

E-HVDP

Outlet grille with horizontal and vertical moving blades.



Description E-HVDP

Grille with a first row of joined horizontal blades and another row of vertical blades also joined which are positioned with the action of two levers. Manufactured with extruded anodized aluminium profiles.

Fixtures:

- ✓ Springs with frame E-MM, E-MAM, E-CLIPO or mountable plenums E-PLEKIT (inn the sizes in which PLEKIT is available).
- ✓ Screws with frame E-MM.

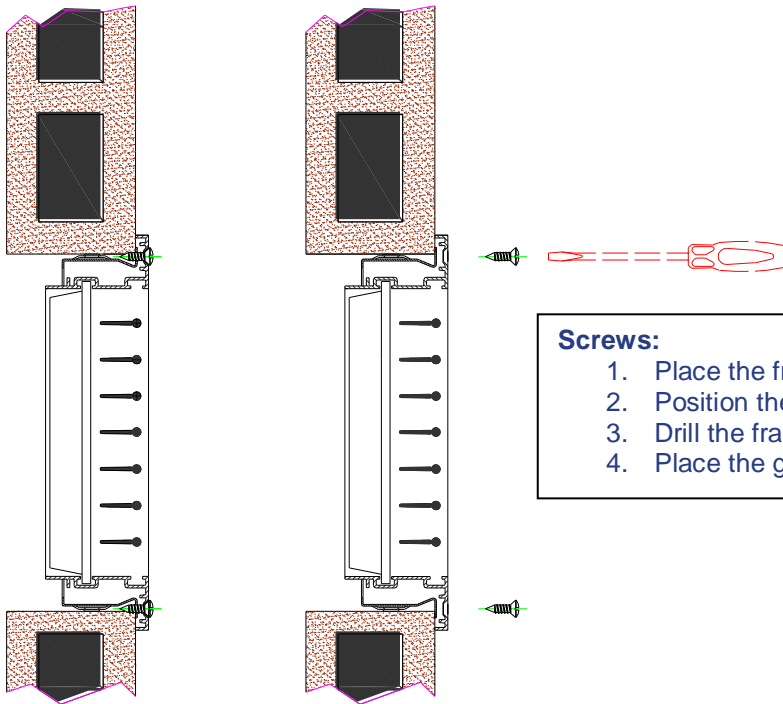
Finish: Anodized or white aluminium. It can be supplied in other colours on request.

Applications: This grill is used in outlets in which it is necessary to frequently change the air direction. Their levers allow making this change in a fast way.

Important note: The first row is of horizontal blades and the second of vertical blades.

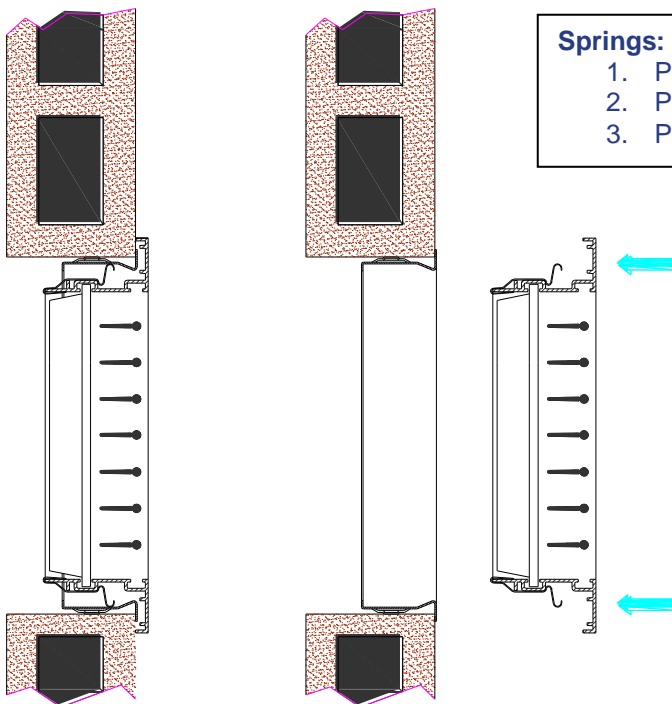


E-HVDP fixtures



Screws:

1. Place the frame in the wall cavity.
2. Position the grille and mark the holes to be made.
3. Drill the frame and the wall at the points marked.
4. Place the grille and screw it down.



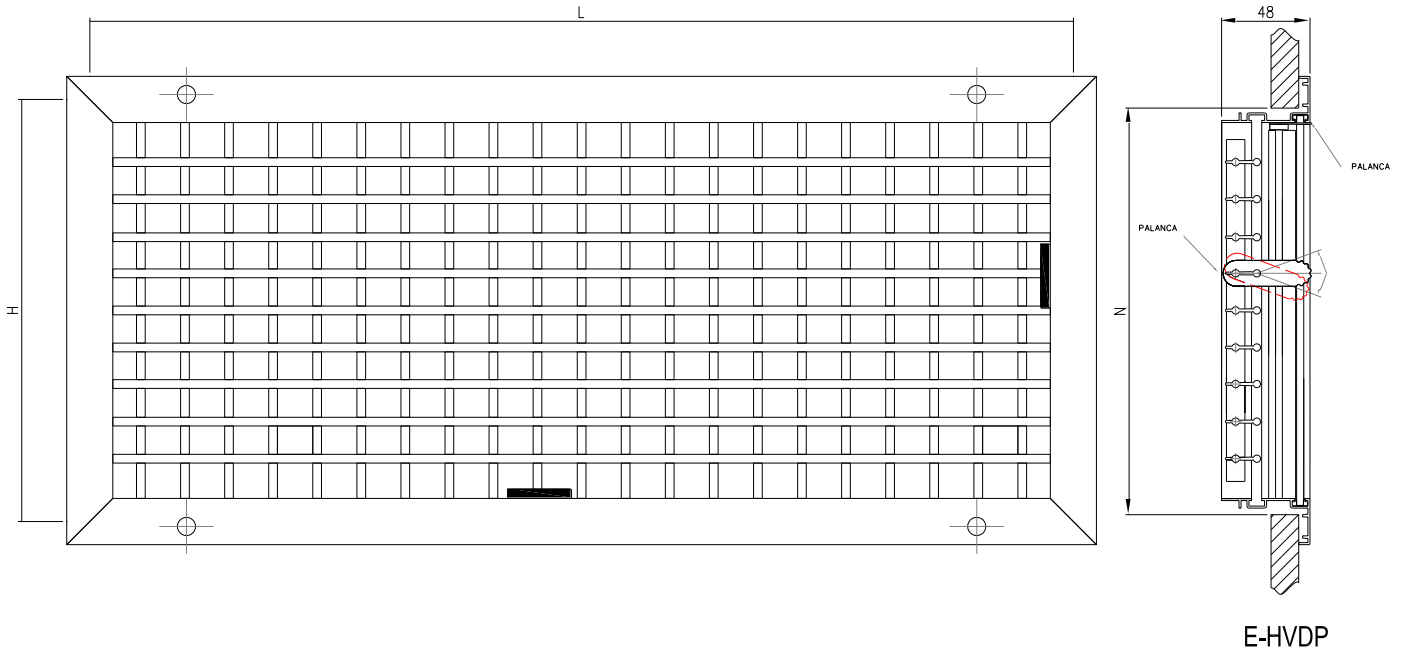
Springs:

1. Place the frame in the wall cavity.
2. Position the grille in the frame.
3. Press until the springs are fixed.



Dimensions E-HVDP

SIZE OF THE HOLE	
With frame	L x H
Without frame	(L + 12) x (H + 12)



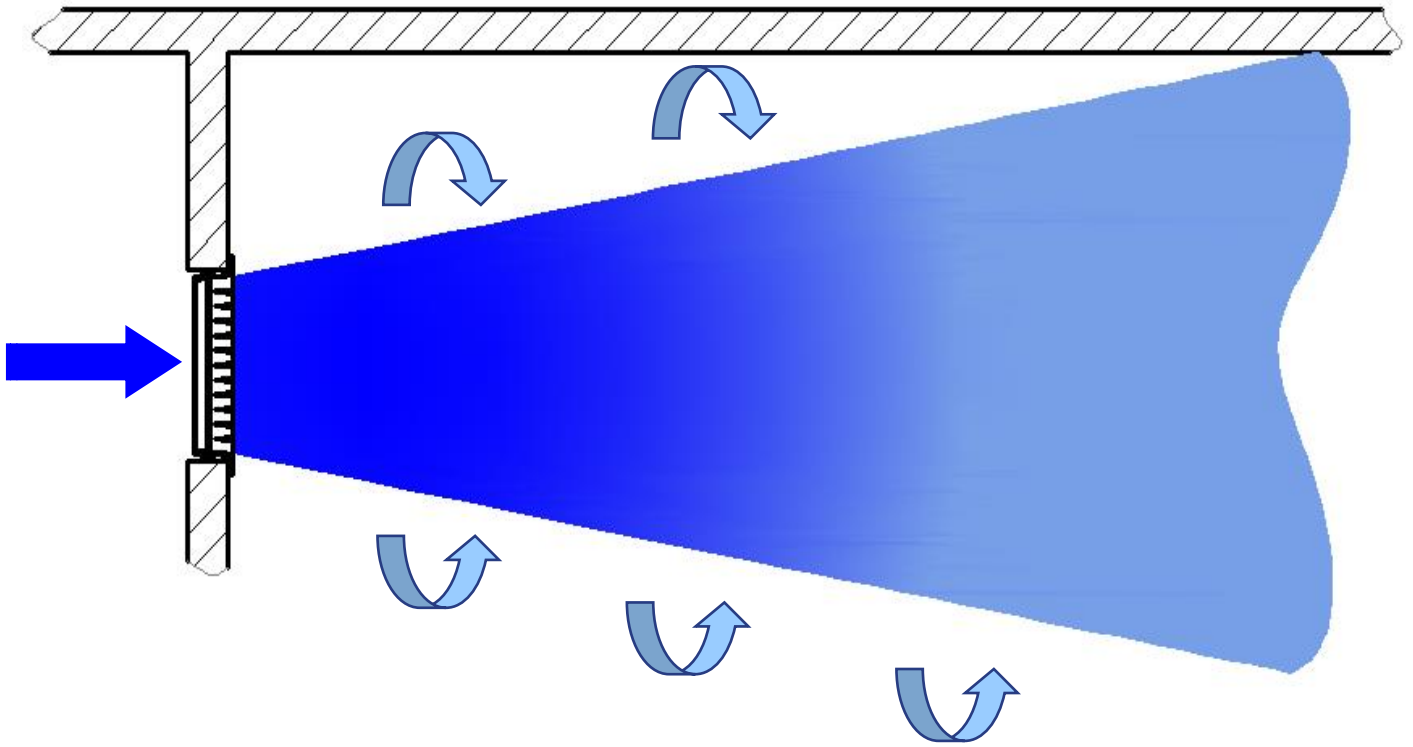
E-HVDP

H \ L	200	300	400	500	600
100	*	*	*	*	*
150		*	*	*	*
200		*	*	*	*
250			*	*	*
300					*

Note: The dimensions indicated on the table are standard. Other grilles of larger or intermediate sizes can be manufactured on request.

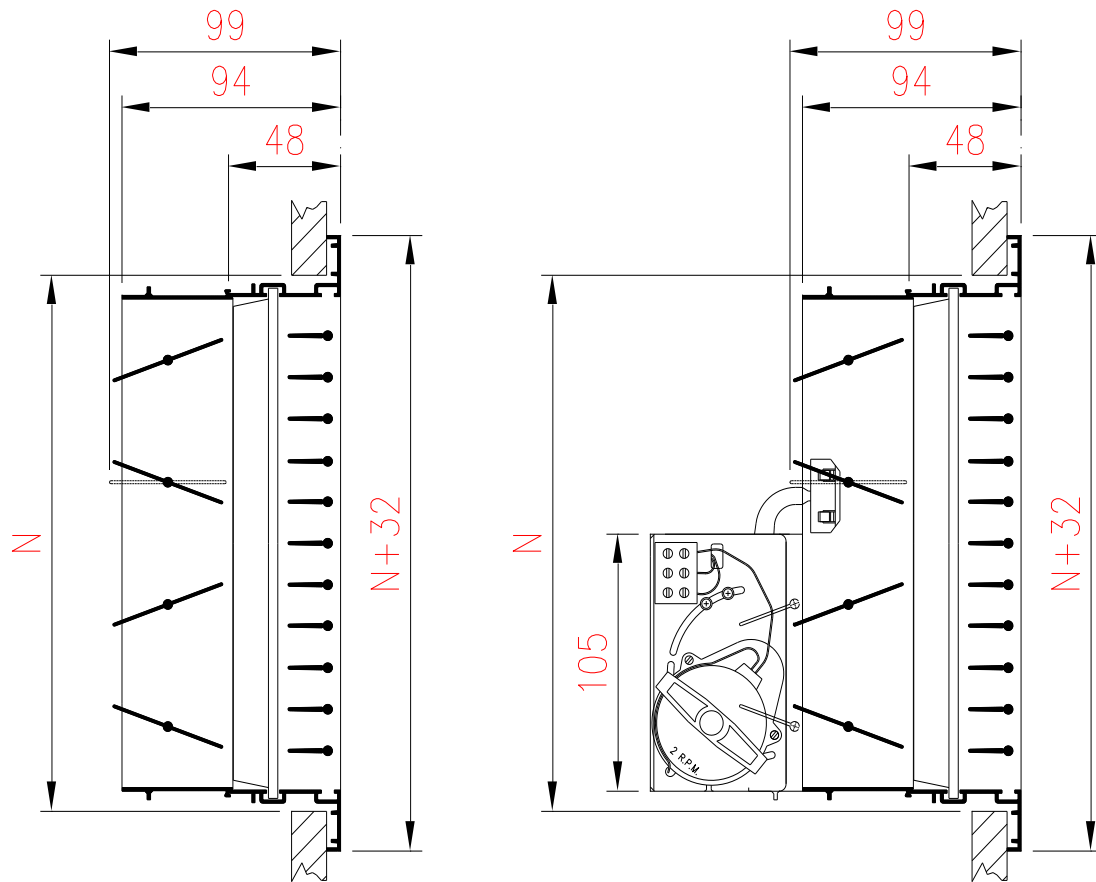


Air diffusion E-HVDP





Accessories E-HVDP



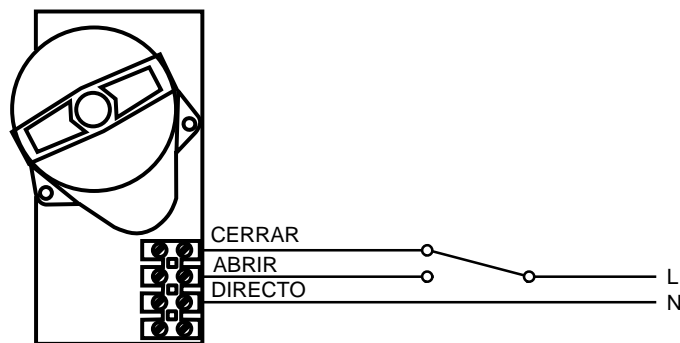
E-R

E-RM

E-R: Opposed blades flow regulation valve, made with aluminium profiles. In this closing position the blades are totally flat, while when in open position the blades are parallel to the air flow.

The opening and closing of the flow regulation is performed through a manually operated crown wheel.

E-RM: Motorization of the regulation valve can be 24 V or 220 V, according to that specified on the order.

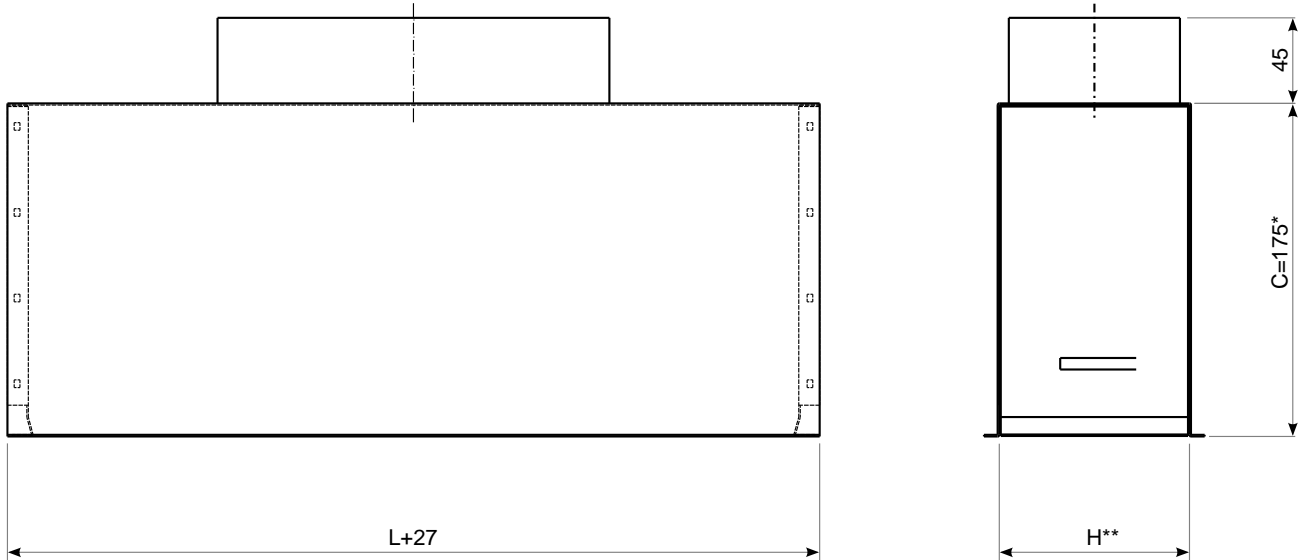


Connection scheme



Plenum E-HVDP

02.276: Plenum mounted in galvanized sheet with one or more circular (or oval) collars of the same diameter located on the side opposite the one to which the grid is placed.



$\varnothing D_{\text{duct}}$	A	B
100	107	90
100	100	100
125	150	190
125	125	125
150	190	90
150	162	130
150	150	150
160	206	90
160	178	130
160	160	160
200	270	90
200	242	130
200	200	200
250	281	190
250	250	250
300	300	300

Si $H \leq \varnothing D_{\text{duct}} \rightarrow$ Oval collar

Si $H > \varnothing D_{\text{duct}} \rightarrow$ Circular collar

Notes:

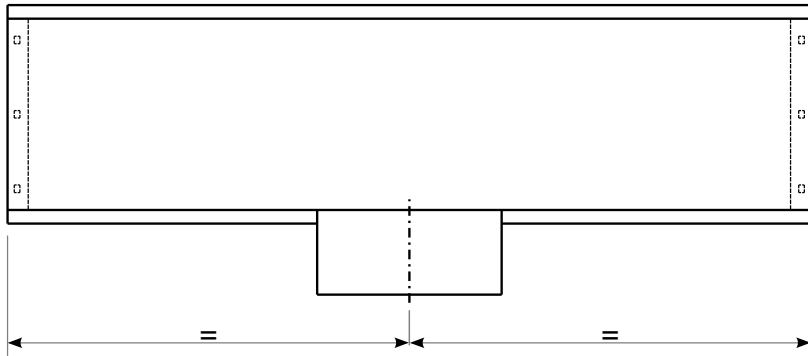
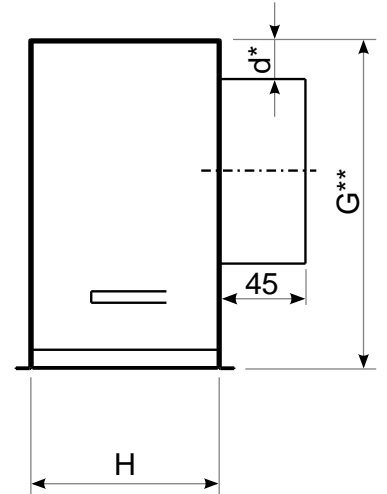
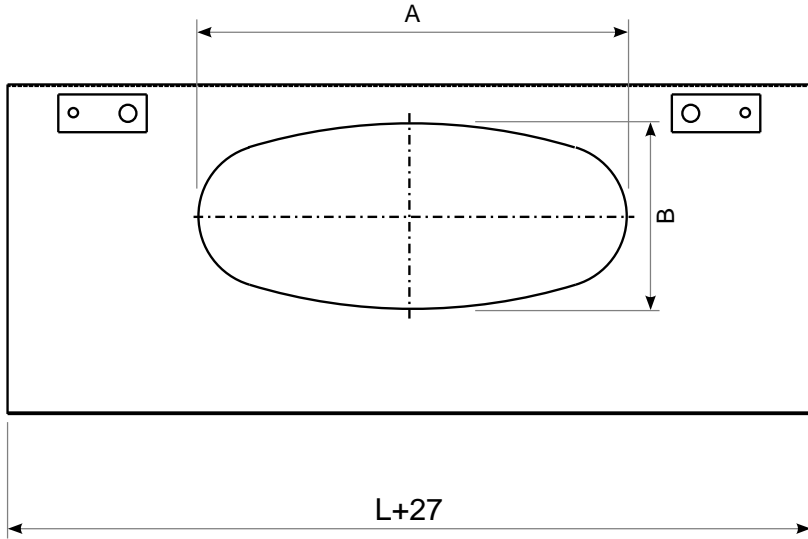
*Possible other dimensions on request

**Minimal H grid dimension B+10mm



Plenums E-HVDP

02.277: Plenum mounted in galvanized sheet with one or more circular (or oval) collars of the same diameter located on the side of the grid.



$\varnothing D_{\text{duct}}$	A	B
100	107	90
100	100	100
125	150	190
125	125	125
150	190	90
150	162	130
150	150	150
160	206	90
160	178	130
160	160	160
200	270	90
200	242	130
200	200	200
250	281	190
250	250	250
300	300	300

Notas:

*25mm minimum height

**G according to request





Selection table E-HVDP

HEIGHT	LENGTH										
400											
350											
300									300		400
250								300		400	500
200			200			300		400		500	600
150		200		300		400		500	600	700	800
100	200	300	400		500	600	700	800	900	1000	1200

m³/h

100	Speed [m/s]	2,8										
	P [mm.c.W.]	0,5										
	Sound L. [dB(A)]	<15										
	Range [m]	5,1										
150	Speed [m/s]	4,2										
	P [mm.c.W.]	1,2										
	Sound L. [dB(A)]	15										
	Range [m]	7,5										
200	Speed [m/s]	5,6										
	P [mm.c.W.]	2,1										
	Sound L. [dB(A)]	22										
	Range [m]	9,9										
300	Speed [m/s]	8,4	5,4									
	P [mm.c.W.]	4,8	2									
	Sound L. [dB(A)]	32	24									
	Range [m]	14,7	10,7									
400	Speed [m/s]		7,3	5,4	4,7							
	P [mm.c.W.]		3,5	1,9	1,4							
	Sound L. [dB(A)]		31	25	22							
	Range [m]		14,1	11,3	10,2							
500	Speed [m/s]		9,1	6,7	5,8	5,3						
	P [mm.c.W.]		5,6	3	2,2	1,9						
	Sound L. [dB(A)]		37	31	28	26						
	Range [m]		17,5	14	12,6	11,8						
600	Speed [m/s]			8,1	7	6,4	5,3	4,5				
	P [mm.c.W.]			4,4	3,2	2,7	1,9	1,4				
	Sound L. [dB(A)]			35	32	31	27	24				
	Range [m]			16,7	15	14,1	12,3	10,9				
700	Speed [m/s]					7,5	6,2	5,3	4,6			
	P [mm.c.W.]					3,8	2,6	1,9	1,4			
	Sound L. [dB(A)]					35	31	28	25			
	Range [m]					16,4	14,2	12,7	11,5			
800	Speed [m/s]						7,1	6	5,3	4,7	4,2	
	P [mm.c.W.]						3,4	2,4	1,9	1,5	1,2	
	Sound L. [dB(A)]						34	31	29	26	24	
	Range [m]						16,2	14,4	13	11,9	11	
900	Speed [m/s]							6,8	5,9	5,3	4,7	
	P [mm.c.W.]							3,1	2,4	1,8	1,5	
	Sound L. [dB(A)]							34	32	29	27	
	Range [m]							16,2	14,6	13,4	12,4	
1000	Speed [m/s]								6,6	5,8	5,2	4,4
	P [mm.c.W.]								2,9	2,3	1,8	1,3
	Sound L. [dB(A)]								34	32	30	26
	Range [m]								16,2	14,8	13,7	11,9

Speed = Effective velocity P = Pressure loss Sound L. = Sound Level Range = Air range at speed of 0,25 m/s



Selection table E-HVDP

HEIGHT	LENGTH												
	500	600	700	800	900	1000	1200	1500	1800	2000	2500	3000	
500													
400					400								
350				400	500	500	600	700	800	900	1000	1200	
300	300		400	500	500	600	700	800	900	1000	1200		
250		400	500		600	700	800	1000		1200			
200		500	600	700	800	900	1000	1200					
150	600	700	800	900	1000	1200							
100	900	1000	1200										

m³/h

1200	Speed[m/s]	7	6,3	5,2	4,5	4									
	P [mm.c.W.]	3,3	2,7	1,8	1,3	1,1									
	Sound L. [dB(A)]	36	34	31	28	26									
	Range [m]	17,7	16,3	14,3	12,4	11,8									
1400	Speed[m/s]			6,1	5,2	4,7	3,9								
	P [mm.c.W.]			2,5	1,8	1,5	1								
	Sound L. [dB(A)]			35	32	29	26								
	Range [m]			16,4	14,8	13,7	11,9								
1600	Speed[m/s]				6	5,4	4,5	3,8							
	P [mm.c.W.]				2,4	1,9	1,3	1							
	Sound L. [dB(A)]				35	33	29	26							
	Range [m]				16,8	15,6	13,6	12,1							
1800	Speed[m/s]					6,1	5	4,3	3,6						
	P [mm.c.W.]					2,4	1,7	1,2	0,8						
	Sound L. [dB(A)]					36	32	29	25						
	Range [m]					17,4	15,2	13,6	11,8						
2000	Speed[m/s]						5,6	4,8	4	3,5	3,2				
	P [mm.c.W.]						2,1	1,5	1	0,8	0,6				
	Sound L. [dB(A)]						35	32	28	25	24				
	Range [m]						16,8	15	13,1	11,8	11,1				
2500	Speed[m/s]								5	4,3	4	3,2			
	P [mm.c.W.]								1,6	1,2	1	0,7			
	Sound L. [dB(A)]								34	31	29	25			
	Range [m]								16,3	14,6	13,8	11,8			
3000	Speed[m/s]									5,2	4,8	3,9	3,3		
	P [mm.c.W.]									1,7	1,5	1	0,7		
	Sound L. [dB(A)]									36	34	30	27		
	Range [m]									17,5	16,4	14,1	12,6		
3500	Speed[m/s]											4,5	3,9	3,3	
	P [mm.c.W.]											1,3	1	0,7	
	Sound L. [dB(A)]											34	31	28	
	Range [m]											16,3	14,6	13,1	
4000	Speed[m/s]													4,4	3,8
	P [mm.c.W.]													1,3	0,9
	Sound L. [dB(A)]													34	31
	Range [m]													16,6	14,9

Speed = Effective velocity P = Pressure loss Sound L. = Sound Level Range = Air range at speed of 0,25 m/s



Effective surface (m²) E-HVDP

H \ L	100	150	200	250	300	350	400	450	500	600	700	800	900	1000
100	0,005	0,007	0,010	0,013	0,015	0,018	0,021	0,023	0,026	0,031	0,037	0,042	0,048	0,053
150	0,007	0,011	0,015	0,020	0,024	0,028	0,032	0,036	0,041	0,049	0,057	0,066	0,074	0,082
200	0,010	0,016	0,022	0,028	0,034	0,039	0,045	0,051	0,057	0,069	0,081	0,092	0,104	0,116
250	0,013	0,020	0,027	0,035	0,042	0,049	0,057	0,064	0,072	0,086	0,101	0,116	0,131	0,146
300	0,015	0,025	0,034	0,043	0,052	0,061	0,070	0,079	0,088	0,106	0,124	0,142	0,161	0,179
350	0,018	0,029	0,039	0,050	0,060	0,071	0,082	0,092	0,103	0,124	0,146	0,166	0,187	0,209
400	0,021	0,033	0,045	0,058	0,070	0,082	0,094	0,107	0,119	0,144	0,168	0,192	0,217	0,242
450	0,023	0,037	0,051	0,065	0,079	0,092	0,106	0,120	0,134	0,161	0,189	0,216	0,244	0,272
500	0,026	0,042	0,057	0,073	0,088	0,104	0,119	0,135	0,150	0,181	0,212	0,243	0,274	0,305

EXAMPLE OF SELECTION

Data: Supply air flow rate $Q = 600 \text{ m}^3/\text{h}$
Sound Level allowed = 30 dB(A)

HEIGHT		LENGTH													
350															
300												300		400	
250										300			400	500	
200				200					300		400			500	600
150			200		300				400		500	600	700	800	
100		200	300	400		500	600	700	800	900	1000	1200			

m³/h

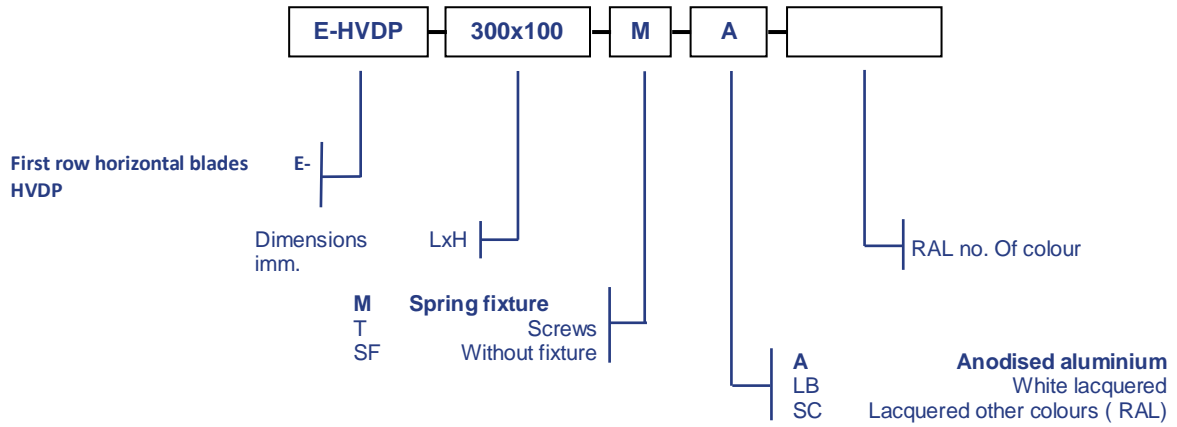
600	Speed[m/s]			8,1	7	6,4	5,3	4,5					
	P [mm.c.W.]			4,4	3,2	2,7	1,9	1,4					
	Sound L. [dB(A)]			35	32	31	27	24					
	Range [m]			16,7	15	14,1	12,3	10,9					

Results: Dimensions 600mm X 100mm
Speed = 5,3 m/s
Pressure Loss P = 1,9 mm.c.W.
Sound Level = 27 dB(A)
Range = 12,3 m



Order reference:

E-HVDP



Note: The options marked in bold will be used in the case no specification is made by the client.

EXAMPLE: E-HVDP-300x100-M-LB: grille HVDP with horizontal blades on the first row 300 mm long and 100 mm high with spring fixtures and lacquered in white.