

SD-45

Versatile saddle shaped nozzles with high infiltration depth



QUICK FACTS

- Patented diffuser with saddle shaped nozzles for high air flows with low sound power values
- Single nozzle adjusts up to 20° and is available in a modular design
- Versatile use as a long-throw nozzle, separator jet, shielding element, or in custom applications

Nr. of nozzles	SD-45											
	L _{PA} = 30 dB			L _{PA} = 35 dB			L _{PA} = 40 dB			L _{PA} = 45 dB		
	V	Δ p	L _{0.5}	V	Δ p	L _{0.5}	V	Δ p	L _{0.5}	V	Δ p	L _{0.5}
	(m ³ /h)	(Pa)	(m)	(m ³ /h)	(Pa)	(m)	(m ³ /h)	(Pa)	(m)	(m ³ /h)	(Pa)	(m)
1	71	82	5.8	83	109	6.8	98	147	8	115	197	9.4
2	128	68	6.6	151	92	7.8	178	124	9.1	209	165	10.7
3	181	61	7.7	214	82	9.1	251	110	10.7	296	148	12.6
4	233	56	8.0	273	76	9.4	322	102	11.1	379	137	13.0
5	281	55	8.4	331	74	9.9	390	100	11.6	459	134	13.6
6	329	51	8.8	387	69	10.4	456	92	12.2	537	124	14.3

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Technical description

Design

The patented SD-45 saddle nozzle is designed for applications requiring high air infiltration or effective air shielding of sensitive areas. Its air flow pattern resembles that of a separator jet system. The nozzle enables highly concentrated air discharge at high air flow rates while maintaining exceptionally low sound power levels.



Functionality

The single nozzle can be adjusted up to 20°, allowing precise directional air flow adjustment. It is also available in a modular design for applications requiring adaptable configurations.

The diffuser supports a wide range of uses, such as long-throw air distribution, as a separator jet system, air flow shielding, and various custom solutions.

Material and surface treatment

Saddle nozzle

- Made of impact-resistant plastic (PPGF20: 20% glass fibre reinforced polypropylene).
- Standard colour:
 - RAL 9005, jet black

Frame

- Made of aluminium.
- Standard colour:
 - Natural anodized
- Alternative standard colours:
 - RAL 9010, pure white, gloss 70
 - RAL 9003, signal white, gloss 70
 - RAL 9006, white aluminium, gloss 70
 - RAL 9005, jet black, gloss 70
 - RAL 7035, light grey, gloss 70

Adaptation

- Other colours available on request.

Accessories

Air flow adjustment kit

Air flow adjustment kit, made of galvanised steel.

Adapter for duct installation

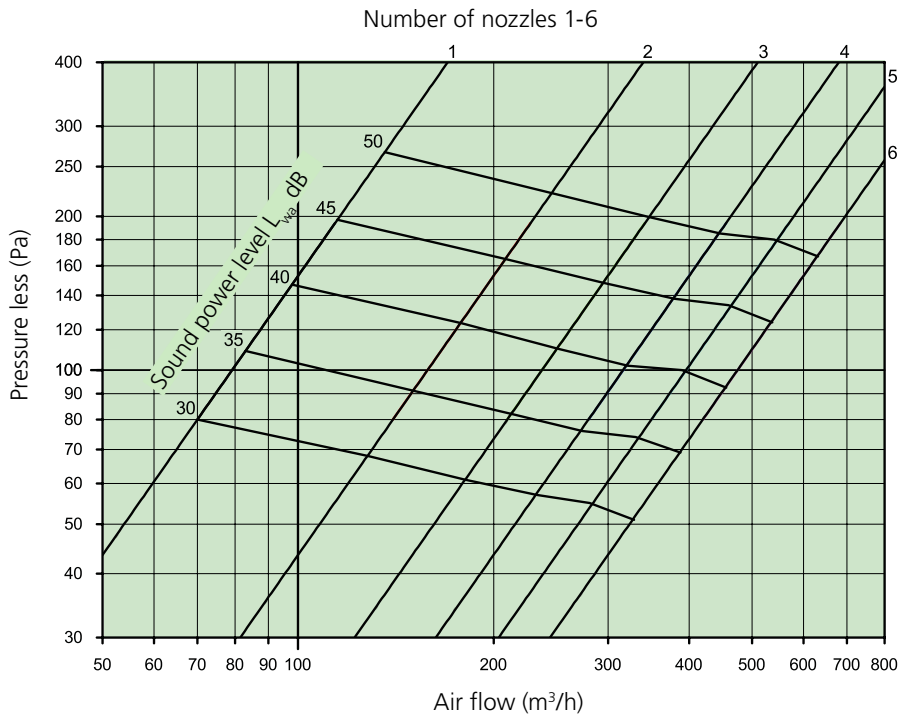
Adapter for duct installation, made of galvanised steel.

Adapter for circular ducts

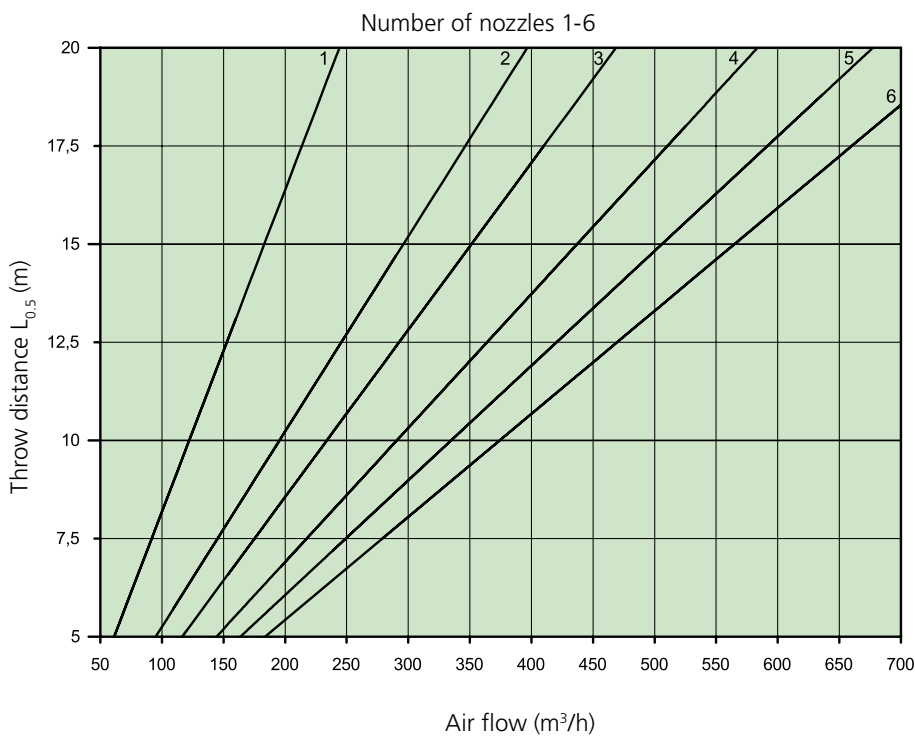
Adapter for circular ducts, made of galvanised steel.

Technical data

Sizing diagram



SD-45 number of nozzles 1-6, throw distance $L_{0,5}$ (m)



Air discharge

Figure 1.
Air flow: 110 m³/h
Number of nozzles: 1
Horizontal air discharge



Figure 2.
Air flow: 110 m³/h
Number of nozzles: 2
Horizontal air discharge



Figure 3.
Air flow: 110 m³/h
Number of nozzles: 3
Horizontal air discharge



Figure 4.
Air flow: 110 m³/h
Number of nozzles: 4
Horizontal air discharge

Dimensions

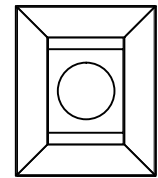
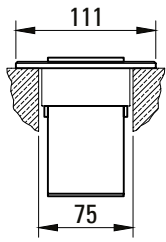


Figure 5. Diffuser with one nozzle and frame (mm).

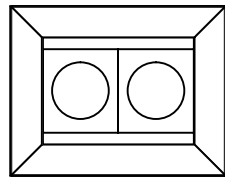
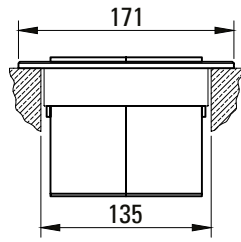


Figure 6. Diffuser with two nozzles and frame (mm).

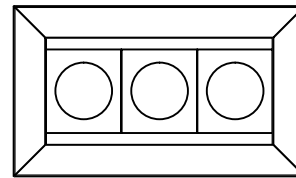
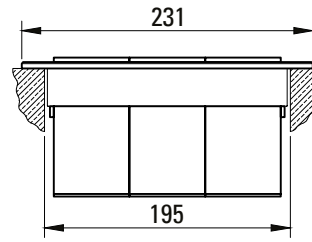


Figure 7. Diffuser with three nozzles and frame (mm).

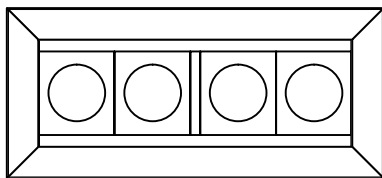
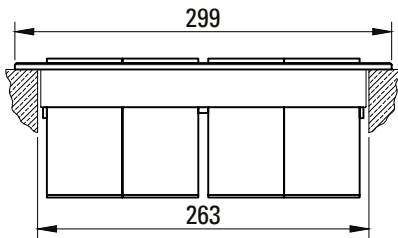


Figure 8. Diffuser with four nozzles and frame (mm).

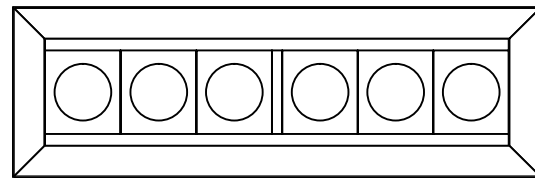
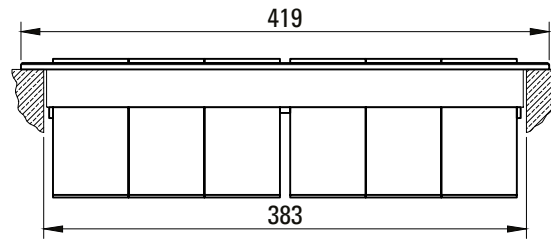


Figure 9. Diffuser with six nozzles and frame (mm).

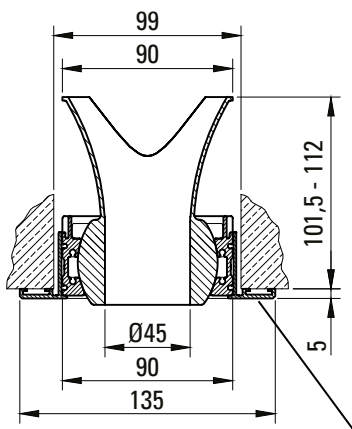


Figure 10. Installation with frame, optional (mm).

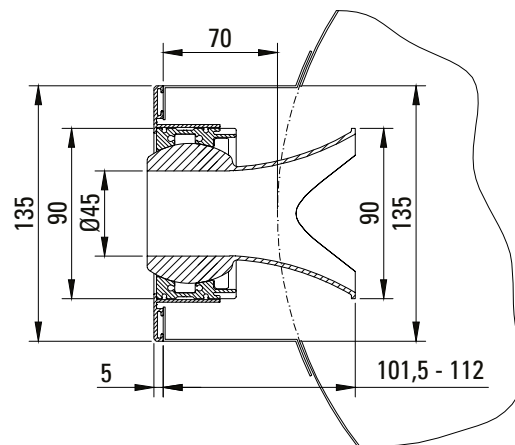


Figure 11. Installation with duct adapter (mm). The duct diameter must be specified when ordering.

Adjustable distribution pattern

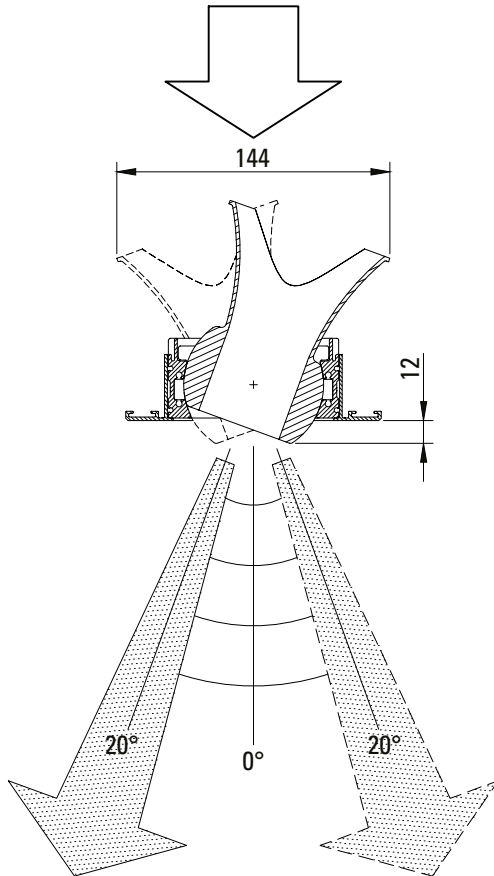


Figure 12. Nozzle adjustable up to 20°.

Specification

For ordering, contact your local Swegon sales office.

Specification text

Patented saddle nozzle SD-45 designed for applications requiring high air infiltration with the following features:

- Enables highly concentrated air discharge at high air flow rates with very low sound power values.
- The single nozzle can be adjusted up to 20°.
- Nozzles made of impact-resistant plastic, painted black.
- Installation frame in aluminium, non-painted.
- Special colours available on request.