

Single deflection grille

SD



Specifications

Grille with one row of horizontal blades, individually adjustable.

Used for exhaust, supply or recirculation, in ventilation systems.

Material

Aluminium.

Finish

Standard finish: white RAL9003.

Optional finishing:
- different RAL (extra cost)
- natural aluminium

Mounting / Fixing

Mounting on the wall or ceiling (inside).
Fixing with visible screws (countersunk hole in frame).

Different fixing systems are available under certain commercial conditions.
(see **Fixing systems for grilles / diffusers**)

Optional accessories

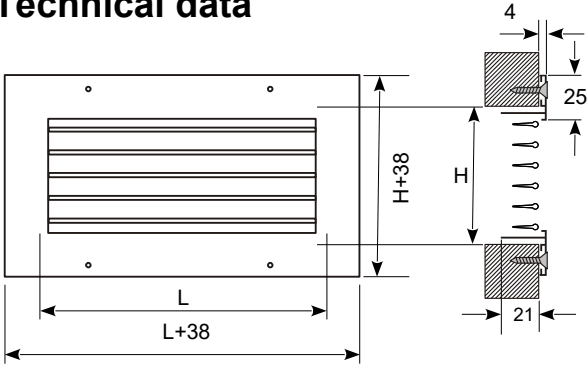
Opposed blade damper – **OBD** (extra cost).
Plenum box – **PL** (extra cost).
Fixing systems (extra cost).

Order code: **SD** **aaa x bbb** **+***

Product code
opening length L (mm)
opening height H (mm)
not specified - white RAL9003 (standard)
RALxxxx - optional RAL code
ALU - natural aluminium

* optional accessories

Technical data



LxH - opening hole size

Grille neck size: (L-10) x (H-10)

Standard sizes

L	H	Q (m³/h) @ Vef 2,5 (m/s)
200	100	150
300	100	220
400	100	280
500	100	360
600	100	440
400	200	580
500	200	750
600	200	900
800	200	1150
1000	200	1400
300	300	640
500	300	970
600	300	1300
800	300	1740
1000	300	2350
600	400	1740
1000	400	2900
595*	595*	2400

* external dimension 595x595, for cassette ceiling system
(without mounting holes in frame)

Custom sizes

Custom sizes available (under certain commercial conditions),
between: LxH 100x100 mm ~ LxH 2000x1000 mm

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Quick selection

Q (m³/h)	LxH (mm)	A _{gr} (m²)	200x100	250x100	300x100	200x150	400x100	250x150	300x150	500x100	600x100	400x150	500x150	400x200	600x150	300x300	500x200	800x150	600x200	1000x150	500x300	800x200	600x300	1000x200	800x300	600x400	1000x300	595x595*	1000x400
			0,016	0,020	0,024	0,032	0,036	0,040	0,048	0,060	0,064	0,072	0,080	0,096	0,120	0,128	0,144	0,160	0,192	0,240	0,320								
150	Lt(m)	2,6	2,3																										
	Lw(dB(A))	17	-																										
	ΔPt(Pa)	4	3																										
200	Lt(m)	3,4	2,9	2,8																									
	Lw(dB(A))	27	20	17																									
	ΔPt(Pa)	7	5	3																									
250	Lt(m)	4,3	3,7	3,5																									
	Lw(dB(A))	33	25	20																									
	ΔPt(Pa)	10	6	5																									
300	Lt(m)	5,2	4,6	4,2	3,7	3,4	3,2																						
	Lw(dB(A))	40	27	25	17	-	-																						
	ΔPt(Pa)	16	9	6	4	3	3																						
350	Lt(m)			4,9	4,3	3,9	3,7																						
	Lw(dB(A))			30	21	18	14																						
	ΔPt(Pa)			8	5	4	4																						
400	Lt(m)				4,9	4,5	4,2	3,8																					
	Lw(dB(A))				28	23	21	-																					
	ΔPt(Pa)				7	6	5	3																					
450	Lt(m)				5,6	5,1	4,7	4,3																					
	Lw(dB(A))				31	26	24	16																					
	ΔPt(Pa)				10	7	6	4																					
500	Lt(m)				6,2	5,7	5,3	4,9	4,4	4,2																			
	Lw(dB(A))				35	30	27	21	15	-																			
	ΔPt(Pa)				12	9	7	5	4	3																			
600	Lt(m)								5,9	5,2	5	4,8	4,5																
	Lw(dB(A))								25	21	20	-	-																
	ΔPt(Pa)								6	5	5	4	3																
700	Lt(m)								7	6,2	5,9	5,6	5,4																
	Lw(dB(A))								32	24	23	20	18																
	ΔPt(Pa)								9	6	6	5	4																
800	Lt(m)								7,9	7,1	6,8	6,4	6,1	5,6	5,1														
	Lw(dB(A))								35	27	27	23	20	-	-														
	ΔPt(Pa)								12	7	7	5	5	3	3														
900	Lt(m)								8	7,6	7,3	7	6,3	5,7	5,5														
	Lw(dB(A))								32	30	26	22	17	16	-														
	ΔPt(Pa)								9	8	7	6	4	4	3														
1000	Lt(m)									8,4	8	7,7	7,2	6,4	6,1														
	Lw(dB(A))										35	33	27	21	20	18													
	ΔPt(Pa)										12	9	7	5	5	4													
1200	Lt(m)													9	8,2	7,4	7,2	6,7	6,4										
	Lw(dB(A))													32	25	22	20	-	-										
	ΔPt(Pa)													9	6	6	5	3	3										
1400	Lt(m)																	9,8	8,7	8,4	7,8	7,5	6,8						
	Lw(dB(A))																	30	27	22	18	18	-						
	ΔPt(Pa)																	8	7	6	4	4	2						
1600	Lt(m)																	12	10,7	10	9,3	8,8	7,9	7,2					
	Lw(dB(A))																	34	32	27	22	21	17	-					
	ΔPt(Pa)																	11	9	7	5	5	3	2					
1800	Lt(m)																	13,5	12,1	11,6	10,7	10	9	7,8					
	Lw(dB(A))																	42	38	33	29	27	20	16					
	ΔPt(Pa)																	17	14	11	8	7	4	3					
2000	Lt(m)																		13,5	12,9	12,3	11,5	10,3	8,9	7,8				
	Lw(dB(A))																		41	37	32	31	21	17	-				
	ΔPt(Pa)																		16	13	9	8	5	4	2				
2500	Lt(m)																					14,9	14,2	13	11,5	9,9			
	Lw(dB(A))																					37	34	26	20	16			
	ΔPt(Pa)																					12	11	6	5	3			
3000	Lt(m)																								15,4	13,9	12,4		
	Lw(dB(A))																								33	26	18		
	ΔPt(Pa)																								9	6	4		
3500	Lt(m)																									15,8	14,2		
	Lw(dB(A))																									32	23		
	ΔPt(Pa)																									9	6		
4000	Lt(m)																										17,3	15,9	
	Lw(dB(A))																										36	27	
	ΔPt(Pa)																										11	7	

*external dimension 595x595, for cassette ceiling system

Data is valid for:

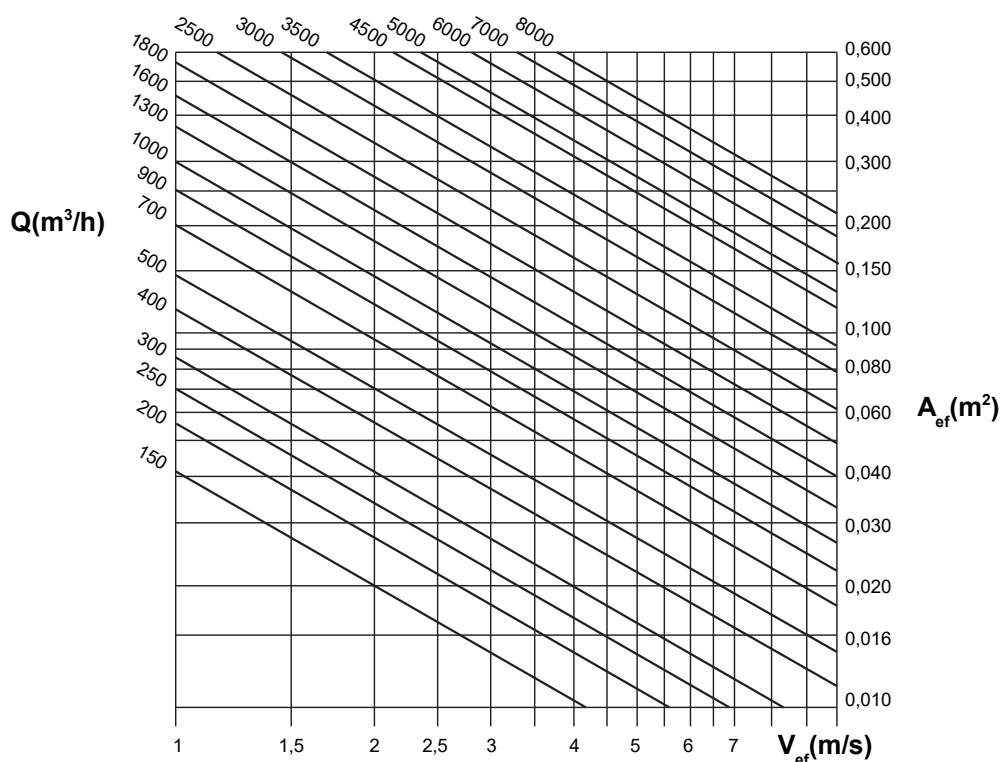
- H ceiling = 2,5±0,5m
- L_t (m) @ V_t=0,2 m/s (without Coanda effect)
- L_w(dB(A)) incl. room attenuation 5dB(A)
- Temperature difference Δt=-10K
- deflection 0°, without damper

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Technical data

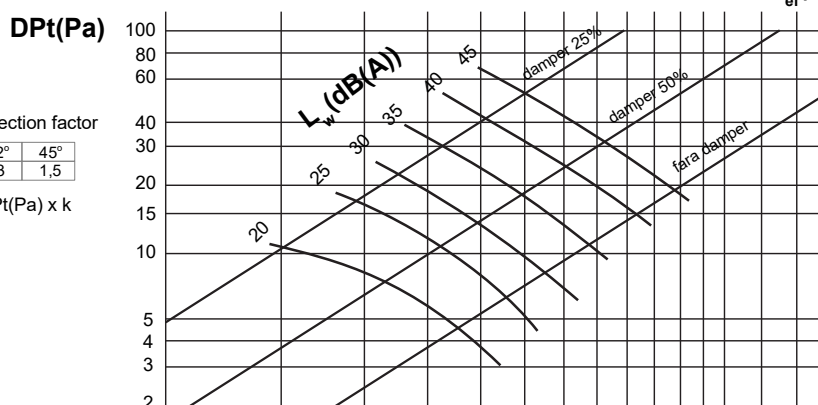
Technical data		A _{ef} (m ²)															
H (mm)	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0,800
	900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0,648 0,720
	800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0,512 0,576	0,640
	700	-	-	-	-	-	-	-	-	-	-	-	-	0,392	0,448	0,504	0,560
	600	-	-	-	-	-	-	-	-	-	-	-	0,288	0,336	0,384	0,432	0,480
	550	-	-	-	-	-	-	-	-	-	-	0,242	0,264	0,308	0,352	0,396	0,440
	500	-	-	-	-	-	-	-	-	-	0,200	0,220	0,240	0,280	0,320	0,360	0,400
	450	-	-	-	-	-	-	-	0,162	0,180	0,198	0,216	0,252	0,288	0,324	0,360	0,360
	400	-	-	-	-	-	-	0,128	0,144	0,160	0,176	0,192	0,224	0,256	0,288	0,320	0,320
	350	-	-	-	-	-	0,098	0,112	0,126	0,140	0,154	0,168	0,196	0,224	0,252	0,280	0,280
	300	-	-	-	-	0,072	0,084	0,096	0,108	0,120	0,132	0,144	0,168	0,192	0,216	0,240	0,240
	250	-	-	-	0,050	0,060	0,070	0,080	0,090	0,100	0,110	0,120	0,140	0,160	0,180	0,200	0,200
	200	-	-	0,032	0,040	0,048	0,056	0,064	0,072	0,080	0,088	0,096	0,112	0,128	0,144	0,160	0,160
	150	-	0,018	0,024	0,030	0,036	0,042	0,048	0,054	0,060	0,066	0,072	0,084	0,096	0,108	0,120	0,120
	100	0,008	0,012	0,016	0,020	0,024	0,028	0,032	0,036	0,040	0,044	0,048	0,056	0,064	0,072	0,080	0,080
	100	150	200	250	300	350	400	450	500	550	600	700	800	900	1000		
	L (mm)																



Deflection correction factor

deflection	22°	45°
k	1,3	1,5

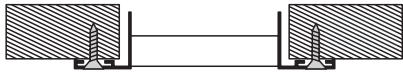
$$DPt_{tot} (Pa) = DPt(Pa) \times k$$



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Fixing



Fixing with visible screws (**standard**).
Screws are supplied at the same color as grille.

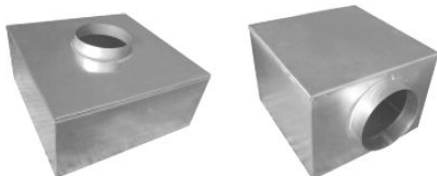
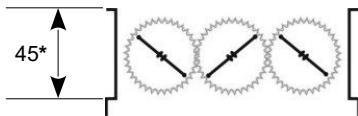
Different fixing systems are available (under certain commercial conditions).
(details in **Fixing systems for grilles / diffusers** chapter)

Optional accessories



OBD - Opposed blade damper. (extra cost)

*to be added to grille depth dimension



PL – Plenum box(extra cost)

Variants:

- uninsulated / thermal insulated
- axial or lateral spigot