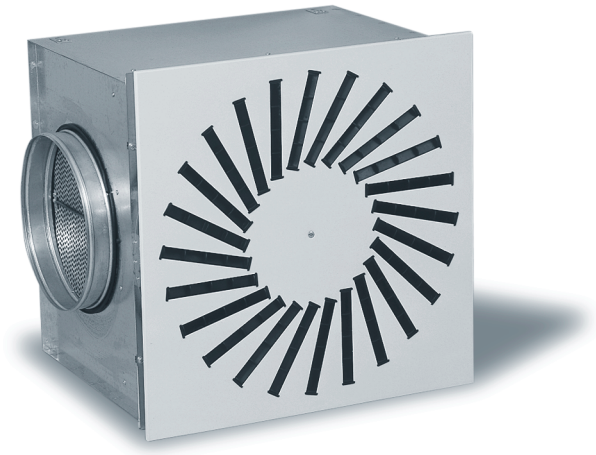


St
RAL 9010
CD

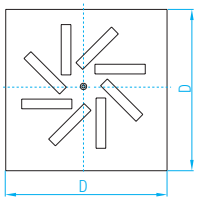
Swirl diffuser OD-8

- Square or round front plate with radial deflector arrangement
- Plastic deflectors
- Possible volume control damper in spigot

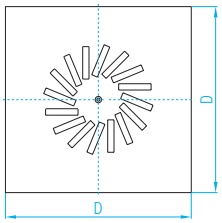
Front plate shapes and dimensions

OD-8 K

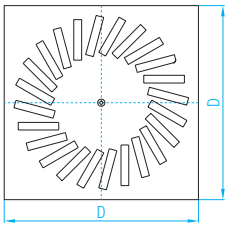
300/8



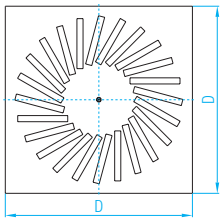
400/16, 500/16, 600/16, 625/16



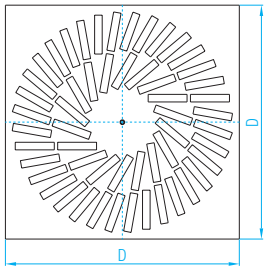
500/24



600/24, 625/24

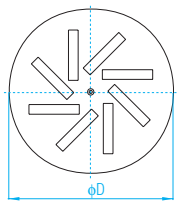


625/54

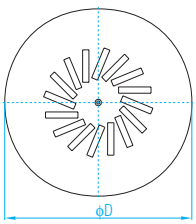


OD-8 R

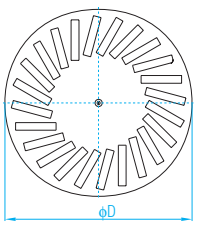
300/8



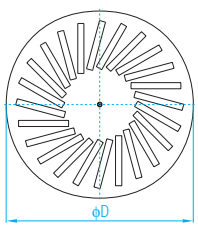
400/16, 500/16, 600/16, 625/16



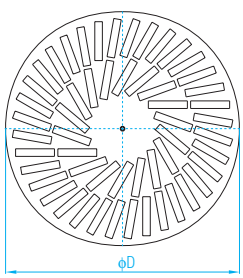
500/24



600/24, 625/24

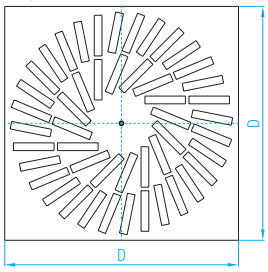


625/54

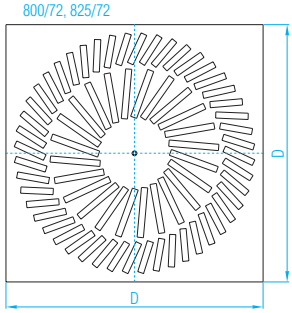


OD-8 K

600/48

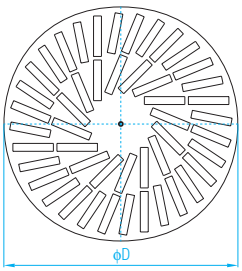


800/72, 825/72

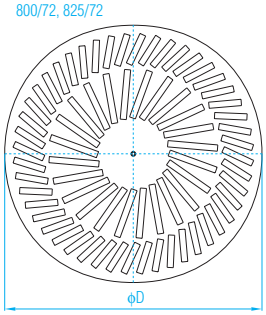


OD-8 R

600/48



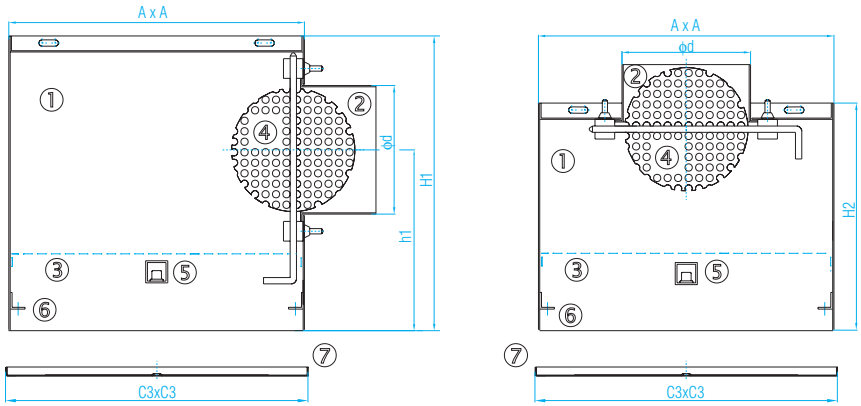
800/72, 825/72



Size	ϕD	D	A_{ef} (m²)
300/8	300	298	0.009464
400/16	400	398	0.018928
500/16	500	498	
600/16	600	598	
625/16	625	623	
500/24	500	498	0.028392
600/24	600	598	0.044928
625/24	625	623	
600/48	600	598	0.056784
625/54	625	623	0.063882
800/72	800	798	0.101712
825/72	825	823	

A_{ef} - efective discharge area (m²)

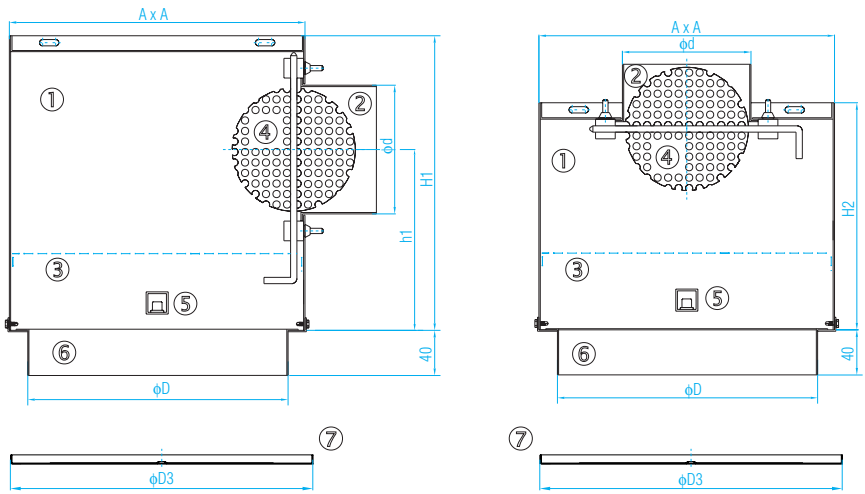
Component parts and dimensions



Size	C3	A	H1	h1	H2	ϕd
300/8 K	298	290	290	170	200	158
400/16 K	398	390	330	190	300	198
500/16 K	498					
600/16 K	598					
625/16 K	623					
500/24 K	498	490	330	190	300	198
600/24 K	598	590	380	215	300	248
625/24 K	623					
600/48 K	598					
625/54 K	623	610	380	215	300	248
800/72 K	798	790	450	250	300	313
825/72 K	823					

OD-8/K (square front plate)

1. Plenum box
2. Inlet spigot
3. Dispersing plate
4. Volume control damper M
5. Traverse
6. Angle bar (fastening with four screws)
7. Diffuser OD-8/K

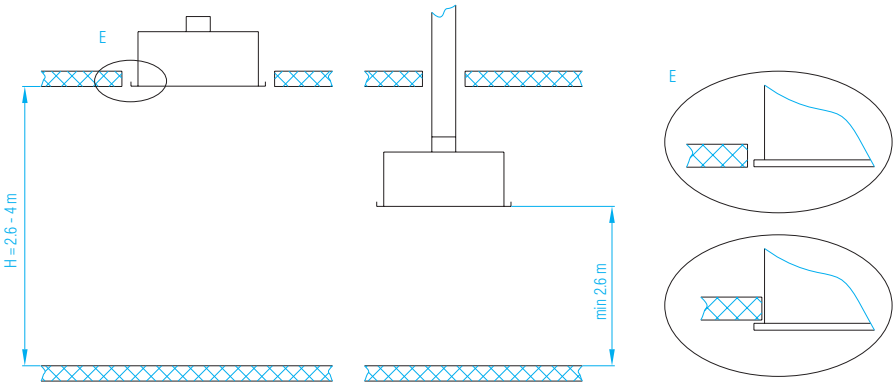


Size	ϕD3	ϕD	A	H1	h1	H2	ϕd
300/8 R	300	290	310	290	170	200	158
400/16 R	400	370	390	330	190	300	198
500/16 R	500						
600/16 R	600						
625/16 R	625						
500/24 R	500	488	510	330	190	300	198
600/24 R	600	560	590	380	215	300	248
625/24 R	625						
600/48 R	600	590	635	380	215	300	248
625/54 R	625	610	635	380	215	300	248
800/72 R	800	790	815	450	250	300	313
825/72 R	825						

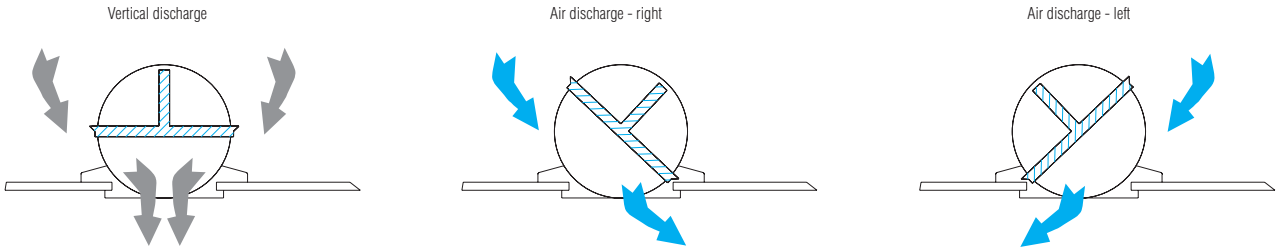
OD-8/R (round front plate)

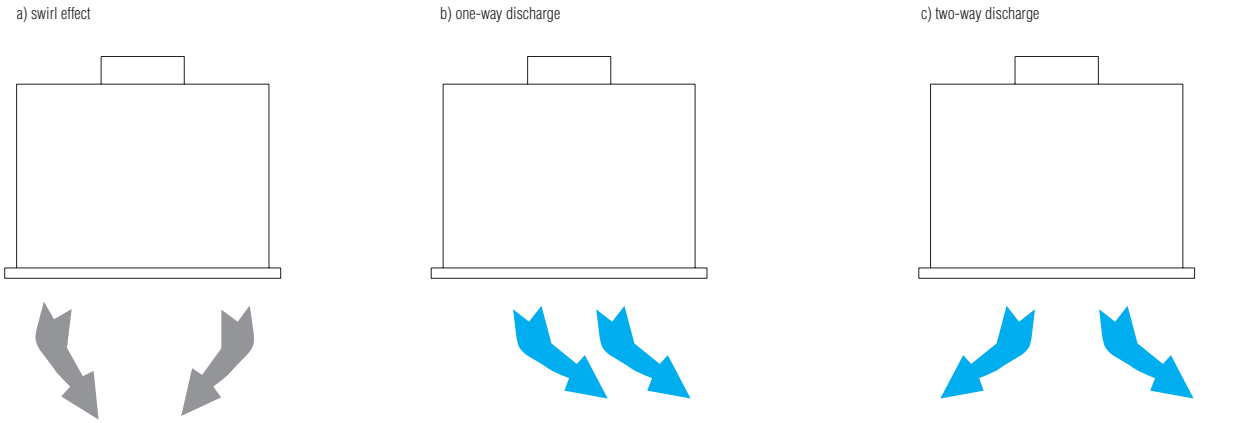
1. Plenum box
2. Inlet spigot
3. Dispersing plate
4. Volume control damper M
5. Traverse
6. Adapter
7. Diffuser OD-8/R

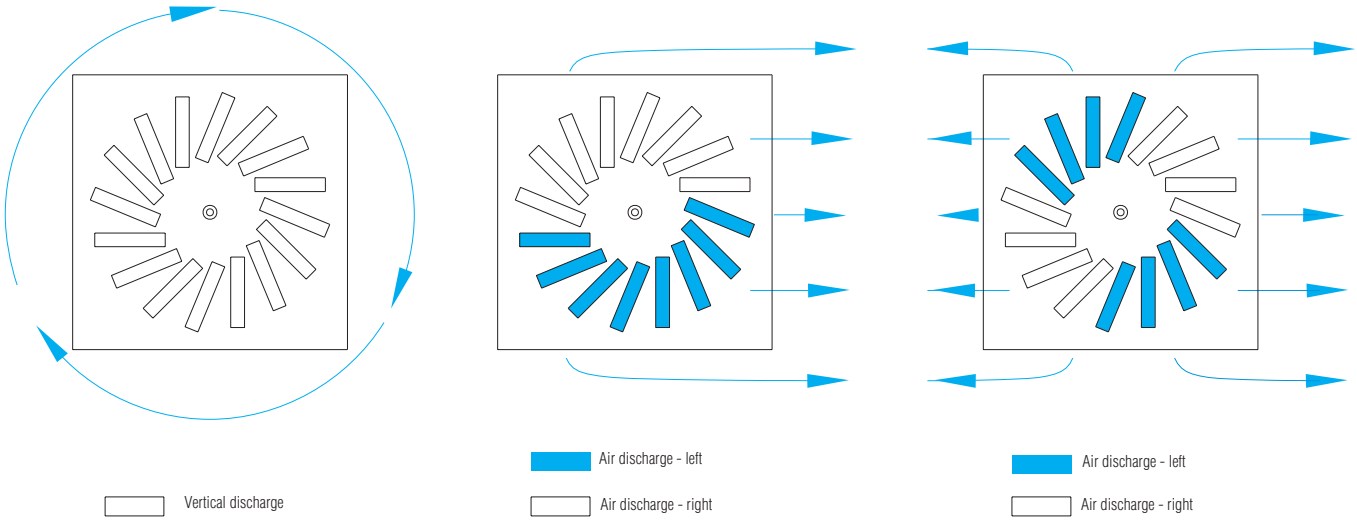
Installation



Discharge direction and air jet shape







Ordering key:

OD - 8 / K1 / Z / S / M

Size 300/8,
400/16, 500/16, 600/16, 625/16,
500/24, 600/24, 625/24,
600/48,
625/54,
800/72, 825/72

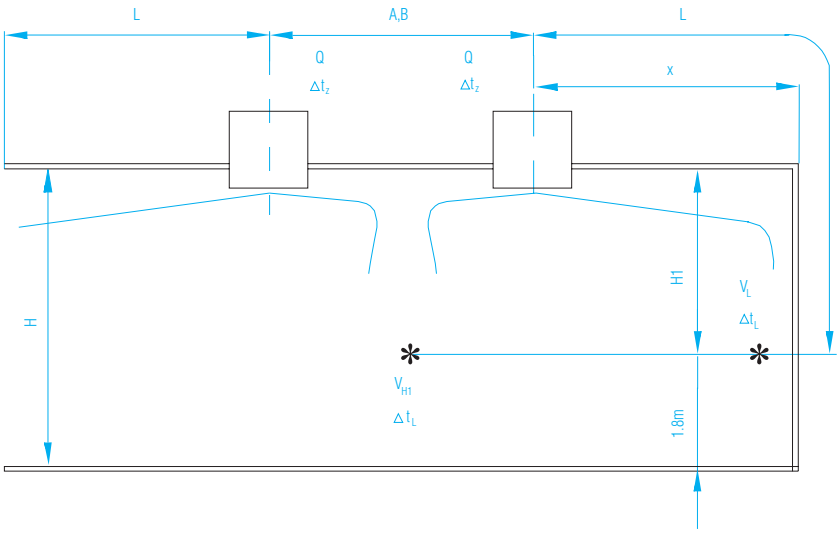
M Volume control damper in the entry spigot

S Side entry spigot
V Vertical entry spigot

Z Supply air
A Exhaust air

K1 Square diffuser plate - central fastening
K4 Square diffuser plate - fastening with four screws*
R1 Round diffuser plate - central fastening only
R4 Round diffuser plate - fastening with five screws (only 800/72 and 825/72)*

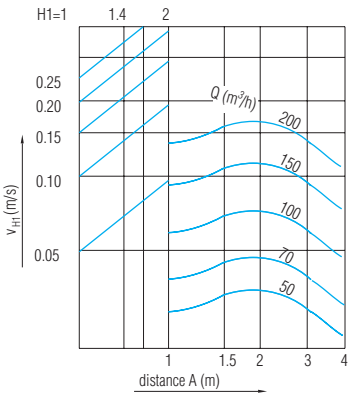
*size 800 (K4, and R4): 4 screws along the edge and one additional screw at the frontplate centre.



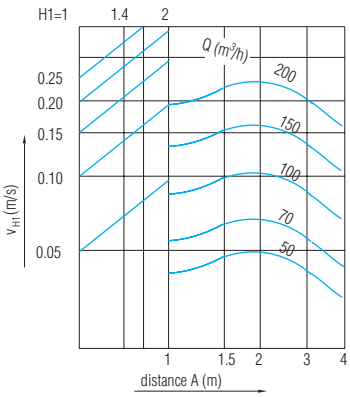
Q (m³/h) Air flow
x (m) Horizontal distance to the wall
H (m) Room height
H1 (m) Distance from ceiling to occupied zone
L (m) Throw distance (L=H1+x)
V_L (m/s) Air velocity at the throw distance L
Δt_z (K) Temperate difference between the supply and room air
Δt_L (K) Difference between the core and room air temperature
Δp_t (Pa) Pressure drop
L_{WA} (db(A)) Sound power level
V_{H1} (m/s) Air velocity at the H1 distance
A, B (m) Distance between diffusers by length and by width

Air velocity at the throw distances and temperature quotient

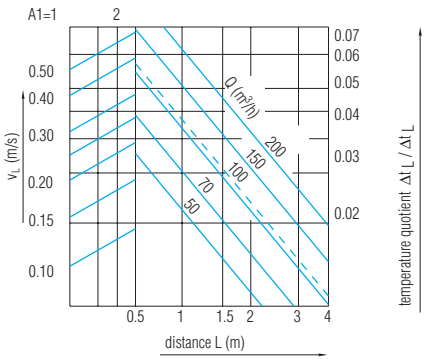
300/8
B>4m



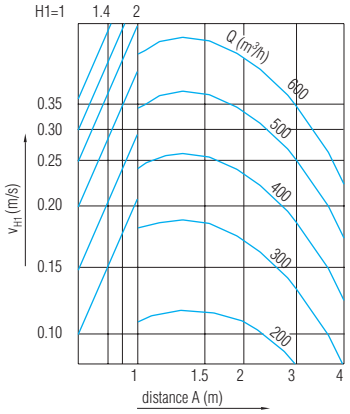
300/8
B=2.5 ... 3.5m



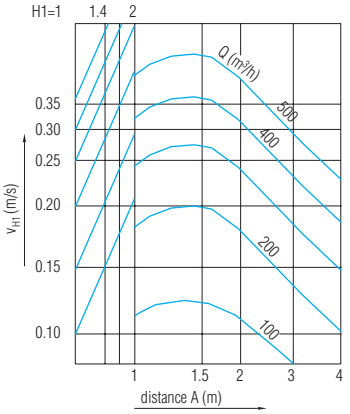
300/8



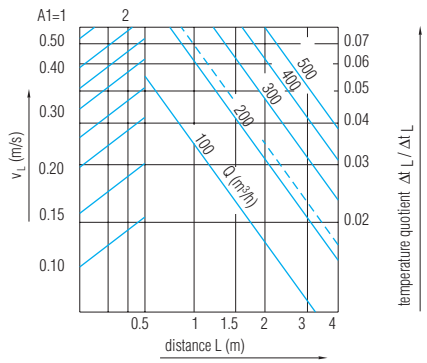
400/16,500/16,600/16,625/16
B>4m



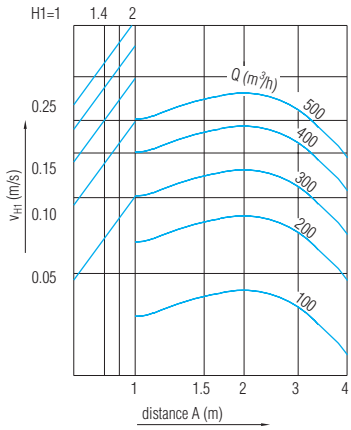
400/16,500/16,600/16,625/16
B=2.5 ... 3.5m



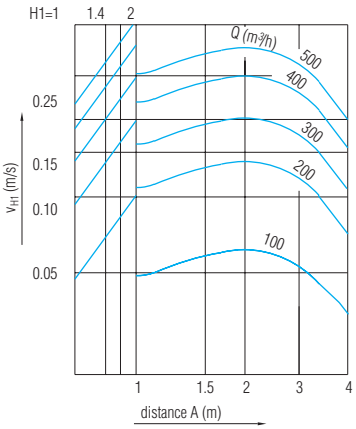
400/16,500/16,600/16,625/16



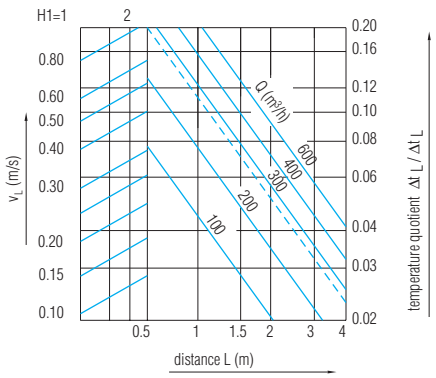
500/24
B>4m



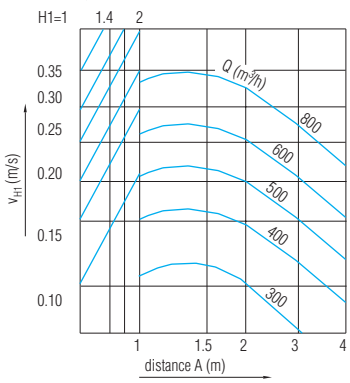
500/24
B=2.5 ... 3.5m



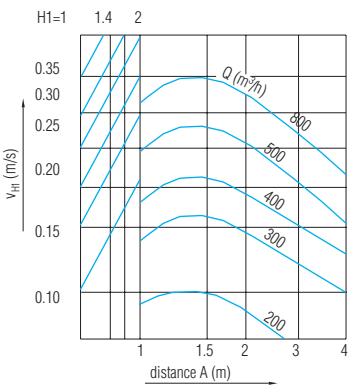
500/24



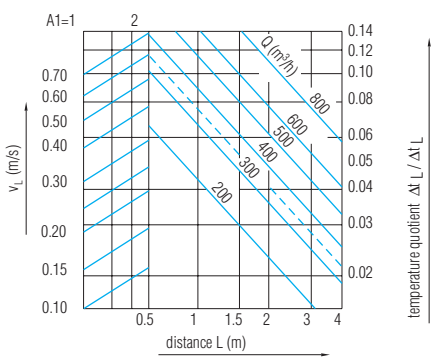
600/24,625/24
B>4m



600/24,625/24
B=2.5 ... 3.5m

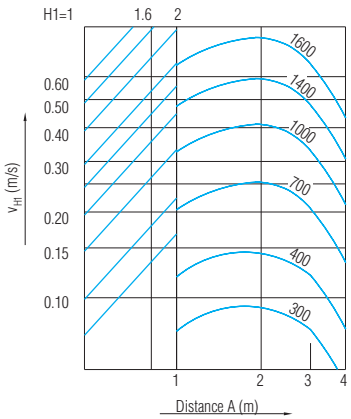


600/24,625/24

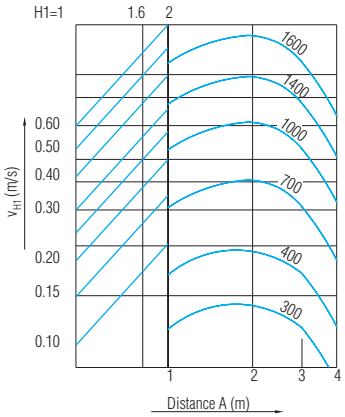


Air velocity at the throw distance and temperature quotient

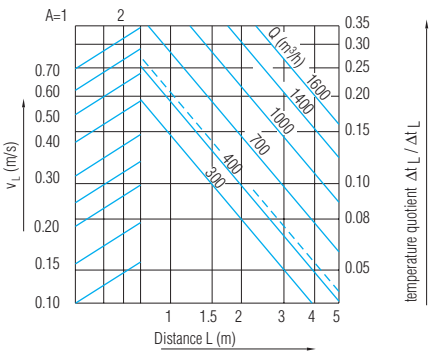
600/48
B>4m



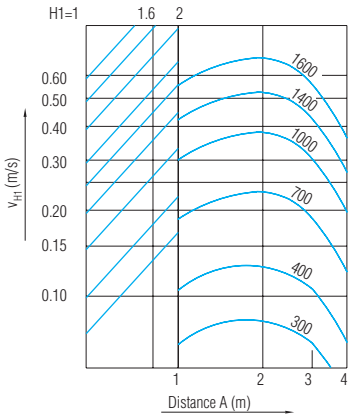
600/48
B=2.5 ... 3.5m



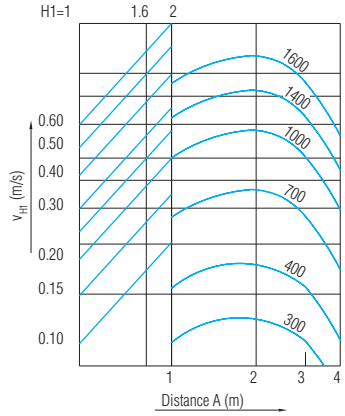
600/48



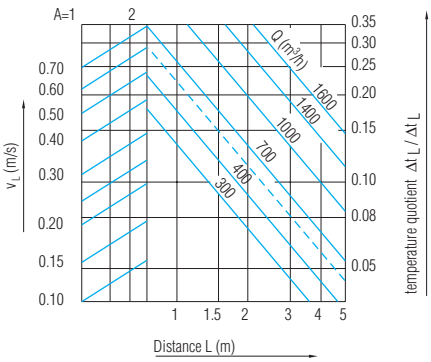
625/54
B>4m



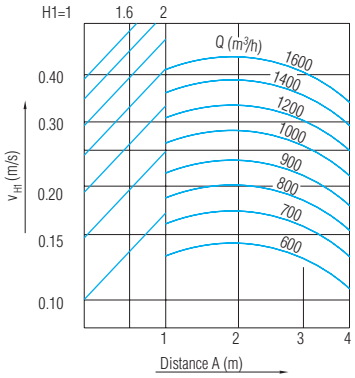
625/54
B=2.5 ... 3.5m



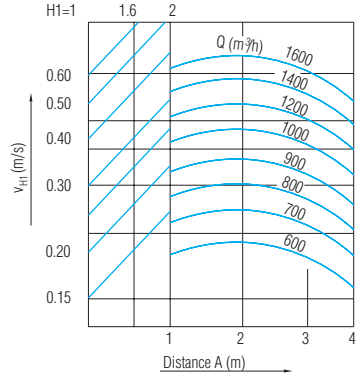
625/54



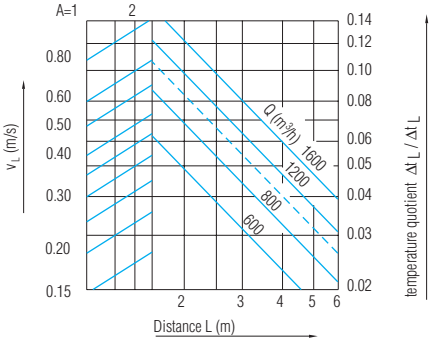
800/72, 825/72
B>4m



800/72, 825/72
B=2.5 ... 3.5m

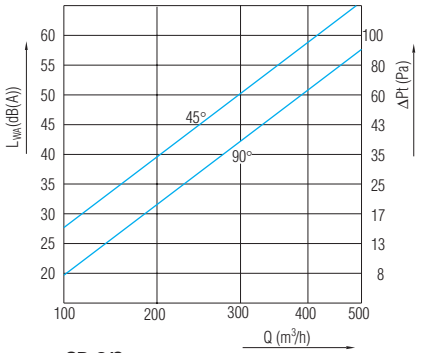


800/72, 825/72

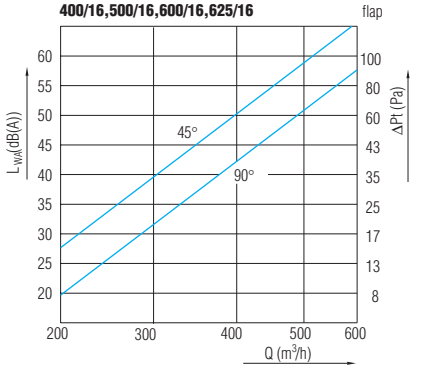


Pressure drop and sound power level diagrams (Control flap angle: 90° - opened, 45° - half opened)

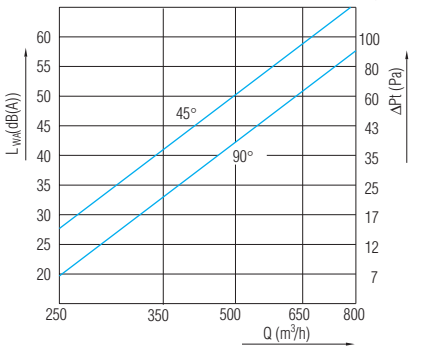
OD-8/V
300/8



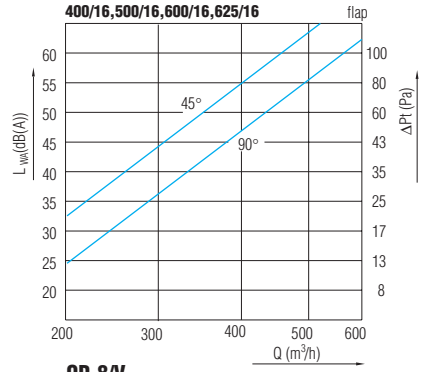
OD-8/V
400/16,500/16,600/16,625/16



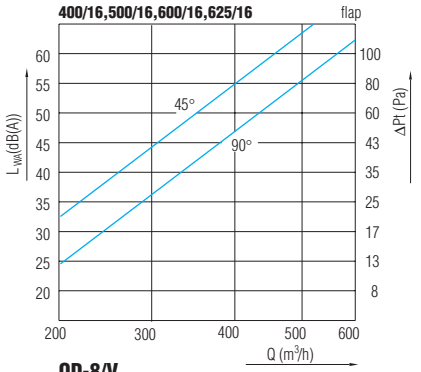
OD-8/V
500/24



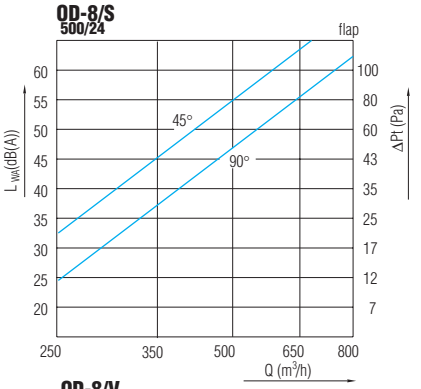
OD-8/S
400/16,500/16,600/16,625/16



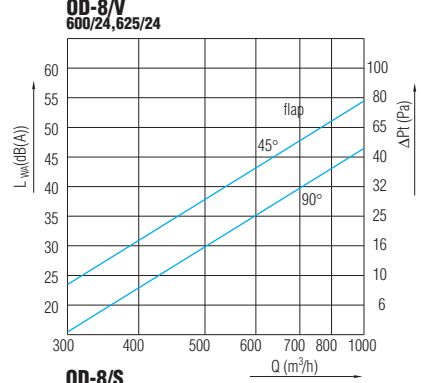
OD-8/S
400/16,500/16,600/16,625/16



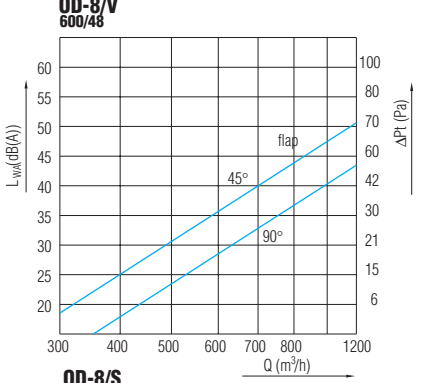
OD-8/S
500/24



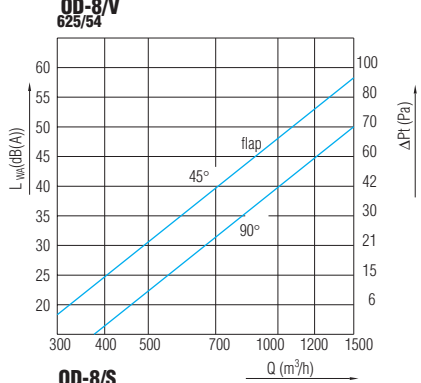
OD-8/V
600/24,625/24



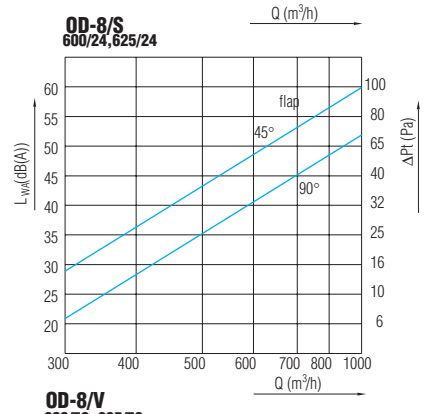
OD-8/V
600/48



OD-8/V
625/54



OD-8/S
600/24,625/24



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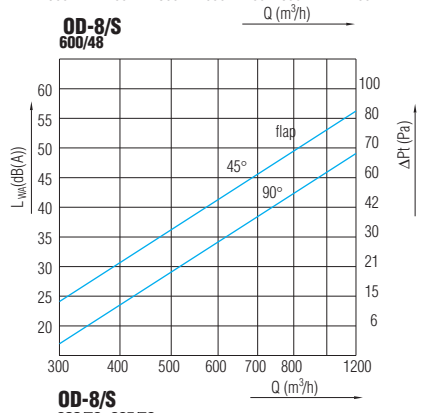
600/48



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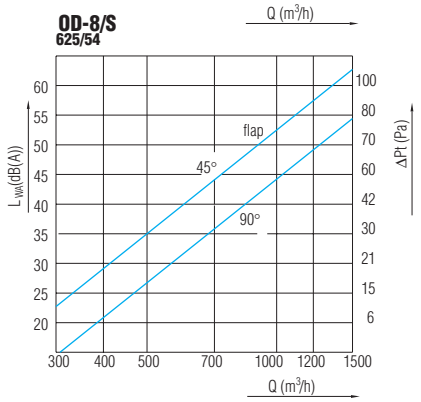
625/54



OD-8/V
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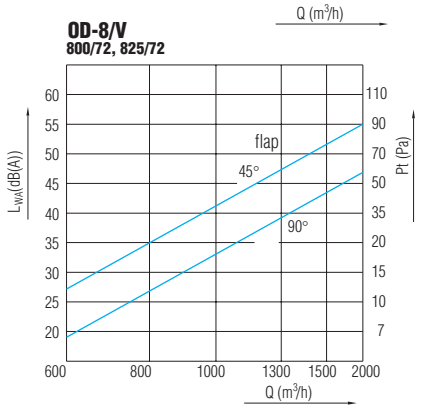

OD-8/S
800/72, 825/72