

NWI

DIFFUSER WITH MOVABLE NOZZLES



Description:
Rectangular steel diffuser with movable plastic nozzles.

Intended use

The NWI diffusers are designed for use in low- and medium-pressure ventilation systems, where an increased air stream range is required.

The micro-nozzles installed in the NWI allow for high air induction. The diffusers are available with a rectangular front panel.

Design

The NWI diffusers are equipped with movable, individually adjustable micro-nozzles. The front panel of the diffuser is rectangular and made of steel powder coated in white RAL9010. The micro-nozzles installed in the panel are made of plastic. The whole unit (a panel with micro-nozzles) is mounted in a frame made of aluminium powder coated in white RAL9010. On request, it is possible to paint the panel and diffuser frame in a different colour from the RAL palette.

Installation

The NWI diffusers are mounted to ventilation ducts, plenum boxes or partitions with screws through holes in the diffuser frame. The holes must be prepared during assembly.



Technical data of the diffusers, including pressure loss, noise level and airflow ranges, is available at smay.eu, in the document Flow Characteristics for Grilles and Diffusers.

Dimensions

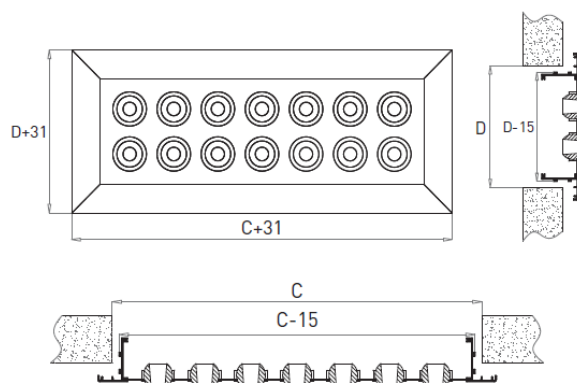


Figure 1. Dimensions of the front panel of the NWI diffuser.

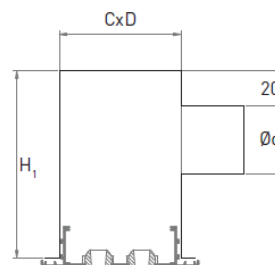


Figure 2. Dimensions of the NWI diffuser plenum box.

Table 1. Number of NWI diffuser nozzles

D-height [mm]	no. of rows nozzles	Width C [mm]													
		250	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500
100	1	4	5	7	9	11	13	15	17	19					
150	2		10	14	18	22	26	30	34	38					
200	3		15	21	27	33	39	45	51	57	63				
250	4			28	36	44	52	60	68	76	84	92	100		
300	5				45	55	65	75	85	95	105	115	125		
350	6						80	92	104	116	128	140	152	164	178



Table 2. Number and diameter of stubs of the diffuser plenum box, NWI, ød [mm]

D-height [mm]	Width C [mm]														
	250	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	
100	1 × 123	1 × 123	1 × 123	1 × 123	1 × 123	1 × 123	1 × 123	1 × 123	1 × 123						
150		1 × 123	1 × 123	1 × 123	1 × 123	1 × 158	1 × 158	1 × 158	1 × 198						
200		1 × 123	1 × 123	1 × 158	1 × 158	1 × 198	1 × 198	1 × 198	1 × 198	1 × 248					
250			1 × 158	1 × 158	1 × 198	1 × 198	1 × 248	1 × 248	1 × 248	1 × 248	1 × 248	2 × 248			
300				1 × 198	1 × 198	1 × 248	1 × 248	1 × 248	2 × 248	2 × 248	2 × 248	2 × 248			
350						1 × 248	1 × 248	2 × 248	2 × 248	2 × 248	2 × 248	2 × 248	2 × 248	2 × 248	

Table 3. Height of the NWI diffuser plenum box, H₁ [mm].

D-height [mm]	Width C [mm]														
	250	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	
100	225	225	225	225	225	225	225	225	225						
150		225	225	225	225	260	260	260	300						
200		225	225	260	260	300	300	300	300	350					
250			260	260	300	300	350	350	350	350	350	350			
300				300	300	350	350	350	350	350	350	350			
350						350	350	350	350	350	350	350	350	350	

NWI – Diffuser with movable nozzles

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

NWI - <W> - <C> - <D> - SL <RAL> / <ADD>

Where:

- W** Required number of rows of micro-nozzles
- C** Mounting hole width in mm
- D** Mounting hole height in mm
- RAL** Colour according to the RAL colour chart *
- ADD** Specify additional accessories here as follows

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

** For more information see the accessories sheet

Order example: **NWI-2-600x150-SL9010/SRts-225-b123P**

Accessories **

Plenum box as per the configuration below:

<SR> <I> - <W> - <H> - <K> <D> <R>T

I	insulation
	None – No insulation
	t – Insulated
W	Sieve deflector
	None – Without a deflector
	s – With a deflector
H	Plenum box height *
D	Connection pipe diameter in mm*
R	Damper in a connection pipe:
	None – No damper
	P – Damper adjusted from outside the box