

## 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 aluminium 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 designed with 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 <sup>1</sup>	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

<sup>1</sup> 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

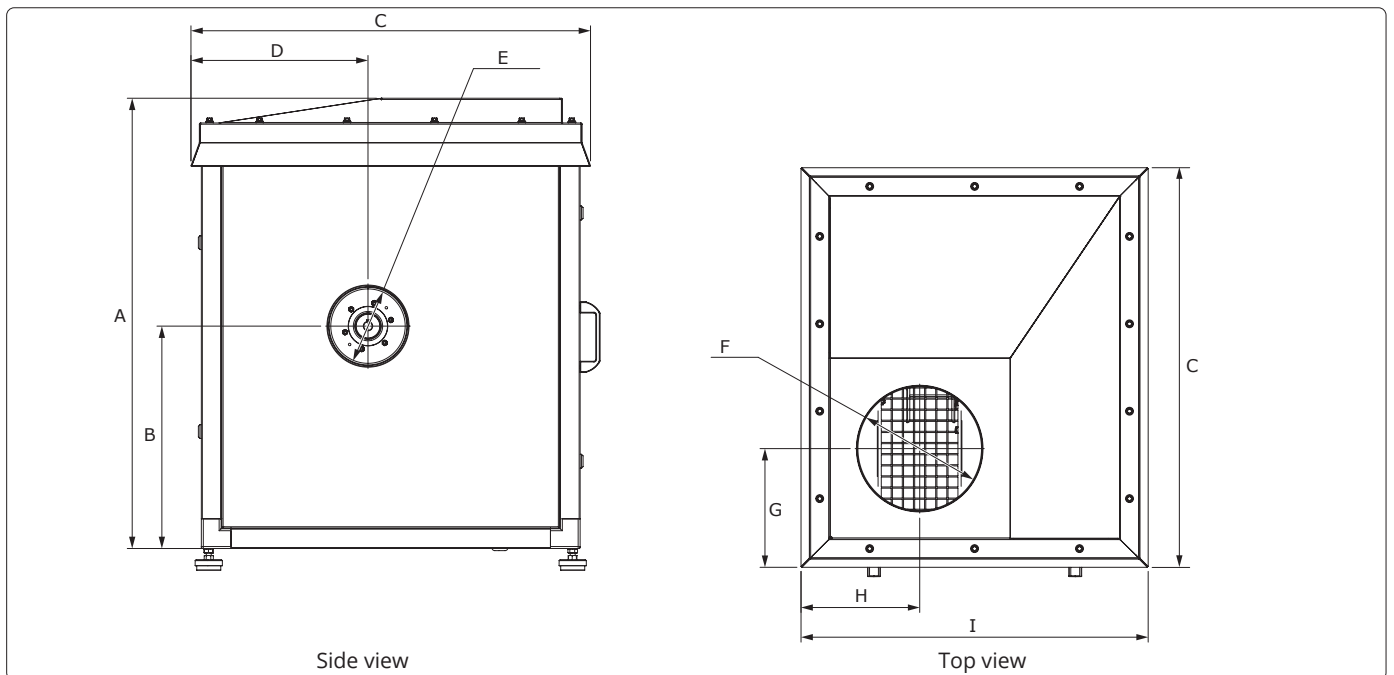
### APPROVALS/CERTIFICATES

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

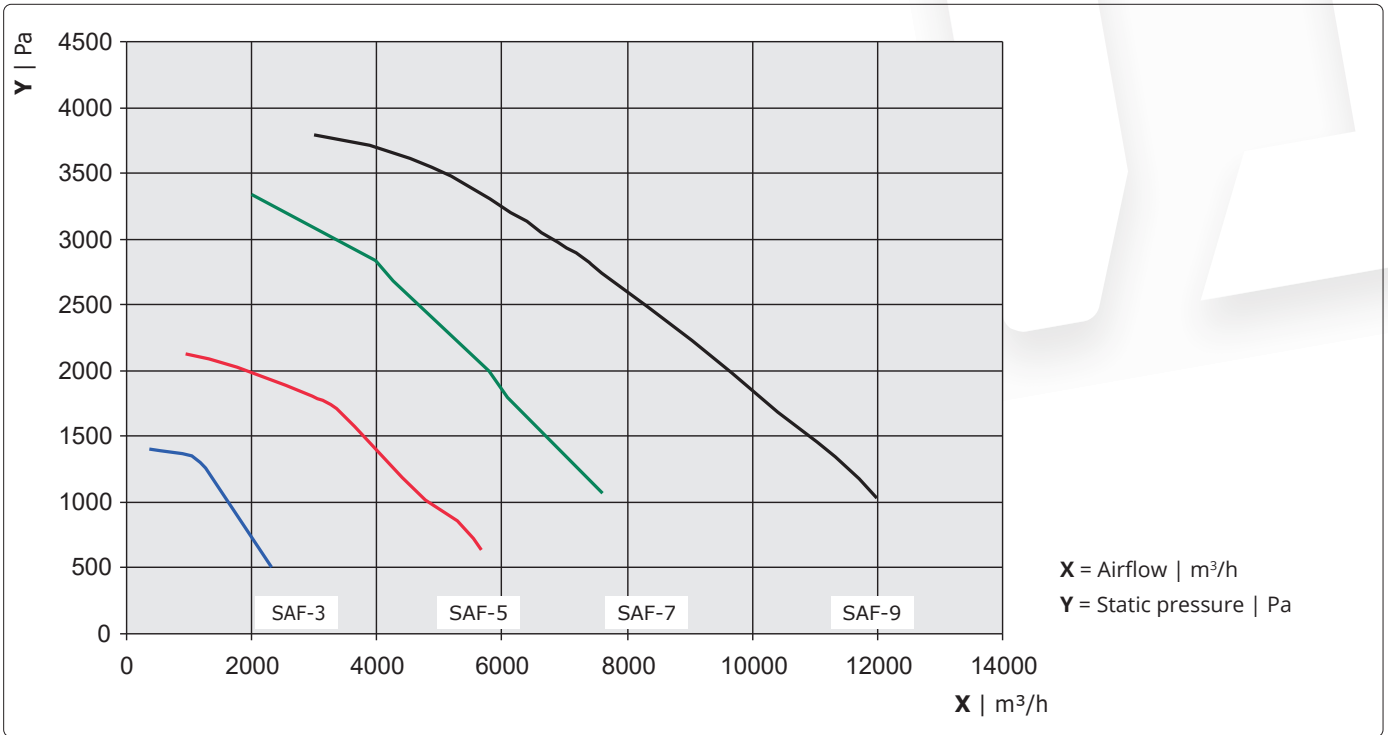
## REMAINING SPECIFICATIONS

Type	SAF-3	SAF-5	SAF-7	SAF-9				
Article no.	0000302729	0000302730	0000302731	0000302732				
<b>Physical dimensions and properties</b>								
Dimensions (ref. images below)	mm	inch	mm	inch	mm	inch	mm	inch
A	911	35 $\frac{3}{8}$	1092	43	1277	50 $\frac{1}{4}$	1389	54 $\frac{3}{8}$
B	450	17 $\frac{3}{4}$	539	21 $\frac{1}{4}$	698	27 $\frac{1}{2}$	716	28 $\frac{1}{4}$
C	808	31 $\frac{3}{4}$	988	38 $\frac{3}{8}$	1192	46 $\frac{3}{8}$	1338	52 $\frac{3}{8}$
D	358	14 $\frac{1}{8}$	401	15 $\frac{3}{4}$	493	19 $\frac{3}{8}$	538	21 $\frac{1}{8}$
E	Ø 160	Ø 6 $\frac{1}{4}$	Ø 200	Ø 7 $\frac{7}{8}$	Ø 250	Ø 9 $\frac{7}{8}$	Ø 315	Ø 12 $\frac{3}{8}$
F	Ø 250	Ø 9 $\frac{7}{8}$	Ø 315	Ø 12 $\frac{3}{8}$	Ø 400	Ø 15 $\frac{3}{4}$	Ø 500	Ø 19 $\frac{3}{8}$
G	240	9 $\frac{1}{2}$	312,5	12 $\frac{1}{4}$	362,5	14 $\frac{1}{4}$	417,5	16 $\frac{3}{8}$
H	240	9 $\frac{1}{2}$	312,5	12 $\frac{1}{4}$	362,5	14 $\frac{1}{4}$	417,5	16 $\frac{3}{8}$
I	702	27 $\frac{3}{8}$	854	33 $\frac{3}{8}$	961	37 $\frac{3}{8}$	1071	42 $\frac{1}{8}$
Weight (net)	111 kg (245 lbs)	165 kg (364 lbs)	239 kg (527 lbs)	311 kg (686 lbs)				
<b>Performance</b>								
Noise level <sup>*)**)</sup>	60 dB(A)	64 dB(A)	63 dB(A)	71 dB(A)				
<b>Electrical data</b>								
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				
<b>Options and accessories</b>								
Duct silencer (recommended)	<ul style="list-style-type: none"> <li>• SAS-250 straight</li> <li>• SAS-250 elbow</li> </ul>	<ul style="list-style-type: none"> <li>• SAS-315 straight</li> <li>• SAS-315 elbow</li> </ul>	<ul style="list-style-type: none"> <li>• SAS-400 straight</li> <li>• SAS-400 elbow</li> </ul>	<ul style="list-style-type: none"> <li>• SAS-500 straight</li> <li>• SAS-500 elbow</li> </ul>				
<b>Logistics data</b>								
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 (29 $\frac{1}{2}$ x 33 $\frac{1}{2}$ x 45 in.)	1000 x 1200 x 1340 mm (39 $\frac{1}{2}$ 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 65 $\frac{1}{2}$ in.)				
*) According to ISO 3746   **) Noise level data of SAF fans with additional duct silencer								

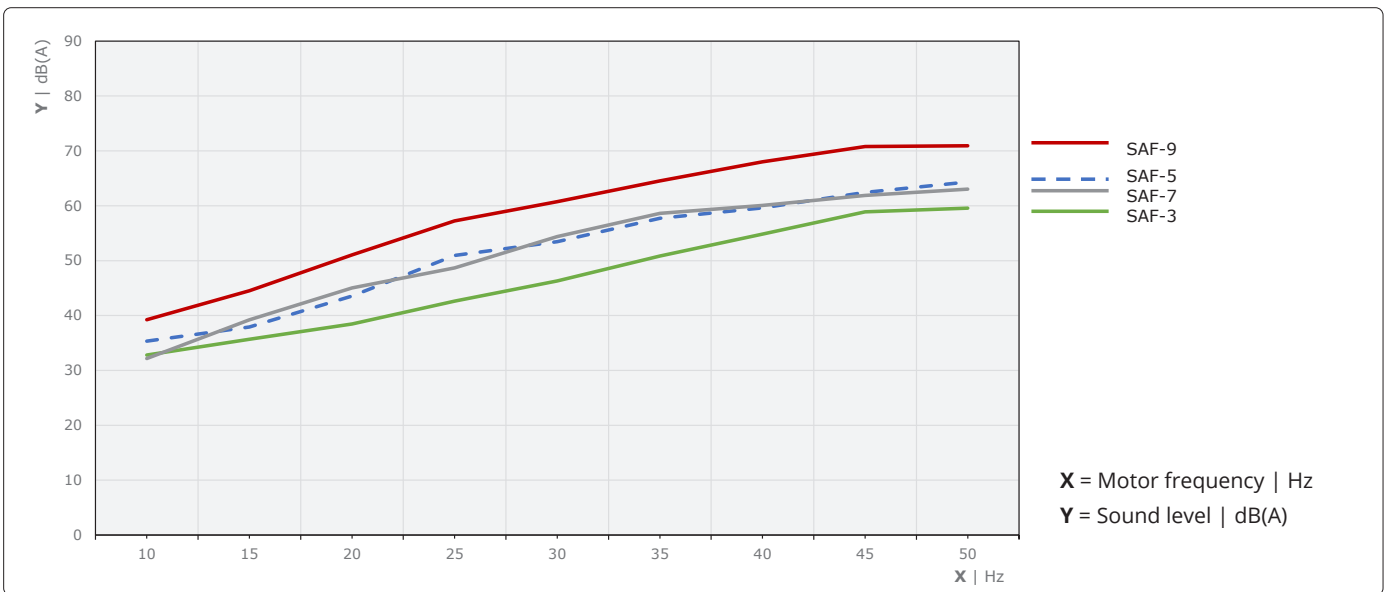
## DIMENSIONS (ref. table above)



FAN CURVES



NOISE LEVEL



Test data based on SAF fans with additional duct silencer. Plymovent highly recommends the use of a duct silencer.

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	C
Always check the latest version on <a href="http://www.plymovent.com">www.plymovent.com</a>	