

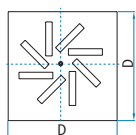
Swirl diffuser OD-8

- Square or round front plate with radial deflector arrangement
- Plastic deflectors
- Possible volume control damper in spigot
- Foam sealing on the flange

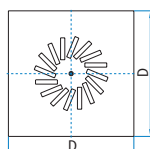


Front plate shapes and dimensions

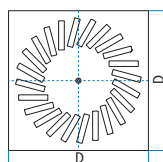
OD-8 K
300/8



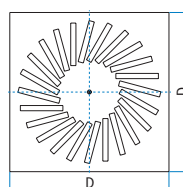
400/16, 500/16,
600/16, 625/16



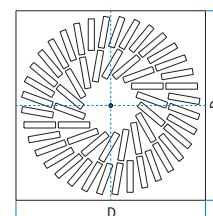
500/24



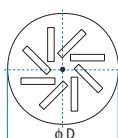
600/24, 625/24



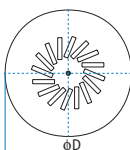
625/54



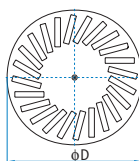
OD-8 R
300/8



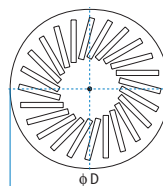
400/16, 500/16,
600/16, 625/16



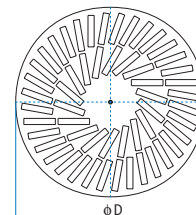
500/24



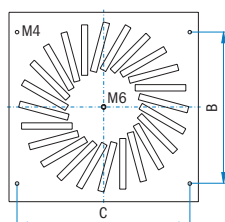
600/24, 625/24



625/54



Fastening with four screws K4

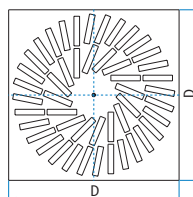


OD-8K1 1x M6 in the center
OD-8K4 4x M4 on the flange

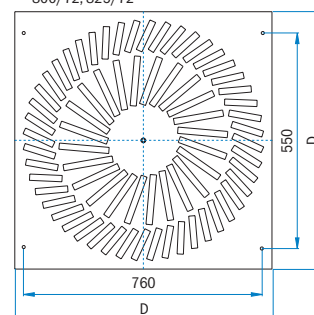
Size	ΦD	D	B	C	A_{ef} (m ²)
300/8	300	295	245	245	0.009464
400/16	400	395	345	345	0.018928
500/16	500	495	445	445	
600/16	600	595	545	545	
625/16	625	620	570	570	0.028392
500/24	500	495	445	445	
600/24	600	595	460	560	
625/24	625	620	460	560	0.044928
600/48	600	595	460	560	
625/48	625	620	460	560	
600/80	600	595	460	560	0.056784
625/80	625	620	460	560	
600/120	600	595	460	560	
625/120	625	620	460	560	0.063882
600/160	600	595	460	560	
625/160	625	620	460	560	
600/240	600	595	460	560	0.101712
625/240	625	620	460	560	
600/360	600	595	460	560	

A_{ef} – effective discharge area (m²)

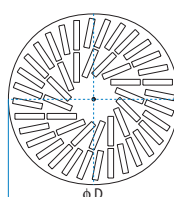
OD-8 K
600/48



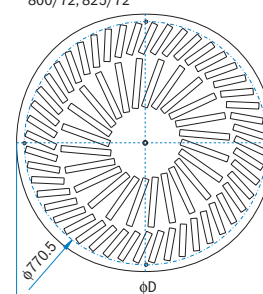
800/72, 825/72



OD-8 R
600/48

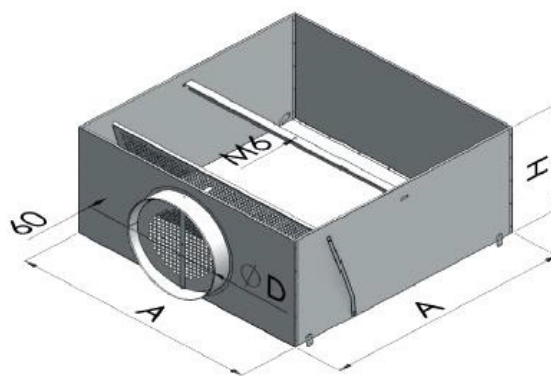


800/72, 825/72



Square plenum box

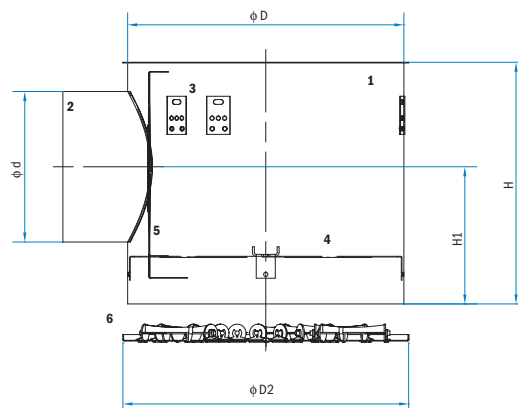
Designation	Size	A [mm]	ΦD [mm]	H [mm]
K/Z/S/M/	300/8	290	158	210
K/Z/S/M/	400/16	390	198	250
K/Z/S/M/	500/16	390	198	250
K/Z/S/M/	600/16	390	198	250
K/Z/S/M/	625/16	390	198	250
K/Z/S/M/	500/24	490	198	250
K/Z/S/M/	600/24	590	248	300
K/Z/S/M/	625/24	590	248	300
K/Z/S/M/	600/48	590	248	300
K/Z/S/M/	625/54	615	248	300
K/Z/S/M/	800/72	790	313	365
K/Z/S/M/	825/72	790	313	365



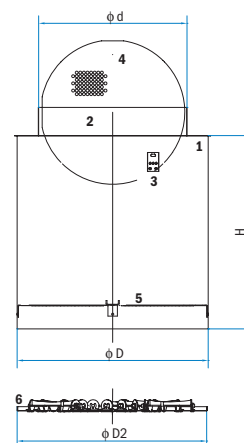
Round plenum box

Size	ΦD	ΦD2	Φd	H	H1
300/8R	290	300	158	245	144
400/16R	370	400	198	285	164
500/16R		500	198		
600/16R		600	198		
625/16R		625	198		
500/24R	488	500	198	285	164
600/24R	560	600	248	335	189
625/24R		625	248		
600/48R	590	600	248	335	189
625/54R	610	625	248	335	189
800/72R	790	800	313	400	221
825/72R		825	313		

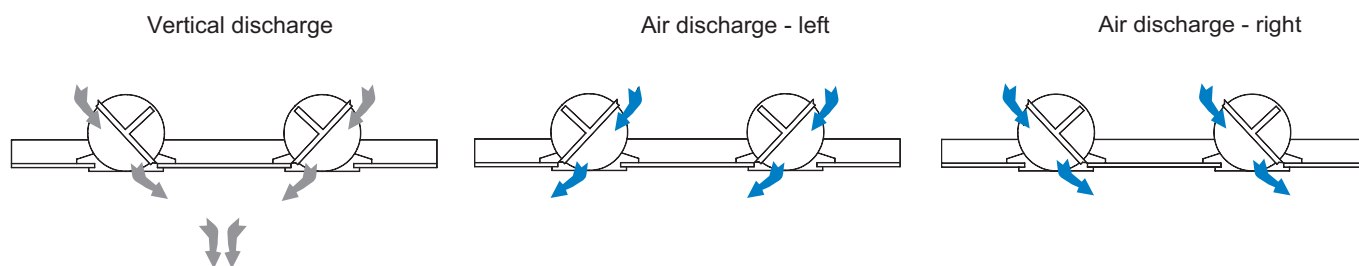
1. Plenum box
2. Inlet spigot
3. Suspension bracket
4. Dispersing plate (only for supply)
5. Volume control damper (M)
6. Diffuser OD-8



Size	ΦD	ΦD2	Φd	H
300/8R	290	300	158	245
400/16R	370	400	198	280
500/16R		500	198	
600/16R		600	198	
625/16R		625	198	
500/24R	488	500	198	280
600/24R	560	600	248	330
625/24R		625	248	
600/48R	590	600	248	330
625/54R	610	625	248	330
800/72R	790	800	313	395
825/72R		825	313	

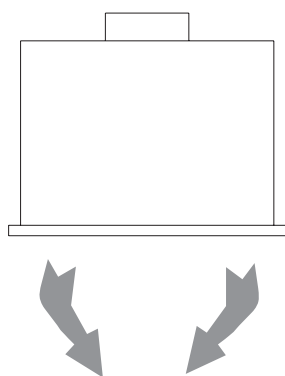


Direction of deflectors and discharge

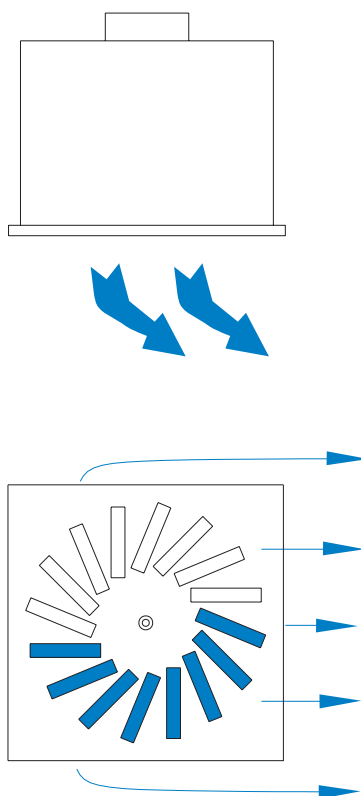


Air jet direction

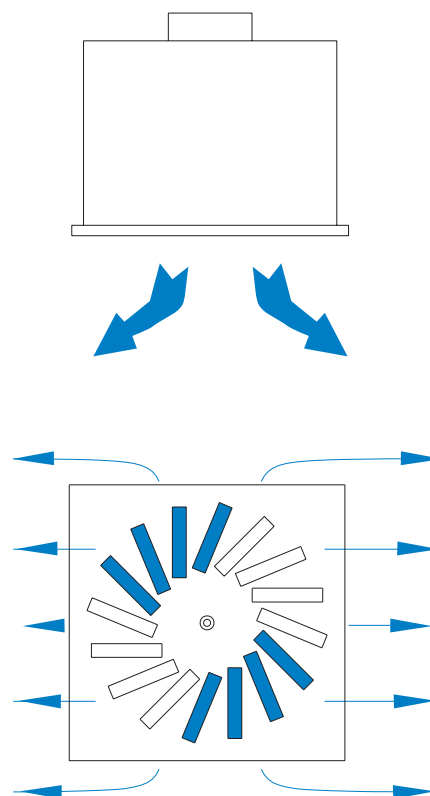
a) swirl effect



b) one-way discharge



c) two-way discharge

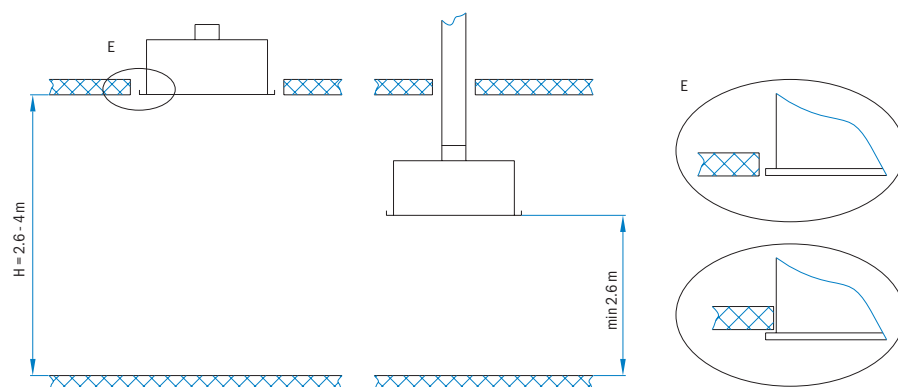


Vertical discharge

Air discharge - left
Air discharge - right

Air discharge - left
Air discharge - right

Installation



Ordering key

OD-8	K1	/	Z	/	S	/	M	/	I5	Size
1	2		3		4		5		6	7

1 Diffuser type

OD-8 Swirl diffuser

2 Diffuser plate type

K1 Square diffuser plate, central fastening

K4 Square diffuser plate, fastening with four screws (for 800/72, 825/; other sizes when ordering diffusers plate only)

R1 Circular diffuser plate, central fastening only

R4 Circular diffuser plate, fastening with five screws (for 800/72, 825/; other sizes when ordering diffusers plate only)

3 Plenum box

Z Air supply with black plastic deflectors

ZW Air supply with white plastic deflectors

A Air exhaust **without** plastic deflectors

ZR Circular plenum box for air supply

4 Spigot

S Side entry spigot and with perforated dispersion plate in the plenum box

V Vertical entry spigot - only on request (with perforated dispersion plate in the plenum box)

5 Air regulation

M Volume control damper in entry spigot

6 Insulation

I5 5 mm PE thermal insulation outside of ZR plenum box

I6 6 mm PE thermal insulation outside of Z plenum box

I9 9 mm synthetic rubber based sound & thermal insulation (-40°C - 105°C) outside of ZR plenum box

I10 10 mm synthetic rubber based sound & thermal insulation (-40°C - 105°C) outside of Z plenum box

I19 19 mm synthetic rubber based sound & thermal insulation (-40°C - 105°C) outside of ZR plenum box

7 Dimensions

300/8

400/16

500/16

600/16

500/24

600/24

625/24

600/48

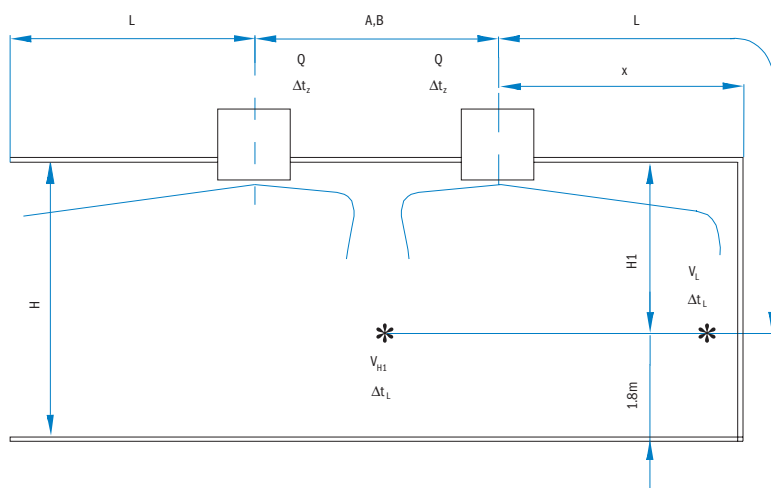
625/54

800/72 with K4 and R4 plate types only: 4 screws along the edge and 1 screw centrally

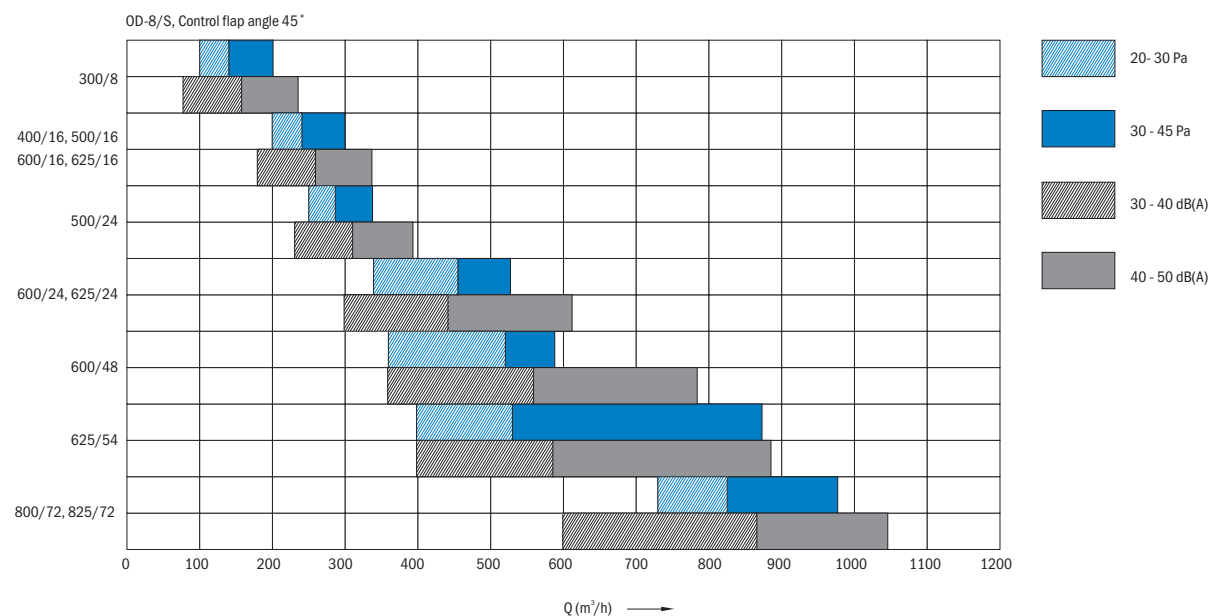
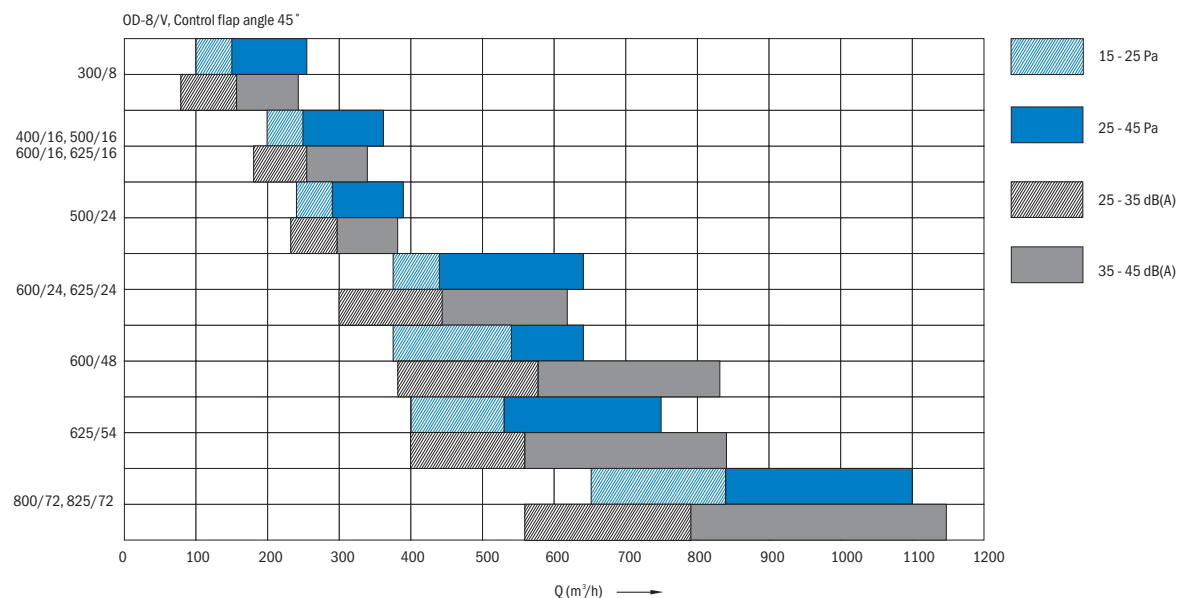
825/72 with K4 and R4 plate types only: 4 screws along the edge and 1 screw centrally

Definition of symbols

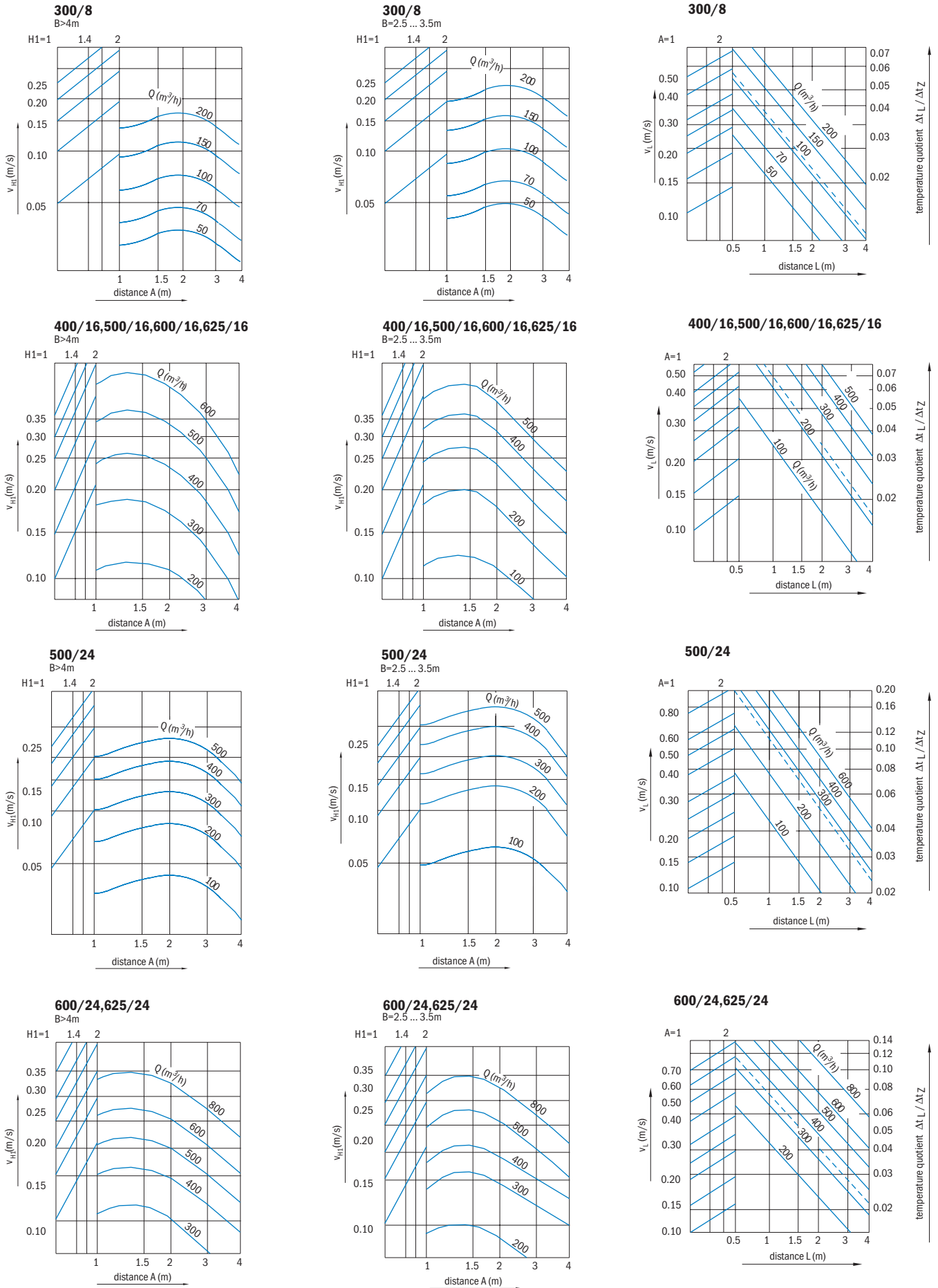
Q (m³/h)	Air flow
x (m)	Horizontal distance to wall
H (m)	Room height
H1 (m)	Distance from ceiling to occupied zone
L (m)	Throw distance (L = H1+ x)
V_L (m/s)	Air velocity at the throw distance L
Δt_z (K)	Temperate difference between the supply and room air
Δt_c (K)	Difference between the core and room 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 two diffusers bylength and width



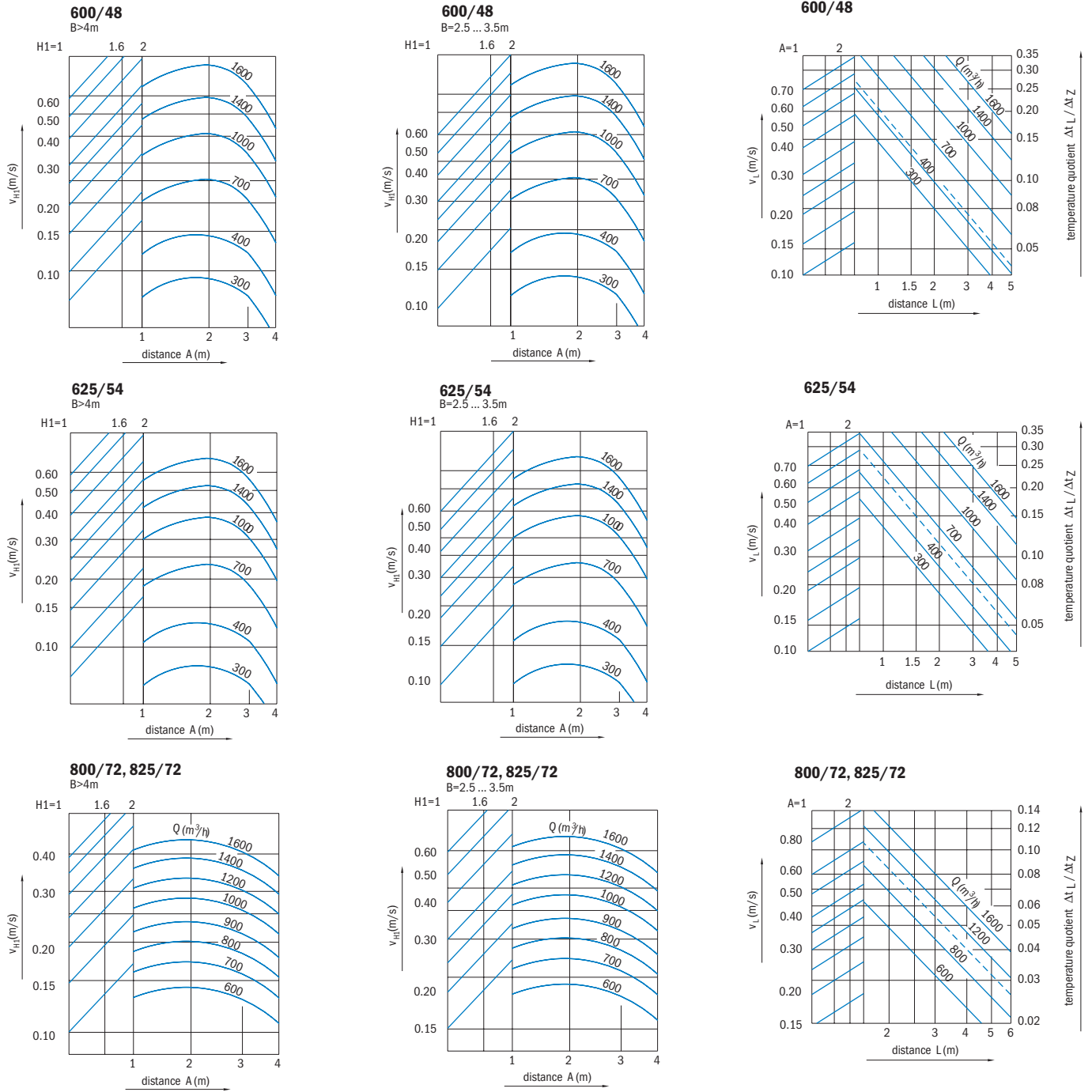
Fast selection diagram



Air velocity at the throw distances and temperature quotient (with ceiling effect)



Air velocity at the throw distance and temperature quotient (with ceiling effect)



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

