## Swirl diffusers



# NS5



Swirl diffusers NS5 are intended to use in low- and medium-pressure ventilation systems. They allow for obtaining the swirl air flow and are especially recommended to use in spaces with height of 2.6m up to 4m and maximum temperature difference of 10K. The diffusers are available with circular or square front panel.

Swirl diffuser NS5 with square panel

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## Swirl diffusers NS5

### **Material and finish**



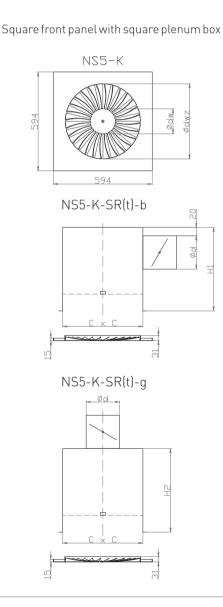
Swirl diffusers NS5 are equipped with fixed blades forming swirl air flow. The front panel of the diffuser may be circular or square-shaped. Usually diffusers NS5 are installed with connecting element which is plenum box SRt...b (recommended for air supply) or SR....g (recommended for air exhaust).

Swirl diffusers NS5 are made of steel, powder coated to RAL 9010. On request it is possible to coat it to different RAL color. The diffusers may be used as air exhaust.

#### **Installation method**

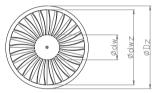
Swirl diffusers NS5 may be installed to the plenum box or to the mounting bracket with use of single screw through the opening located in the central part of the diffuser. NS5 with square front panel may be also installed directly in the suspended ceiling.

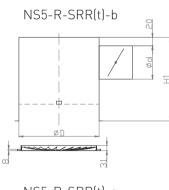
#### Front panel variants

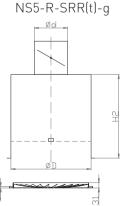


Circular front panel with circular plenum box

NS5-R







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## Swirl diffusers NS5



## Front panel sizes

Size	Ødw [mm]	Ødwz [mm]	ØDz [mm]	Number of blades [szt]	Aeff [m2]	C [mm]	ØD [mm]	Ød [mm]	H1 [mm]	H2 [mm]
300	85	250	300	20	0,0167	293	270	123	270	110
400	115	350	400	24	0,0301	393	370	158	270	125
500	150	450	500	28	0,0468	493	470	198	330	140
600	180	550	600	32	0,0700	583	570	248	380	160

## Scope of application

Size		300		400		500		600	
		V <sub>min</sub> [m <sup>3</sup> /h]	V <sub>max</sub> [m <sup>3</sup> /h]	V <sub>min</sub> [m <sup>3</sup> /h]	V <sub>max</sub> [m <sup>3</sup> /h]	V <sub>min</sub> [m <sup>3</sup> /h]	V <sub>max</sub> [m <sup>3</sup> /h]	V <sub>min</sub> [m <sup>3</sup> /h]	V <sub>max</sub> [m <sup>3</sup> /h]
V <sub>t</sub> [m <sup>3</sup> /h]		100	350	250	520	250	650	350	900
L <sub>02</sub>	[m]	1,5	4	2,5	4,5	1,8	4,5	2,5	5,5
L <sub>WA</sub>	[dB <sub>(A)</sub> ]	√25	50	↓25	45	↓25	45	↓25	45

Designation:

 $V_t$  [m<sup>3</sup>/h] volumetric air flow

L<sub>02</sub> [m] airflow range at 0,2m/s

 $L_{WA} \left[ dB_{A} \right]$  sound power level

## Accessories and how to order NS5

While ordering, please provide the information using the following method:

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

Where:	
< <b>C</b> >	- frontal panel
	R = circular
	K = square
< <b>W</b> >	- size: 300; 400; 500; 600
<ral></ral>	- colour according to RAL palette *
< <b>ADD</b> >	- Additional accessories shall be specified here, according to the list below:

Accessories \*\*

<**SR**><**I**>-<**W**>-<**H**>-<**K**><**D**><**R**> - plenum box according to the configuration as below:

< >	- insulation:
	none = no insulation
	t = insulated
<w></w>	- mesh deflector: *
	none = without deflector (default for the air exhaust diffuser)
	s = with deflector (default for the air supply diffuser)
< <b>H</b> >	- height of the plenum box in mm*
< <b>K</b> >	- connector position:
	b = side
	q = top
< <b>D</b> >	- diameter of the connector in mm*
< <b>R</b> >	- damper in the connector:
	none = no damper
	P = damper with perforated blade and adjustment outside the plenum box
	Pc = damper with adjusting tendon inside the plenum box
	Pd = damper with adjusting lever inside the plenum box
*optional	l values - default values will be used if optional values are not specified

\*\* more information about accessories in grilles and diffusers accessories data sheet

Order example:

#### NS5-R-500/SRt