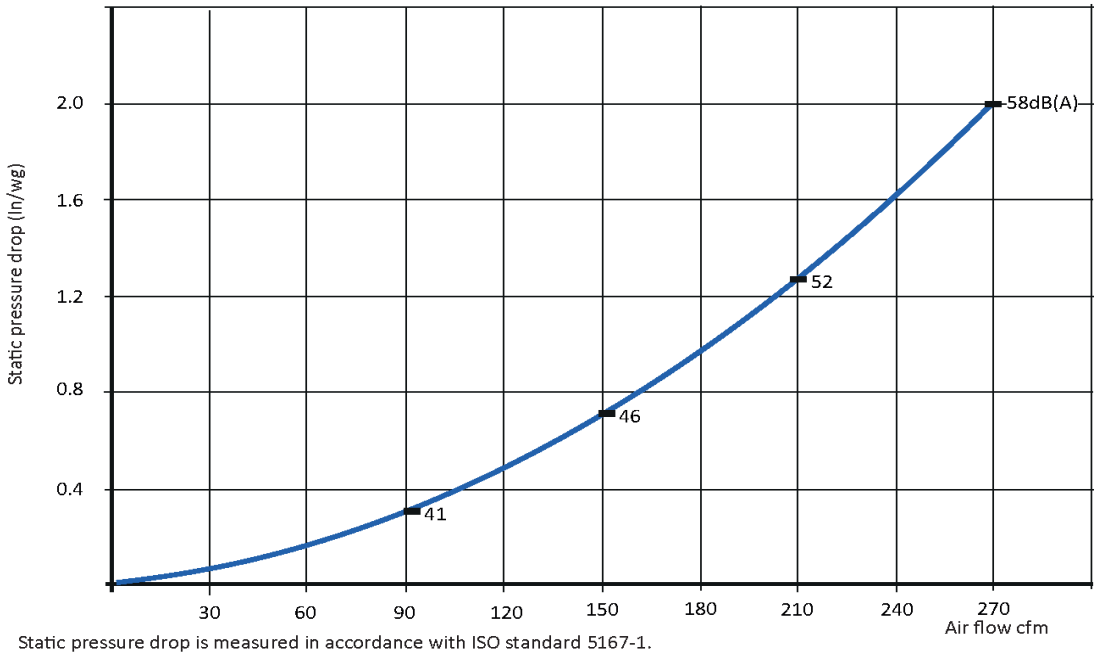
MET



Add MTI bracket for ceiling mounting.
Add MVK bracket for wall mounting.

	Total length of arm (inches)
ME 1150-100	46"
ME 1350-100	54"
ME 1650-100	66"
ME 1900-100	76"
ME 2100-100	84"
ME 2650-100	106"

Pressure drop



Static pressure drop is measured in accordance with ISO standard 5167-1.
Noise level is measured in accordance with ISO standard 3743.
Indicated sound level refers to sound pressure level.

MOVEX® ME 100

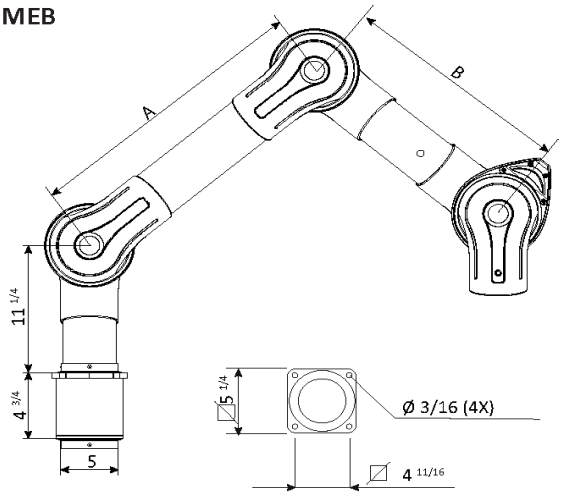
MEB for table mounting, 3 joints

Standard	Size (inches)			Gas spring	Weight
	A	B	Ø C	pcs.	(lb)
MEB 1150-100	18	14	4	0	10.8
MEB 1350-100	22	18	4	0	11.9
MEB 1650-100	30	22	4	1	13
MEB 1900-100	40	22	4	1	14.1

PP	Size (inches)			Gas spring	Weight
	A	B	Ø C	pcs.	(lb)
MEB 1150-100PP	18	14	4	0	10.8
MEB 1350-100PP	22	18	4	0	11.9
MEB 1650-100PP	30	22	4	1	13
MEB 1900-100PP	40	22	4	1	14.1

ATEX	Size (inches)			Gas spring	Weight
	A	B	Ø C	pcs.	(lb)
MEB 1150-100EX	18	14	4	0	10.8
MEB 1350-100EX	22	18	4	0	11.9
MEB 1650-100EX	30	22	4	1	13
MEB 1900-100EX	40	22	4	1	14.1

MEB



Reach at recommended installation height

The following installation heights and sideways displacement relative to the work area are recommended for optimal extraction:

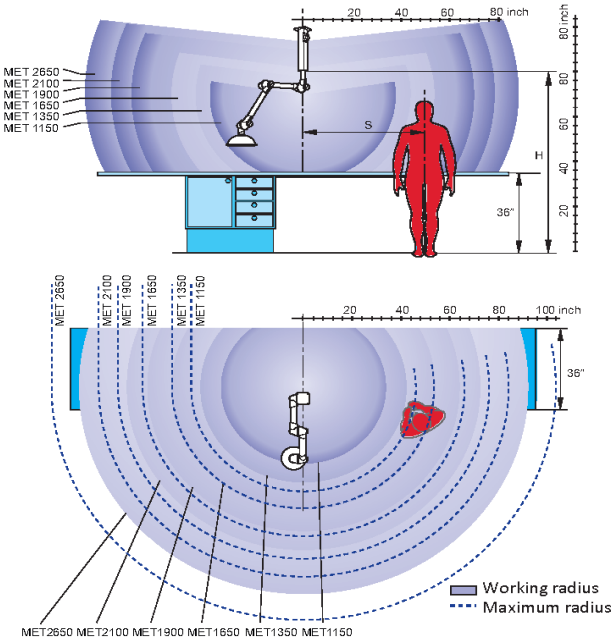
Recommended installation height

Designation	H (inches)
MET 1150-100	68-76
MET 1350-100	76-84
MET 1650-100	80-88
MET 1900-100	88-96
MET 2100-100	92-100
MET 2650-100	92-100

Recommended side displacement

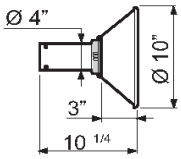
radius, relative to work area

Designation	S (inches)
MET 1150-100	12-24
MET 1350-100	16-28
MET 1650-100	20-32
MET 1900-100	28-32
MET 2100-100	28-36
MET 2650-100	52-36



MOVEX® ME 100

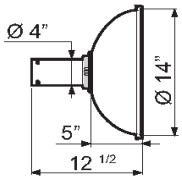
Hoods



METAL HOOD
The metal hood is used when working in corrosive environments and for capturing hot gasses and dust splatter.
Metal hoods can be fitted with work lighting.
Temp. range: -5°F to +176°F

Standard	Variants	Weight (oz)
MEM 251-100	PP, EX	18

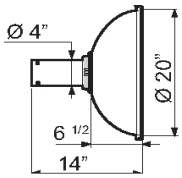
Material
Standard/PP: Powder-coated aluminum
EX Powder-coated aluminum



DOME HOOD
The clear dome hood is suitable for lighter gasses with a wider dispersal of contaminants without blocking the user's vision.
Temp. range: -5°F to +176°F

Standard	Variants	Weight (oz)
MEK 351-100	PP,EX	21.5

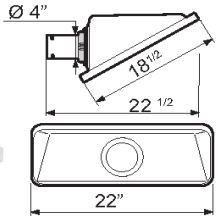
Material
Standard: PMMA
PP Polypropylene, transparent
EX PEEL black



DOME HOOD
The larger clear dome hood is also suitable for lighter gasses with an even wider dispersal of contaminants, still without blocking the user's vision.
Temp. range: -5°F to +176°F

Standard	Variants	Weight (oz)
MEK 500-100	PP,EX	26

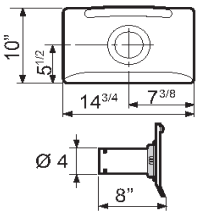
Material
Standard: PMMA
PP Polypropylene, transparent
EX PEEL black



SQUARE HOOD
The square hood is suitable for placing above gases with a high lift, or adjacent to the work surface for contaminants with no lift or low lift – all this without interfering with the work.
Temp. range: -5°F to +176°F

Standard	Variants	Weight (oz)
MESH 500-100		40

Material
Standard: PETG



FLAT SCREEN HOOD
The flat screen hood is designed to maximise the working area without obscuring the object from the user. The flat screen hood gives the best suction effect for table and bench tasks.
Temp. range: -5°F to +176°F

Standard	Variants	Weight (oz)
MEPH 375-100	PP,ES, EX	22

Material
Standard: PETG
PP Polypropylene
EX PEEL black

PROTECTIVE GRILL
The protective grill (mounted in the first joint) keeps objects out of the extractor.
Temp. range: -5°F to +176°F

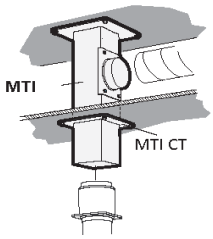
Standard	Variants	Weight (oz)
MSG-100	EX	0.40

MOVEX® ME 100

Brackets

All Movex laboratory extractors have as standard a full swivel that allows 360° of rotation without the need to add special sleeve couplings.

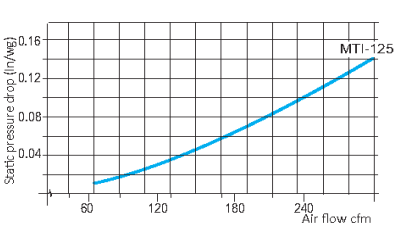
Both ceiling and wall brackets have a special square-shaped profile in anodized aluminum to provide a stylish and stable installation. This aluminum profile also allows both the wall and ceiling brackets to be custom tailored at the job site.

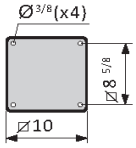


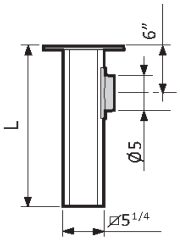
The MTI ceiling bracket

The ceiling bracket functions as a simple and stable duct for outgoing air, avoiding the need for expensive ducting and additional holes through false ceilings. **On request, the MTI can be supplied in lengths exceeding 80 inches.**

	Dimensions (inches)	Weight
Standard	L	(lb)
MTI 500-125	20	10.8
MTI 750-125	30	12.8
MTI 1000-125	40	14.8
MTI 1250-125	50	16.8
MTI 1500-125	60	18.8
MTI 1750-125	70	20.8
MTI 2000-125	80	22.8





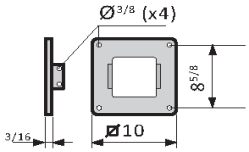


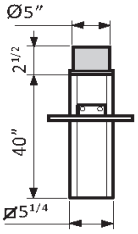
The MTF ceiling bracket

Ceiling bracket, for fitting through beams. The attachment plate is adjustable for the entire length of the aluminum profile. If required, the aluminum profile can be cut during fitting.

	Dimensions (inches)	Weight
Standard	L	(lb)
MTF-125	40	9.3

As well as the standard design, the MTI/MTF is available in an ATEX (EX) version.
The ceiling brackets can be supplied with an epoxy-coated exterior in all lengths.
For aggressive environments, we recommend epoxy coating on the interior and exterior.



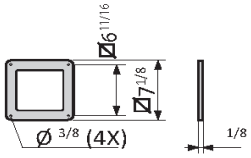


The MTI CT escutcheon plate

Escutcheon plate, used with the MTI ceiling brackets for stabilization and to cover the rough cut in the false ceiling.

	Weight
Standard	(oz)
MTI CT-125	4.4

As well as the standard design, the escutcheon plate is available in an ATEX (EX) version.

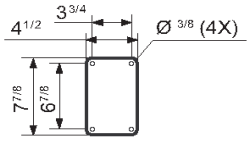


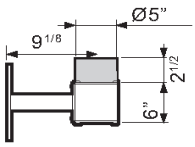
MVK wall bracket

Wall brackets can be special ordered in custom horizontal and vertical lengths.

	Weight
Standard	(lb)
MVK-125	3.4

As well as the standard design, the wall bracket is available in an ATEX (EX) version.





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Material description

Friction joints
Ball bearing-equipped adjustable friction joints in polypropylene (PP), with guide ring in low friction-treated rubber.Support springs and other component parts in zinc-plated steel or stainless steel.

Tubes
Made from thin-walled anodized aluminum or from polypropylene. Air-tight damper supplied as standard.

ME Standard
The standard ME version has polypropylene joints and anodized aluminum tubes.
The standard ME version is suitable for evacuating most types of airborne contaminants, e.g. in laboratories, schools, hospitals, the pharmaceutical industry, nail salons and light industrial applications.

ME PP
Polypropylene joints and tubes version. All metallic parts that are in contact with the air flow are made of stainless steel.
The PP version of the ME is used primarily for evacuating very corrosive contaminants in high concentrations, e.g. in certain laboratories and in the pharmaceutical and chemical industries. When using a PP extractor fitted to a ceiling, we recommend that you order the MTI ceiling bracket with an internal epoxy coating.

ME ATEX
Conductive polypropylene joints and tubes. All metallic parts that are in contact with the air flow are made of stainless steel. Static electricity is diverted to a separate grounded connection. All steel supporting parts are lined in a conductive powder coating. The product meets the requirements of category 2 of the ATEX directive (94/9/EC) for gases and dust.
The ATEX version of the ME is suitable for evacuating airborne contaminants where there is a requirement for ATEX-classified products, e.g. laboratories, the chemical and petrochemical industries, gas distribution, and the paint and pharmaceutical industries.

Delivery

Ceiling/ Wall MET	Supplied assembled, excluding hood. The ceiling or wall brackets should be ordered separately.
Table-MEB	Supplied assembled, with attachment plate for table fitting, excluding hood. The MBF flexible table bracket should be ordered separately.

MOVEX®
104 Commerce Drive, Northampton, PA 18067, USA
Phone: 610 440-0478, Fax: 610 440-0480
www.movexinc.com info@movexinc.com

DST 111 PrepArm Fan

cincinnati fan
OEM and Industrial Air Handling Specialist

Arrangement 4

SPB-9

PRESSURE BLOWER

SPECIFICATIONS FOR SPB SERIES

Wheels shall be 319 or 356T6 cast aluminum with integral cast hub and blades. Blower housing shall be 14 gauge stamped steel with round inlet and discharge for connection to hose or duct without using a transition piece. Blower housing to have a baked, powder coated, high gloss, black enamel finish inside and out.

Fan motor and fan bearing vibration levels shall not exceed 1.5 mils displacement at 3450 RPM. Shafts shall be turned, ground and polished steel (or stainless steel). All fan shafts shall receive a rust preventive coating prior to shipment.

Fan bearings shall be grease lubricated, heavy duty, self-aligning ball bearings mounted in cast iron pillow blocks. V-belt drives shall be selected for a minimum of 1.3 times nominal horsepower.

Fan construction shall be AMCA Type B spark-resistant if an aluminum ring is added around the fan/motor shaft.

SPARK-RESISTANT CONSTRUCTION

AMCA Type A: All parts in contact with airstream are of nonferrous material (See Model PB catalog).

AMCA Type B: Cast aluminum wheel and aluminum rubbing ring for motor or fan shaft. By adding aluminum rubbing ring to drive side of housing, the SPB Series is AMCA B spark-resistant. Maximum Temperature 400°F.

⚠ WARNING

The use of aluminum or aluminum alloys in the presence of steel which has been allowed to rust requires special consideration. Research by the U.S. Bureau of Mines and others has shown that aluminum impellers rubbing on rusty steel may cause high intensity sparking.

The use of the above construction in no way implies a guarantee of safety for any level of spark resistance. Spark-resistant construction also does not protect against ignition of explosive gases caused by catastrophic failure or from any airstream material that may be present in a system.

HIGH TEMPERATURE CONSTRUCTION

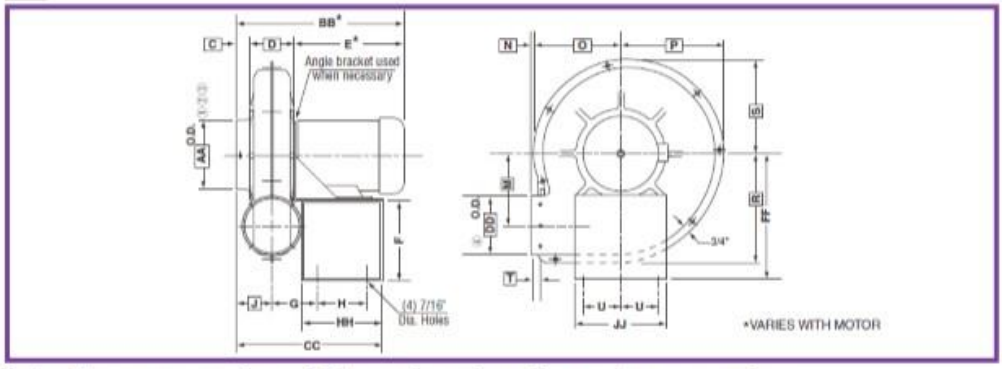
Arrangements 2, 4 and 4HM
Up To 150°F: Standard fan construction.
151° - 400°F: Standard fan with heat slinger, slinger guard and teflon shaft seal. External hub on wheel or a shaft extension may be required (except on Arr. 2). Wheel is either high temperature cast aluminum or fabricated steel. **If wheel is fabricated steel, BC type wheels are not available.**

DIMENSIONS and SPECIFICATIONS

NOTE: The table below contains blower housing dimensions common to all arrangements

MODEL	C	D	J	M	N	O	P	R	S	T	AA	DD ④
SPB-9	1 1/2	3 3/4	3 3/8	5 5/8	9/16	6 3/4	8	8 11/32	7 1/4	7/8	5①	3 15/16

Arrangement #4, Direct Drive



Note: For common boxed blower housing dimensions, see above.

DIMENSIONS IN INCHES ± 1/8"

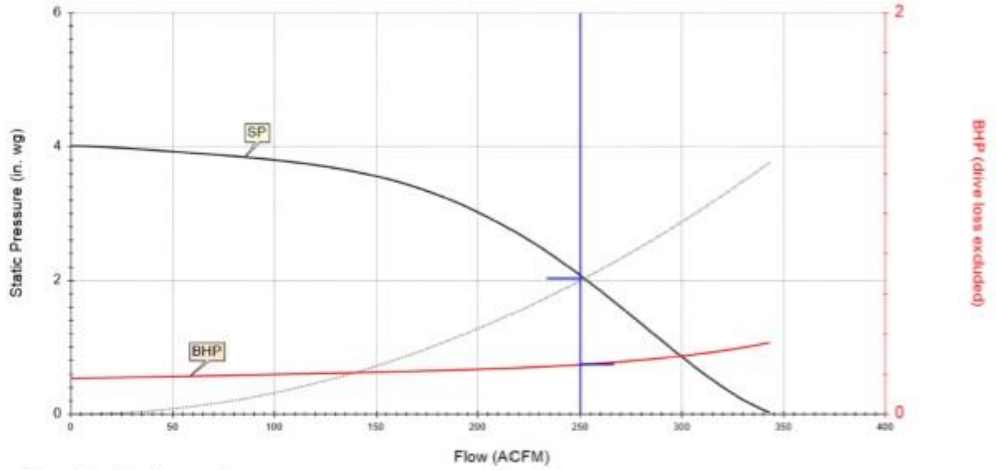
MODEL NO.	MOTOR FRAME	E*	F	G	H	U	BB*	CC	FF	HH	JJ
SPB-9	56	12 1/2	6 7/8	3 3/16	5 3/4	2 3/4	17 3/4	13 3/8	10 7/16	7 7/8	7
	143-145T	12	8 1/4	4	5	3 3/4	17 1/4	13 7/8	11 7/8	8	9

SPB SERIES DIRECT DRIVE RATING TABLES at 2850 RPM

CFM and BHP at Static Pressure Shown — Ratings at 70˚F., .075 Density, Sea Level

MODEL NO.	WHEEL DIA. & WIDTH	INLET SIZE	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
SPB-9	8 x 2¾	4"	228	.15	171	.13												
	8½ x 2¾	4"	250	.20	194	.19	99	.15										
	9 x 2⅞	4"	263	.23	212	.20	134	.16										
	8 x 2¾	5"	277	.17	199	.15												

Cincinnati Fan Model SPB-9 with 8 X 2-3/4 Radial Wheel (Full Width) @ 3,450 RPM
Rating Point: 250 ACFM @ 2.0 in. wg SP, 0.0745 lb./ft.³ Density, 0.25 BHP, 4.0 in. Inlet



Operating Requirements

Volume, ACFM	250
Static Pressure, in. wg	2.0
Density, lb./ft.³	0.0745
Operating Temperature, °F	70
AMCA Arrangement No.	4
Motor Frequency, Hz	60
Start-Up Temperature, °F	70

Fan Selection and Specifications

Model	SPB-9
Fan RPM	3,450
Suggested Motor RPM	3,450
Actual Flow, ACFM	252
Actual SP, in. wg	2.03
Percentage of Peak SP	50.6%
Wheel Description	8 X 2-3/4 Radial
Wheel Width, %	100%
Wheel Diameter, in.	8.00
Number of Blades	6
WR², lb. - ft.²	.1
Tip Speed, ft./min.	7,226
Inlet Diameter, in.	4.00
Inlet Area, ft.²	0.09
Outlet Dimensions	3.9375 in. dia.
Outlet Area, ft.²	0.08
Outlet Velocity, ft./min.	2,979
Fan BHP	0.25
Suggested Motor HP	0.33
Static Efficiency, %	32.4%
Cold Start BHP	0.25
Construction Class	N/A
Maximum Wheel RPM	0
Maximum Shaft RPM	N/A

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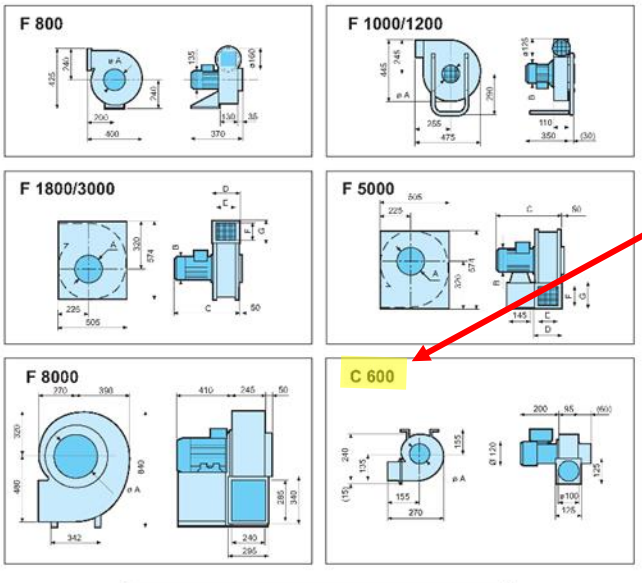
Fans

F 800, 1000, 1200, 1800, 3000, 5000, 8000, C 600



Designation	Measurement						
	A	B	C	D	E	F	G
F 800	Ø160	-	-	-	-	-	-
F 1000	Ø160	Ø135	-	-	-	-	-
F 1200	Ø160	Ø150	-	-	-	-	-
F 1800	Ø160	Ø160	340	160	110	140	165
F 3000	Ø200	Ø180	490	190	140	140	165
F 5000	Ø315	Ø230	610	290	240	195	220
F 8000	Ø315	-	-	-	-	-	-
C 600	Ø100	-	-	-	-	-	-

FUMEX

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***DST 112 PrepArm Fan**

FANS

F 800, F 1000
F 1200, F 1800
F 3000, F 5000
F8000
C 600

FUMEX fans are designed to operate reliably in polluted air (e.g. welding fumes, exhaust fumes etc.) with no deterioration in performance. The self-cleaning impellers reduce the risk for any out-of balance condition.

The impeller design which uses straight blades in cast aluminium alloy gives spark-free performance. This does not apply to fan type C600.

The exhaust direction is easily changed by adjusting the mounting bracket or the fan casing.

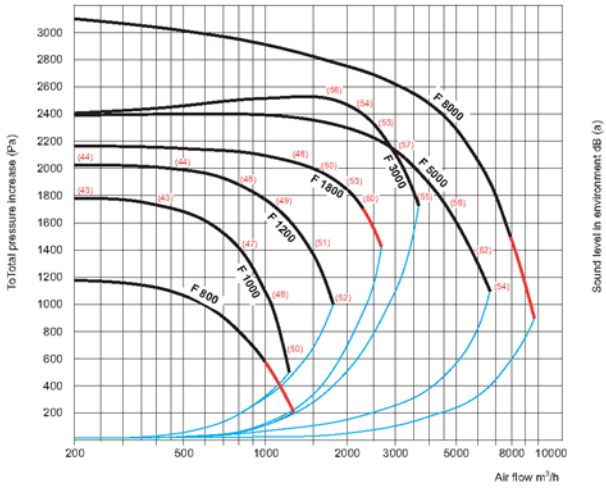
The fan is mounted in a powder-coated sheet steel housing which is rated for indoor or outdoor use.

Fumex also offers a range of local extractors, accessories ,automatic control devices and filters for our fans.

FUMEX
LOCAL EXTRACTOR
Pure advantage

PERFORMANCE

Sound data in brackets



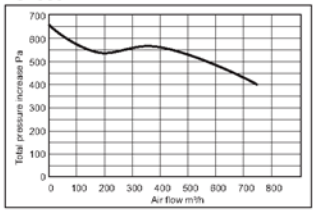
Total pressure
Critical area
Dynamic pressure

Sound level in the environment, dB (A)

( )= At free range and a distance of 10 m from the fan.

For sound to duct, see separate computer sheet.

C 600



Designation	No of revs	Rated power	Rated current		Voltage	Weight
			A	A		
	rpm	kW	1 -phase 230 V	3 -phase 230 V 400 V	V	Kg
F 800 -3	2800	0.37		1.68 0.97	230/400	11
F 800 -1	2800	0.37	2.75		230	12
F 1000 -3	2800	0.55		2.3 1.33	230/400	11
F 1000 -1	2800	0.55	3.6		230	13
F 1200 -3	2800	0.75		3.11 1.8	230/400	15
F 1200 -1	2800	0.75	5.1		230	17
F 1800 -3	2800	1.1		4.1 2.37	230/400	24
F 1800 -1	2800	1.1	7.3		230	25
F 3000	2800	2.2		7.9 4.6	230/400	32
F 5000	2800	4.0		13.5 7.8	400/690	52
F 8000	2800	7.5		23.9 13.8	400/690	85
C 600 3	2800	0.25		1.2 0.7	230/400	7
C 600 1	2770	0.25	2.0		230	6

FANS F

Fan casing

Made of powder coated sheet steel.

Impellers

T-impellers made of cast aluminium alloy.

Motor

3-phase or single phase asynchronous motors. Housing rated IP 55. Insulation class B up to 1.1 kW, class above 1.1 kW. class F.
Versions available on request include other voltages, two-speed and explosion proof.

Accessories

IThe FUMEX range also includes contactors and manually operated protective motor switches.
Where variable fan speeds are required, use the FUMEX electronic controller SFC, which may be combined with the pressure regulator ST 300 to optimise fan performance. See sales sheet Control Units.

Other information

Fans F-1000 and F-1200 are supplied complete with mounting brackets. Other versions have integrated mounting fittings.
FUMEX may also supply larger fans on request. Our range includes e.g. polypropene fans.
See separate sales sheet Plastic fans.

FANS C

Fan casing

Made of powder coated sheet steel.

Impellers

F-impellers made of steel plate coated with zinc.

Motor

3-phase or single phase asynchronous motors. Housing rated IP 54. Insulation Class B.

Accessories

The FUMEX range also includes contactors and manually operated protective motor switches.
Where variable fan speeds are required, use the FUMEX electronic controller SFC, which may be combined with the pressure regulator ST 300 to optimise fan performance. See sales sheet Control Units.

SMB

SMB PROTECTIVE MOTOR SWITCH

The SMB is a 3-pole protective motor switch with thermal-magnetic release and equipped with phase failure protection. The SMB is designed for control and protection of fan motors.

Dimensions $3^{11/16}$ x $5^{13/16}$ x $3^{5/16}$ inches
Enclosure class IP 55

Product	Current range (A)	3-phase ~460 V (HP)
SMB 10*	0,63-1,0	0,37
SMB 16*	1,0-1,6	0,5/0,75
SMB 25*	1,6-2,5	1
SMB 40*	2,5-4,0	1,5/2,0
SMB 63*	4,0-6,3	3,0
SMB 100*	6,0-10,0	5,5
SMB 140**	9,0-14,0	7,5
SMB 180**	13,0-18,0	10

* Self-protecting, pre-fusing not required
** Max. pre-fusing when Ik>Icu is 63 A.

***DST 111 PrepArm Fan**

SMB

SMB PROTECTIVE MOTOR SWITCH

The SMB is a 3-pole protective motor switch with thermal-magnetic release and equipped with phase failure protection. The SMB is designed for control and protection of fan motors.

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SMB 40*	2,5-4,0	1,5/2,0
SMB 63*	4,0-6,3	3,0
SMB 100*	6,0-10,0	5,5
SMB 140**	9,0-14,0	7,5
SMB 180**	13,0-18,0	10

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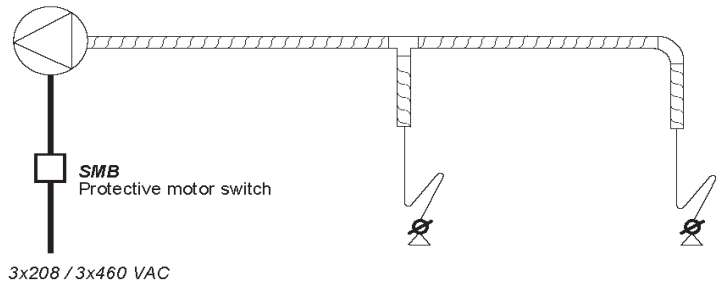
***DST 112 PrepArm Fan**

Start and stop of fans, with or without speed control

System 1:1
Manual start and stop of fan

The fan is manually started and stopped with a protective motor switch SMB.

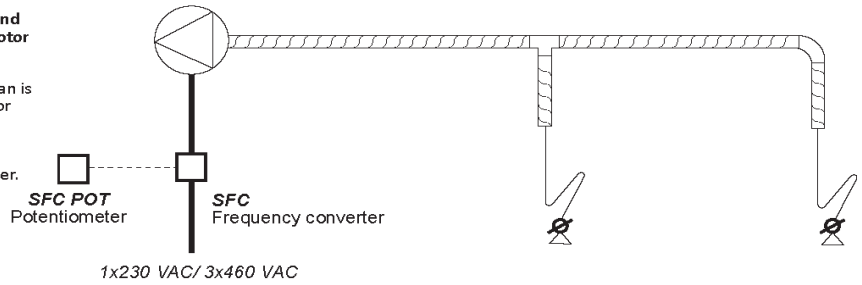
The protective motor switch has a thermal-magnetic release and phase failure protection.



System 1:2
Manual speed control of fan is started and stopped with external signal 3-phase motor only

The signal for starting and stopping the fan is produced with an external signal from, for example, a central monitoring system.

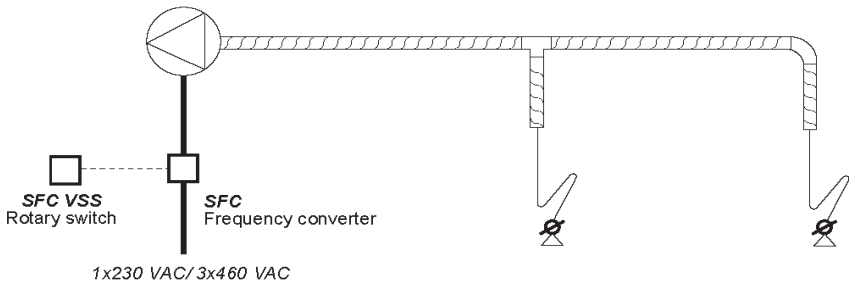
The fan's speed is regulated manually as necessary with the SFC POT potentiometer.



System 1:3
Manual start and stop of fan with two speeds 3-phase motor only

The fan is manually started and stopped with the SFC VSS rotary switch.

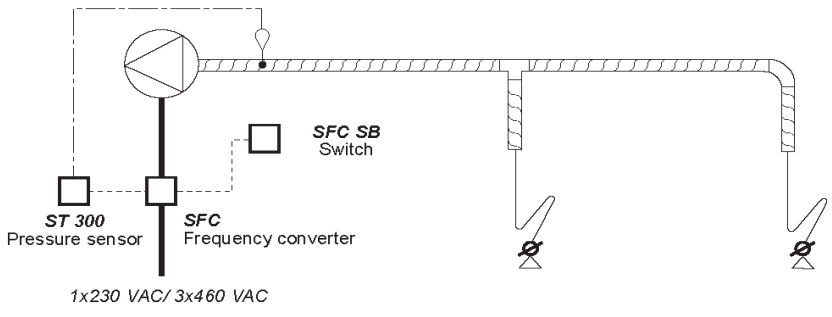
With the rotary switch, the fan speed can be regulated between two preset speeds that are programmed on the frequency converter display.



System 1:4
Manual start and stop of fan and need-adapted control of fan speed 3-phase motor only

The fan is manually started and stopped with the SFC SB switch.

The frequency converter maintains a constant negative pressure in the main duct via the pressure sensor.



1x230/ 3x208 / 3X460 VAC
Signal cable
Hose