

SOUND ABSORBING FAN

SAF-3 | SAF-5 | SAF-7 | SAF-9

SAF fans are TEV fans*) that are built in an additional sound absorbing box with inspection cover. It concerns central extraction fans that are equipped with a lightweight aluminum impeller. This makes them suitable to exhaust gases, volatile fumes and dust.

Matched inlet and outlet areas, together with optimized impellers, ensure an even airflow, a high extraction capacity and a low noise level.

SAF fans are mechanically isolated by used of vibration dampers and flexible sleeves. The fans are designed with a slanted top cover and materials that can withstand most weather types, making them highly suitable for both indoor and outdoor use.

*) Refer to separate product data sheet

APPLICATIONS

The Sound Absorbing Fan is intended to be used for the following applications:

- MIG-MAG/GMAW welding
- TIG welding
- FCAW welding
- Stick/MMAW welding
- Stainless steel welding
- Grinding
- Polishing
- Finishing
- To eliminate hazardous vehicle exhaust emissions with our vehicle exhaust capture and removal systems for the following segments: fire and emergency service stations as well as military facilities.

SPECIFICATIONS

(also refer to the table on page 2 and the charts on page 3)

Physical dimensions and properties	
Material (fan + housing)	powder coated galvanized sheet metal
Colour:	
• housing	grey (RAL 7011)
• fan	grey (RAL 7011)
• motor	black (RAL 9005)
Performance	
Fan type	radial
Speed of revolutions	2800 rpm
Noise reduction of sound absorbing box ¹	approx. 10 dB(A)
Design conditions	20°C (41°F) at sea level
Electrical data	
Efficiency level	IE3
Insulation class	F with PTC
Protection class:	
• motor	• IP 33
• housing	• IP 55
Max. start/stops per hour	30

¹ With additional duct silencer



Ambient conditions	
Process temperature:	
• min.	• -20°C (-4°F) *)
• nom.	• +20°C (41°F)
• max.	• +80°C (176°F)
*) SAF fans can operate in temperatures below -20°C (-4°F) if you connect it to a Plymovent VFD (frequency inverter). Contact your Plymovent distributor for more information.	
Max. relative humidity	rain resistant
Suitable for outdoor use	yes
Storage conditions	• 5-45°C (41-113°F) • relative humidity max. 80%
Product combinations	
Welding fume extraction systems with filter unit	
Welding fume extraction systems without filter unit	
Vehicle exhaust systems	
Control equipment	
Options and accessories (recommended)	
Duct silencer	SAS range; refer to the table on page 2
Scope of supply	
Extraction fan in sound absorbing box Cable gland (2) Square key 8 mm	
Logistics data	
Harmonized Tariff Code	84145925
Max. number/pallet	1

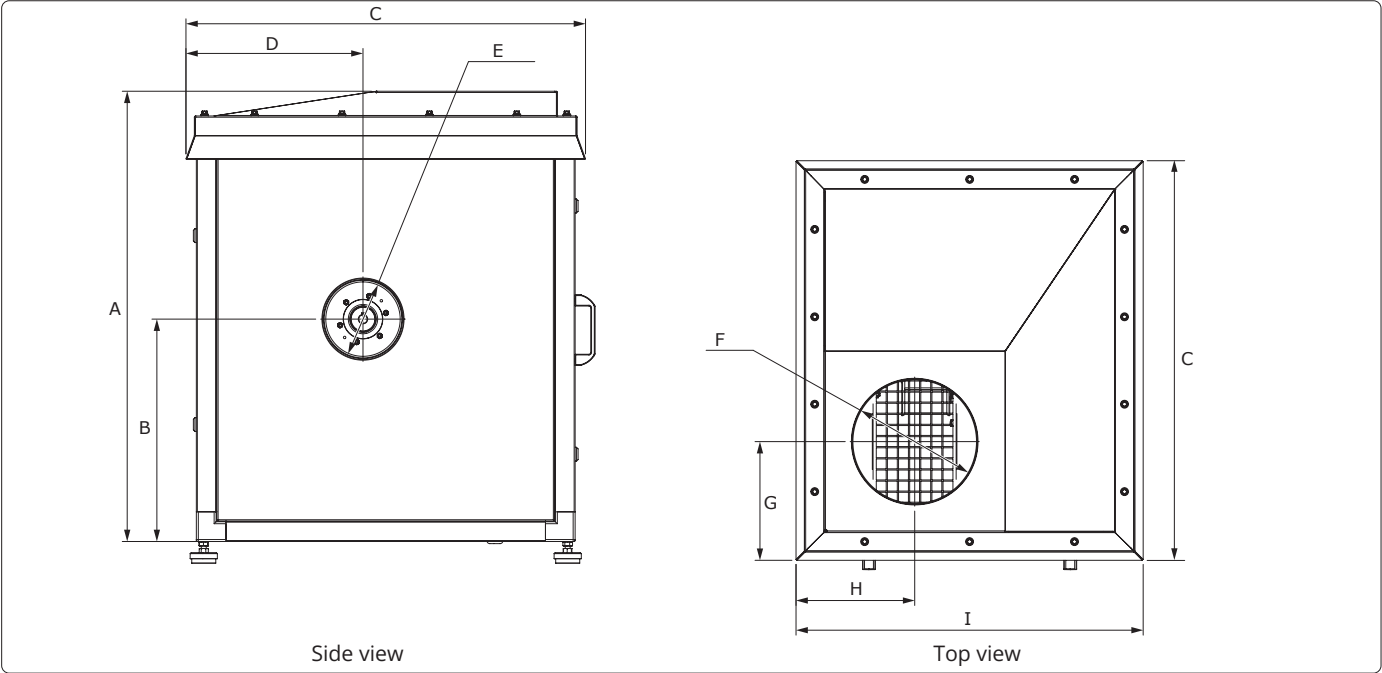
APPROVALS/CERTIFICATES

CE UK CA	Compliance with CE & UKCA directives
RoHS	Directive 2011/65/EC (RoHS) valid as of 8 June 2011
SA	Certified motor

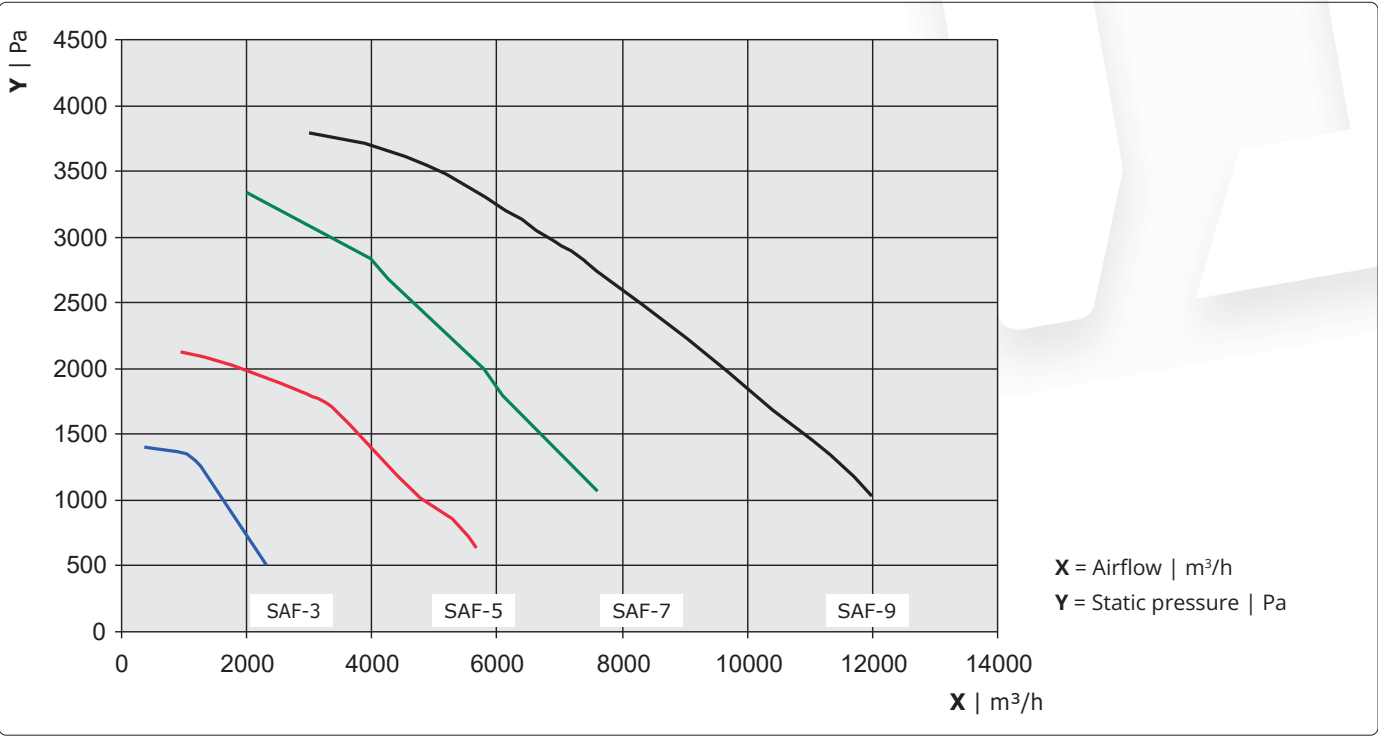
REMAINING SPECIFICATIONS

Type	SAF-3		SAF-5		SAF-7		SAF-9	
Article no.	0000302729		0000302730		0000302731		0000302732	
■ Physical dimensions and properties								
Dimensions (ref. images below)	mm	inch	mm	inch	mm	inch	mm	inch
A	911	35⅞	1092	43	1277	50¼	1389	54⅞
B	450	17¾	539	21¼	698	27½	716	28¼
C	808	31¾	988	38⅞	1192	46⅞	1338	52⅞
D	358	14⅞	401	15¾	493	19⅞	538	21⅞
E	Ø 160	Ø 6¼	Ø 200	Ø 7⅞	Ø 250	Ø 9⅞	Ø 315	Ø 12⅞
F	Ø 250	Ø 9⅞	Ø 315	Ø 12⅞	Ø 400	Ø 15¾	Ø 500	Ø 19⅞
G	240	9½	312,5	12¼	362,5	14¼	417,5	16⅜
H	240	9½	312,5	12¼	362,5	14¼	417,5	16⅜
I	702	27⅞	854	33⅞	961	37⅞	1071	42⅞
Weight (net)	111 kg (245 lbs)		165 kg (364 lbs)		239 kg (527 lbs)		311 kg (686 lbs)	
■ Performance								
Noise level *)**)	60 dB(A)		64 dB(A)		63 dB(A)		71 dB(A)	
■ Electrical data								
Connection voltage	230-400V/3~/50Hz		230-400V/3~/50Hz		230-400V/3~/50Hz		400-690V/3~/50Hz	
Power	0,75 kW		2,2 kW		4 kW		7,5 kW	
Nominal current								
230 V	3,02 A		7,98 A		13,32 A		-	
400 V	1,7 A		4,61 A		7,69 A		14,1 A	
690 V	-		-		-		8,2 A	
■ Options and accessories								
Duct silencer (recommended)	• SAS-250 straight • SAS-250 elbow		• SAS-315 straight • SAS-315 elbow		• SAS-400 straight • SAS-400 elbow		• SAS-500 straight • SAS-500 elbow	
■ Logistics data								
Gross weight (incl. pallet)	126 kg (278 lbs)		180 kg (397 lbs)		259 kg (571 lbs)		331 kg (730 lbs)	
Packing dimensions (incl. pallet)	750 x 850 x 1140 mm (29½ x 33½ x 45 in.)		1000 x 1200 x 1340 mm (39½ x 47 x 53 in.)		1300 x 1600 x 1600 mm (51 x 63 x 63 in.)		1300 x 1600 x 1670 mm (51 x 63 x 65½ in.)	
*) According to ISO 3746 **) Noise level data of SAF fans with additional duct silencer								

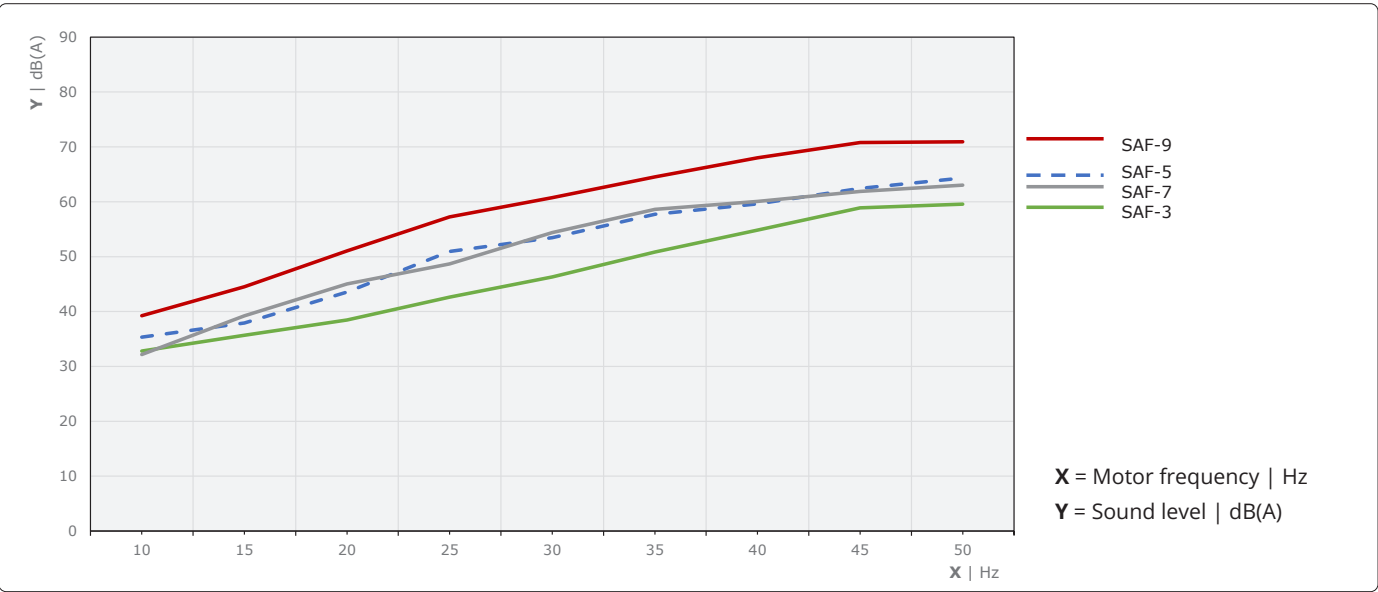
DIMENSIONS (ref. table above)



FAN CURVES



NOISE LEVEL



Test data based on SAF fans with additional duct silencer. Plymovent highly recommends the use of a duct silencer. Tested according to ISO 1996, ISO 3744 and ISO 3746 at 1 meter distance.

Disclaimer

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Do **not** use the product in combination with a filter for the following applications or in the following circumstances: polishing applications in combination with grinding, welding or any other application that generate sparks (fibres from polishing or abrasive flap disks are highly flammable and pose a high risk of filter fires when exposed to sparks) | aluminium laser cutting | oil mist | heavy oil mist in welding fume | arc-air gouging | extraction of aggressive fumes and gases (e.g. from acids, from alkaline, from soldering paste containing lithium) | extraction of hot gases (more than 70°C/158°F continuously) | grinding aluminum and magnesium | flame spraying | extraction of cement, saw dust, wood dust etc. | sucking cigarettes, cigars, oiled tissues and other burning particles, objects and acids | explosive environments or explosive substances/gases

Product

Sound Absorbing Fan

Article no.

Refer to remaining specifications (p. 2)

Product category

Fans

Version

E

Always check the latest version on www.plymovent.com