

## Description and application

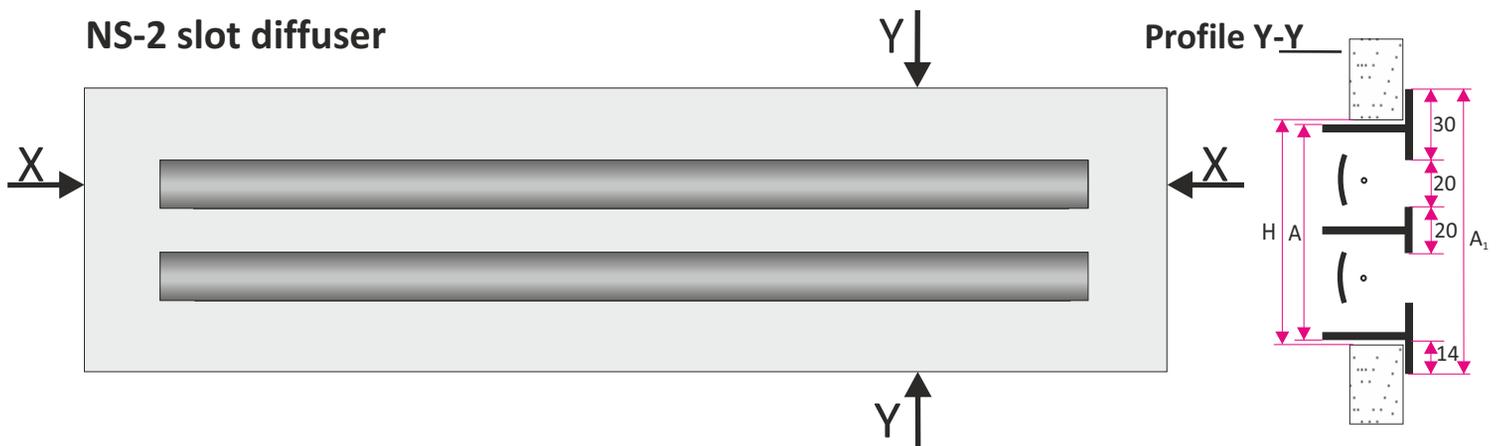
Slot diffuser is used for ventilation and air conditioning industrial and public buildings with a height of 2.5 m - 4.5 m. They are designed for installation in suspended ceilings and plenum boxes. Mounted next to each other can create a string of supply air along the whole room. The airflow direction can be formed from vertical to horizontal. Supply air can be by one- or two-sided. Changing the direction of air flow is also possible after installation the diffuser. Resistance of the blades provides uniform distribution of air over the whole length of the diffuser. The method of mounting the blades provides solid surface air discharge, regardless of their settings. Diffusers are mounted using visible bolts in stamped holes in front frame or with additional frame to hide the mounting elements.

Slot diffuser has Hygienic Certificate **HK/K/0522/01/2016**

## Material and workmanship

Slot diffuser are made of aluminum powder coated in white RAL 9016. Upon customer request we can paint in any color RAL and special made of stainless steel. The diffusers can be done in the extract air version without air discharge directing blades.

## Size

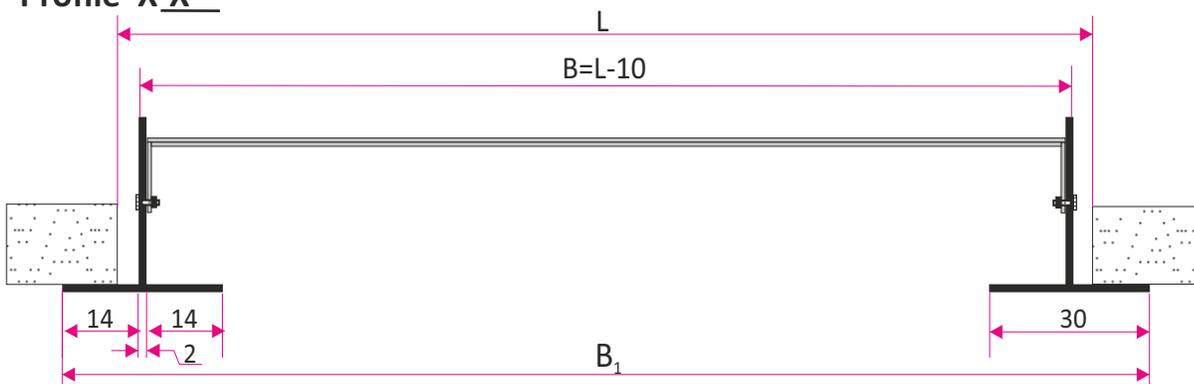


Examples dimensions diffusers 1, 2, 3, 4 slots:

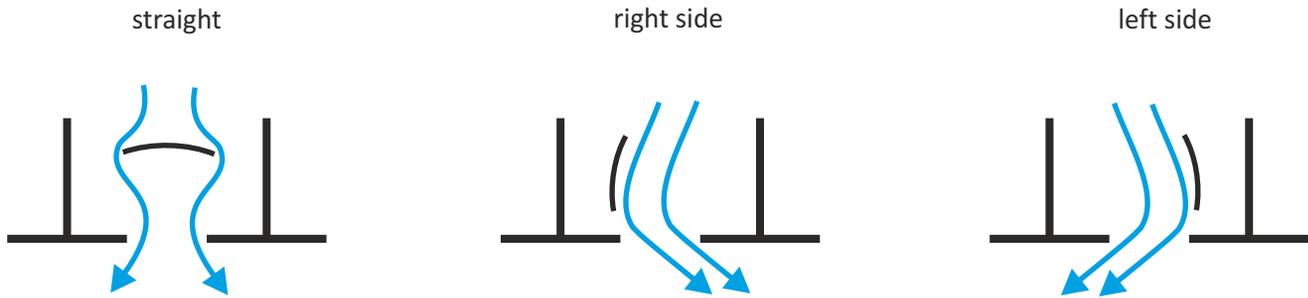
L	600	1000	1200	1500	2000
B [mm]	590	990	1190	1490	1990
B <sub>1</sub> [mm]	618	1018	1218	1518	2018

Number of slots	A [mm]	A <sub>1</sub> [mm]	H [mm]
1	52	80	62
2	92	120	102
3	132	160	142
4	172	200	182

## Profile X-X

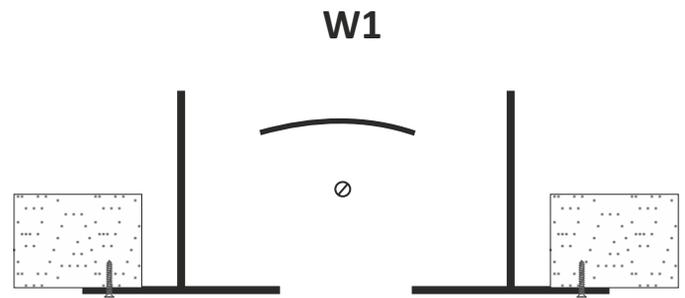
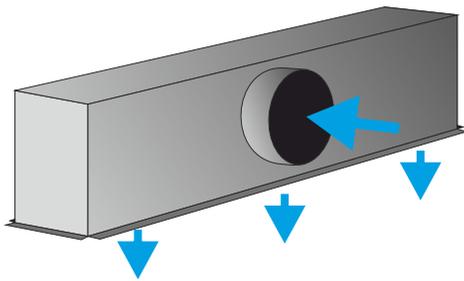


## Air flow directions



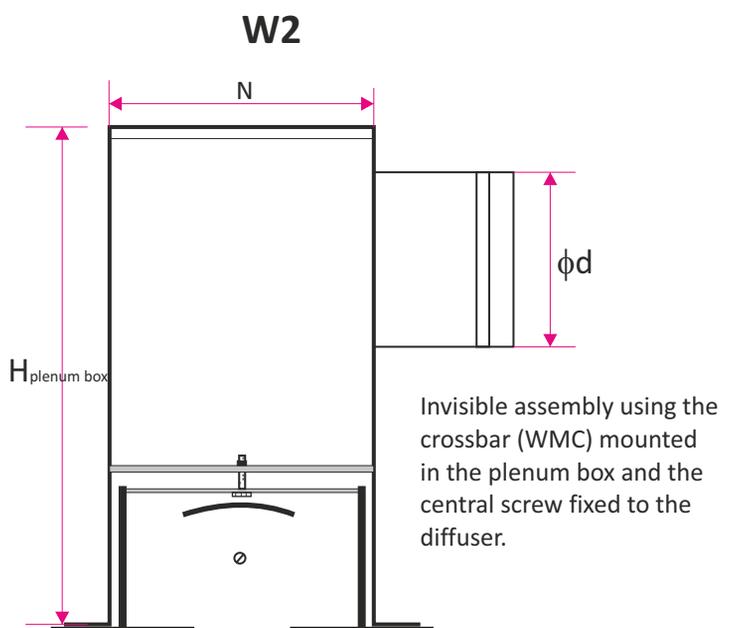
## Accessories - plenum box and methods of assembly

Plenum box is made of galvanized steel. On request it can be equipped with a damper control onto the connected spigot. The plenum box can be isolated inside with rubber (acoustic) or outside with mineral wool (thermal). In the standard height of the plenum box is adapted to size of the spigot or diffuser size (you can specify the height of the plenum box). We can produce plenum boxes for individual orders, for example with two spigots.



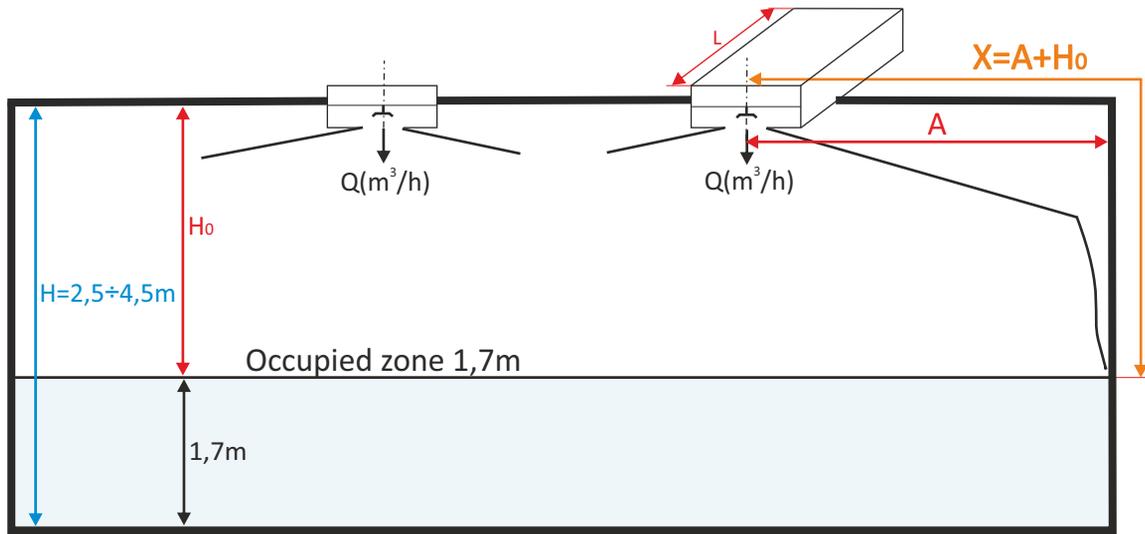
Visible assembly using screws and the mounting holes in the diffuser frame.

Number of slots	1	2	3	4
N	62	102	142	182
H <sub>plenum box</sub>	215	265	315	365
φd	123	158	198	248



Invisible assembly using the crossbar (WMC) mounted in the plenum box and the central screw fixed to the diffuser.

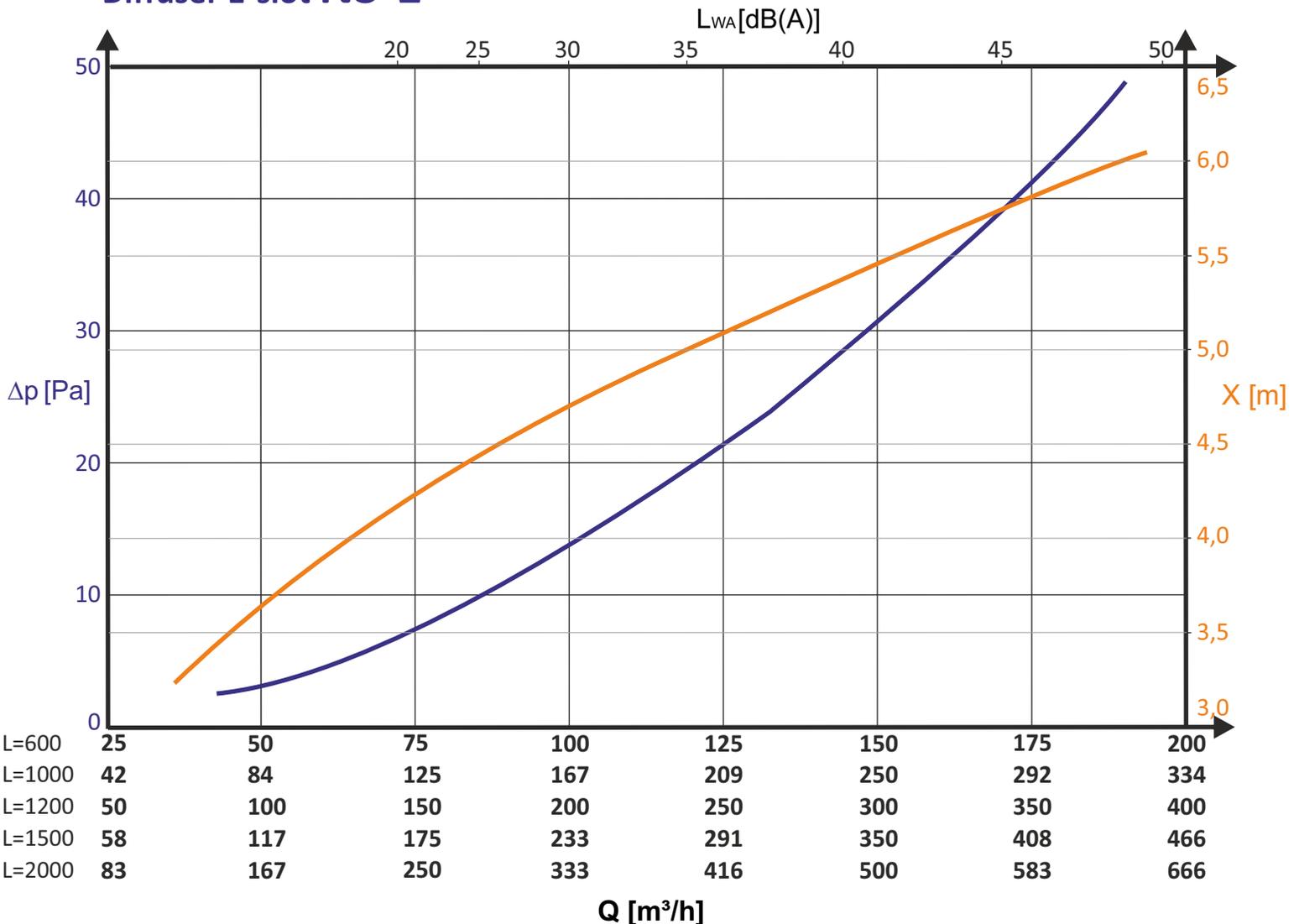
**Technical data**



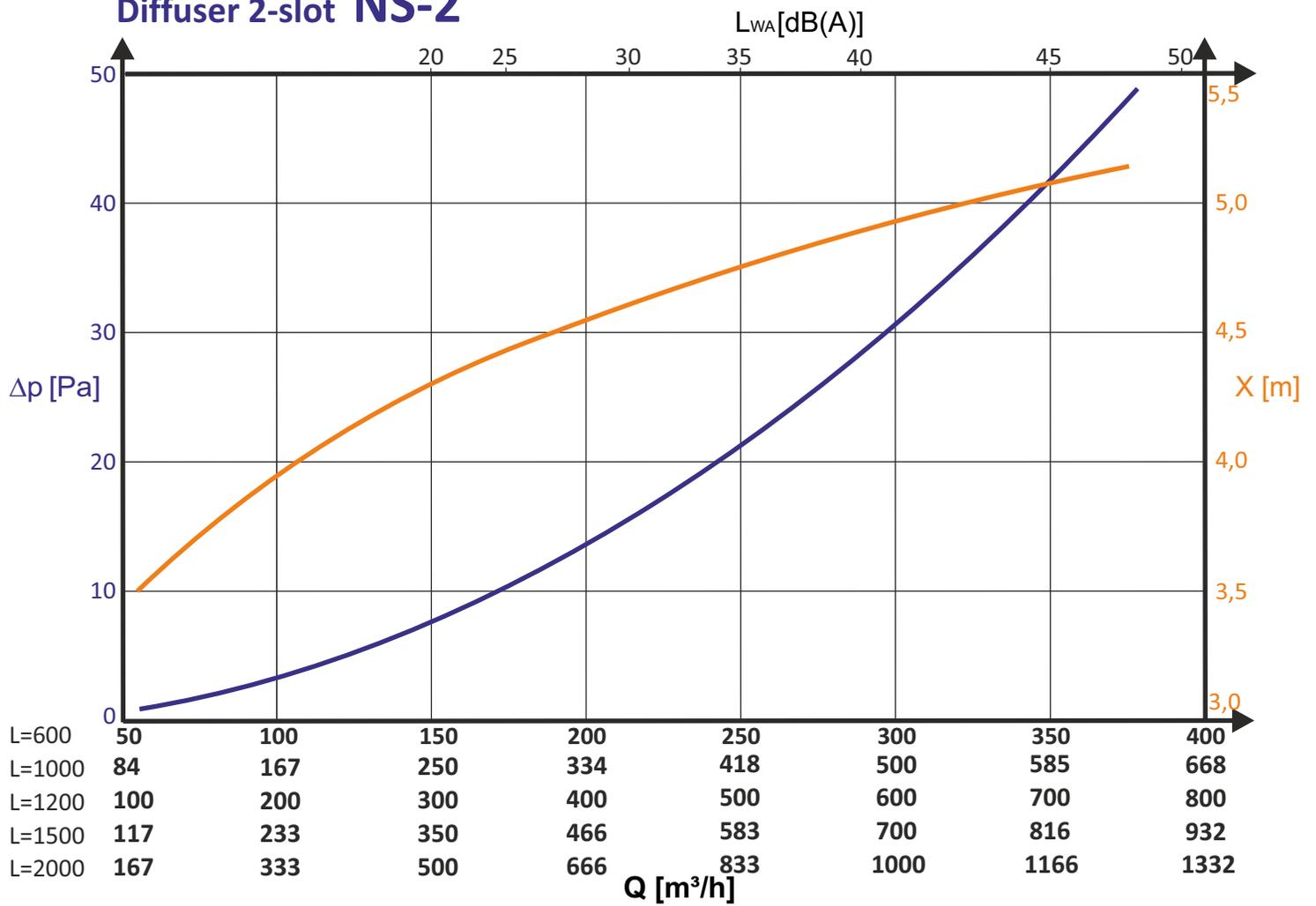
**Marking:**

- L [mm]-length of diffuser
- Q [m³/h]- air volume flow
- $\Delta p$  [Pa]- pressure drop
- X [m]-air stream range
- $L_{WA}$  [dB(A)]- acoustic power

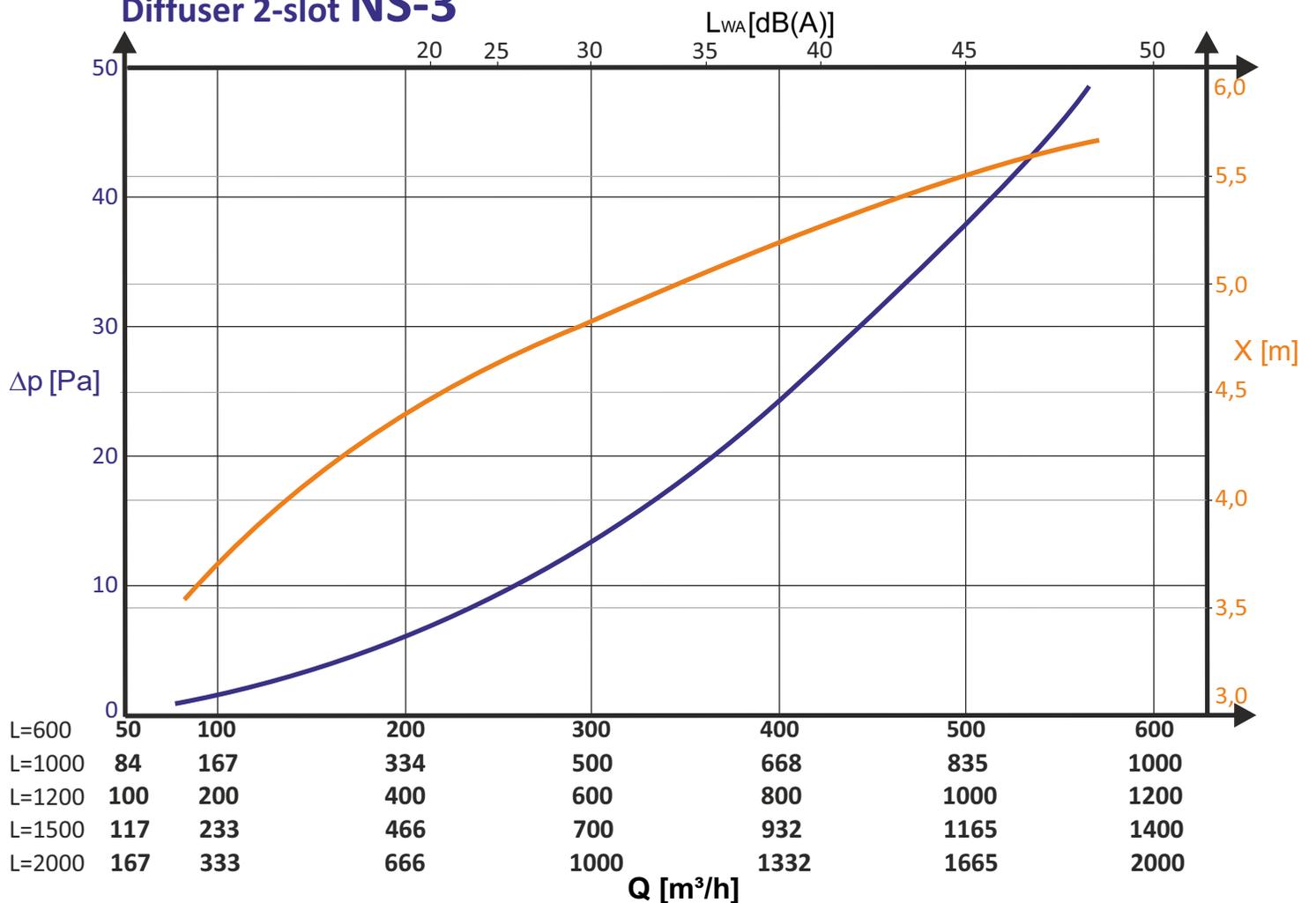
**Diffuser 1-slot NS-1**

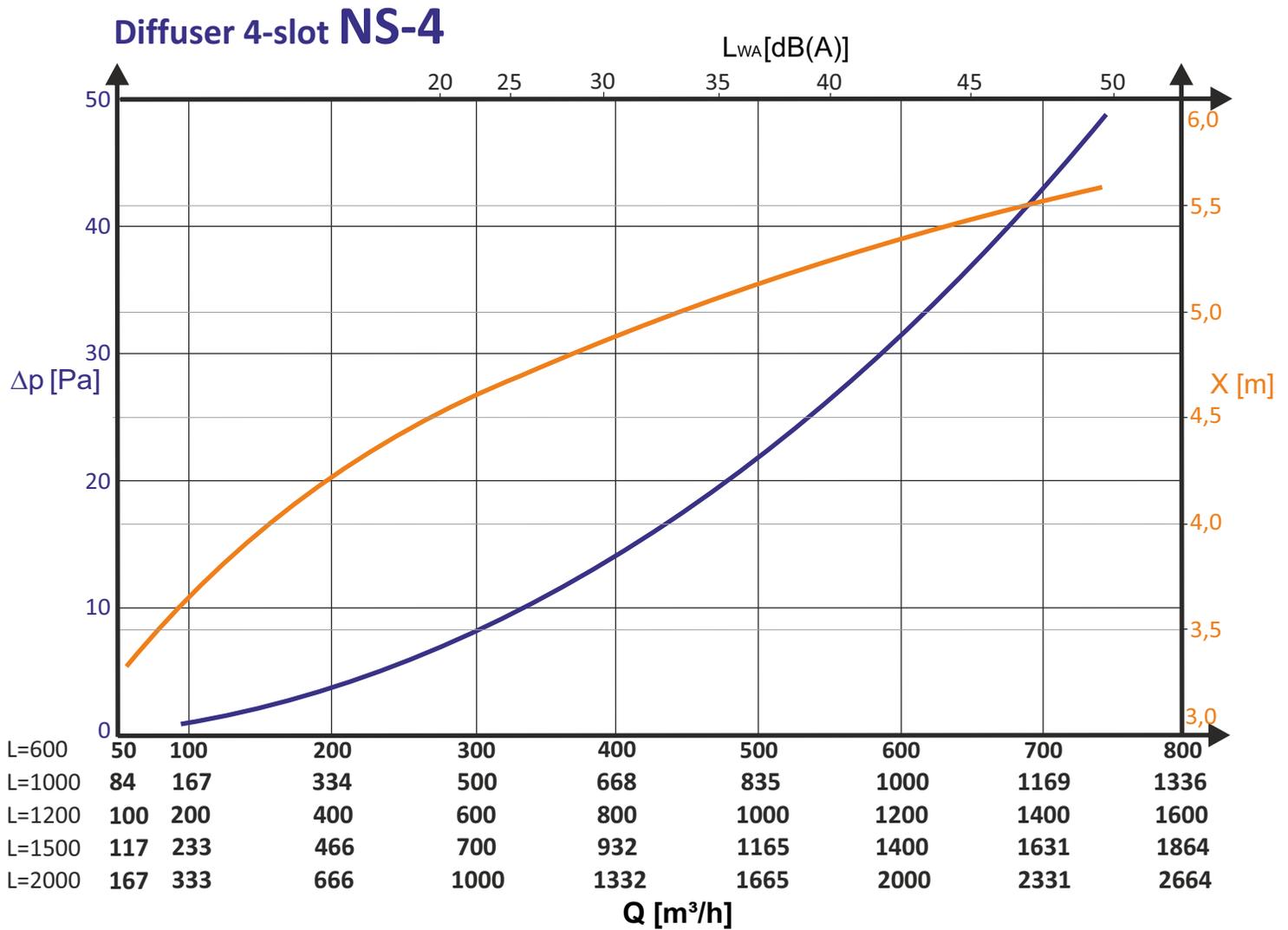


## Diffuser 2-slot NS-2



## Diffuser 2-slot NS-3



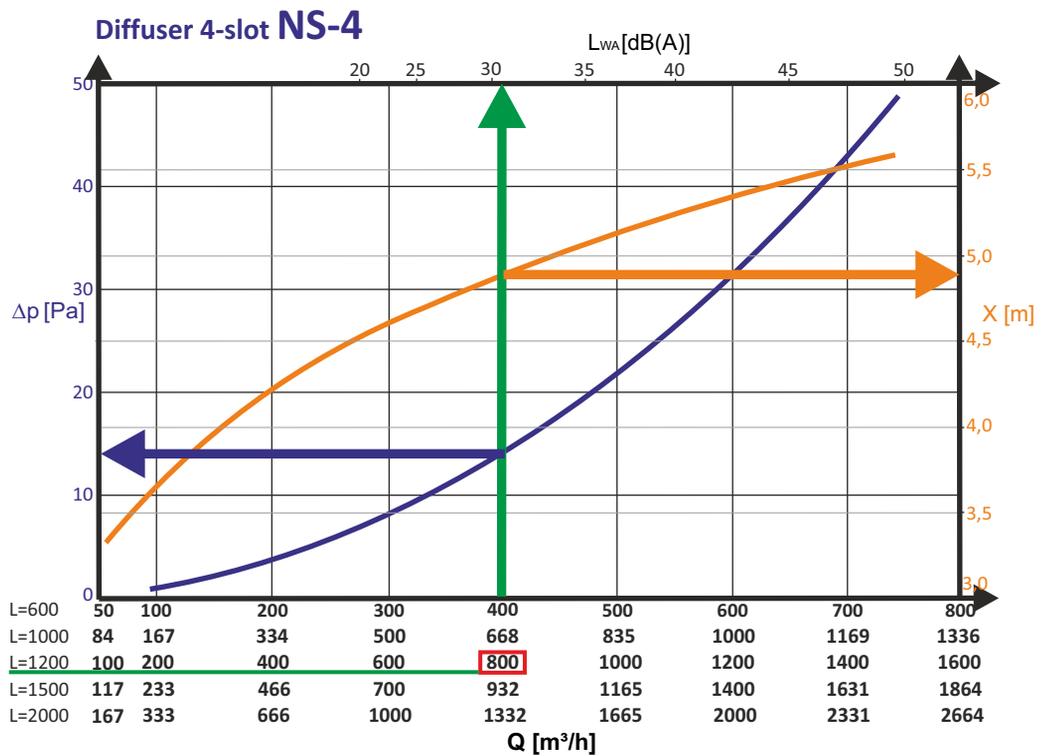


**EXAMPLE**

- diffuser 4-slots L=1200 [mm]
- air volume flow Q=800 m<sup>3</sup>/h

**Reading from the graph:**

- pressure drop in diffuse Δp=14 Pa
- acoustic power (L=1200) L<sub>wa</sub>=31 dB
- air stream range X=4,8 m



## The method of placing an order

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Please make orders according to the following formula:

**NS / 'S' / 'R' / 'L' / 'RAL' / 'M' / 'W' + 'SR' / 'φd' / 'k' / 'I' / 'P' / 'H'**

'S'	number of slots: 1, 2, 3, 4
'R'	purpose of diffuser <b>none</b> - diffuser with blades with function of supply air* <b>W</b> - diffuser without blades directing the air flow (in function of the extract air)
'L'	length of the mounting hole, where the diffuser will be installed
'RAL'	color according to RAL palette (standard RAL9016*)
'M'	material: AL - aluminum powder coated KO - stainless steel (type 1.4301 or 1.4404)
'W'	mounting option: <b>W1</b> , <b>W2</b>
'SR'	plenum box: <b>SR-Bc</b> - plenum box with side spigot connection <b>SR-Gc</b> - plenum box with top spigot connection
'φd'	the diameter of spigot
'k'	the numbers of spigots
'I'	isolation: <b>none</b> - plenum box without isolation * <b>Iw</b> - inside isolation (acoustic) <b>Iz</b> - outside isolation (thermal)
'P'	adjustment damper at spigot connection: <b>brak</b> - plenum box without damper* <b>P</b> - damper on spigot connection adjustable from the outside <b>PP</b> - damper on spigot connection adjustable from the inside
'H'	the height of the plenum box *

\* - If you don't give the information will be used standard parameters.