

Description and application

Ceiling diffusers are designed for gravity ventilation, low and medium pressure systems and air conditioning systems, air intake and exhaust. For assembly on rectangular ventilation ducts, plenum boxes and suspended ceilings. 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. Diffusers enable the directing air flow in 1-, 2-, 3- and 4 sides.

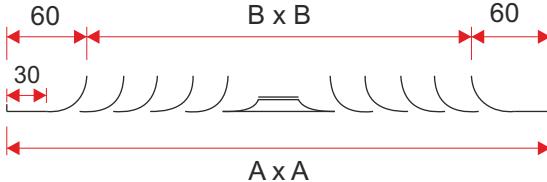
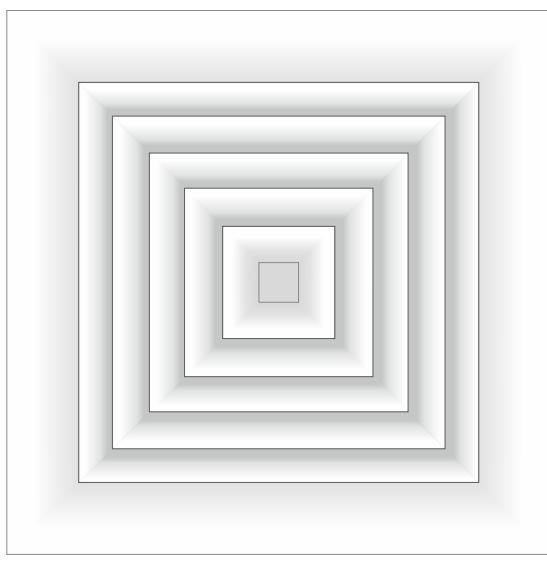
Intake anemostat diffuser has Hygienic Certificate HK/K/0522/01/2016

Material and workmanship

Anemostats are made of galvanized sheet steel powder coated, standard on the white color 9016. On customer request can be powder coated to any color from the RAL palette and special execution of stainless steel or aluminum.

Size

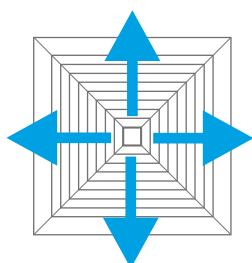
The anemostat diffusers are manufactured on order. Examples dimensions of the diffusers are given in the table.



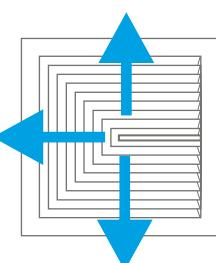
Size	A	B	$A_{ef} (m^2)$
0	190x190	70x70	0,010
1	245x245	125x125	0,013
2	301x301	181x181	0,021
3	357x357	237x237	0,032
4	412x412	292x292	0,046
5	469x469	349x349	0,065
6	498x498	378x378	0,075
7	595x595	475x475	0,120
8	623x623	505x505	0,130

Other dimensions are produced on customer request

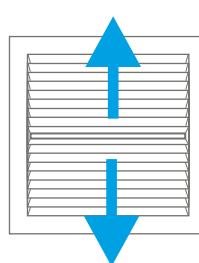
Specification - air flow direction (EXAMPLES)



4-directions air flow

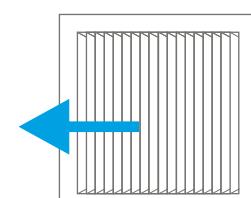
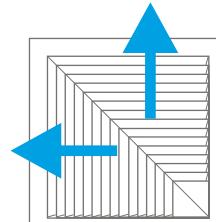


3-directions air flow



2
2a

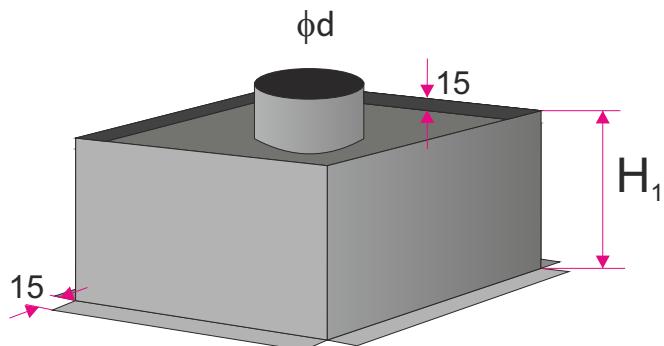
2-directions air flow



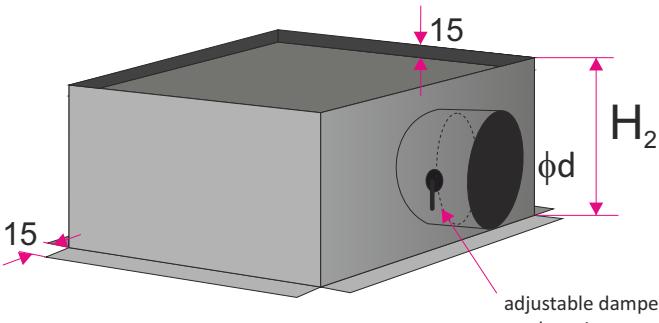
1-direction air flow

Accessories- plenum box

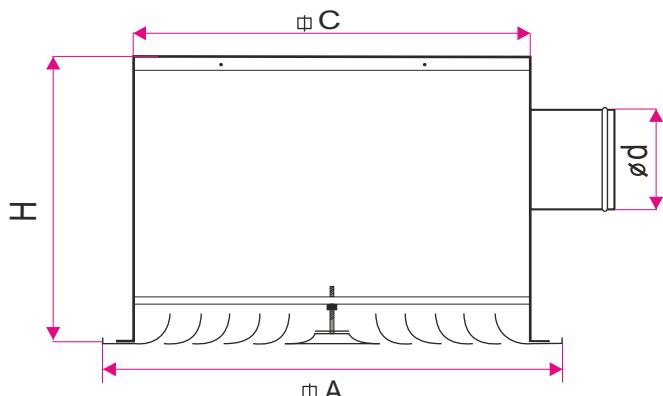
Plenum box is made of galvanized steel. On request it can be equipped with a damper control onto the connected spigot. The plenum box can be isolated inside with rubber (acoustic) or outside with mineral wool (thermal). In the standard height of the plenum box is adapted to size of the spigot or diffuser 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**

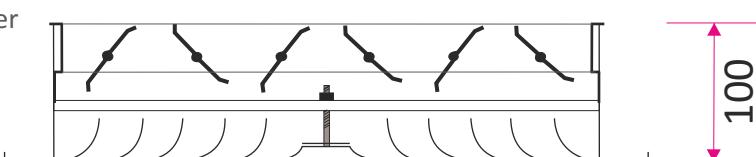


A	C	H1	H2	ϕd
190x190	149x149	310	280	123
245x245	204x204	310	280	158
301x301	260x260	310	280	158
357x357	316x316	310	280	198
412x412	372x372	310	280	198
469x469	428x428	310	330	248
498x498	457x457	310	330	248
595x595	557x557	310	380	313
623x623	582x582	310	380	313

Other dimensions are produced on customer request

Accessories - damper with counter running blades GP

Anemostat can also be equipped with a damper with counter running blades, localized directly behind the anemostat. Damper control is possible from the panel side, after previous disassembly the diffuser.



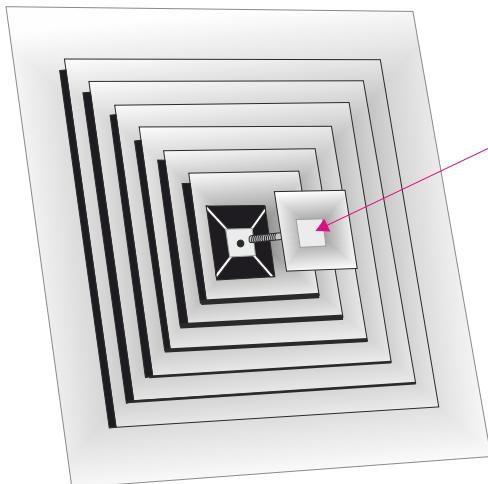
Methods of mounting

W1


Assembly invisible on the construction of the suspended ceiling - anemostat panel 595x595
- anemostat without mounting holes in the panel.

W2


Assembling visible using screws and the mounting holes in the anemostat faceplate.

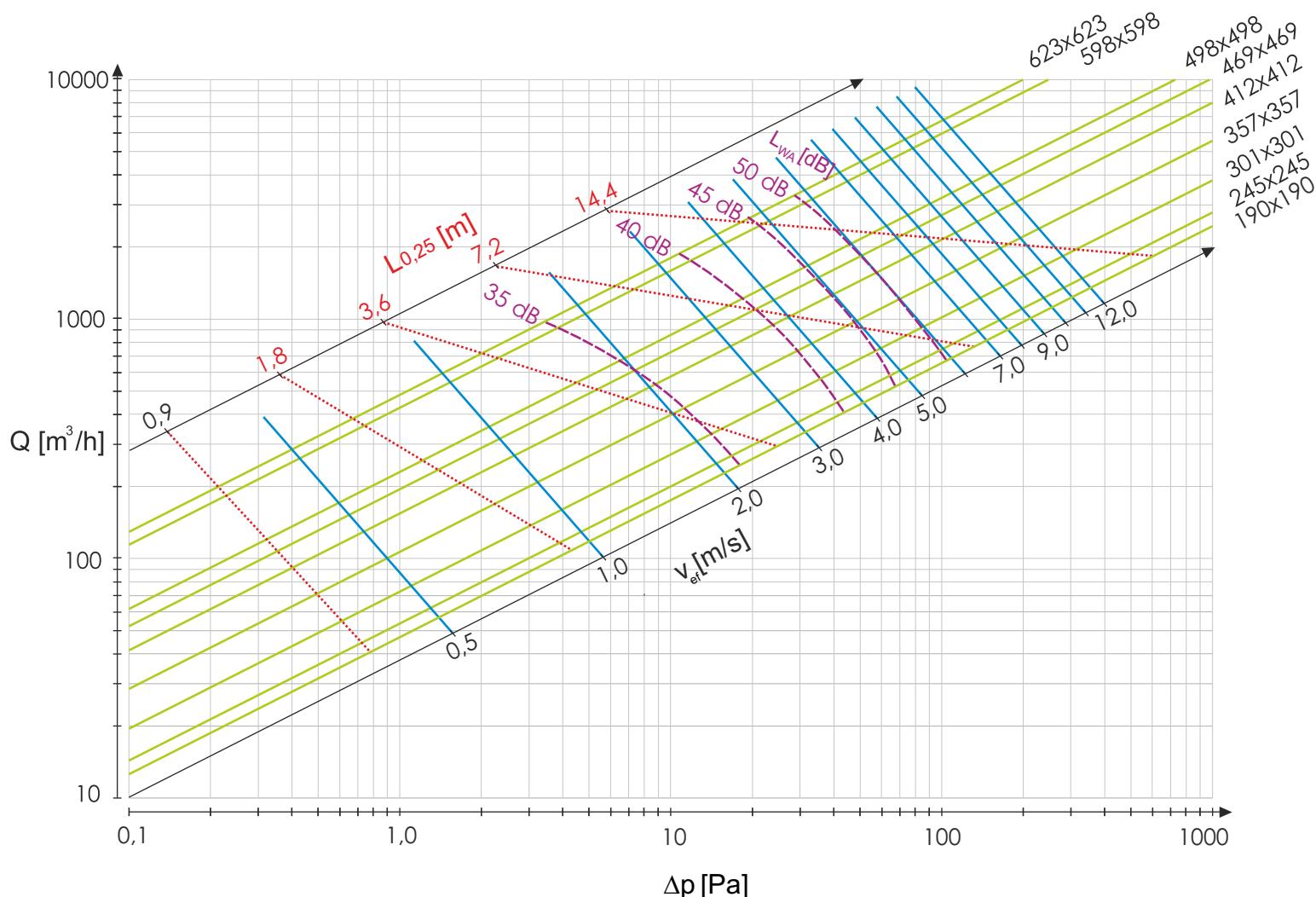
W3


Central assembly through the crossbar (WMC) mounted in the plenum box and the central mounting screw attached to the central part of the anemostat.

Technical parameters - quick selection

Size	357x357		412x412		469x469		498x498		595x595		623x623	
Amount of air [m ³ /h]	volume [dB]	speed of air on anemostat [m/s]	volume [dB]	speed of air on anemostat [m/s]	volume [dB]	speed of air on anemostat [m/s]	volume [dB]	speed of air on anemostat [m/s]	volume [dB]	speed of air on anemostat [m/s]	volume [dB]	speed of air on anemostat [m/s]
300	< 35	1,5	< 35	1	< 35	< 1	< 35	< 1	< 35	< 1	< 35	< 1
400	35	2	< 35	1,5	< 35	1,2	< 35	1,1	< 35	< 1	< 35	< 1
500	37	2,5	< 35	1,9	< 35	1,6	< 35	1,4	< 35	< 1	< 35	< 1
600	38	3	36	2,3	35	2	35	1,8	< 35	1,1	< 35	1
700	40	3,5	37	2,6	36	2,2	36	2	< 35	1,4	< 35	1,3

TECHNICAL DATA


Marking:

$Q \text{ [m}^3/\text{h}]$ - air volume flow

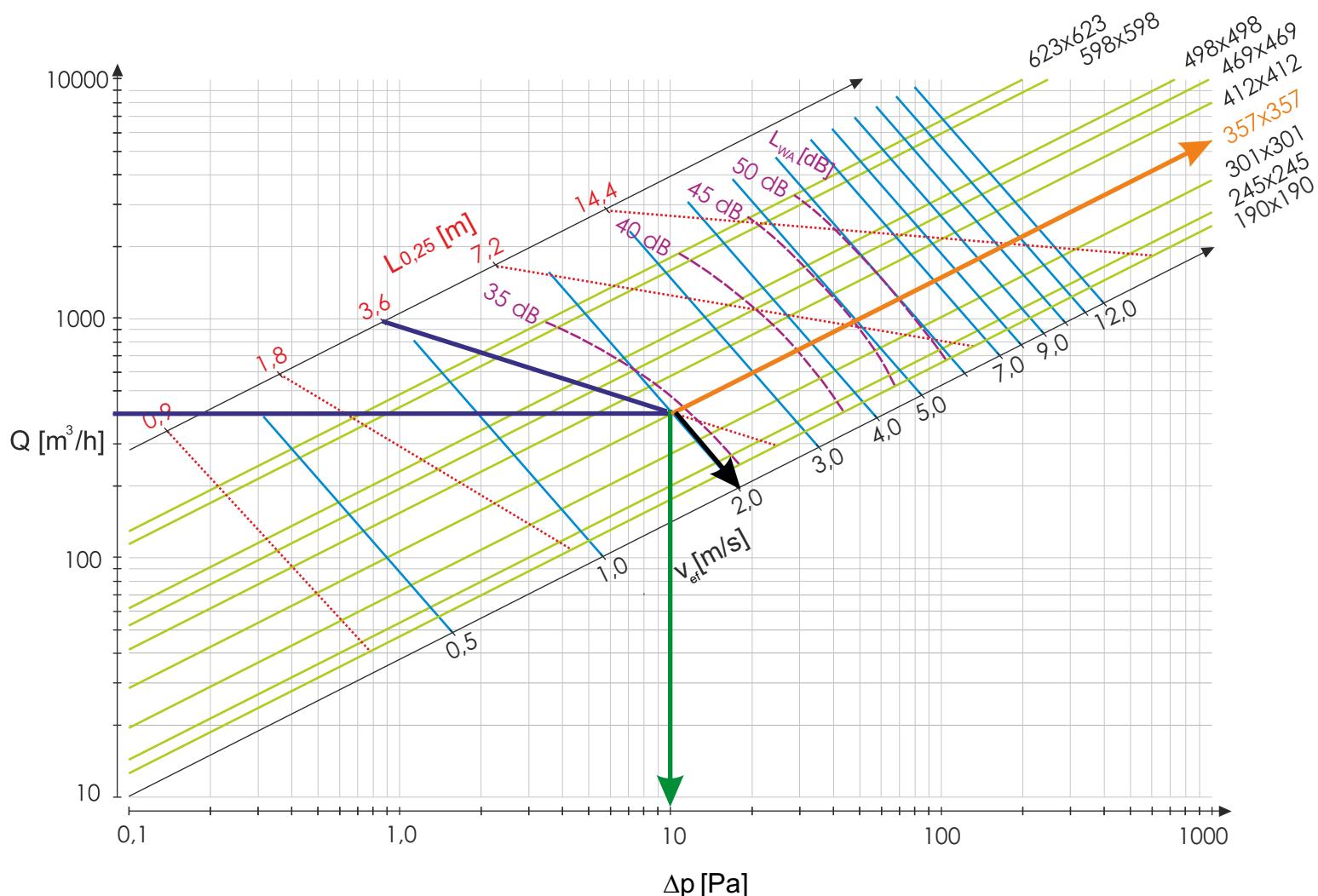
$L_{0,25} \text{ [m.]}$ - air stream range for speed $v < 0,25 \text{ m/s}$

$v_{ef} \text{ [m/s]}$ - effective speed of extract air

$L_{WA} \text{ [dB]}$ - acoustic power

$\Delta p \text{ [Pa]}$ - pressure drop

TECHNICAL DATA- example


Marking:

Q [m^3/h] - air volume flow

$L_{0,25}$ [m.] - air stream range for speed $v < 0,25 \text{ m/s}$

v_{eff} [m/s] - effective speed of extract air

L_{WA} [dB] - acoustic power

Δp [Pa] - pressure drop

Example:

Given air volume flow: $400 \text{ m}^3/\text{h}$
air stream range: $3,6 \text{ m..}$

Reading from the graph :

The selected anemostat: 357×357
Effective speed of extract air: 2 m/s
pressure drop: 10 Pa
acoustic power: 35 dB

The method of placing an order

Please make orders according to the following formula:

AN - 'R' / 'N' / 'G' / 'RAL' / 'M' / 'W' + 'SR' / 'I' / 'P' / 'K' / 'H'

- '**R'** the size of the anemostat: **0, 1, 2, 3, 4, 5, 6, 7**
'**N'** directions of air flow: **1-direction, 2-directions, 3-directions or 4-directions**
'**G'** adjustment by damper
 none - anemostat without damper
 GP - regulation by damper with counter running blades behind anemostat
'**RAL'** diffuser color according to RAL palette (standard RAL9016*)
'**M'** material:
 ST - powder coated steel*
 AL - aluminum powder coated
 KO - stainless steel / acid proof steel (type 1.4301 or 1.4404)
'**W'** mounting option:
 W1 - assembly invisible on the construction of the suspended ceiling
 W2 - visible assembly with screws
 W3 - the central assembly using the crossbar (in plenum box)
- '**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.