Air-flow grille KFC for fan coils

Description and application

Ventilation grilles KFC have the function of supply and equalizing- air flow. Grilles have still not moving blades bent at an angle 45°. The grille frame has a holes for fixing the grille directly to the mounting surface. **Grille KFC sespecially recommended for use with fan coils.** The bent fin allows to get supply air one- or two-way (example below). Small depth of grille (only 15mm) allows installation in a plate GK. Ideal also as a door grille.

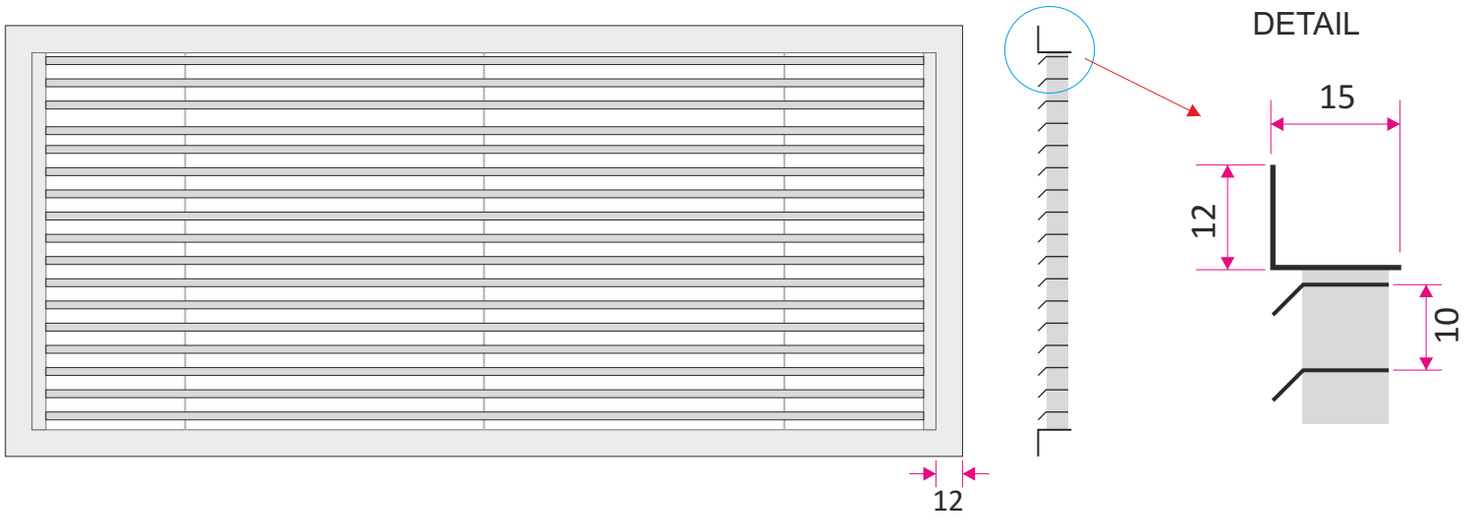
Grille has Hygienic Certificate HK/K/0522/01/2016

Material and workmanship

Standard grille is made of powder coated galvanized sheet steel. On the special request it can be made of aluminum and painted in any RAL color. Making an order give the information if the grille will be mounted inside or outside the building.
Producer reserves the right to make technical changes (agreed with the client).

Size

Grilles are manufactured to order. Grilles dimension by the customer request.
Example for H=175mm



Technical data - The effective area of air flow

H \ L	300	400	500	600	800	1000	1200	1400
mm	Aef (m^2) effective area							
50	0,011	0,015	0,018	0,022	0,030	0,038	0,046	0,053
100	0,024	0,032	0,040	0,048	0,064	0,080	0,096	0,113
150	0,036	0,048	0,061	0,073	0,098	0,123	0,147	0,172
200	0,049	0,065	0,082	0,099	0,132	0,165	0,198	0,231
250	0,061	0,082	0,103	0,124	0,165	0,207	0,249	0,290
300	0,074	0,099	0,124	0,149	0,199	0,249	0,299	0,349
350	0,086	0,116	0,145	0,174	0,233	0,292	0,350	0,409

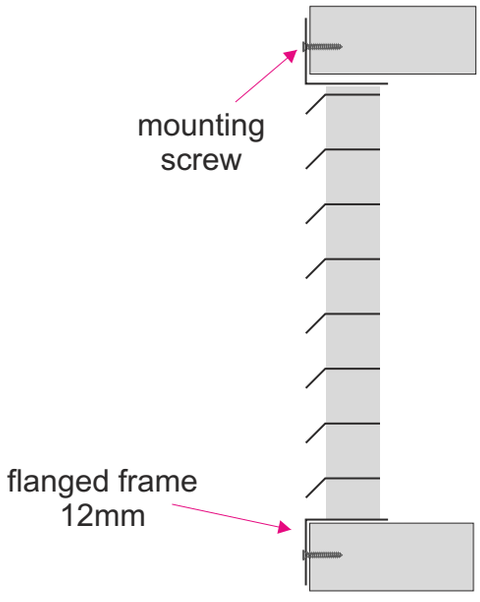
Grilles are made on request.
The dimensions in the table are only used for determine the effective area the grille

L i H - mounting size hole

Methods of mounting

W1

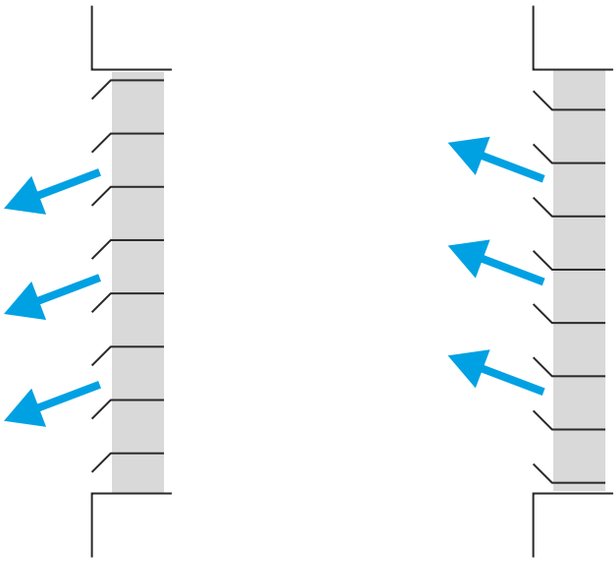
Assembling visible through screws and mounting holes in the grille frame.



Way of making- allocation of blades

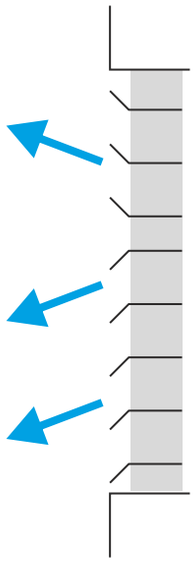
Depending on the mounting location and the destination grille KFC gives you the ability to determine the direction of the air flow:

One-way supply air



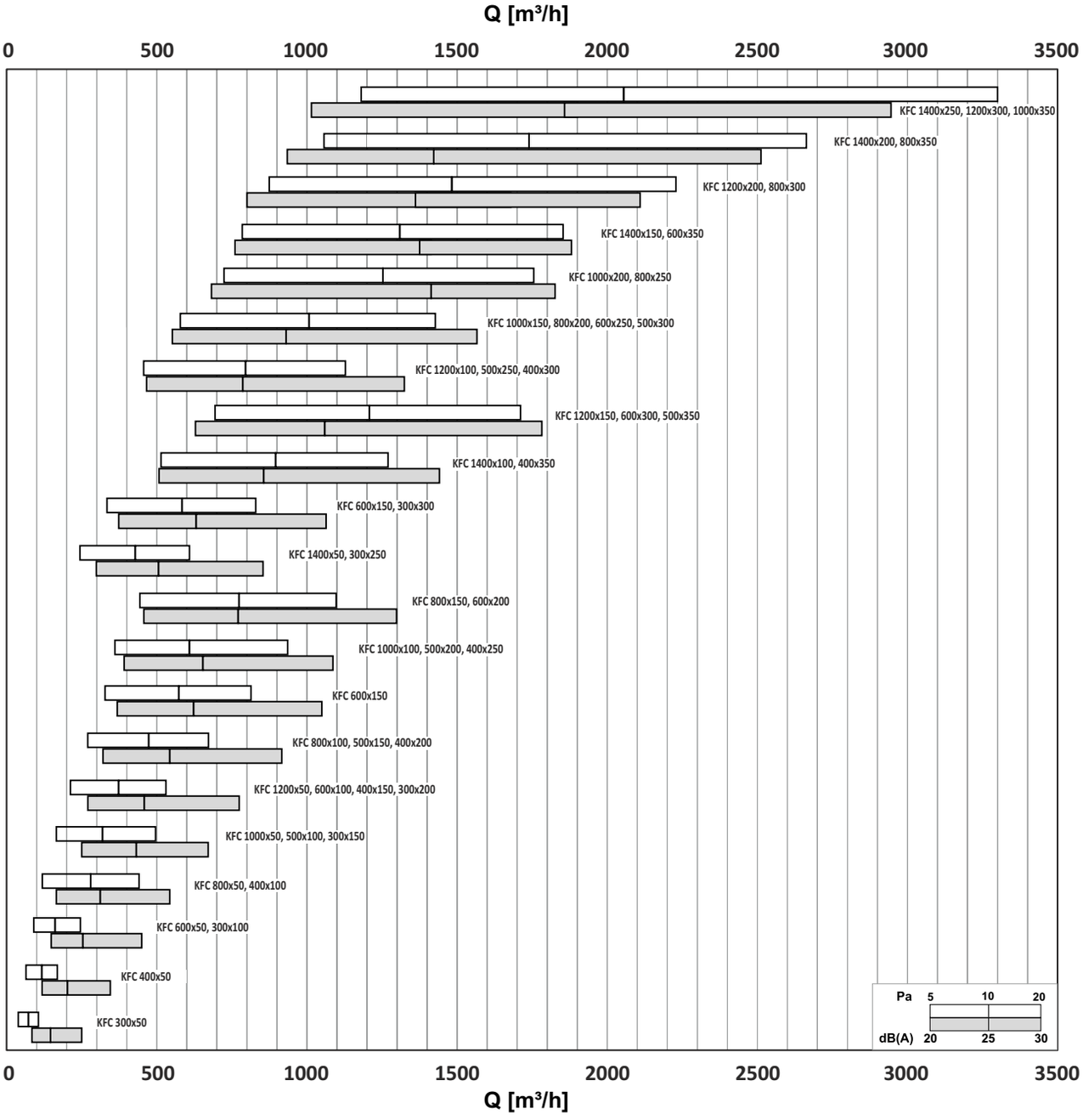
effect under ceiling

Two-ways supply air 1/3 - 2/3



Technical data

The dependence of pressure drop ∆p[Pa] and acoustic power level L_{WA} [dB(A)] depending of the air volume flow Q [m/h].



EXAMPLE

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- grille size: 800x200
- Q=1000 m^3/h
- A_{ef}= 0,132 m^2

$$v = \frac{Q}{3600 \cdot A_{ef}} \ [m/s]$$

$$v = \frac{1000}{3600 \cdot 0{,}132} = \mathbf{2{,}1\ [m/s]}$$

H \ L	300	400	500	600	800	1000	1200	1400
mm	Aef (m^2) effective area							
50	0,011	0,015	0,018	0,022	0,030	0,038	0,046	0,053
100	0,024	0,032	0,040	0,048	0,064	0,080	0,096	0,113
150	0,036	0,048	0,061	0,073	0,098	0,123	0,147	0,172
200	0,049	0,065	0,082	0,099	0,132	0,165	0,198	0,231
250	0,061	0,082	0,103	0,124	0,165	0,207	0,249	0,290
300	0,074	0,099	0,124	0,149	0,199	0,249	0,299	0,349
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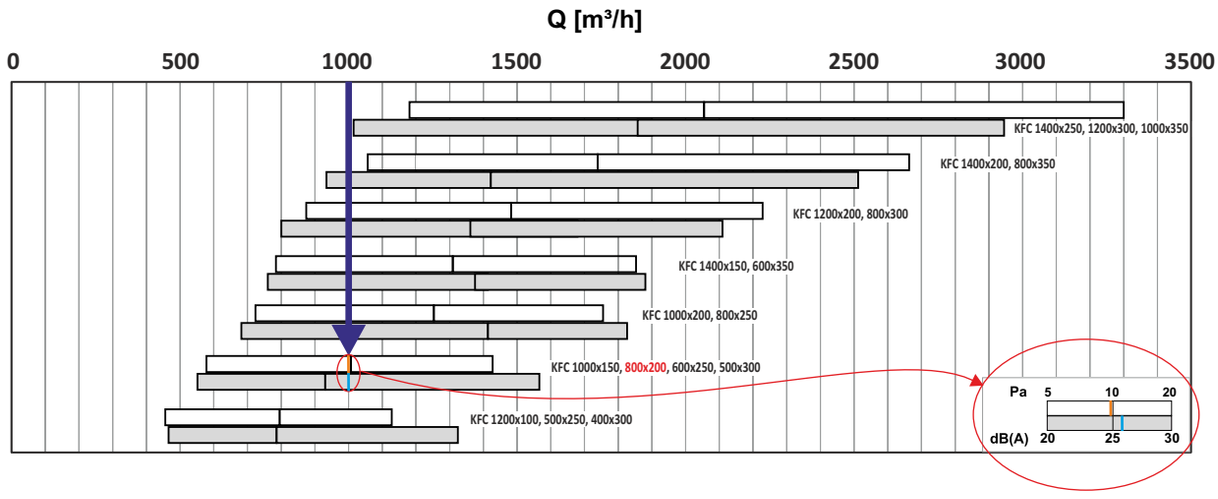
EXAMPLE cd.



EXAMPLE
- air volume flow Q=1000 m^3/h
- grille size: 800x200 (A_{ef}= 0,132 m^2)

Reading from the graph:
- pressure drop on grille Δp=10 Pa
- acoustic power L_{WA}=26 dB(A)

The method of placing an order

Please make orders according to the following formula:

KFC / 'LxH' / 'RAL' / 'M' / 'MM' + 'SR' / 'I' / 'P' / 'K' / 'H'

'LxH'	- mounting hole size (width x height) w mm
'RAL'	- grille color according to RAL palette (standardd RAL9016*)
'M'	- material:
	OC - powder coated steel*
	AL - aluminum powder coated
'MM'	- mounting place:
	W - inside building
	Z - outside building (elevation, outside doors)
	ADDITIONAL EQUIPMENT:
'SR'	- plenum box:
	SR-Gw - plenum box with top spigot connection
	SR-Bw - plenum box with side spigot connection
	SR-Tw - plenum box with back 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.