

3/S4
v 3.3 (en)

AIR DISPLACEMENT DIFFUSERS

SD



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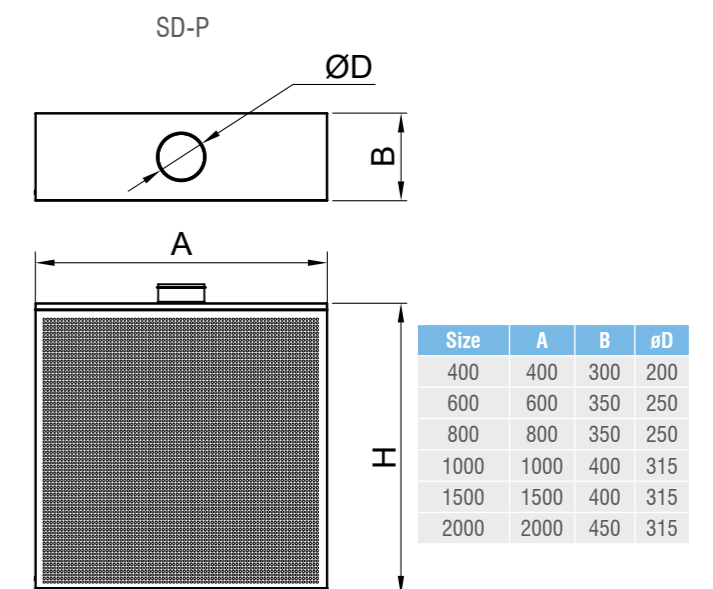
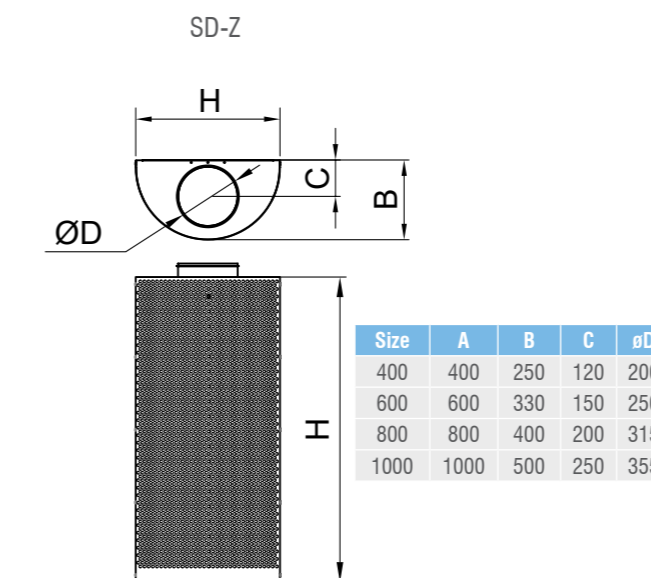
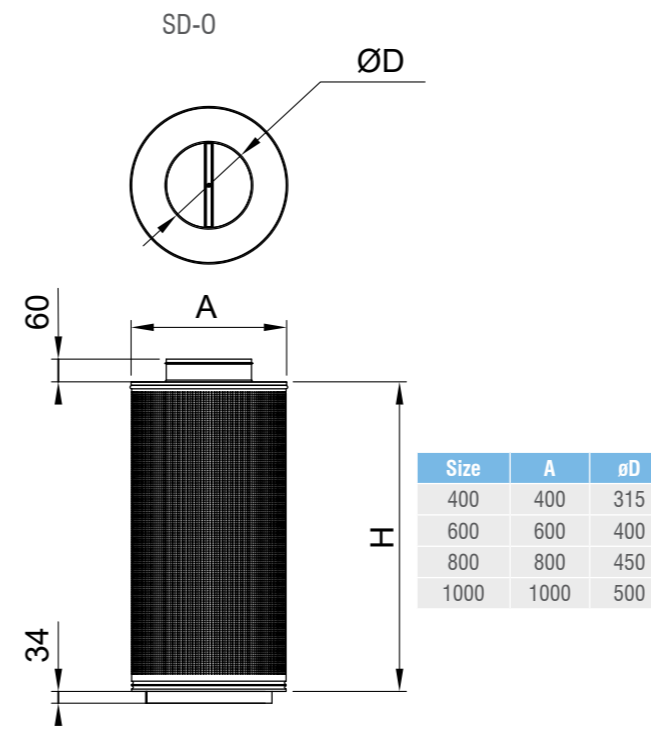
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AIR DISPLACEMENT DIFFUSER, TYPE SD

- For cooling and fresh air supply in industrial and commercial spaces
- Low turbulence, low outlet velocity
- Increased air quality in residence areas
- For temperature differences up to 6K
- Made out of steel sheet, standard powder coating RAL 9010
- Standard heights: H = 750, 1000, 1250 and 1500

Options

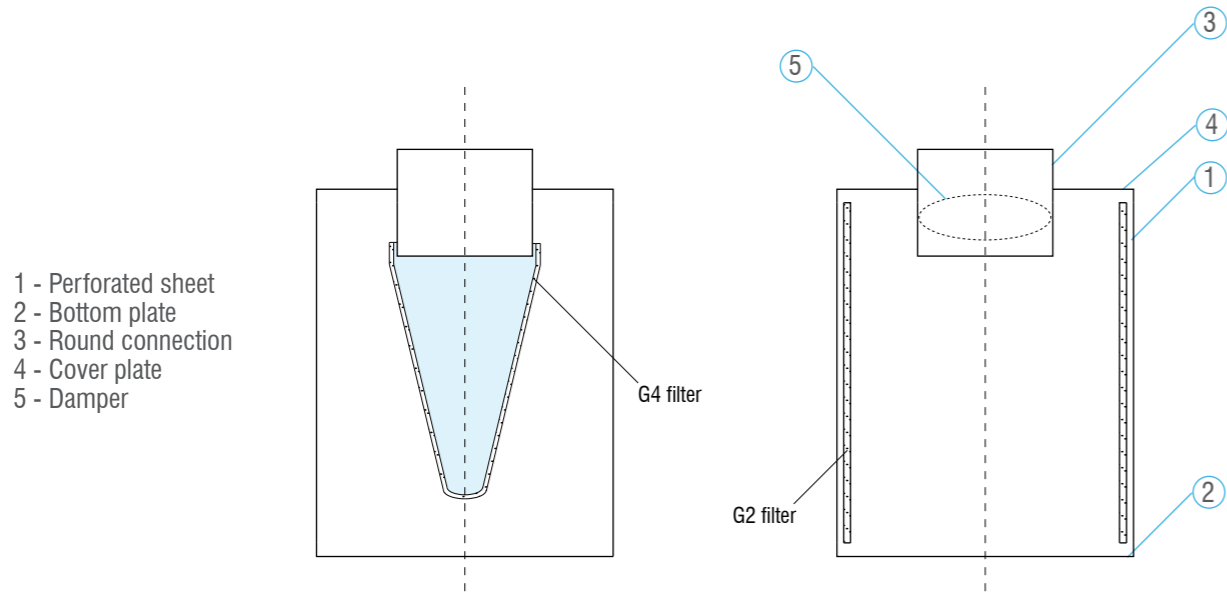
- Models: SD-Z - wall diffuser
SD-O -central diffuser SD-P - rectangular diffuser
- Damper
- Filter



Definition of symbols:

V [m³/h]	- Air flow	t_z [°C]	- Supply air temperature
x [m]	- Distance from the wall	t_p [°C]	- Air temperature in a room
A, B [m]	- Distance between diffusers	t_m [°C]	- Core air temperature
C, X [m]	- Distance between diffusers and walls	Δt_z [K]	- ($t_z - t_p$)
L [m]	- Throw distance $L = x + h$	Δt_L [K]	- ($t_m - t_p$)
v_L [m/s]	- Average core velocity at distance L (m) from a diffuser	Δp_t [Pa]	- Total pressure drop
h [m]	- Distance from the ceiling to the occupied zone	L_{WA} [dB(A)]	- Sound power level
v_h [m/s]	- Average core velocity between two diffusers at distance h [m]		
H [m]	- Room height		

Filter

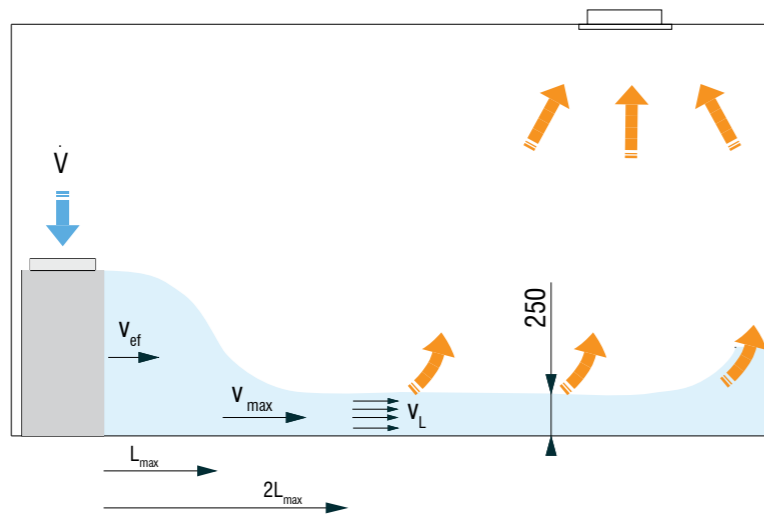


- 1 - Perforated sheet
- 2 - Bottom plate
- 3 - Round connection
- 4 - Cover plate
- 5 - Damper

G4 - conical stabilization filter placed inside diffuser, made out of G4 class filtration material.

G2 - inner side of diffuser covered in black G2 class filtration material.

Discharge pattern

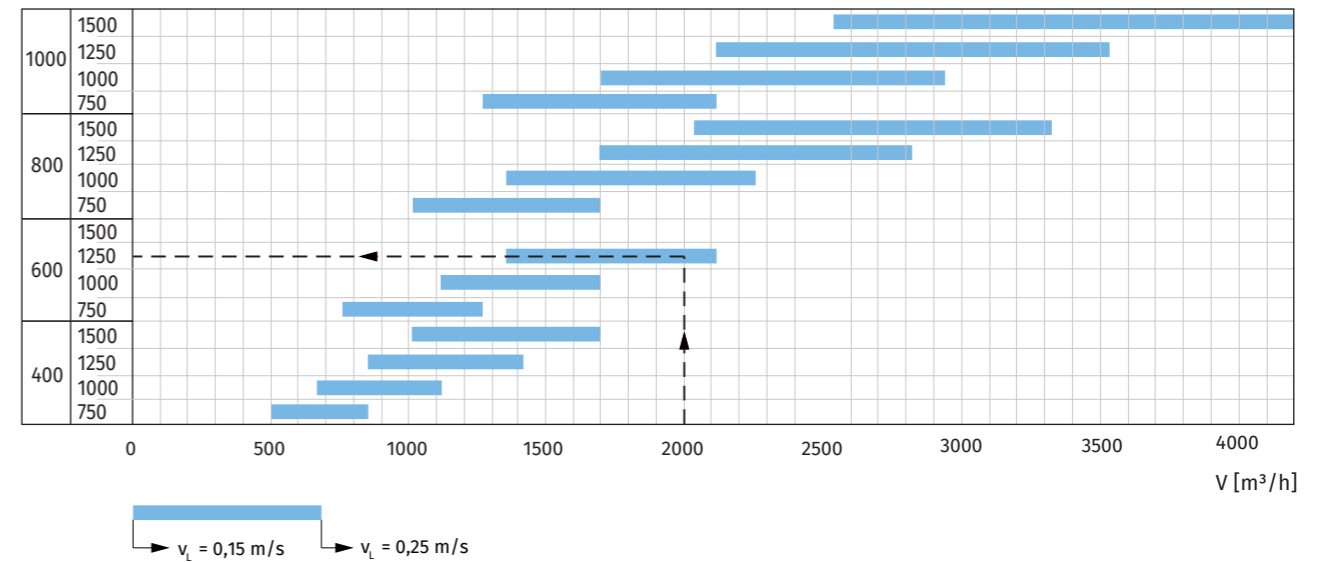


Ordering key

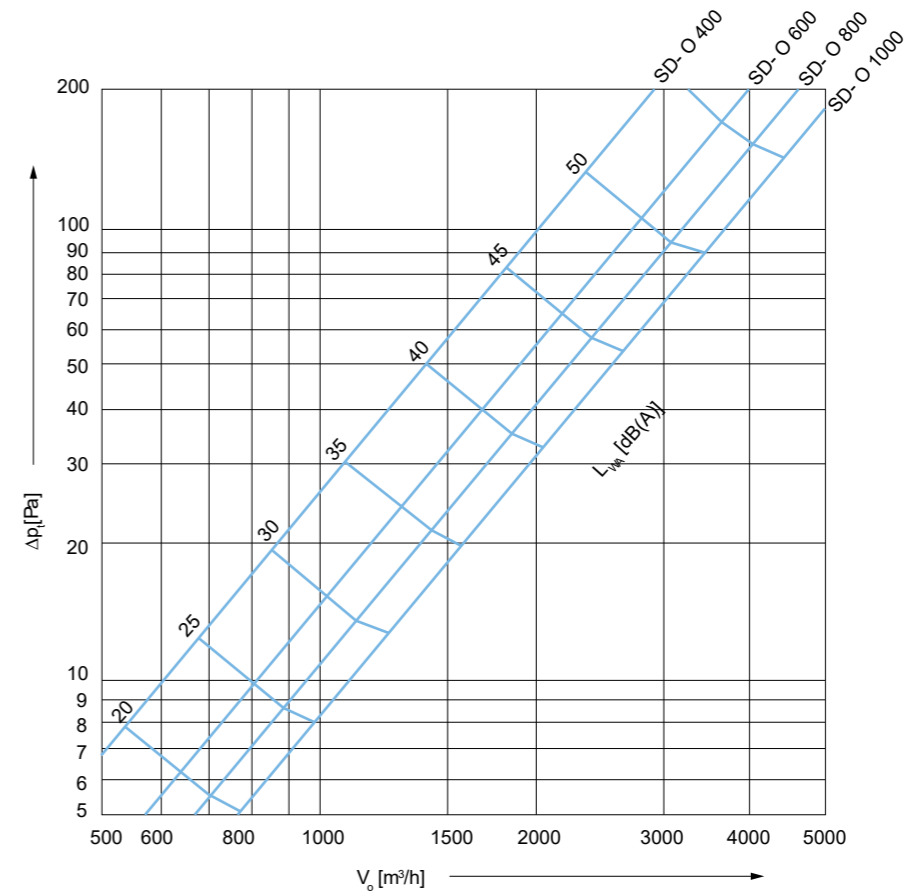
Air displacement diffuser **SD - S - øD - H - G2 - RAL...**
O - central
Z - wall
P - rectangular
 Connection diameter (**øD, BxH**)
 Diffuser height
 Filter **G2..G4**
 RAL...

SELECTION DIAGRAMS

Fast selection diagram SD-0



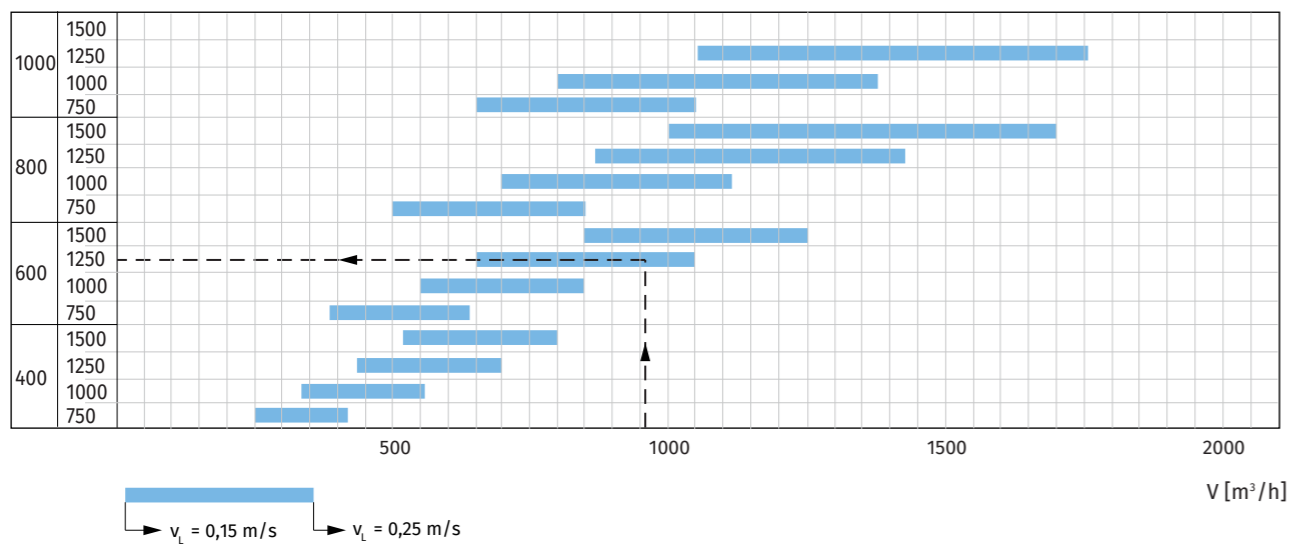
Pressure drop and sound power level



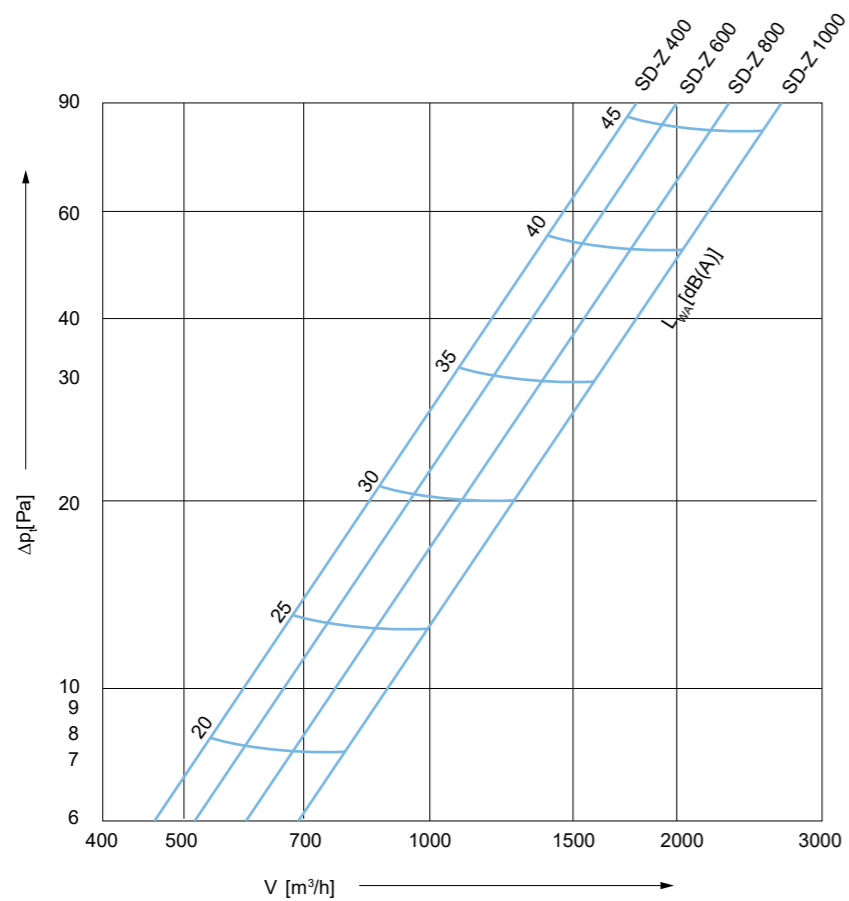
Correction values

H [mm]	750	1000	1250	1500
Δp_i [Pa]	x 1,25	x 1,00	x 0,80	x 0,65
L_{WA} [dB(A)]	+3	± 0	-3	-6

Fast selection diagram SD-Z



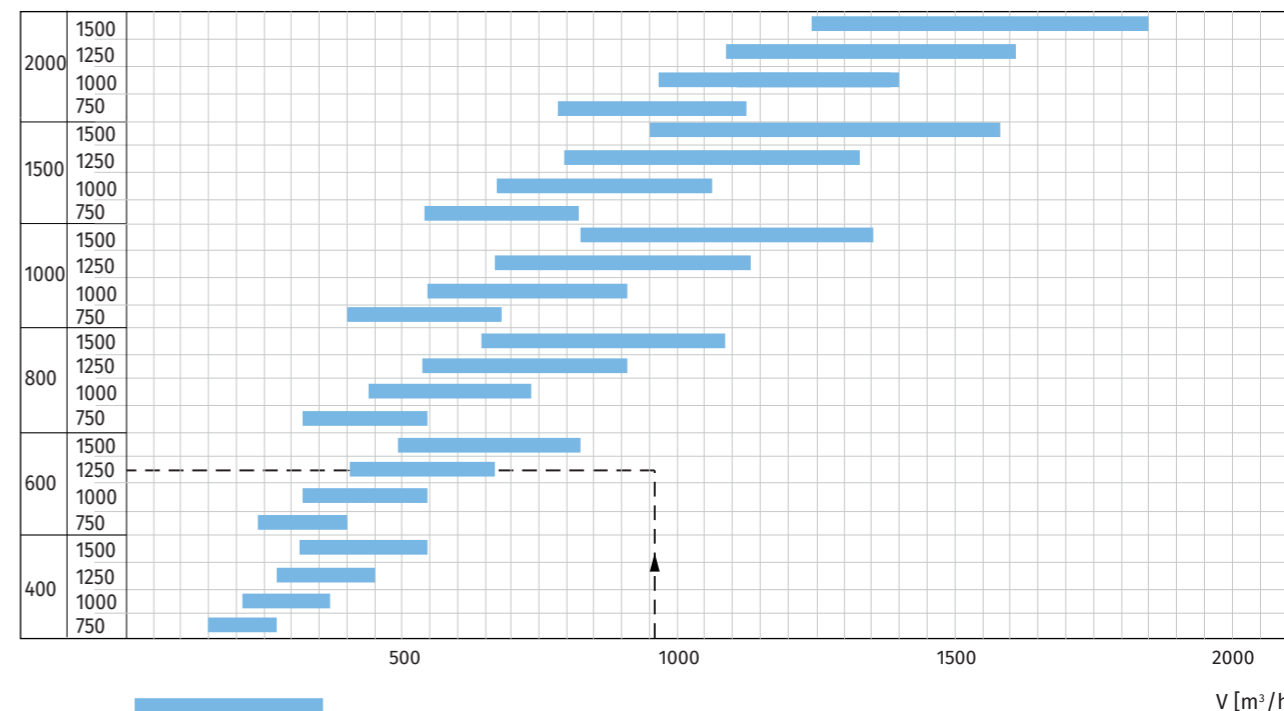
Pressure drop and sound power level



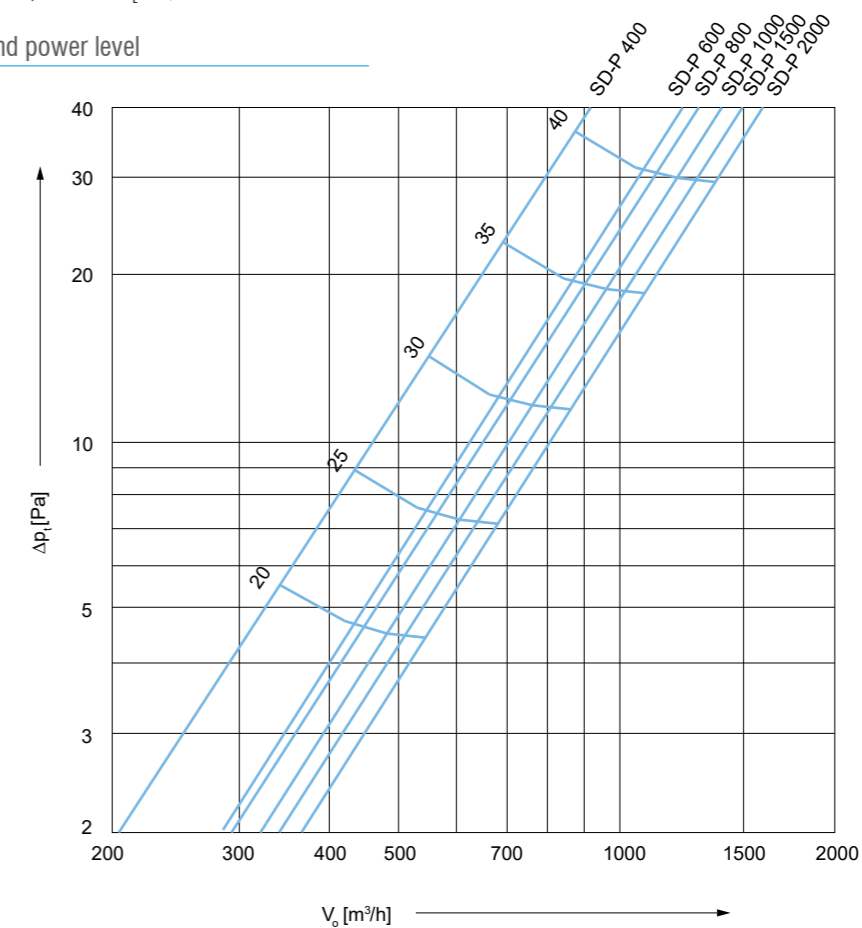
Correction values

H [mm]	750	1000	1250	1500
Δp_t [Pa]	x 1,25	x 1,00	x 0,80	x 0,65
L_{wa} [dB(A)]	+3	± 0	-3	-6

Fast selection diagram SD-P



Pressure drop and sound power level



Correction values

H [mm]	750	1000	1250	1500
Δp_t [Pa]	x 1,25	x 1,00	x 0,80	x 0,65
L_{wa} [dB(A)]	+3	± 0	-3	-6

