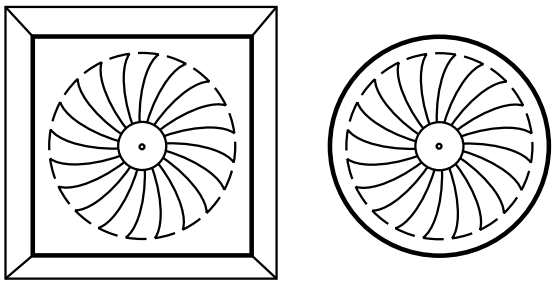
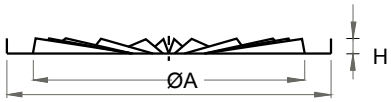


Version “R”



4

DESCRITPION

NV are swirl diffusers designed for low- and medium-pressure installations. They can be used with constant and variable airflow. The air can be supplied at the temperature lower or higher than the temperature in the ventilated room. Therefore those diffusers can be used for both – heating and cooling. It is recommended to install NV diffusers in the ceiling.
Full airflow scope within small distance from the diffuser makes them ideal for rooms high as 2.2–4.5 m.
Diffusers NV are perfect for public buildings like offices, hotels, restaurants, conference halls and everywhere, where comfortable temperature conditions are required.

FEATURES

- R version is additionally equipped with decorative aluminium frame
- made of steel sheet and available in standard RAL 9003 colour
- can be installed with an expansion box SR/NV
- available square (K) and round (O)
- highly resistant
- upon customer’s request, can be made in any colour from RAL palette
- the possibility of making each diffuser in the front panel of any size

STANDARD SIZES

Size	ØA [mm]	B [mm]	H [mm]
300	260	300	12
400	340	400	12
500	440	500	12
600	530	600	12
625	530	625	12

ORDER REFERENCE

NV - K - 300/600 | **R** | **RAL9003**

- RAL9003 — colour
- R — R frame (only version K)
- 600 — in a plate ⌀ 595
- 300 — size
- K — version: O - round, K - square
- NV — type

INSTALLATION

NV are designed for installation with the expansion box SR/NV.

INSTALLATION IN THE FULL UNDERSLUNG CEILING: prepare an installation hole in the ceiling of a size of the expansion box. Put the expansion box in so that edges stick out by approx. 12 mm from the ceiling panel. Fix it with steel screws to the sides. Remember to seal joints.

INSTALLATION IN PANEL CEILING: diffuser together with the expansion box should be installed above the ceiling level so that the front panel of the diffuser sticks evenly to the ceiling panel.

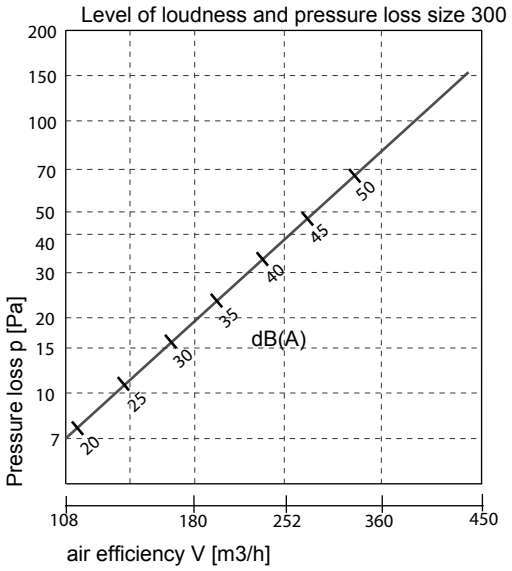
FEATURES

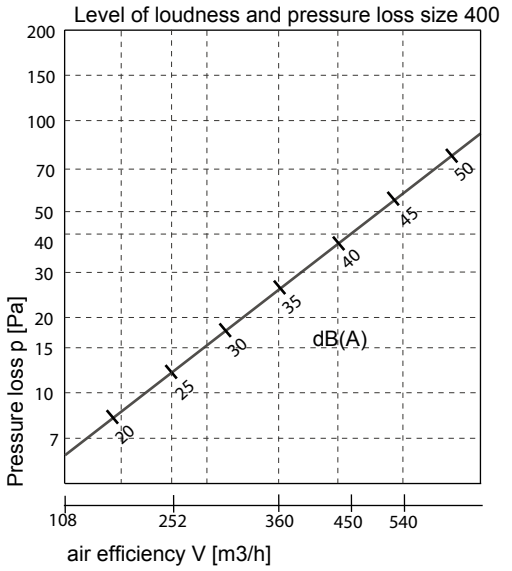
The figure shows airflow capacity V (m^3/h), pressure loss p (Pa), airflow scope L (m) for end speed of 0.25 m/s, and volume level [db(A)].

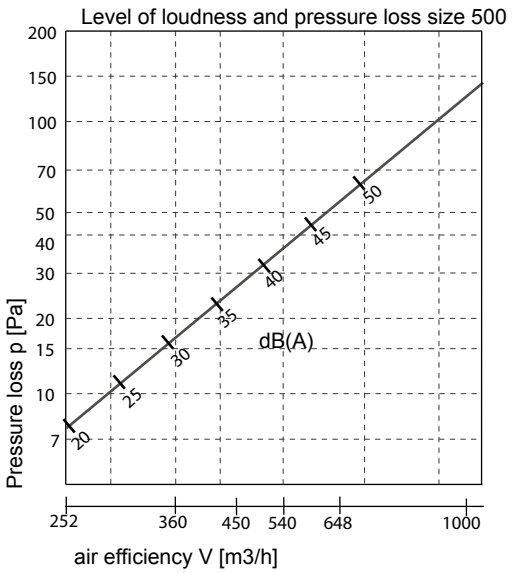
The airflow scope L relates to isothermal air supply.

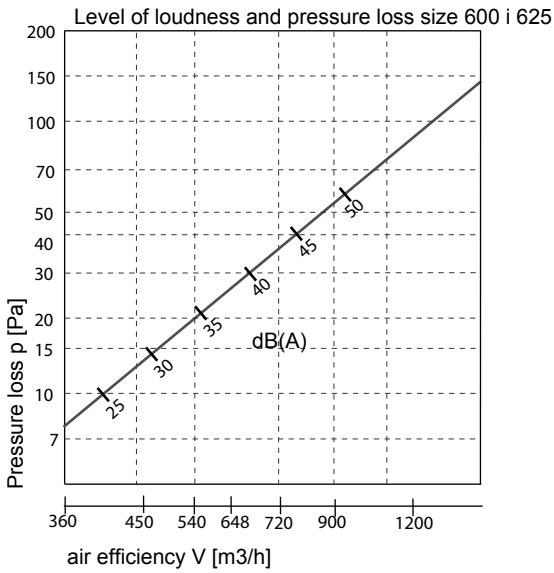
4

NAWIEWNIKI NV









SELECTION OF TABULAR

Size	A_{ef} m^2	V (l/s)	30		50		70		100		125		150		180		200		250	
		V m^3/h	108		180		252		360		450		540		648					
300	0,0108	$L_{0.5}/L_{0.3}$ m	-	1.2	1.2	1.9	1.6	2.6	2.3	3.8										
		L_{WA} dB(A)	<20		29		39		49											
		Δp_t Pa	7		19		38		78											
		v_{H1} 1.2 m m/s	-	<0.1	0.11	0.11	0.16	0.16	0.25	0.24										
400	0,0193	$L_{0.5}/L_{0.3}$ m					1.2	2.0	1.7	2.8	2.1	3.5	2.5	4.2						
		L_{WA} dB(A)					24		35		41		46							
		Δp_t Pa					13		27		40		60							
		v_{H1} 1.2 m m/s					0.12	0.12	0.18	0.18	0.23	0.23	0.28	0.25						
500	0,0280	$L_{0.5}/L_{0.3}$ m					-	1.6	1.4	2.3	1.7	2.9	2.1	3.5	2.5	4.2				
		L_{WA} dB(A)					<20		28		35		40		45					
		Δp_t Pa					8		17		26		37		52					
		v_{H1} 1.2 m m/s					-	0.10	0.15	0.15	0.18	0.18	0.23	0.23	0.28	0.25				
600/625	0,0400	$L_{0.5}/L_{0.3}$ m							1.2	2.0	1.5	2.4	1.8	2.9	2.1	3.5	2.3	3.9	2.3	4.9
		L_{WA} dB(A)							<20		25		30		35		39		45	
		Δp_t Pa							8		13		18		26		33		30	
		v_{H1} 1.2 m m/s							0.12	0.12	0.15	0.15	0.19	0.19	0.23	0.23	0.25	0.24	0.33	0.25

$L_{0.5}/L_{0.3}$	m	-flow velocity range for the final 0,3 or 0,5 m/s
V	l/s	- diffuser efficiency
V	m^3/h	- diffuser efficiency
A, B	m	- distance between two ventilators
X	m	- distance from the axis of the diffuser wall
H_1	m	- distance from the ceiling area of human presence
V_{H1}	m/s	- average flow velocity at the time between the two ventilators in the distance H1
Δt_Z	K	- difference between room temperature and ventilation
Δt_L	K	- difference between room temperature and flux at a distance
		L=A/2 +H1
		L=B/2 +H1
		L=X +H1
A_{eff}	m^2	- effective surface outflow
Δp_t	Pa	- total pressure loss (ventilation)
L_{WA}	dB(A)	- sound intensity in the level A
$L_{W\,NC}$		- curve limit sound intensity spectrum
		$L_{W\,NC} = L_{WA}$ - 6 dB
$L_{W\,NR}$		- $L_{W\,NR} = L_{W\,NC}$ +2

V_{H1} reference to A = L +H1, for B>= 4.00 m
L see table
H1 =1.2 m
L_{WA} or Δp_t : TDF - Silent Air - ... -H