



## LINEAR SLOT DIFFUSERS DOUBLE DEFLECTOR

KH  
SERIES

### OVERVIEW CHARACTERISTICS APPLICATIONS

#### OVERVIEW :

The KH series linear diffusers allow to manage high air flows with minimum pressure losses and generated noise power. They allow to fully make use of the induction principle, guaranteeing optimum comfort conditions, no noticeable air currents and temperature uniformity, even in large spaces by positioning the diffusers along the perimeter of the ceiling.

#### CHARACTERISTICS AND FUNCTION:

The KH series diffusers are constructed from an aluminium body housing the different exhaust slots each with a pair of deflector blades. The change of direction of the air throw can be easily made without removing the diffuser. The regulation of the air flow can be made by using a butterfly type damper in the plenum connection.

#### APPLICATIONS :

The KH diffusers are ideal in air ventilations applications with ceiling heights from 2,4 to 4 metres.

#### DIFFUSER INSTALLATION:

The KH diffusers are installed inside special plenums fixed on the sides with screws or by suspension by using mounting bridges.

This second solution allows for a quick installation even after all the work has been completed in the building site.

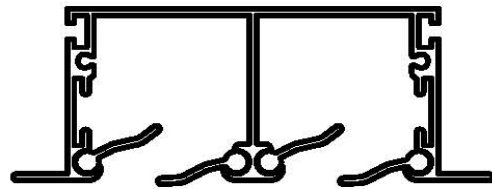
The wider shape of the plenum allows to contain the generated noise and the pressure losses connected to the expanding effect of the air.

#### FINISH :

The KH diffusers are constructed from an aluminium or RAL 9010 painted body and deflector blades. Different finishes can be agreed on request.

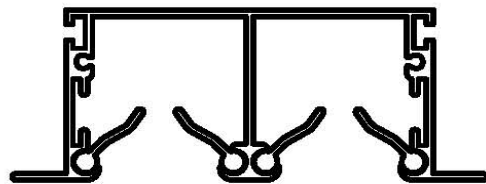
#### UNSUITABLE ENVIRONMENTS

The aluminium products are not suitable for installation in environments with an atmosphere containing corrosive substances for this material and in particular containing chlorine, such as swimming pools, spas and some types of food industries.



#### Horizontal throw configuration

The air flows along the ceiling  
Guarantees the complete absence of air currents both in heating and cooling.



#### Vertical throw configuration

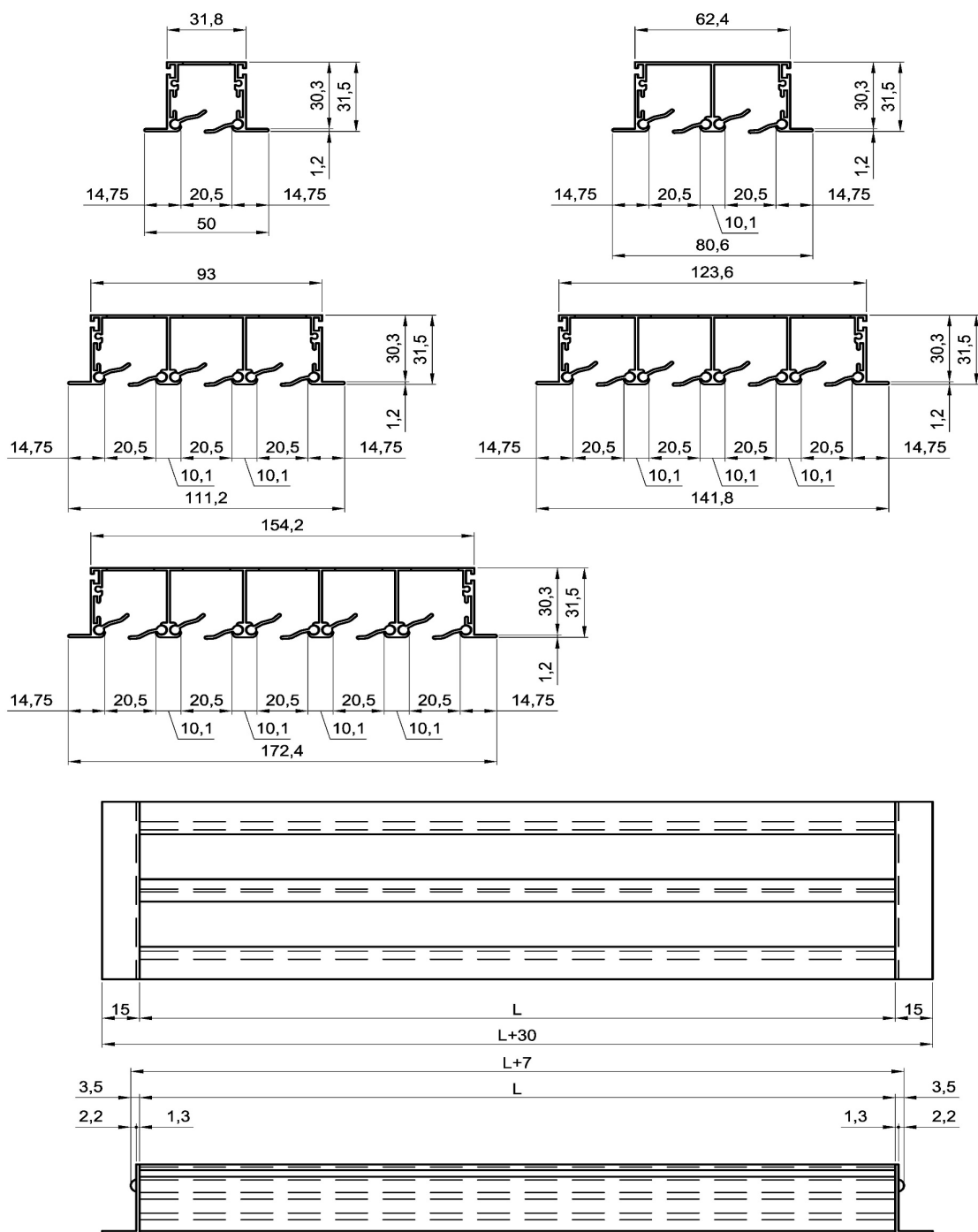
The air penetrates directly into the room  
Prevents the formation of layers of hot air when used for heating.



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## DIMENTIONS



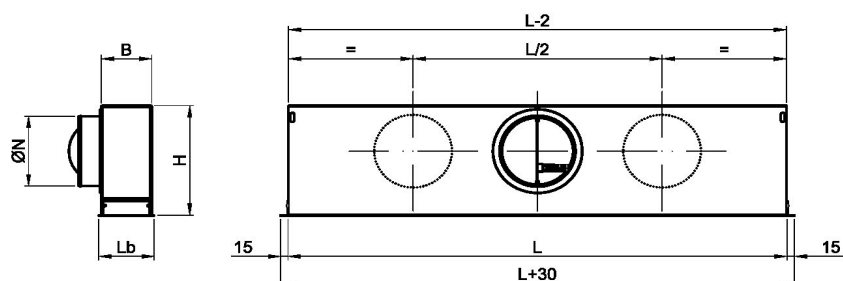
| Efficient section AK for diffuser L=1 m (m <sup>2</sup> ) |         |         |         |         |
|---|---------|---------|---------|---------|
| 1 slot  | 2 slots | 3 slots | 4 slots | 5 slots |
| 0,012   | 0,025   | 0,037   | 0,052   | 0,069   |



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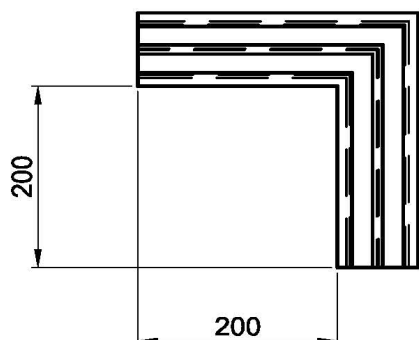
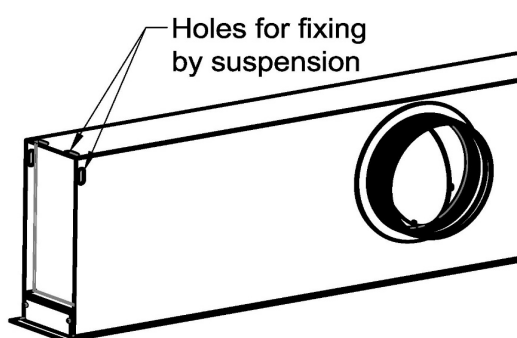
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PLENUM

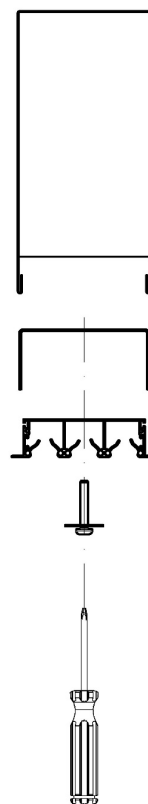


| N° slots | B     | H   | ØN          | Lb    |
|----------|-------|-----|-------------|-------|
| 1        | 40    | 200 | 123 ABS (*) | 50    |
| 2        | 71    | 200 | 123 ABS (*) | 80,6  |
| 3        | 101,5 | 235 | 155 ABS (*) | 111,2 |
| 4        | 132   | 235 | 155 ABS (*) | 141,8 |
| 5        | 163   | 275 | 195 ABS (*) | 172,4 |

for L up to 1500 one connection ØN  
for L greater than 1500: two connections ØN  
(\*) Steel on request



Corner connection



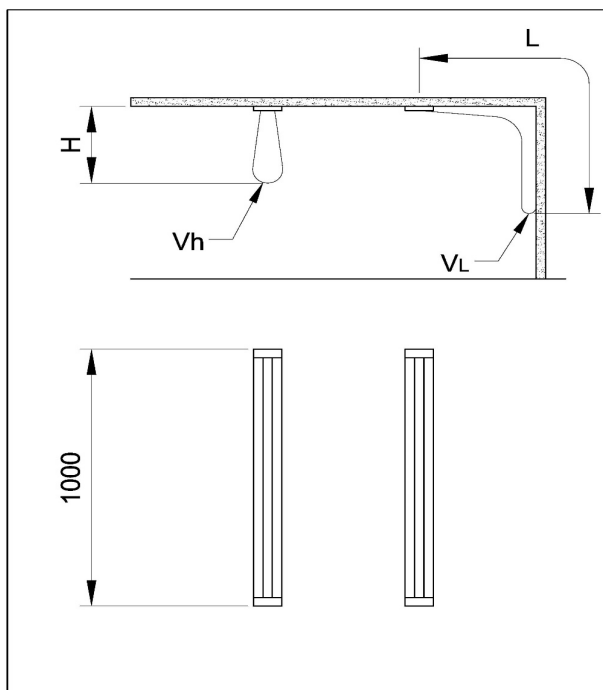
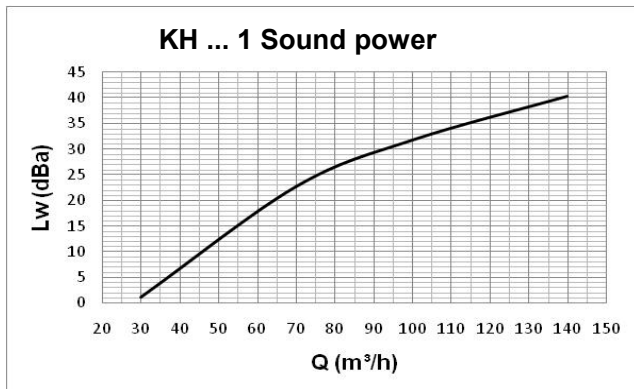
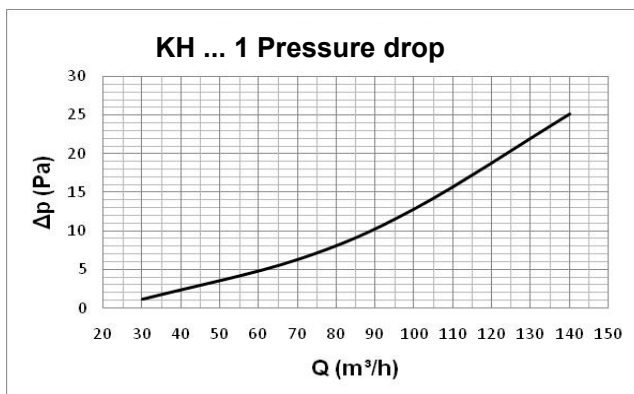
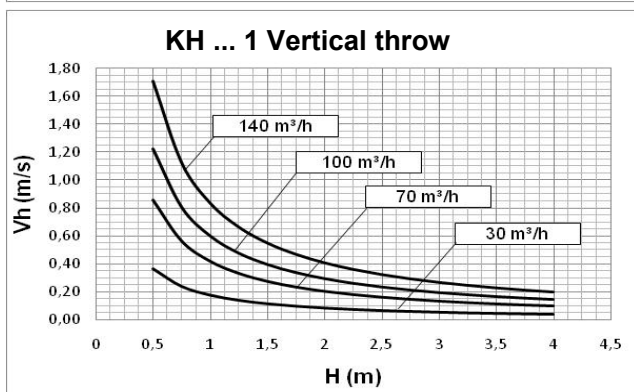
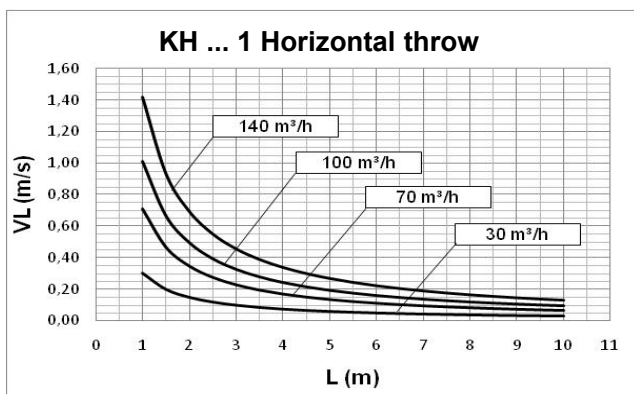
Mounting bridge



## LINEAR SLOT DIFFUSERS DOUBLE DEFLECTOR

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PERFORMANCE  
ONE SLOT



Aeraulic data measured in isothermic conditions for a one meter long diffuser in accordance with the international standard:

ISO 5219 1984: *Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.*

L (m) horizontal distance in meters from the centre of the diffuser

VL (m/s) maximum air speed in the air vain at a distance L

H (m) distance from ceiling

Vh (m/s) speed at height H

Acoustic data measured in reverberating room for a one meter long diffuser in accordance with the international standard:

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ISO 5135 1997: *Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.*

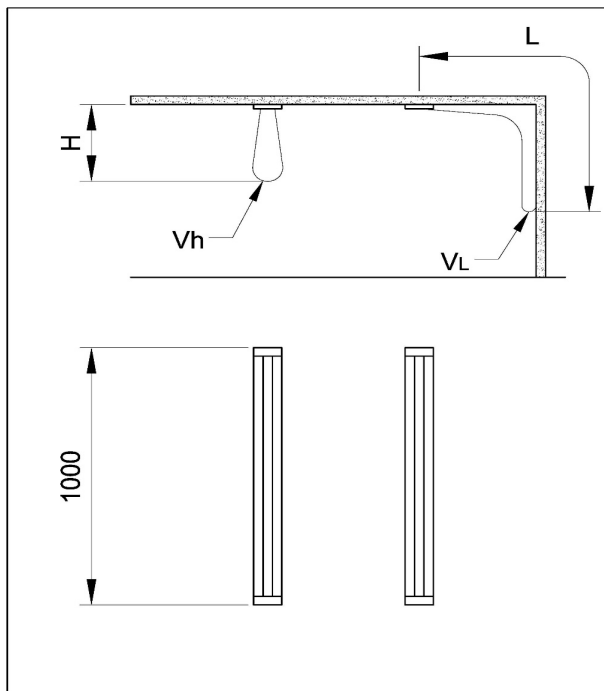
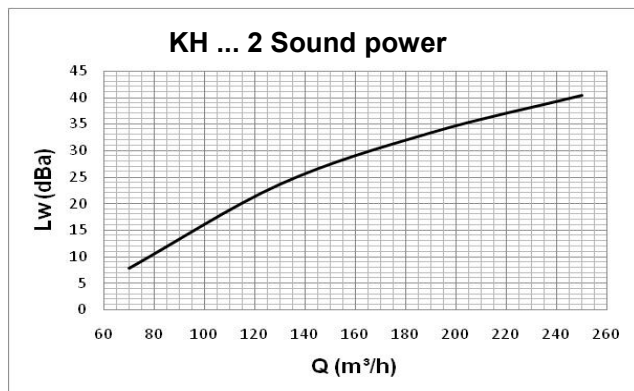
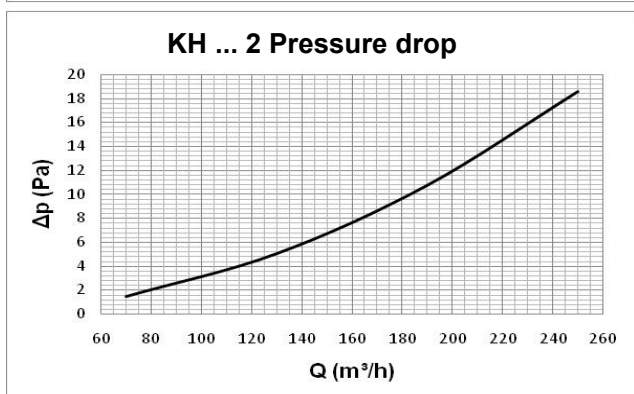
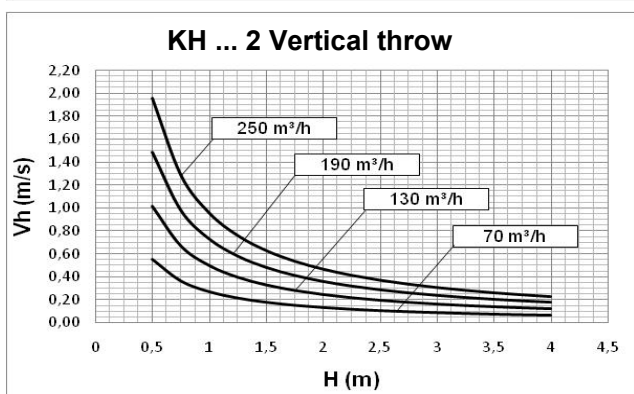
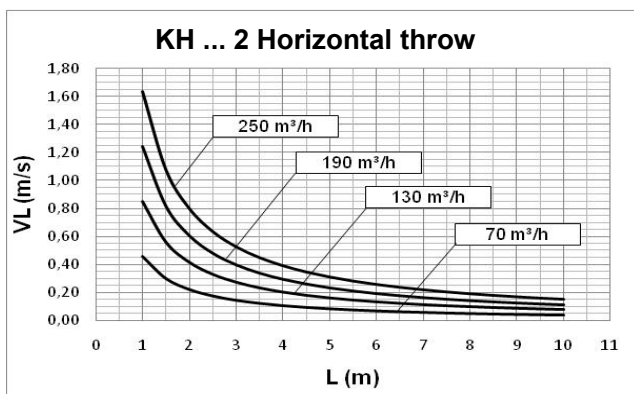
The data shown does not consider the attenuation given by the place of installation. This attenuation is normally included between 6 and 10dBa and is determined by the dimensions of the room, its shape and the arrangements of the furnishings within it.



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PERFORMANCE  
TWO SLOTS



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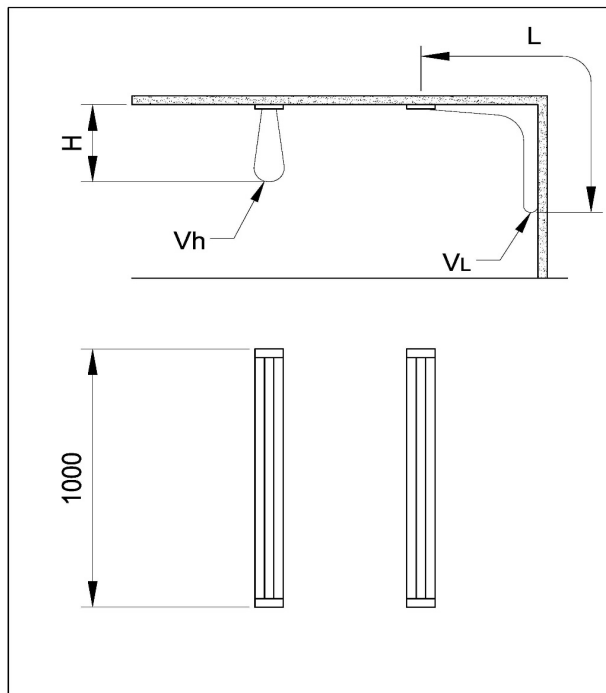
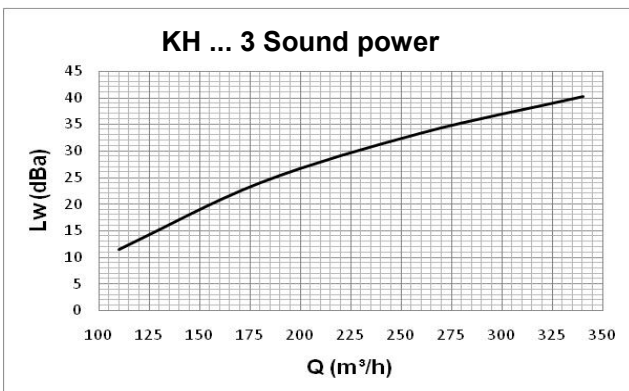
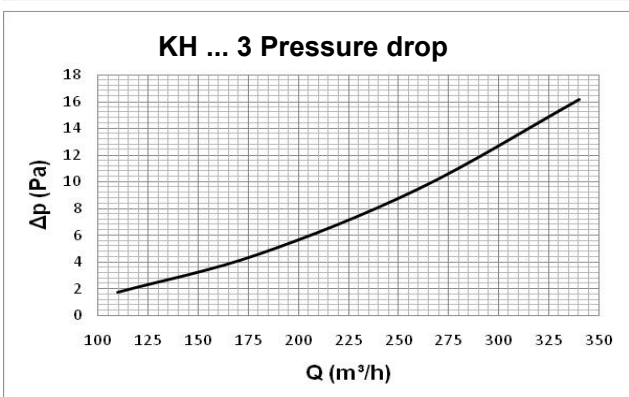
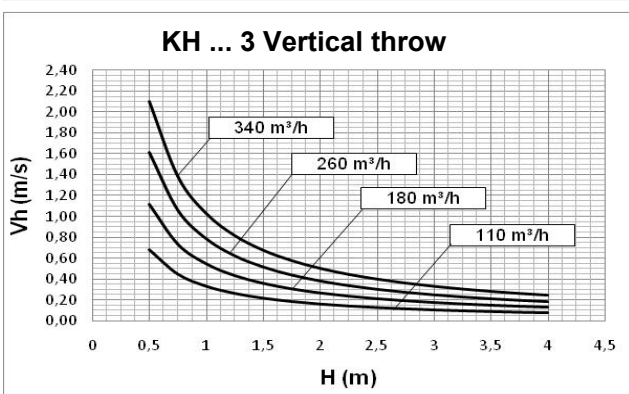
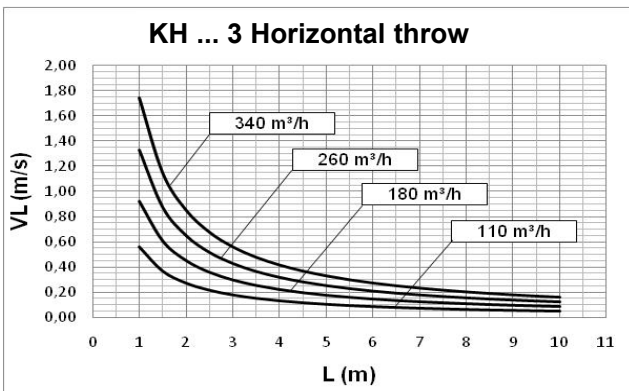
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PERFORMANCE  
THREE SLOTS



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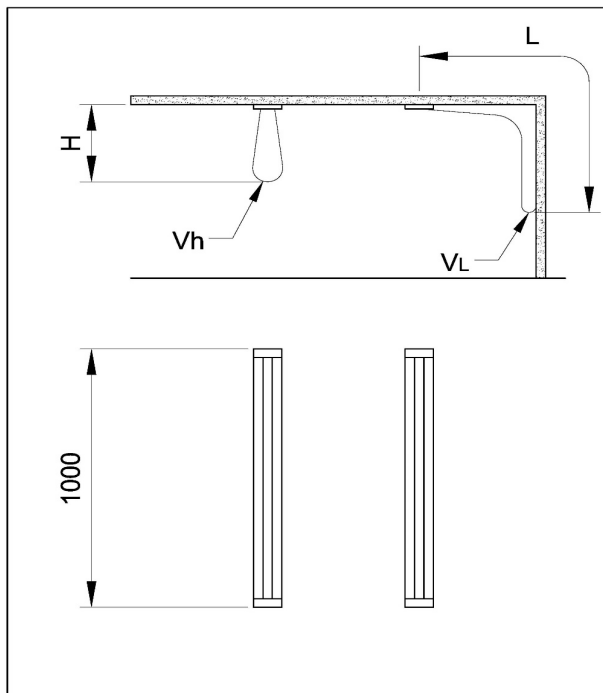
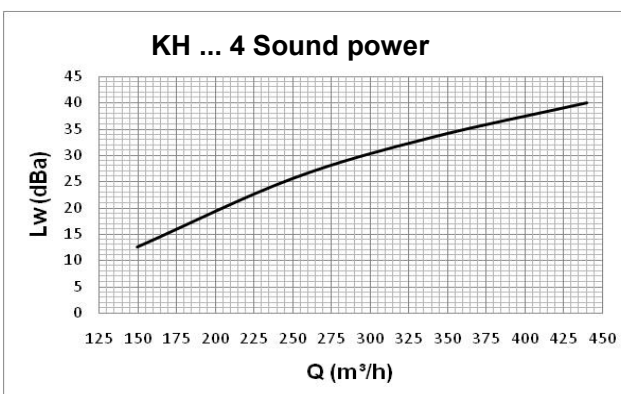
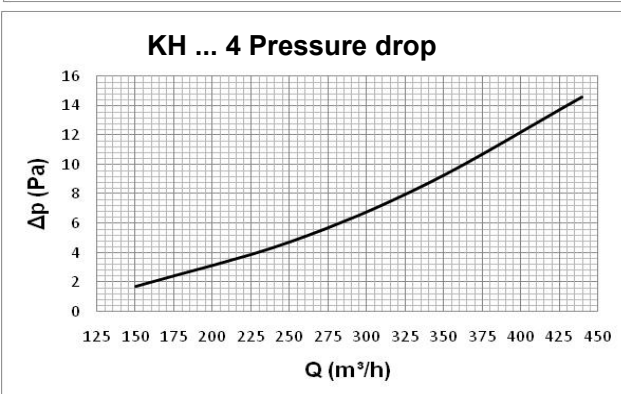
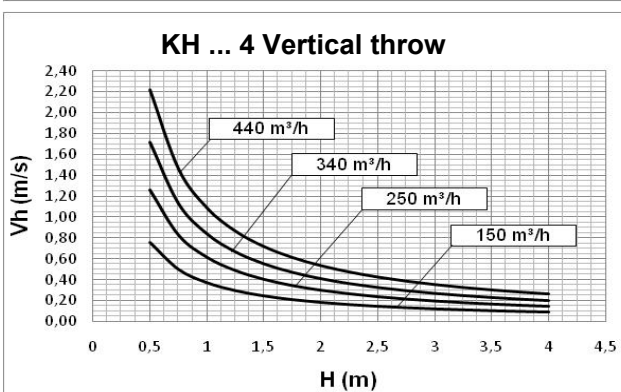
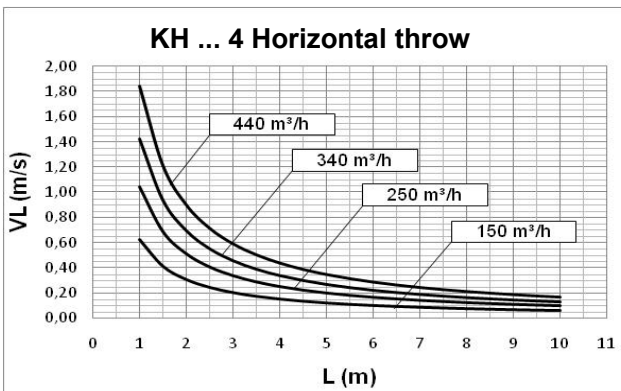
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PERFORMANCE  
FOUR SLOTS



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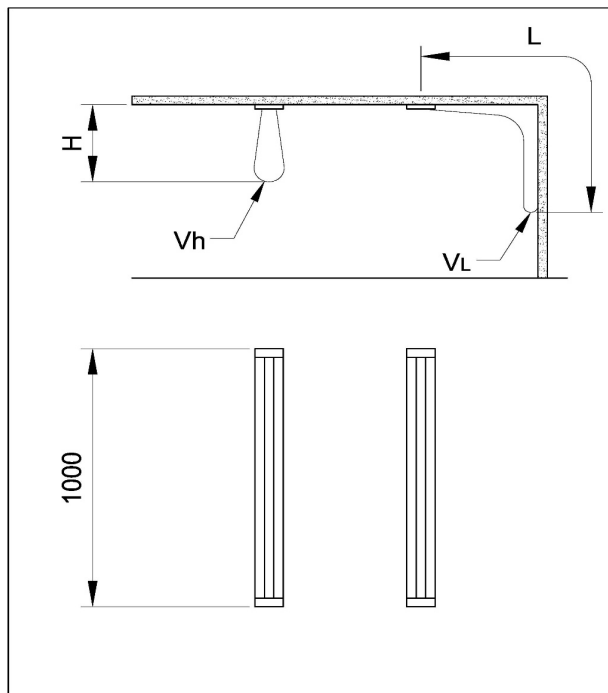
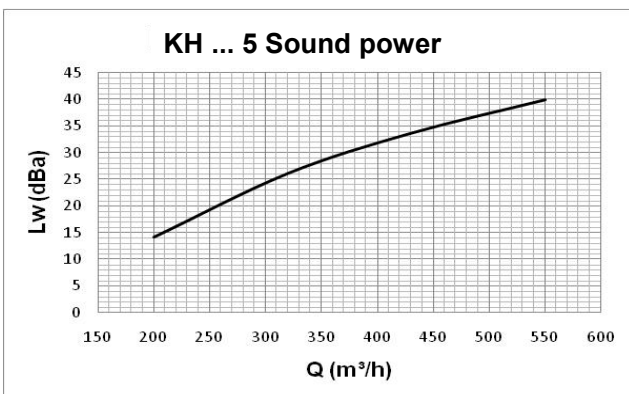
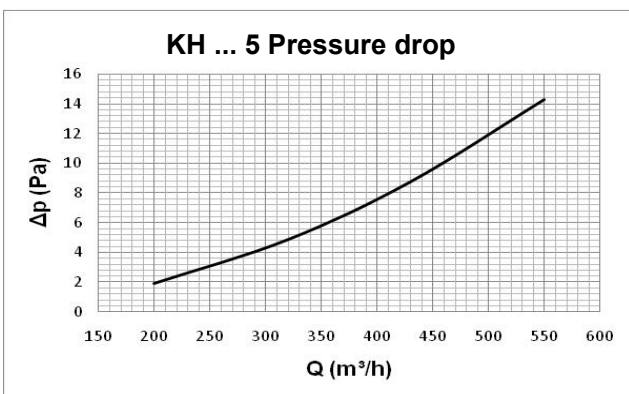
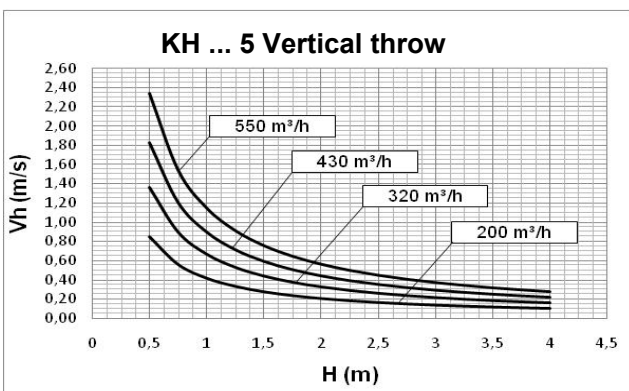
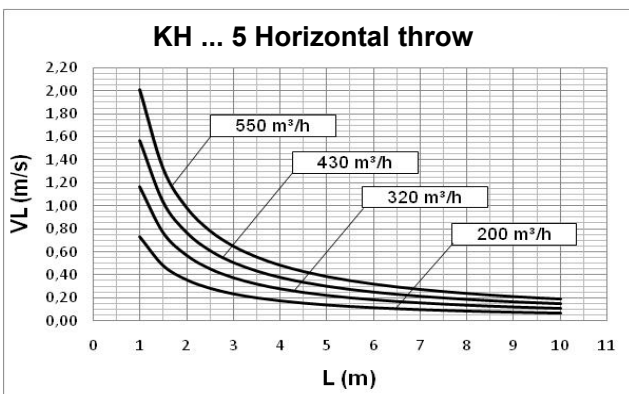
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PERFORMANCE  
FIVE SLOTS



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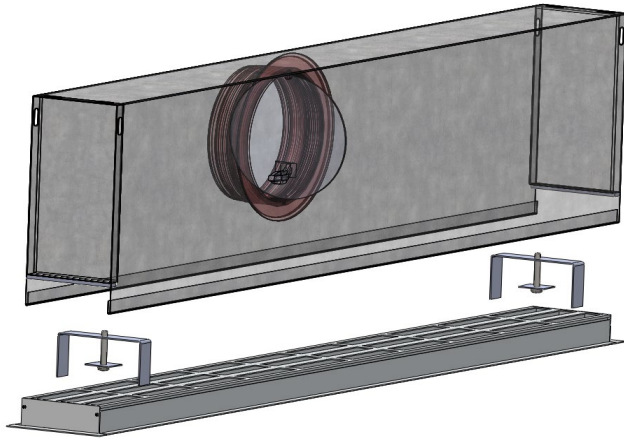
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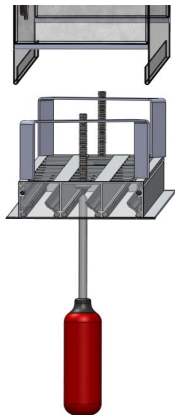
## MOUNTING INSTRUCTIONS



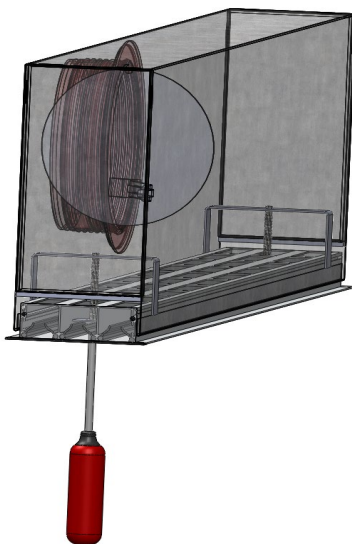
Plenum

Mountin bridges

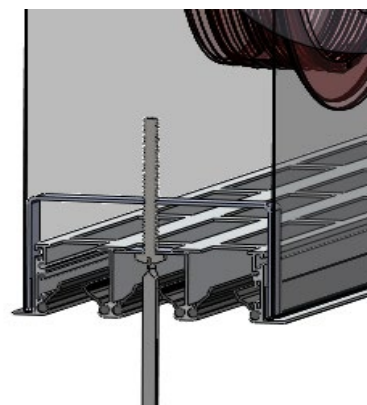
Diffuser



insert the mounting bridges into the rear opening  
of the diffuser



insert the diffuser into the plenum  
and tighten the screws

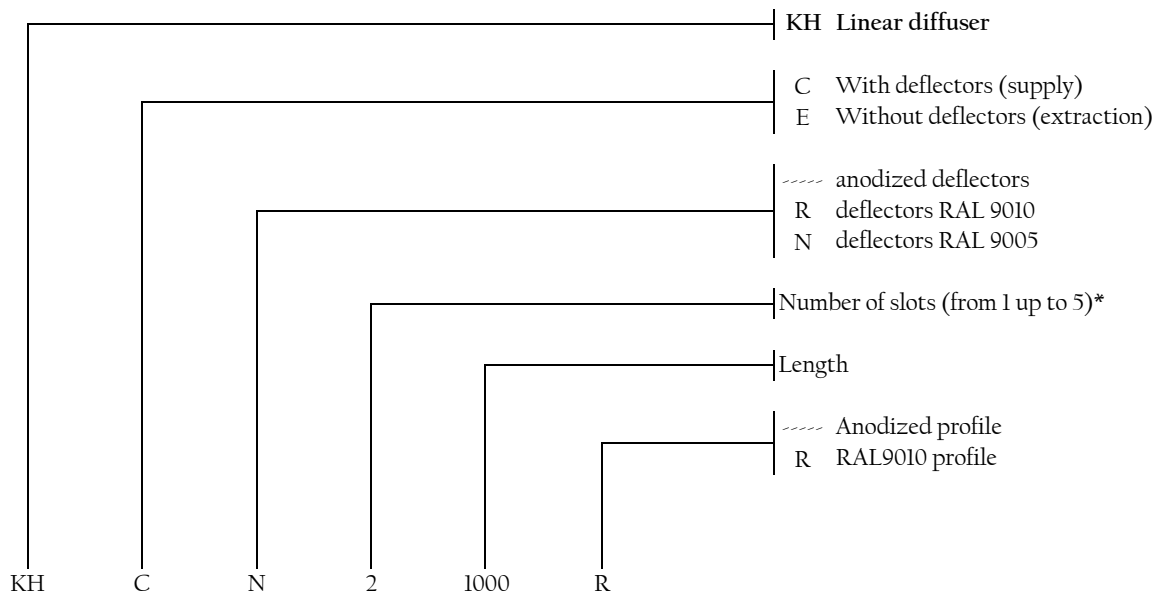




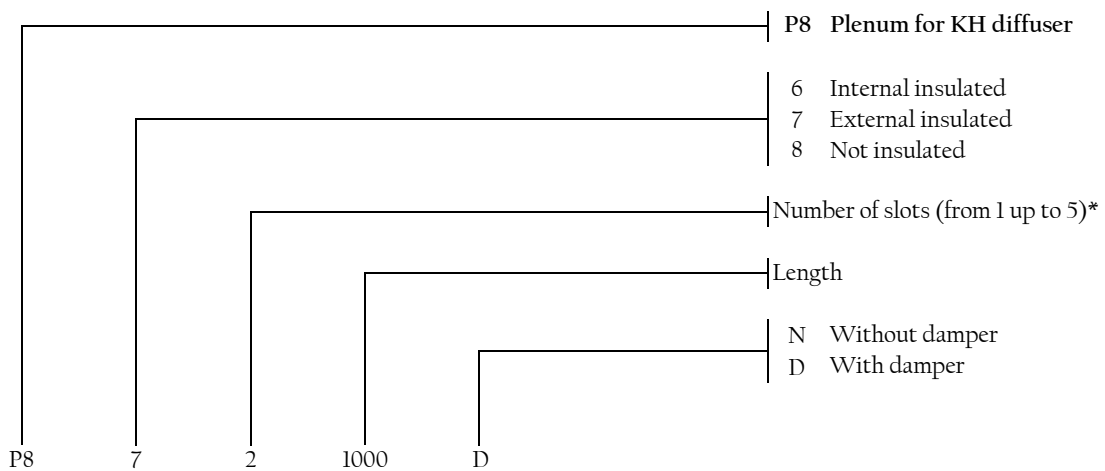
## LINEAR SLOT DIFFUSERS DOUBLE DEFLECTOR

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### ORDER CODES



\* No special version are foreseen  
with a greater number of slots



Standard lengths:

600 mm  
800mm  
1000mm  
1200mm  
1500mm  
2000mm