

## Description and application

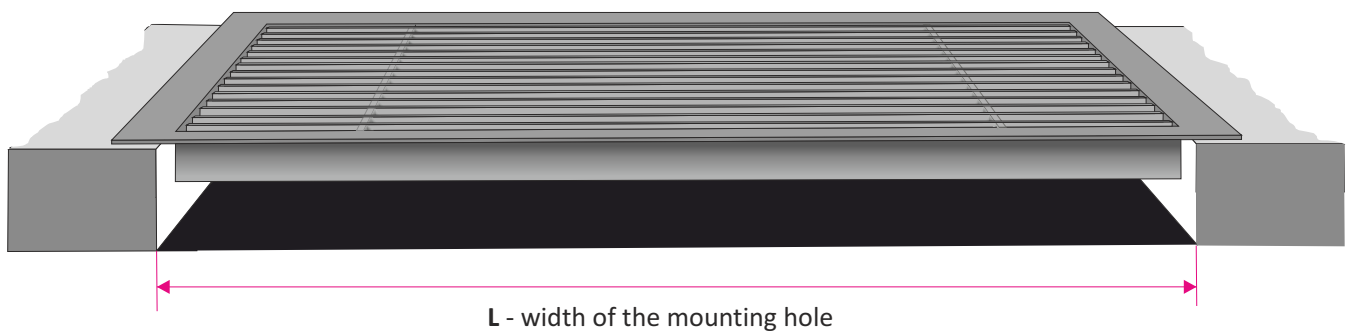
Intake and exhaust floor grille used in installation low and medium pressure. It is designed for mounting in the floor as the end of the ventilation system in the mounting hole properly prepared. The grille is resistant to extreme forces. Optionally, is possible to make the grille with the outer frame for installation in the floor. On request, the grille can be equipped with a damper for regulating air GP or directing air flow stream GW. Floor grille can also be supplied with plenum box leveling air speed and to allow equal air flow of the air stream.

Grilles have Hygienic Certificate HK/K/0522/02/2016

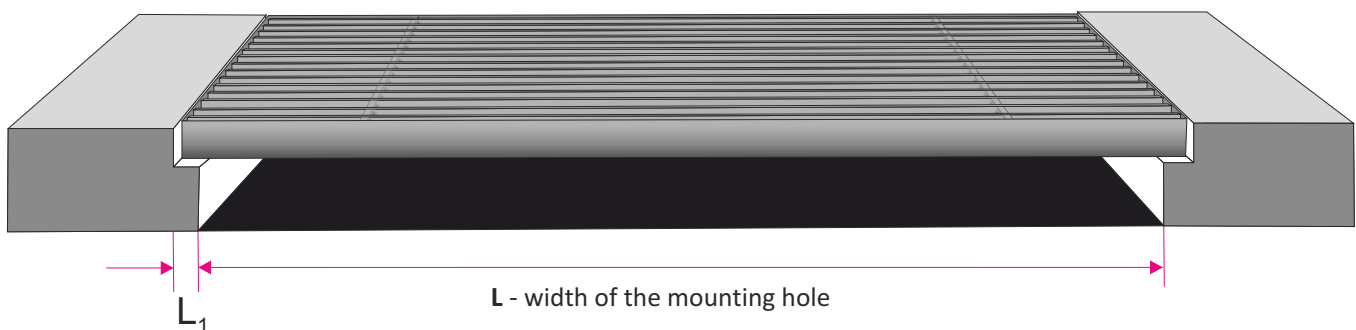
## Material and workmanship

The frame and grate grille are made of aluminum profile. We can make grille in the frame with eversion or without eversion according to the schemes shown on p1 i 2. The whole grille is powder coated in selected RAL color. Manufacturers reserve the right to make technical changes adapted to the conditions of mounting grille or its dimensions (agreed with the client). Damper and plenum box in standard are made of galvanized steel - to be agreed.

**KPWP-2z - in frame with eversion**



**KPWP-2k - in the frame of an angle bar**

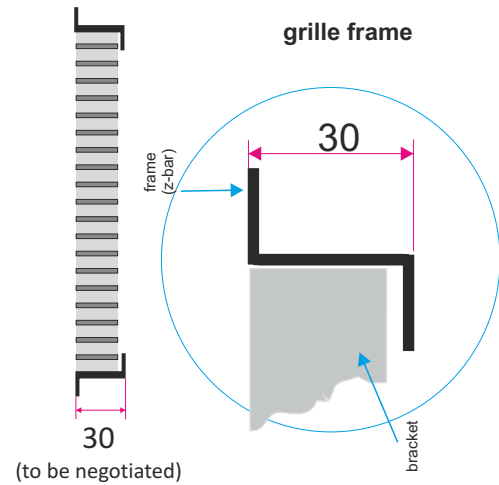
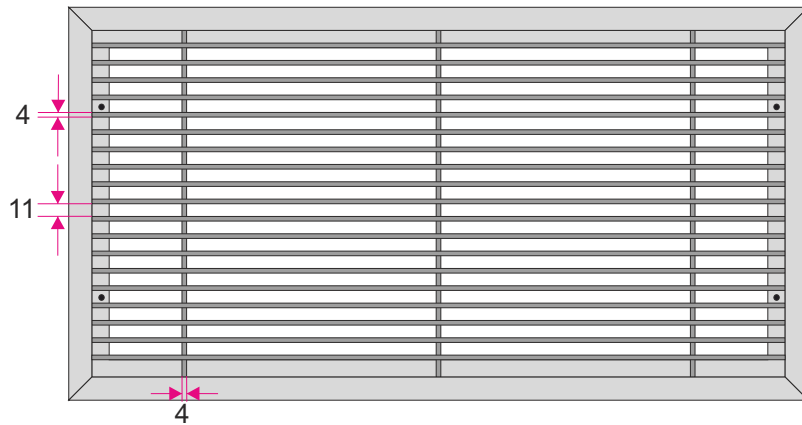


$L_1$  - the width of support for grille  
(Please specify this information  
when placing an order)

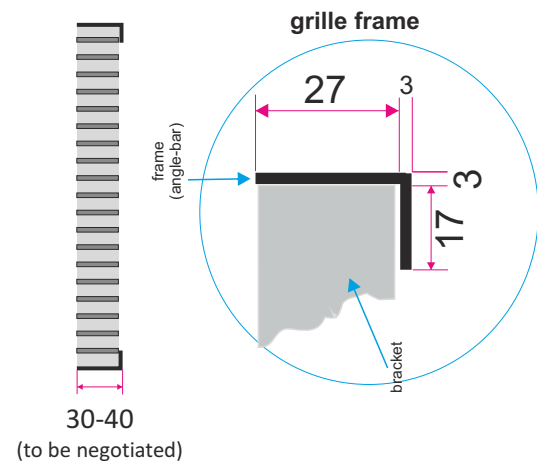
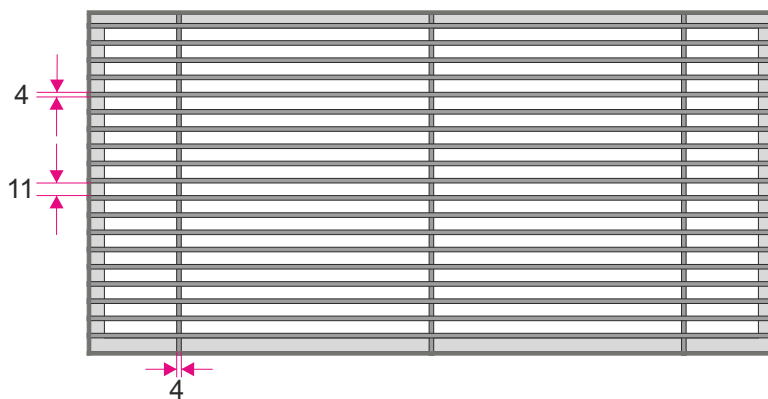
## Size

Grilles are manufactured on order. Grilles dimension specified by the customer, fitted to the mounting hole LxH.

### KPWP-2z in frame with eversion



### KPWP-2k in the frame of an angle bar



## Effective area air flow (example sizes)

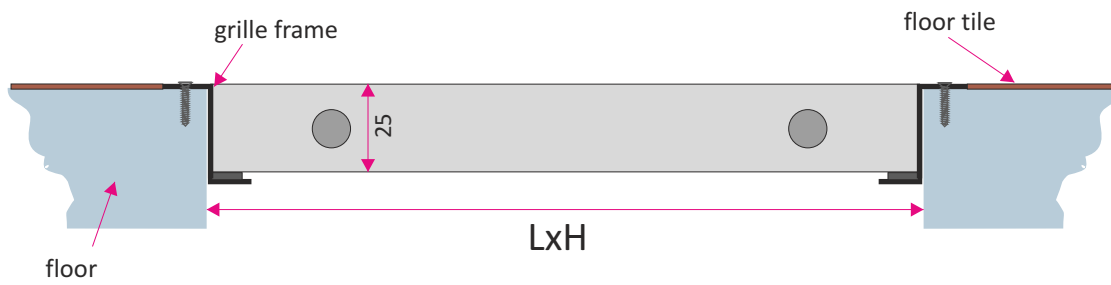
Grilles are made to order, according to measures LxH. The dimensions in the table are only used for determining the grille effective area.

L [mm] \ H [mm]	100	200	300	400	500	600	800	1000	1200
Aef (m <sup>2</sup> ) effective area									
100			0,022	0,030	0,037	0,044	0,059	0,074	0,090
200		0,028	0,043	0,058	0,072	0,086	0,115	0,145	0,174
300	0,020	0,042	0,064	0,086	0,106	0,128	0,171	0,215	0,259
400	0,026	0,056	0,086	0,115	0,143	0,173	0,232	0,290	0,348
500	0,033	0,070	0,106	0,143	0,178	0,215	0,286	0,360	0,434
600	0,039	0,083	0,127	0,171	0,213	0,257	0,345	0,433	0,521

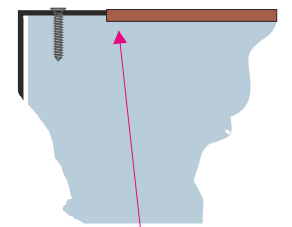
LxH - size of ventilation duct (width x height)

Methods of mounting

**KPWP-2 in the frame with eversion - mounting screws in the grille frame (W1)**

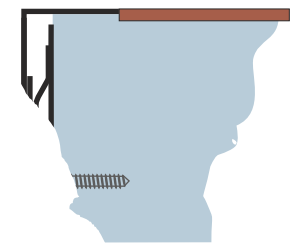
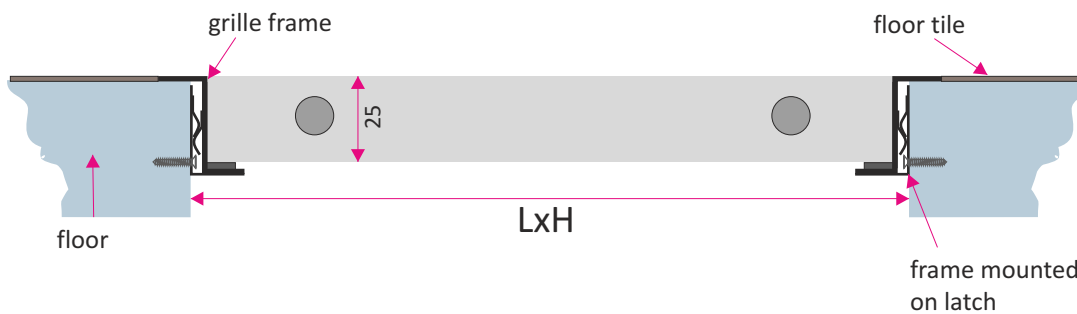


detail



suggesting solution

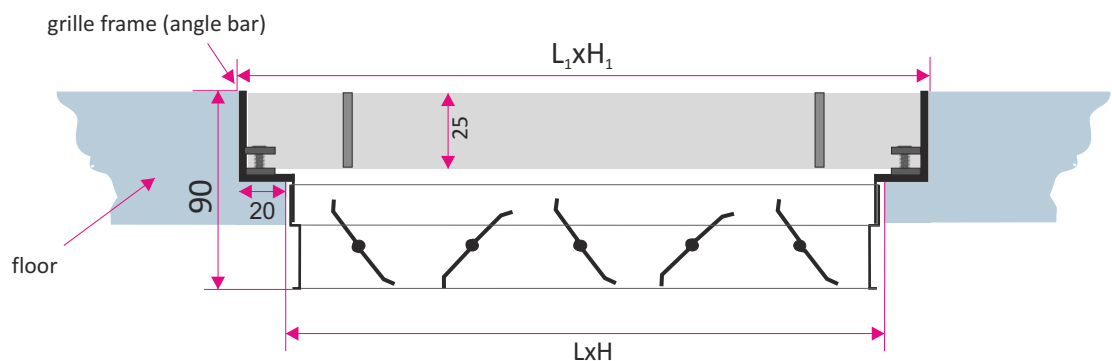
**KPWP-2 in the frame with eversion - mounting invisible on latch (W2)**



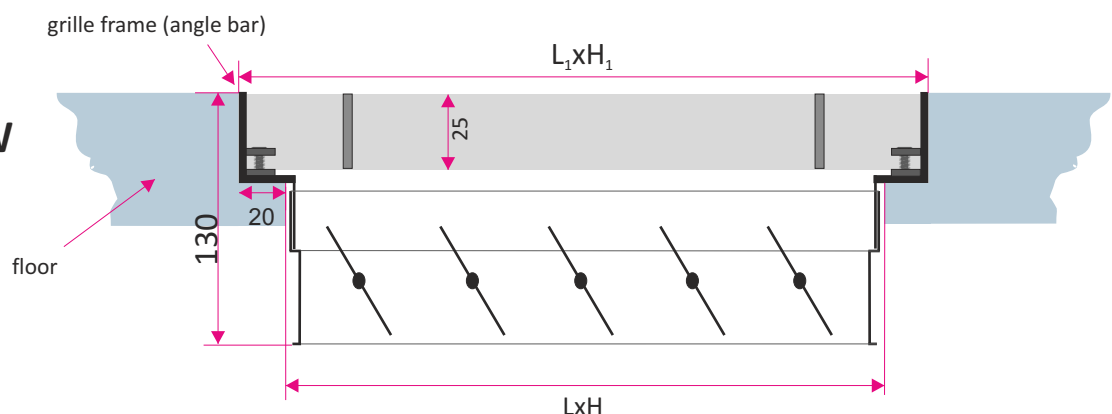
Accessories- dampers

Grille KPWP-2 can also be equipped with a damper, positioned directly behind the grille blades. In this type of grill, damper regulation is possible from the front side of grille, without the need for disassembly (between the blades). Below there are the types of dampers used for the ventilation grilles.

**KPWP-2 + GP**

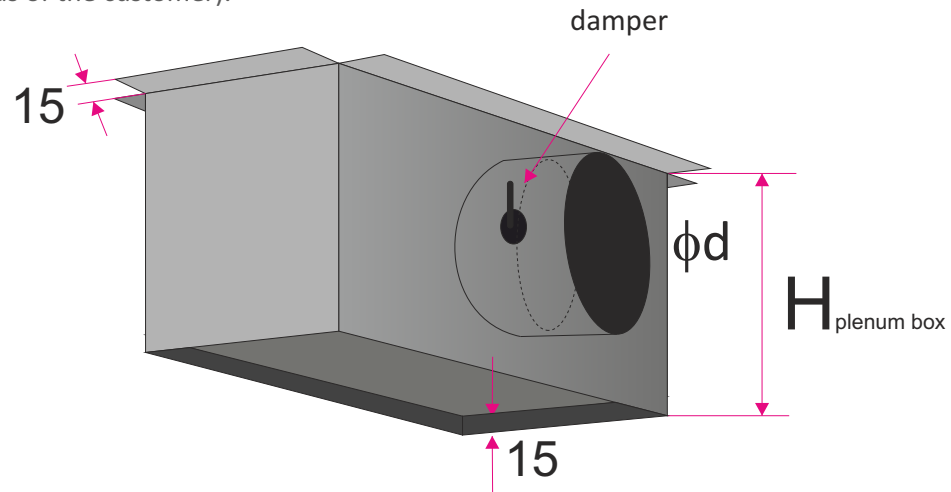


**KPWP-2 + GW**



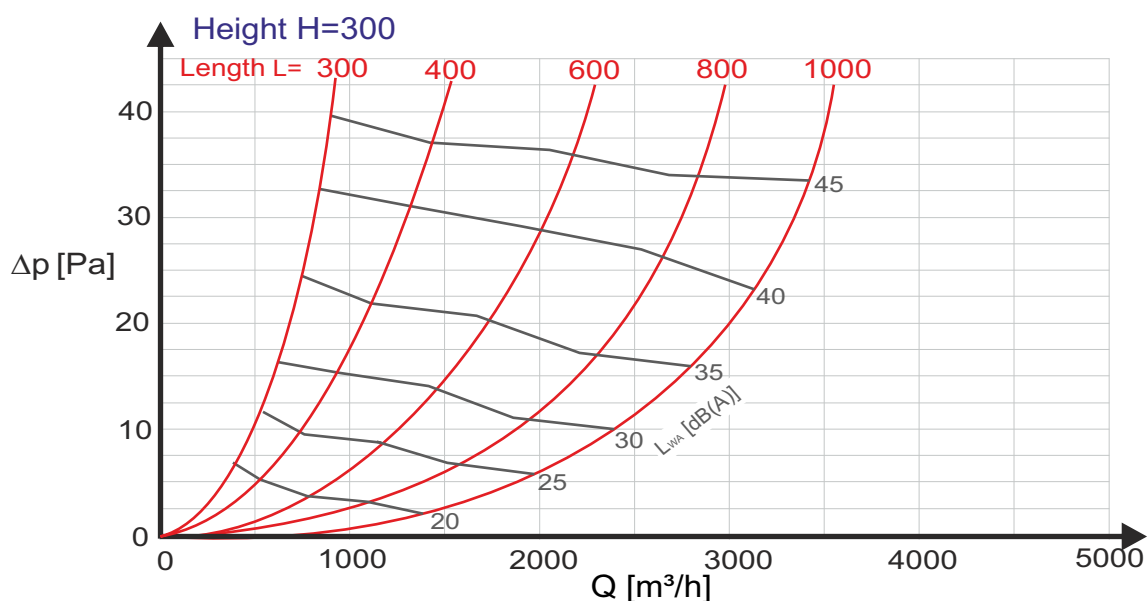
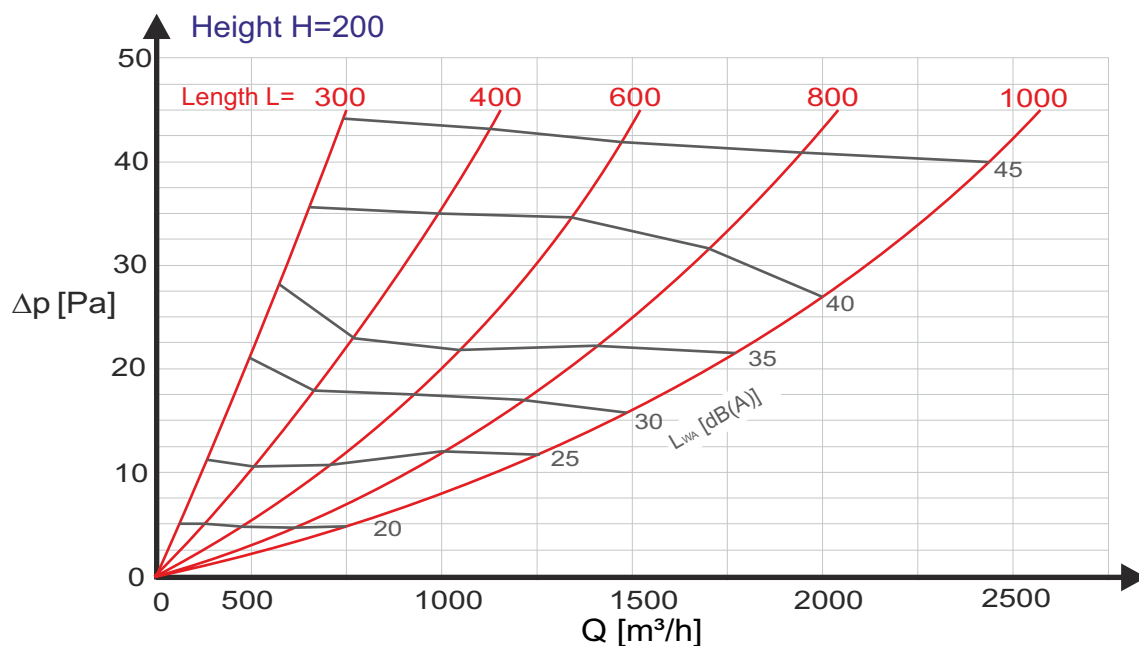
## Accessories - plenum box

Floor grilles can be equipped with plenum box. Boxes in standard are made of galvanized steel (possibility of making boxes according to the individual needs of the customer).



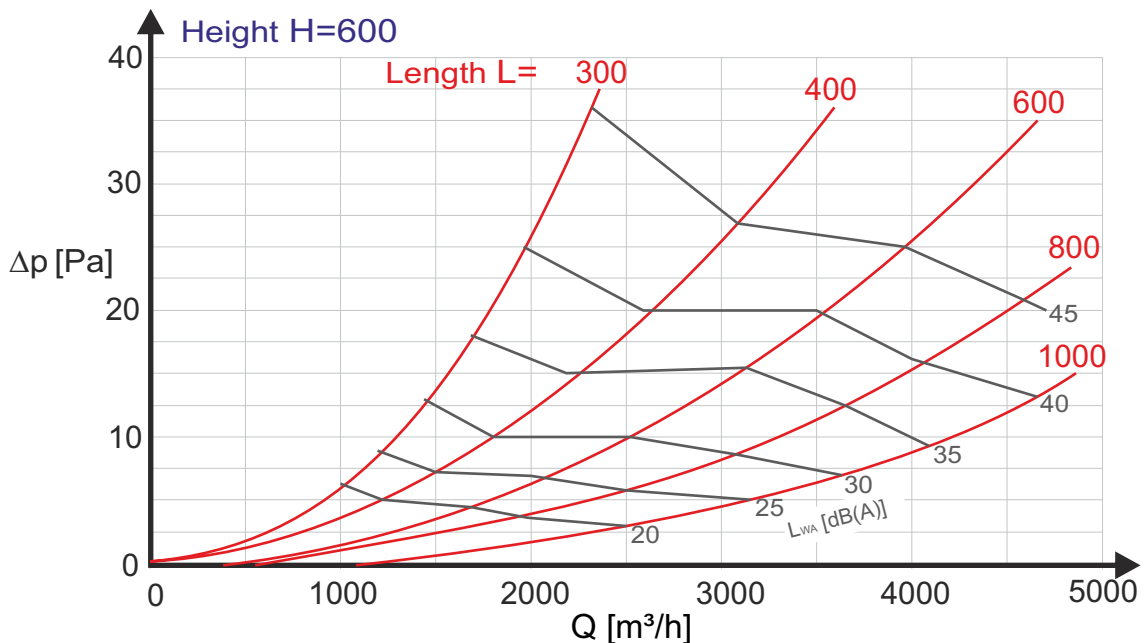
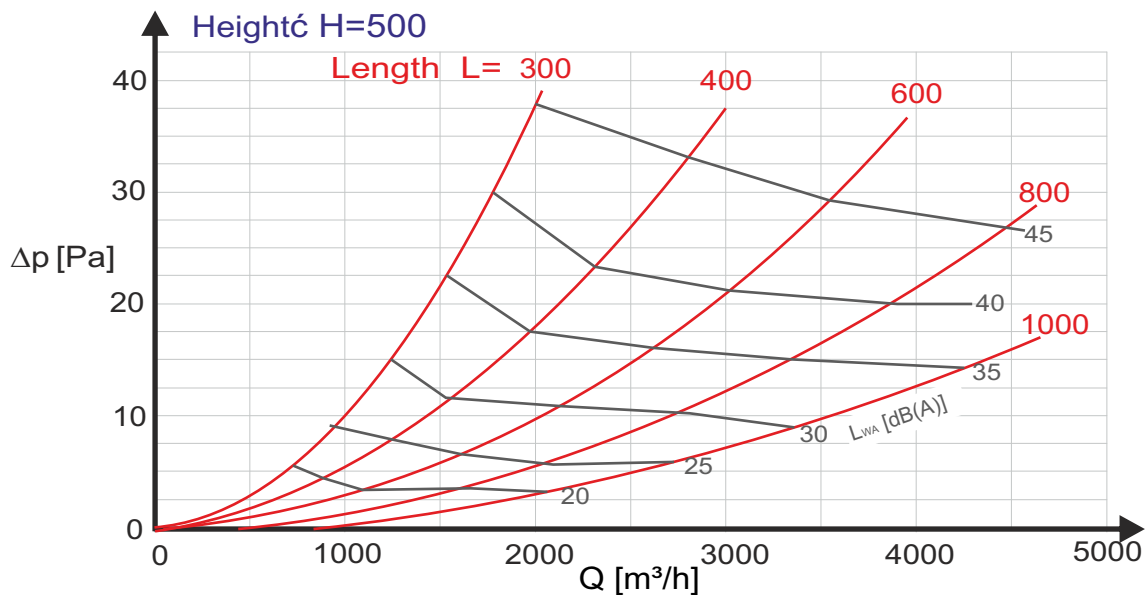
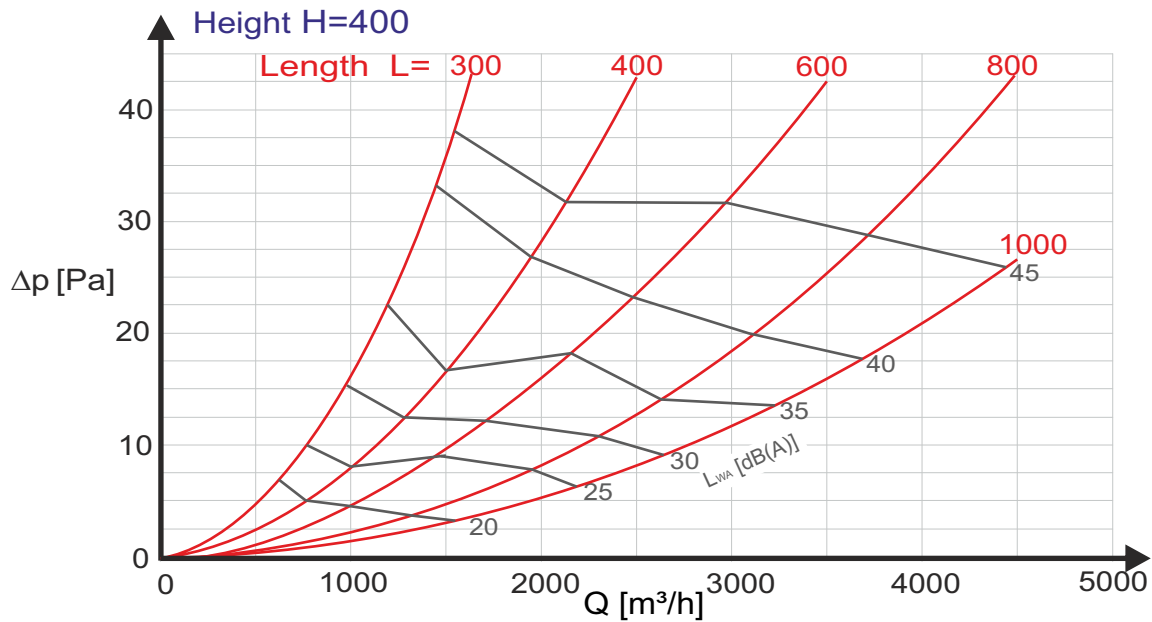
## Technical data

The dependence of pressure drop  $\Delta p$  [Pa] and acoustic power level  $L_{WA}$  [dB(A)] of air volume flow  $Q$  [m<sup>3</sup>/h].



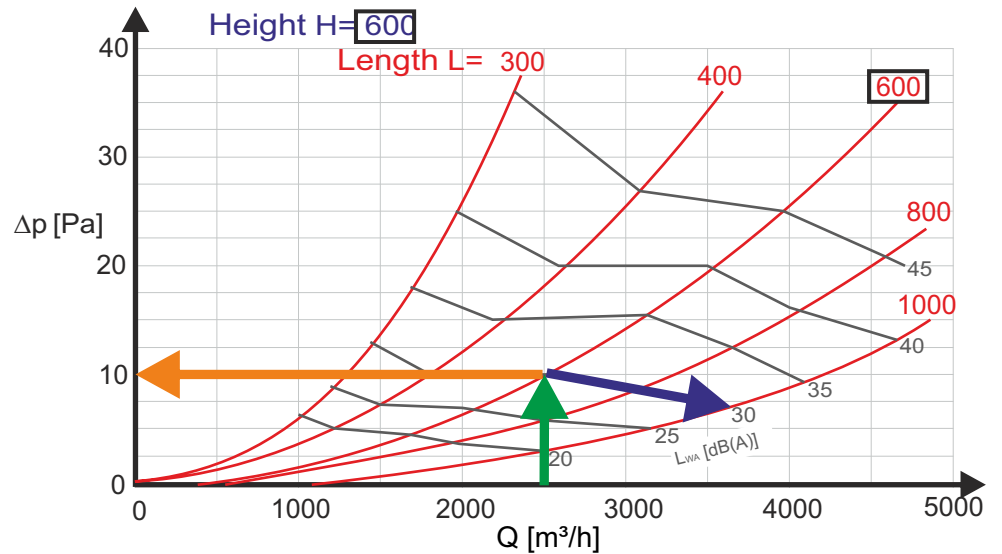
## Technical data

The dependence of pressure drop  $\Delta p$  [Pa] and acoustic power level  $L_{WA}$  [dB(A)] of air volume flow  $Q$  [m<sup>3</sup>/h].



**EXAMPLE**

- grille LxH= 600x600 [mm]
  - air volume flow Q=2500 m<sup>3</sup>/h
- Reading from the graph:**
- pressure drop  $\Delta p=10$  Pa
  - acoustic power  $L_{WA}=30$  dB



**The method of placing an order**

Please make orders according to the following formula:

**KPWP-2 / 'R' / 'G' / 'LxH' / 'L1' / 'RAL' / 'W' + 'SR' / 'I' / 'P' / 'K' / 'H'**

- 'R' - kind of frame  
z - frame of aluminum profile (Z)  
k - frame with aluminum angle (K)
- 'G' - damper type:  
none- grille without damper \*  
GP - opposed blade damper  
GW - parallel blade damper
- 'LxH' - mounting hole size (width x height) in mm
- 'L1' - width of support for grille (especially in case of the grilles in the frame of the angle bar)
- 'RAL' - grille color according to RAL palette (standard RAL9006\*)
- 'W' - mounting option  
W1 - visible assembly through screws in holes in grille front frame \*  
W2 - invisible mounting using latch springs and additional mounting frame
- 'SR' - plenum box:  
SR-Gc - plenum box with top spigot connection(lower)  
SR-Bc - plenum box with side spigot connection
- 'I' - isolation:  
none - plenum box without isolation\*  
Iz - outside isolation (thermal)  
Iw - inside isolation (acoustic)
- 'P' - adjustment damper at spigot connection:  
none - no damper\*  
P - damper on spigot connection adjustable from the outside  
PP - damper on spigot connection adjustable from the inside
- 'K' - diameter spigot connection in size mm
- 'H' - the height of the plenum box in mm\*

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