

NS8

SWIRL DIFFUSER WITH MOVABLE VANES



Description:

Rectangular or circular steel swirl diffuser with movable plastic vanes.



Intended use

NS8 diffusers are designed for low- and medium-pressure ventilation systems. Movable vanes allow the supply airflow to be shaped as desired to obtain a swirling supply of air. They are particularly recommended for 2.6 to 4 m high rooms, when the difference in temperature between the supply air and the air in the room is up to 10 K. NS8 diffusers may be used in extraction mode.

Design

NS8 diffusers are equipped with plastic vanes that generate a swirling airflow. They are adjustable and can be positioned individually. Normally, the vanes are black. It is possible to provide white vanes on request. The front panel of the diffuser may be round or square. They are normally made of powder-coated steel and painted with RAL9010 paint. Other RAL colours and stainless steel versions are available on request (square panels only). NS8 diffusers may be made in the Z supply version (with plastic vanes and the plenum box with a deflector) or in the A exhaust version (without vanes and with the plenum box without a deflector).

Installation

- **R1** – Round panel, one bolt positioned centrally
- **K1** – Square panel, one bolt positioned centrally
- **K4** – Square panel, four screws in the corners (up to 625/54),
- **K8** – Square panel, eight screws in the corners (for 800/72 and 825/72 only).

Installation with four or eight screws is recommended for square front panels larger than 500.



The technical data of the diffusers, including pressure drop, noise level and stream ranges, is available at www.smay.eu, in the diffuser selection range.

Dimensions

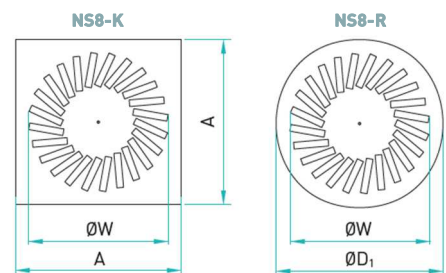


Figure 1. NS8 front panel dimensions.

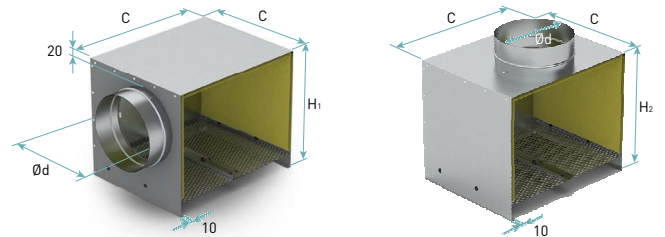


Figure 2. Dimensions of SR rectangular plenum boxes for NS8-K panels.

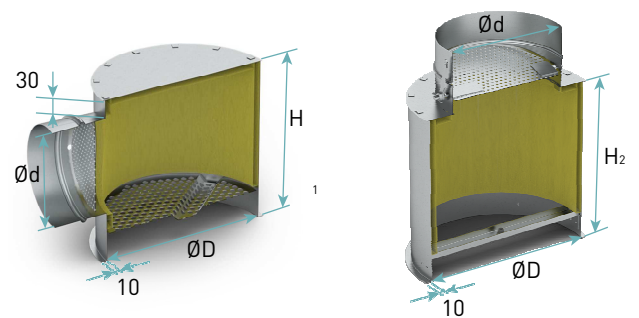


Figure 3. Dimensions of SRR round plenum boxes for NS8-R panels.

Table 1. Standard dimensions of NS8 diffusers and plenum boxes.

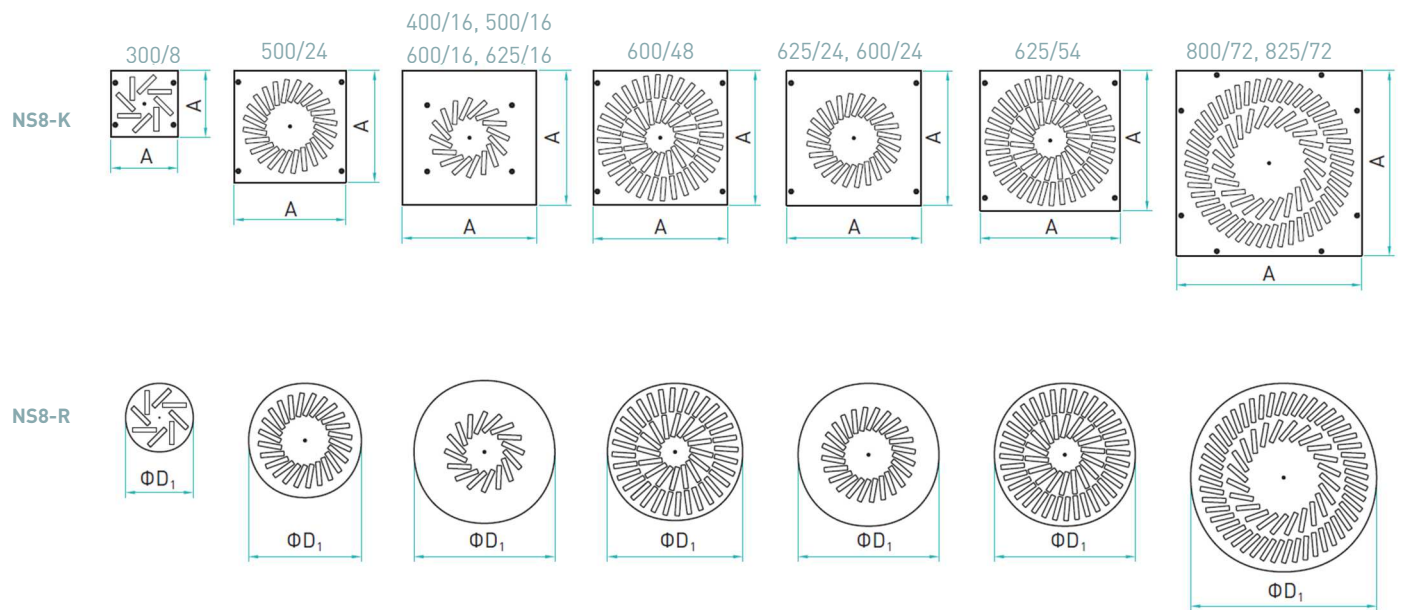
Size	A	ØD ₁	ØW	Ød	C	ØD	H ₁	H ₂
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
300/8	298	300	262	158	293	270	290	200
400/16	398	400	357	198	393	370	330	300
500/16	498	500	357	198	393	370	330	300
600/16	598	600	357	198	393	370	330	300
625/16	623	625	357	198	393	370	330	300
500/24	498	500	420	198	493	470	330	300

Size	A	ØD ₁	ØW	Ød	C	ØD	H ₁	H ₂
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
600/24	598	600	420	198	493	470	330	300
625/24	623	625	420	198	493	470	330	300
600/48	598	600	562	248	593	570	380	300
625/54	623	625	579	248	613	590	380	300
800/72	798	800	762	313	793	770	450	300
825/72	823	825	762	313	793	770	450	300

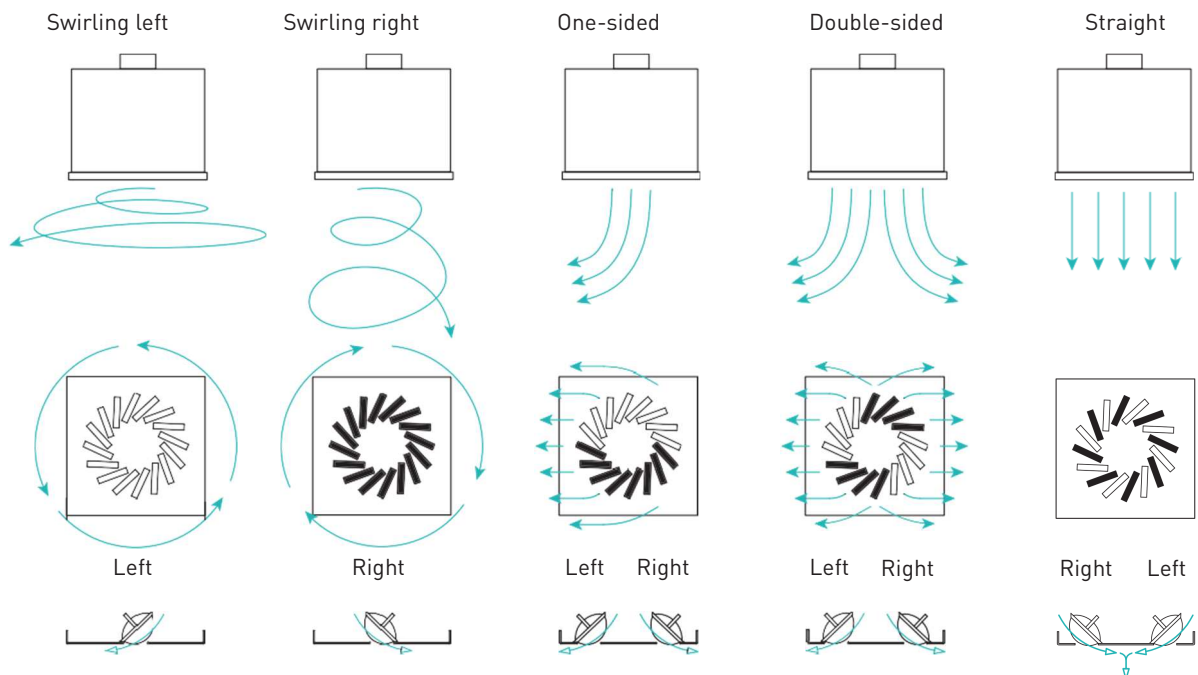
SL SN RAL



NS8 diffuser versions



Vane setting versions



* Swirling left is the standard factory setting of the vanes

NS8 – Swirl diffuser with movable vanes

When ordering, please provide information in accordance with the following pattern:

NS8 - <C><X> - <W> - <R> - <P><RAL><KK> / <ADD>

Where:

C	Front panel and the installation method*
	R1 – Round panel, installation with a single bolt
	K1 – Square panel, installation with a single bolt
	K4 – Square panel, installation with four screws (for sizes from 300/8 to 625/54 only)
	K8 – Square panel, installation with eight screws (for sizes 800/72 and 825/72 only)
X	Intended use*
	Z – Air supply (with plastic vanes)
	A – Exhaust (without plastic vanes)
W	Size: 300, 400, 500, 600, 625, 800, 825
R	Number of vanes: 8, 16, 24, 48, 54, 72
P	Finish*
	SL – Panel made of painted steel, vanes made of plastic
	– Stainless steel, grade 1.4301 (304 according to AISI, 0H18N9 according to PN), plastic vanes (for K square front panels only)
RAL	colour according to the RAL colour chart*
KK	Vane colour*
	None – Black
	B – White
ADD	Specify additional accessories here, as follows**

Accessories:

Plenum box as per the configuration below:

<TYP> <I> <W> - <H> - <K><D><R> - <P>

Where:

TYPE	Plenum box type
	SR – Rectangular plenum box
	SRe – Rectangular box, budget version
	SRR – Round plenum box
I	Insulation*
	None – No insulation
	t – Insulated
W	Screen deflector*
	None – No deflector (default for exhaust)
	s – With a deflector (default for supply)
H	Plenum box height in mm*
K	Connection pipe position *
	b – Side
	g – Top
D	Connection pipe diameter in mm*
R	Damper in a connection pipe*
	None – No damper
	P – Damper adjusted from outside the box (for SR or SRR only)
	Pc – Damper adjusted from inside the box with a cord (for SR or SRR only)
	Pd – Damper adjusted from inside the box with a lever (for SR or SRR with no deflector only)
	Pe – Damper adjusted from inside the box with a lever (for SRe without deflector)
P	Design*
	SO – Galvanised steel
	SN – Stainless steel, grade 1.4301 (304 according to AISI, 0H18N9 according to PN) (for SR only)
	SM – Stainless steel, grade 1.4404 (316L according to AISI, 0H17N14M2 according to PN) (for SR only)

* Optional values – if not specified, default values will be used

** For more information on accessories see the accessories sheet

Sample order: **NS8-K4-Z-625-54-SL9010 / SRts-380-b248P**



- Blocks for REVIT software,
- selection range and
- certificates are available

at www.smay.pl.