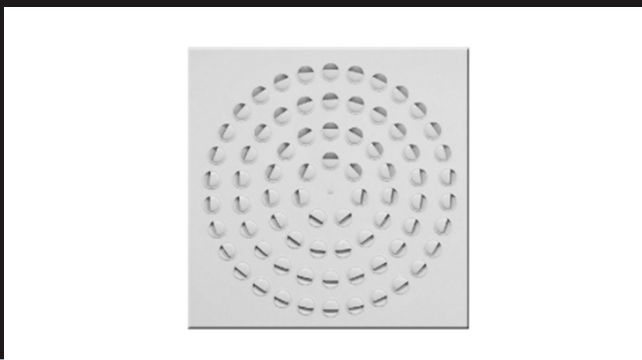


DIFFUSER WITH MOVABLE VANES



Characteristics:

Square or round steel diffuser with movable plastic nozzles.

SL

RAL

version: 18/02/25

Intended use

The NZD diffusers are designed for use in low and medium pressure ventilation systems. Movable vanes allow for any shaping of the supply air stream. They are particularly recommended for rooms with a height of 2.6 to 4 m and for use with a supply air temperature difference of up to 10 K in the room. The diffusers are available with a round or square front panel.

Design

The NZDs come with white plastic vanes. They are 360° movable and can be set individually. The front panel of the diffuser can be round (NZD-O) or square (NZD-KK or NZD-KO). The front panel is made of steel powder coated in white RAL9010. On request, it is possible to paint the panel in a different RAL colour or to make the NZD-KO and NZD-KK diffusers in sizes 400 and 500, with a front panel 596x596 for installation in the suspended ceiling structure.



Figure 1. NZD-O

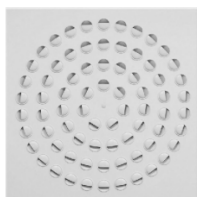


Figure 2. NZD-KO

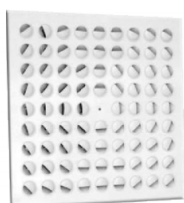


Figure 3. NZD-KK

Installation

The diffusers can be mounted with one screw through the hole located in the central part of the diffuser or by direct embedding in the suspended ceiling structure.

Dimensions

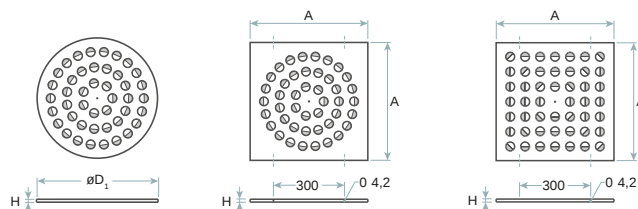


Figure 4. Dimensions NZD-O/NZD-KO/NZD-KK

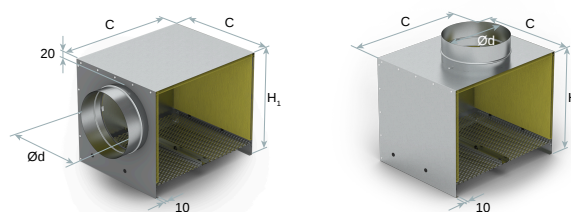


Figure 5. Dimensions of square SR boxes for NZD-KO and NZD-KK.

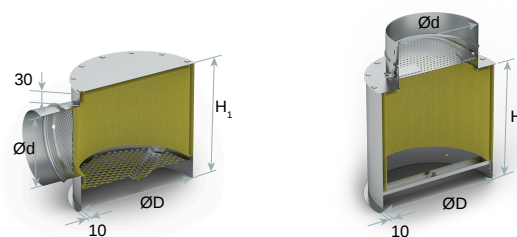


Figure 6. Dimensions of round SRR plenum boxes for NZD-O.

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

Size	A	ØD ₁	H	Ød	C	ØD	H ₁	H ₂
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
400	396	396	12	198	385	370	330	300
500	496	496	12	198	485	470	400	300
600	596	596	12	248	585	570	440	400
625	621	621	12	248	585	570	440	400

Manufacturing Versions

NZD-O – with a round front panel.

NZD-KK – with a square front panel and a square arrangement of vanes.

NZD-KO – with a square front panel and a circular arrangement of vanes.

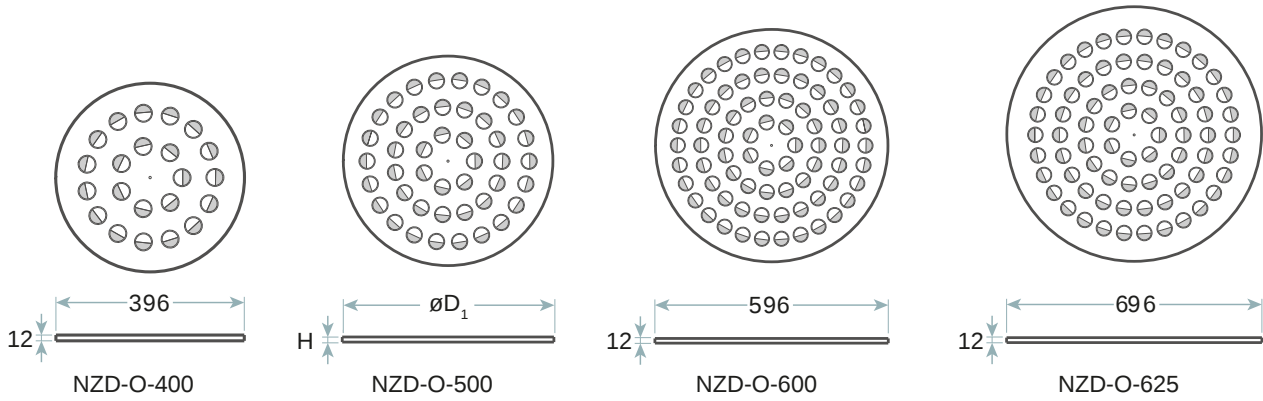


Figure 7. Dimensions NZD-O

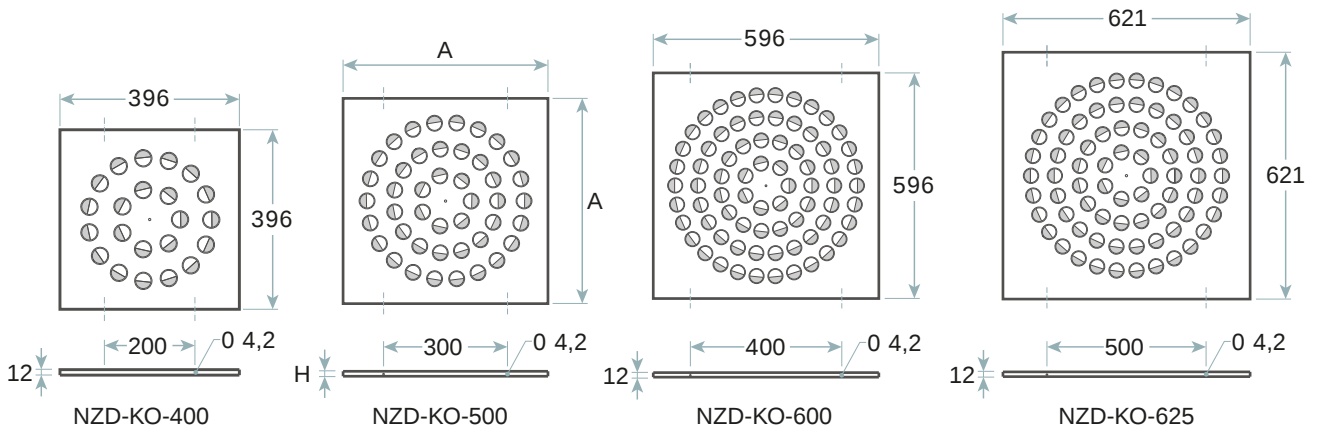


Figure 8. Dimensions NZD-KO

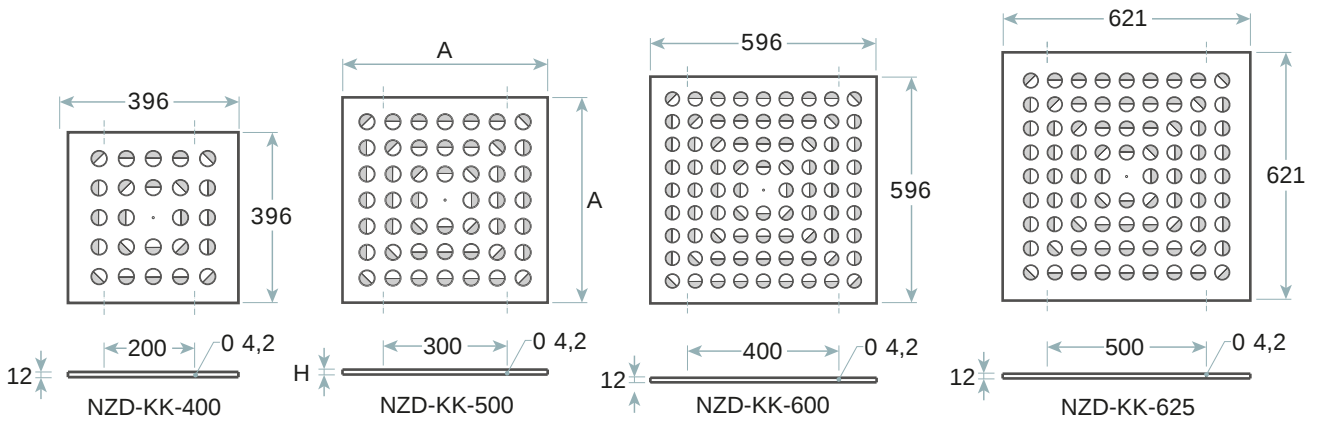


Figure 9. Dimensions NZD-KK.

Technical data

Stream range

Note: Parameters apply to diffuser with plenum box with side spigot. Throw length $L_{0,2}$ for terminal velocity 0,2 m/s and swirl stream of isothermal air.

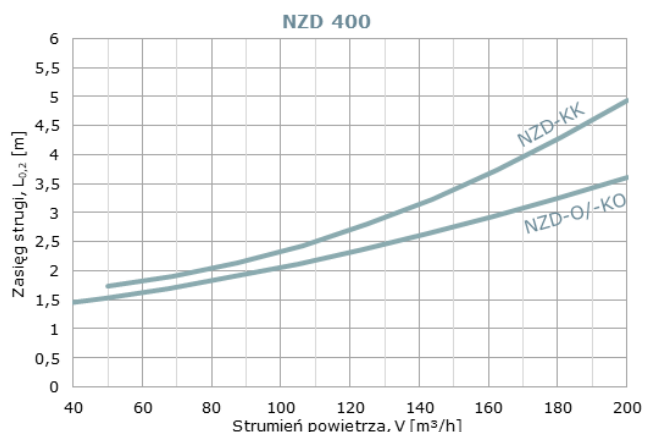


Chart 1. Stream range of NZD-400.

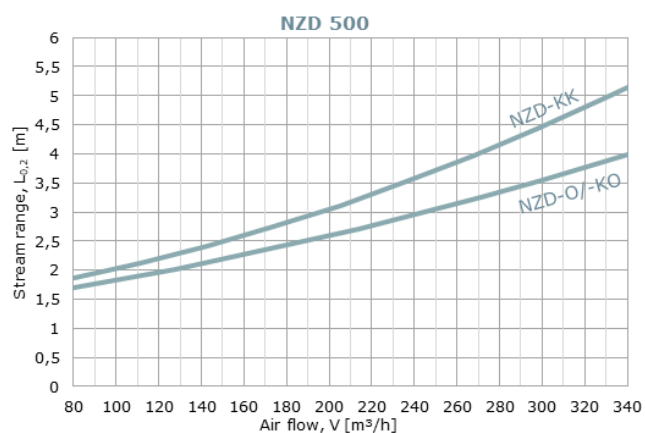


Chart 2. Stream range of NZD-500.

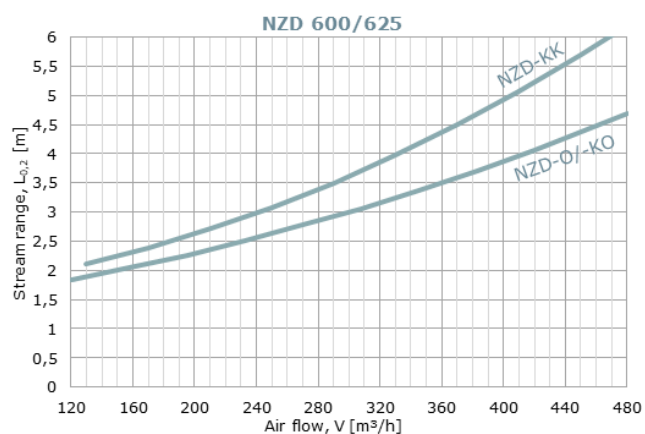


Chart 3. Stream range of NZD-600/625.

Pressure drop and acoustic data

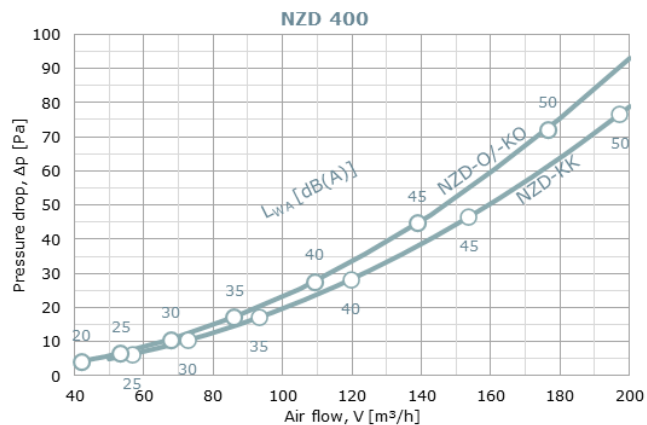


Chart 4. Pressure drop and sound power level of NZD-400.

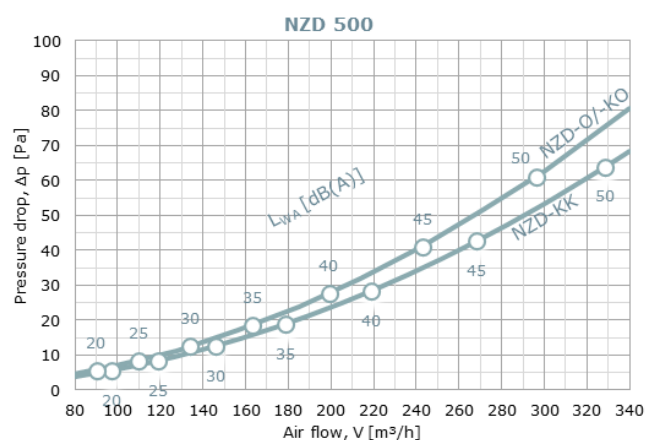


Chart 5. Pressure drop and sound power level of NZD-500.

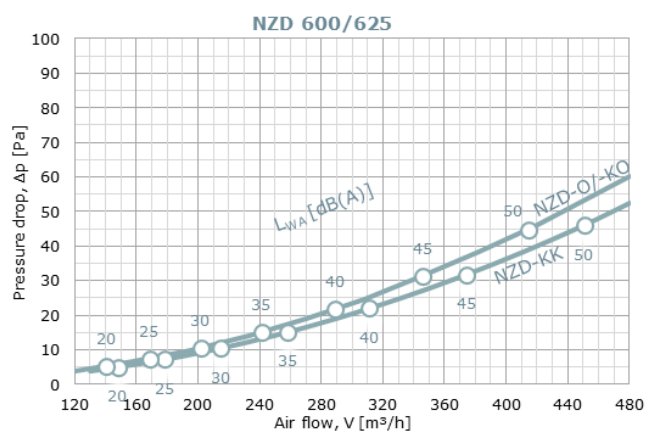


Chart 6. Pressure drop and sound power level of NZD-600/625.

NZD - Diffuser with movable vanes

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

NZD - <C> <T> - <W> - <SL> <RAL> / <ADD>

Where:

C	front panel
	<ul style="list-style-type: none"> O – Round panel KO – Square panel, round vane system KK – Square panel, square vane arrangement
T	Front panel type*
	<ul style="list-style-type: none"> None – Standard panel SP – Panel 596×596 (only applies to NZD-KK and NZD-KO sizes 400 and 500)
W	Size: 400, 500, 600, 625
SL	Front panel finish: painted steel
RAL	Front panel colour as per RAL (RAL9010 by default)*
ADD	Specify additional accessories here as follows:

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

** For more information on accessories see the accessories data sheet

Sample order: **NZD-KK-600-SL9010/SRts-440-b353P**

Plenum box as per the configuration below:

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

Where:

I	Insulation*
	<ul style="list-style-type: none"> None – No insulation t – Insulated
W	Screen deflector*
	<ul style="list-style-type: none"> None – Without deflector s – With a deflector
H	Plenum box height in mm*
K	Position of spigot *
	<ul style="list-style-type: none"> b – Side g – Top
D	Connection pipe diameter in mm*
R	Damper in spigot *
	<ul style="list-style-type: none"> None – No damper P – Damper adjusted from outside the box