

# NSW

## SLOT DIFFUSER



### Description:

Aluminium slot diffuser with movable vanes, set individually for each slot.

### Intended use

The NSW diffusers are designed for use in low and medium pressure ventilation systems with constant or variable air flow. They can be used in ceilings or walls of rooms with a height of 2.4 to 6.0 m. The NSWs are particularly recommended for use in VAV installations and for supply air with a temperature difference between the supply air and the air in the room of up to 10 K.

### Design

Standard NSW diffuser lengths range from 500 to 2000 mm (100 mm steps). On request, it is possible to make a diffuser with a non-standard length. The NSW diffusers may have from 1 to 6 slots. In the NSW-N version, the slots have moving vanes to enable vertical, horizontal, or skew air supply. The body is made of natural anodized aluminium. Vanes are made of raw aluminium in natural colour. The body of the diffuser may be powder-painted to any RAL colour on request, and the vanes can be anodised to black. The diffusers which are longer than 2,000 mm are made of smaller modules, to be combined at the construction site.

Plenum boxes with a length of ~1,600 mm are equipped with two connection stubs. On request, it is possible to make plenum boxes with connection stubs other than standard



Technical data of the diffusers, including pressure loss, noise level and airflow ranges, is available at [smay.eu](http://smay.eu), in the document Flow Characteristics for Grilles and Diffusers.

### Dimensions

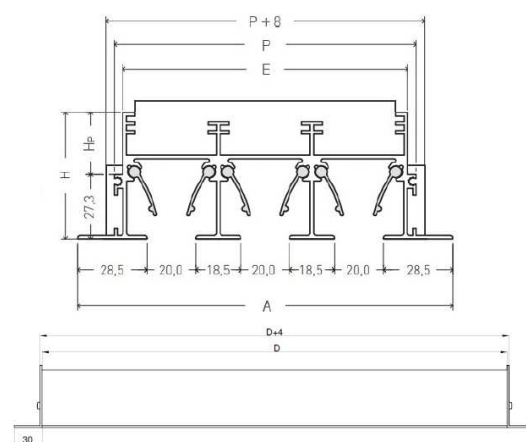


Figure 1. Dimensions of NSW front panels

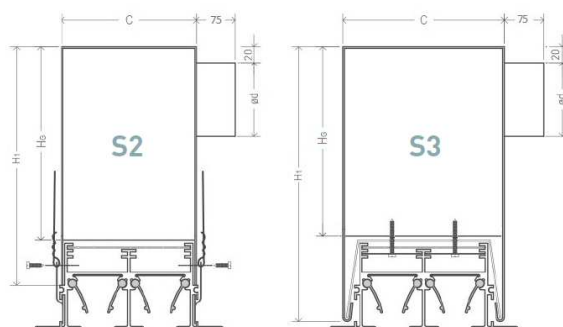


Figure 2. Dimensions of plenum boxes S2 and S3

Table 1. Plenum boxes S2 and S3.

Number of slots	A [mm]	E [mm]	P [mm]	H [mm]	H <sub>P</sub> [mm]	ød [mm]	S2 box		S3 box		H <sub>0</sub> [mm]
							C	H <sub>1</sub>	C	H <sub>1</sub>	
							[mm]	[mm]	[mm]	[mm]	
1	77	40	47	60	32	158	44	270	60	270	270
2	116	79	86	54	27	198	82	270	98	270	270
3	154	117	124	54	27	198	120	270	136	270	270
4	193	156	161	54	27	248	158	270	174	270	270
5	231	194	201	60	32	248	196	270	212	270	270
6	270	232	239	60	32	313	234	335	250	335	235

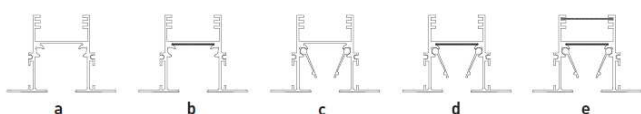
AA

AL

RAL



## Manufacturing versions



- a – NSW-W: exhaust air vent
- b – NSW-WP: exhaust air vent with slot damper
- c – NSW-N: air diffuser
- d – NSW-NP: air diffuser with slot damper
- e – NSW-NPD: air diffuser with slot damper and screen deflector

## NSW – Slot diffuser

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

<TYPE> - <W> <D> - <K> - <P> - <RAL> - <M> / <ADD>

### Where:

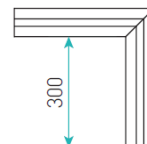
<b>TYPE</b>	Diffuser type: NSW-W, NSW-WP, NSW-N, NSW-NP, NSW-NPD
<b>W</b>	Number of slots: 1, 2, 3, 4, 5, 6
<b>D</b>	Nominal length in mm: 500 - 2000 mm (every 100 mm)
<b>K</b>	Vane finish*
	aa – Aluminium in natural colour
	ac – Black anodized aluminium
<b>P</b>	Body finish*
	AA – Anodised aluminium
	AL – Painted aluminium
<b>RAL</b>	colour as per RAL (for AL finishing)
<b>M</b>	Installation*
	None – Stand alone
	S – Serial [linear development]
<b>ADD</b>	Specify additional accessories here as follows:

## Installation

The diffuser is screwed to the S2 plenum box. The installed unit is mounted to the ceiling by means of slings. The S3 plenum box is fixed to the ceiling with slings. The diffuser is mounted to the suspended S3 plenum box using trapezoidal clips.

## Accessories

L-type connection for two supply diffusers installed in a line.



Accessories\*\*

Plenum box as per the configuration below:

<SR> <I> - <N> - <Dk> - <R> <M> <L>

<b>SR</b>	Plenum box type*
	S2 – Diffuser mounted to the box with screws
	S3 – Diffuser mounted to the box with trapezoidal clips
<b>I</b>	Insulation*
	None – No insulation
	t – Insulated
<b>N</b>	Number of connection pipes*
<b>Dk</b>	Connection pipe diameter in mm*
<b>R</b>	Damper in spigot *
	None – No damper
	P – Damper adjusted from outside the box
	Pc – Damper adjustable with a cable from the inside of the box
<b>M</b>	Installation*
	None – Stand alone
	S – Serial [linear development]
<b>L</b>	L-type masking connector to connect 2 diffusers at an angle of 90 degrees

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

Sample order: **NSW-N-2-1000-aa-AL9010/S3t-1-198P**