

Description and application

Ceiling diffusers are designed for gravity ventilation, low and medium pressure systems and air conditioning systems, mainly exhaust air. Designed for mounting on rectangular ventilation ducts, plenum boxes and construction of a suspended ceiling. Diffuser with a very large effective surface area to be used wherever necessary to ensure the comfort of a large air exchange. The air flow adjusted with a damper with counter running blades GP located directly behind the anemostat or single-leaf damper P on plenum box spigot.

Ceiling anemostat diffuser raster has Hygienic Certificate

Material and workmanship

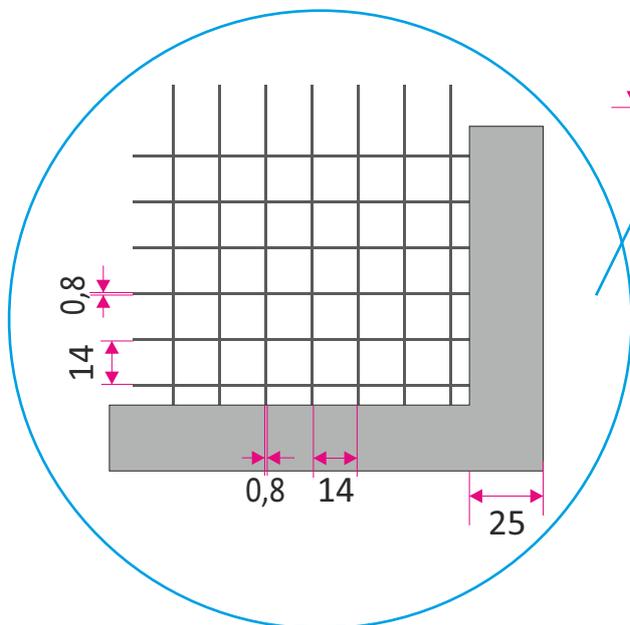
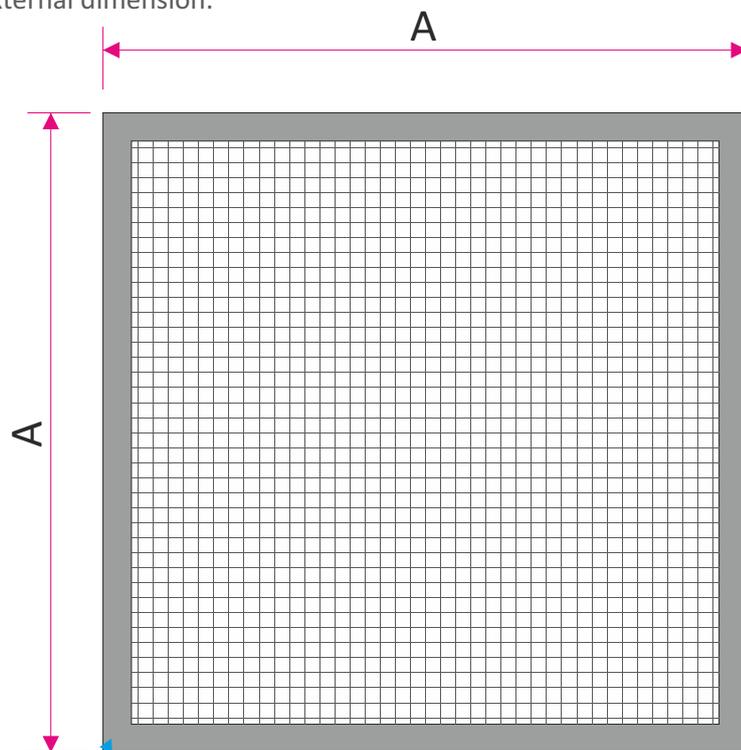
The front frame and internal grate are available in three material variants: galvanized steel, aluminum - powder coated or stainless steel (1.4301 or 1.4404). On customer request powder coated to any color from the RAL palette (standard RAL9016). A possibility to make frame with the angle bar (raster frame stiffener) to put on the suspended ceiling construction or with a standard wrapping 25mm allowing the diffuser screwed to the ceiling. The manufacturer reserves the right to make technological changes.

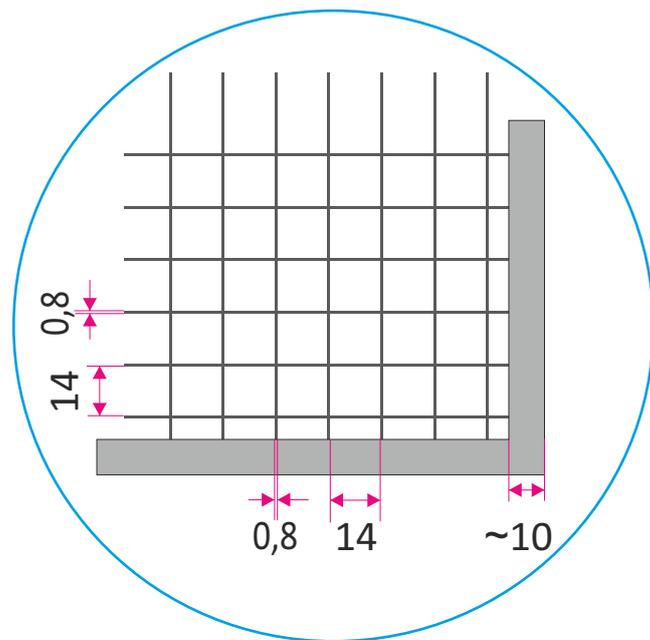
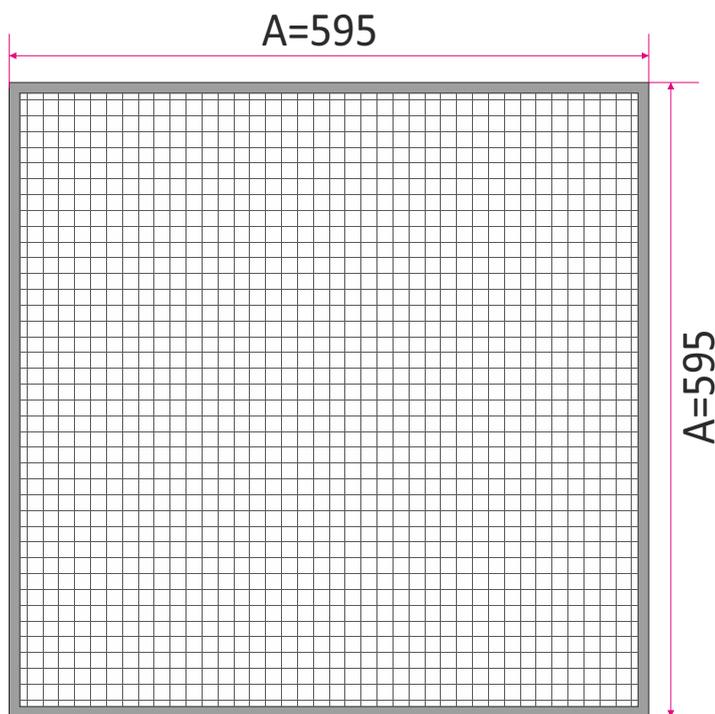
Size

The anemostat diffusers are manufactured on order by the external dimension. Examples dimensions of the diffusers are given in the table.

A	Aef (m ²)
300x300	0,0703
400x400	0,1292
500x500	0,2058
595x595	0,2957
600x600	0,3002
625x625	0,3273
825x825	0,5785

Other dimensions are produced on customer request





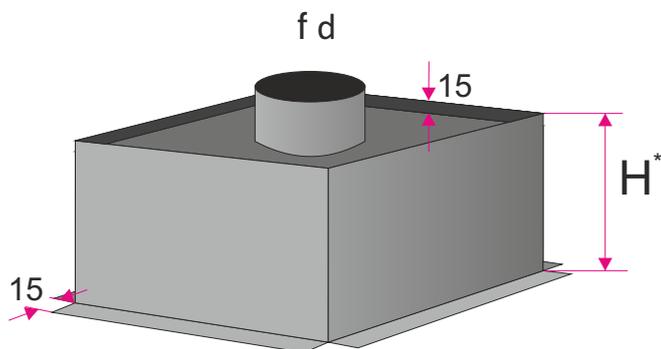
Version in the frame of the angle bar (AR-k) is recommended to be mounted on the suspended ceiling construction

W4

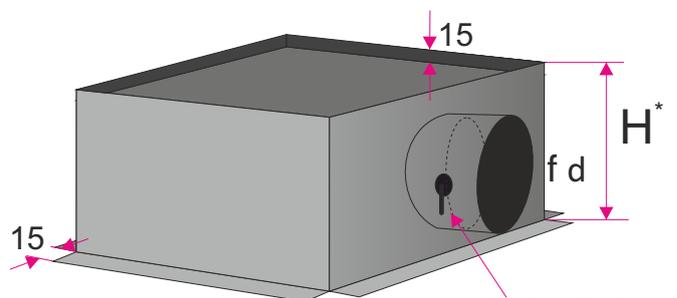


Accessories - plenum box

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).



Rectangular plenum box with the spigot on the top **SR-Gc**



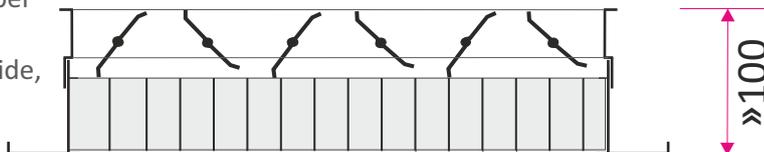
Rectangular plenum box with the spigot on the side **SR-Bc**

adjustable damper on the spigot

* - the height of plenum box adjusted to size of the spigot or by the customer request.

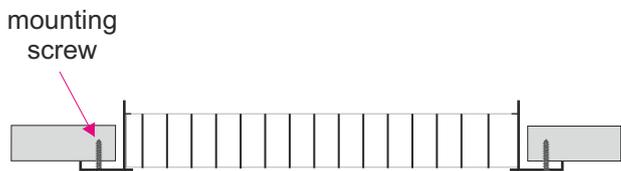
Accessories - damper with counter running blades GP

Anemostat diffuser raster can also be equipped with a damper with counter running blades, localized directly behind the mesh grille. Damper control is possible from the panel side, without disassembling the diffuser.

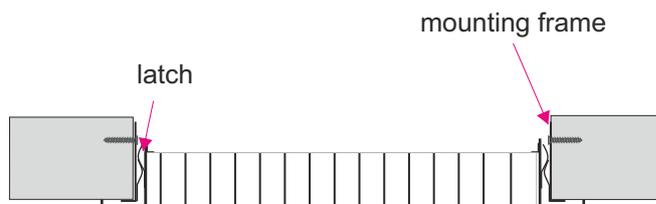


Methods of mounting

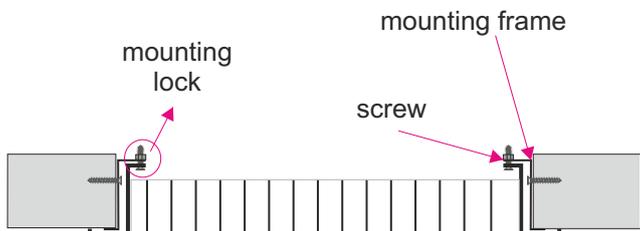
W1



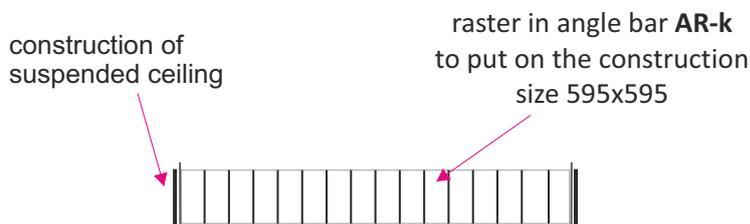
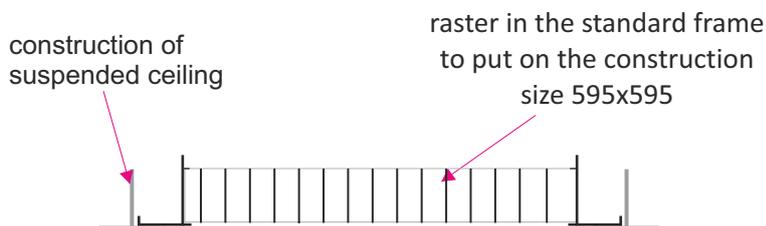
W2



W3

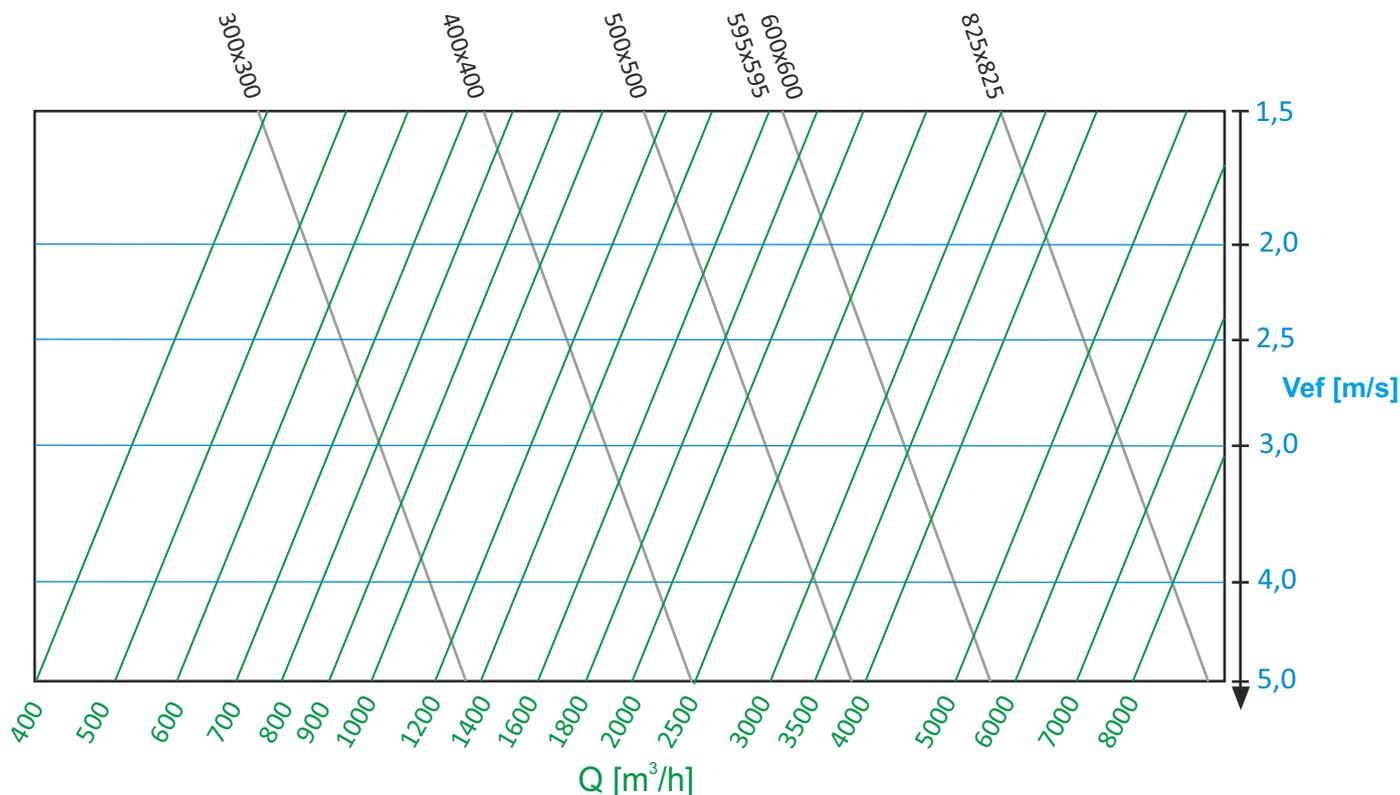


W4



Technical data

Effective speed depending on the size of the diffuser and air volume flow

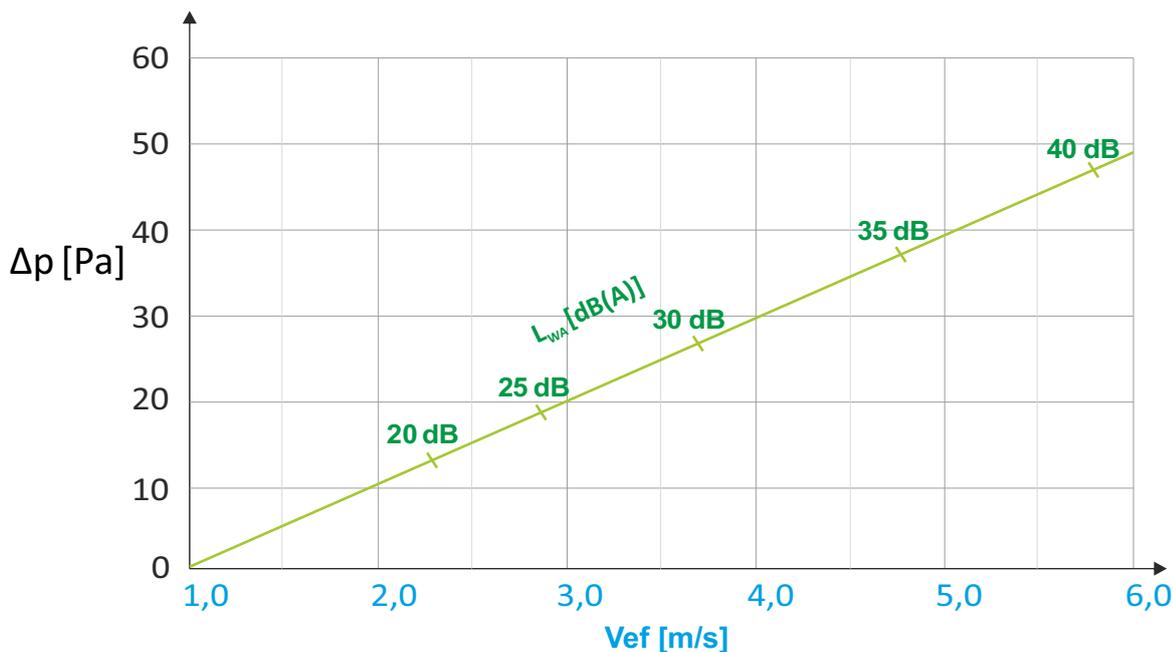


Marking:

Q [m³/h]- air volume flow

V_{ef} [m/s]- effective speed on diffuser

Pressure drop and acoustic power depending on the effective speed



Marking:

V_{ef} [m/s]- effective speed on diffuser

L_{WA} [dB(A)]- acoustic power level

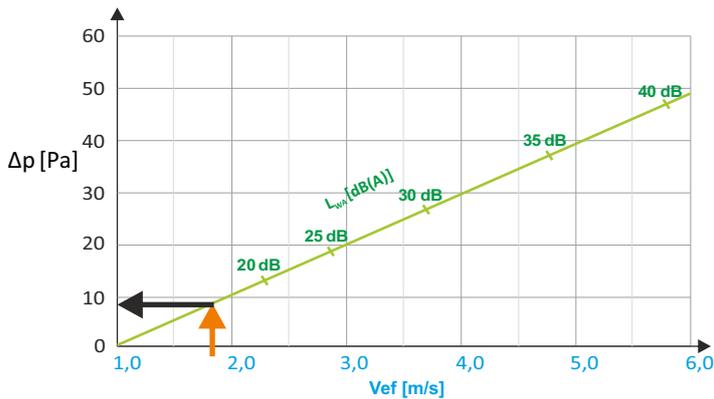
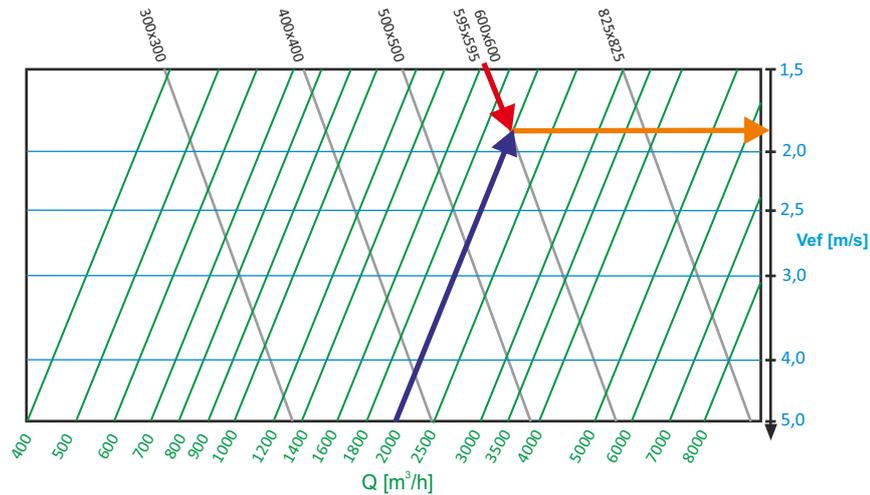
DP [Pa]- pressure drop

EXAMPLE

- Air volume flow $Q=2000 \text{ m}^3/\text{h}$
- size: 600x600

Reading the graph

- effective speed: $v_{\text{ef}} = 1,8 \text{ m/s}$



Reading the graph (for $v_{\text{ef}} = 1,8 \text{ m/s}$):

- acoustic power $L_{\text{WA}} < 20 \text{ dB}$
- pressure drop on diffuser $\Delta p = 8 \text{ Pa}$

The method of placing an order

Please make orders according to the following formula:

AR / 'AxA' / 'RAL' / 'M' / 'W' + 'SR' / 'I' / 'P' / 'K' / 'H'

'AxA'	- external size (width x height) in mm
'RAL'	- grille color according to RAL palette (standard RAL9016*)
'M'	material OC - frame + grate: galvanized steel, powder-coated AL - frame + grate: powder-coated aluminum KO - frame + grate: stainless steel (1.4301 or 1.4404)
'W'	- mounting option: W1 - visible assembly on screw through the holes in front frame* W2 - invisible assembly using latch springs and additional mounting frame W3 - invisible assembly using screws and an additional mounting frame W4 - invisible assembly on the construction of the suspended ceiling (a possible solution KR-1k)
'SR'	plenum box: SR-Gc - plenum box with top spigot connection 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.