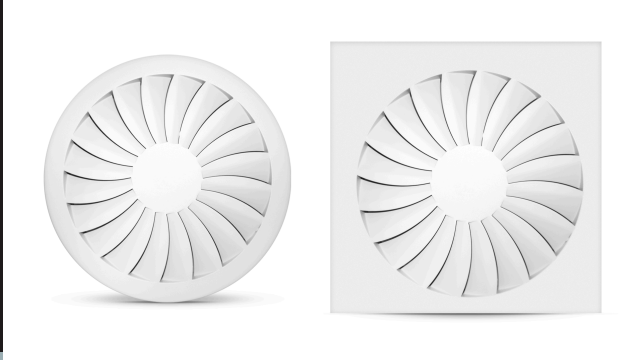


SWIRL DIFFUSER WITH FIXED VANES



Characteristics:

Rectangular or circular steel swirl diffuser with fixed vanes.

SL

RAL

version: 17/01/25

Intended use

NS5 diffusers are designed for low- and medium-pressure ventilation systems. They provide a swirling air supply and are particularly recommended for 2.6 to 4 m high rooms, when the difference in temperature between the supply of air and the air in the room is up to 10 K. NS5 diffusers may be used in extraction mode.

Design

NS5 diffusers are equipped with fixed vanes arranged radially that generate a swirling air flow. The front panel of the diffuser may be round or square. NS5 diffusers are normally installed together with a plenum box serving as the connection element. NS5 diffusers are made of powder-coated steel, painted in RAL9010 white. On request they may also be coated with other RAL colours. NS5 diffusers can be made in a supply version (a plenum box with a deflector) or in an exhaust version (a plenum box without a deflector).

Installation

- R – round panel, 1 bolt positioned centrally:
 - to an SR plenum box,
 - to a mounting bracket.
- K – square panel, 1 bolt positioned centrally:
 - to an SR plenum box,
 - to a mounting bracket,
 - directly in a suspended ceiling structure.

Dimensions

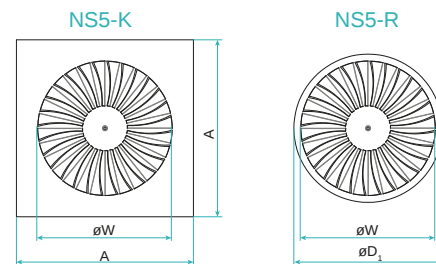


Figure 1. NS5 front panel dimensions.

Plenum boxes dimensions

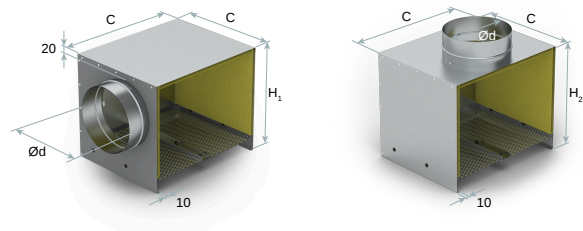


Figure 2. Dimensions of SR rectangular plenum boxes for NS5-K panels.

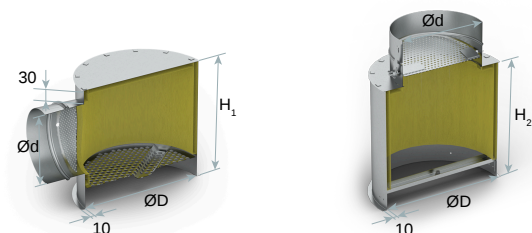


Figure 3. Dimensions of SRR round plenum boxes for NS5-R panels.



The technical data of the diffusers, including pressure drop, noise level and stream ranges, is available at www.smay.eu, in the [Diffuser selection program](#).



Revit blocks and approval documents available at www.smay.pl

Table 1. Standard dimensions of NS5 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	594	300	250	123	293	270	270	110
400	594	400	350	158	393	370	270	125
500	594	500	450	198	493	470	330	140
600	594	600	550	248	583	570	380	160

NS5 - Swirl diffuser with fixed vanes

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

NS5 - <C><S1> - <W> - SL<RAL> / <ADD>

Where:

C	Front panel*
	K – Square
	R – Round
S1	Front panel mounting bolt*
	1 – White mounting bolt with a cap
	0 – No mounting bolt or cap
W	Size: 300, 400, 500, 600
SL	Finish: coated steel
RAL	Colour according to the RAL colour chart
ADD	Specify additional accessories here, as below**

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

** For more information on accessories see the accessories sheet

Sample order:

NS5-K1-500 / SRT-330-b198P

Accessories:

Plenum box as per the configuration below:

SR/SRR <I> <W> - <H> - <K> <D> <R> - <P>

Where:

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	Position of spigot *
	b – Side
	g – Top
D	Connection pipe diameter in mm*
R	Damper in spigot *
	None – No damper
	P – Damper adjusted from outside the box
	Pc – Damper adjusted from inside the box with a cord
	Pd – Damper adjusted from inside the box with a lever (for the boxes with no deflector only)
	Pe – Damper adjusted from inside the box with a lever (only for P=SO)
P	Design*
	SO – Galvanised steel
	SN – Stainless steel, grade 1.4301 (304 according to AISI, 0H18N9 according to PN), SR square version only
	– Stainless steel, grade 1.4404 (316L according to AISI, 0H17N14M2 according to PN), SR square version only
	SM