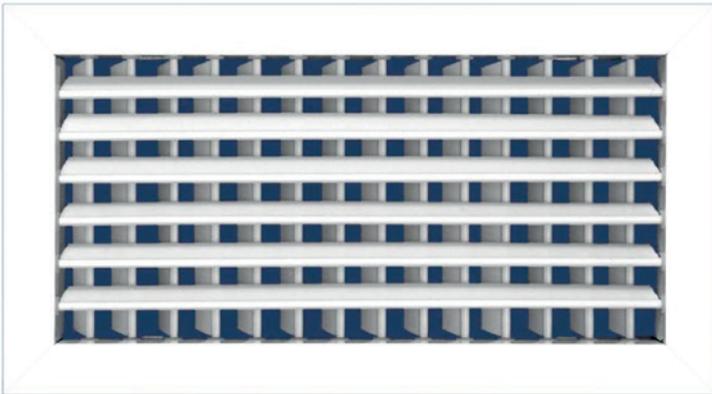
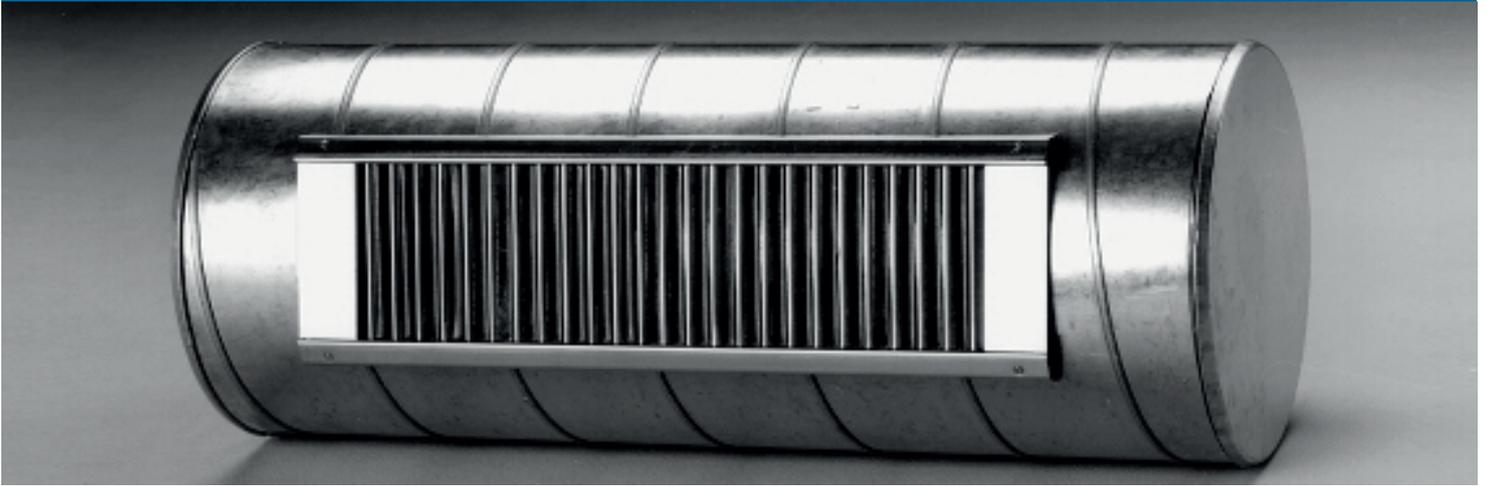




AERON



PC 08 Air Valves and Ventilation Grilles



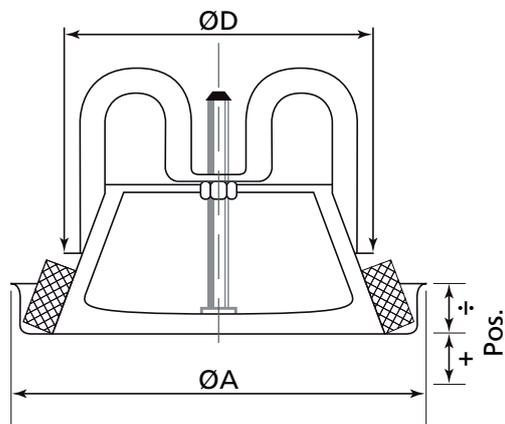
Offshore
AERONMOLLIER

www.aeron.no

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Control Valve KSU

Dimension



DESCRIPTION

The KSU valve is used for air exhaust. The valve has a low sound effect level even at a relatively large pressure loss. KSU is supplied in four standard sizes: 100, 125, 160 and 200 mm. The KSU valve fits directly into Lindab pipes by means of a standard VG type bayonet fitting or VGU or VGM type valve bushing.

ØD mm	A mm	m kg
100	134	0,30
125	160	0,40
160	191	0,60
200	241	0,80

MATERIALS AND FINISH

Material: Galvanised steel
 Standard finish: Powder-coated
 Standard colour: White RAL 9010, gloss 30

Ordering: **KSU aaa**
 Type _____
 Size _____

Specifications

PERFORMANCE

The volume flow q (l/s, m³/h), total pressure loss p_t (Pa) and sound pressure level L_A (dB(A)) are shown in the diagrams at various cone settings.

PRESSURE LOSS P_t

The diagram shows the pressure loss p_t (Pa) specified as total pressure loss.

SOUND PRESSURE LEVEL L_A

The diagram show the sound pressure level L_A (dB(A)) at room attenuation of 4 db.

SOUND POWER LEVEL L_w

Sound power level LW (dB) = $L_A + K_{ok}$. See table 1.

Table 1 - Mean frequency (Hz)								
Size	63	125	250	500	1K	2K	4K	8K
100	-	-4	-1	1	-3	-1	-6	
125	-	-1	0	-1	-3	0	-8	
160	-	-1	0	3	0	-7	-9	
200	-	2	1	1	0	-5	-6	

tolerance	+/-6	+/-3	+/-2	+/-2	+/-2	+/-2	+/-2	+/-3
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SOUND ATTENUATION ΔL

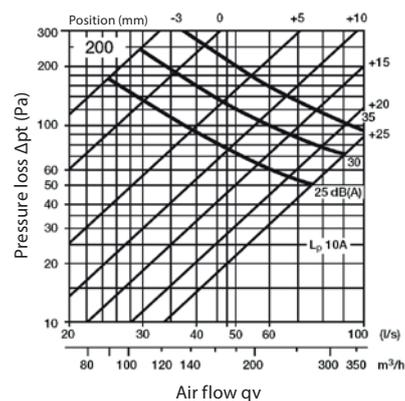
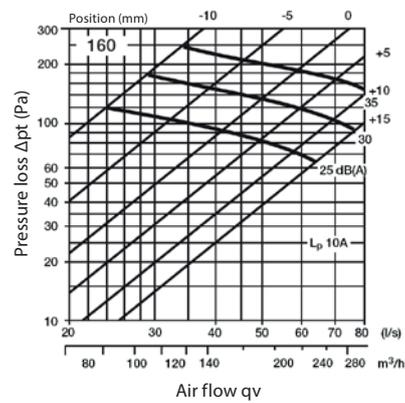
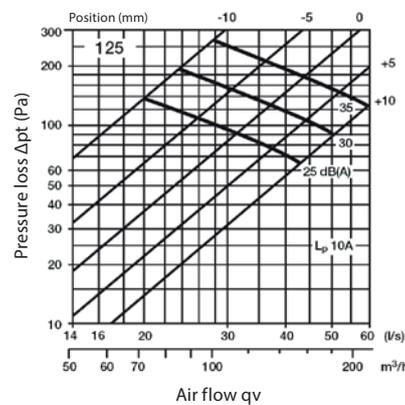
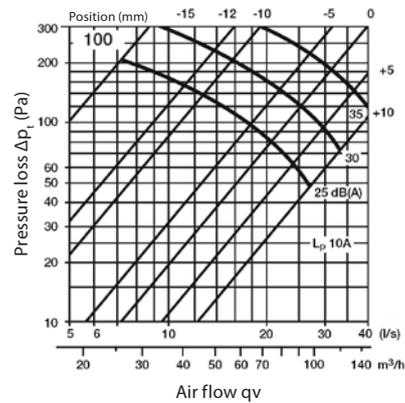
Sound attenuation ΔL (dB) of unit including end reflection to the inlet diameter. See table 2.

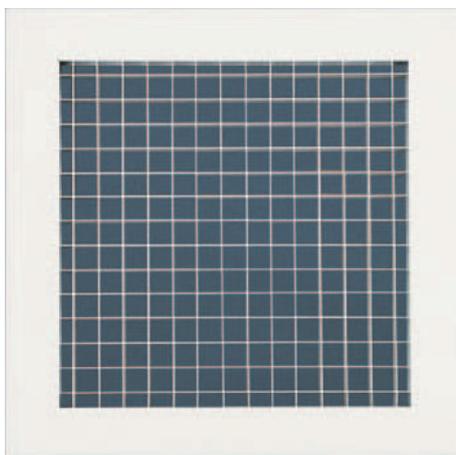
Table 2 - Mean frequency Hz								
Size	63	125	250	500	1K	2K	4K	8K
100	-	18	14	12	12	14	5	-
125	-	17	12	11	12	11	7	-
160	-	14	12	11	11	14	5	-
200	-	13	11	11	13	12	7	-

tolerance	+/-6	+/-3	+/-2	+/-2	+/-2	+/-2	+/-2	+/-3
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BALANCING

Balancing data of the control of the air flow is available in a separate brochure.





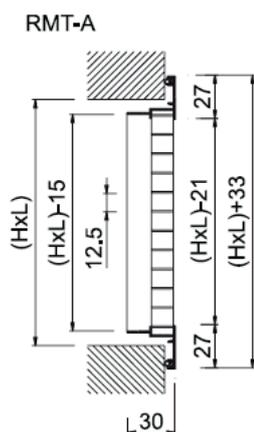
RMT EGGCRATE GRILLES

The RMT-A series grilles are designed to be used in airconditioning, ventilation, and heating.

They form a square netting, designed to be used in extraction.

They are mounted on walls or in false ceilings.

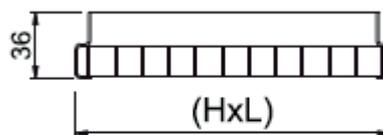
RMT -CLASSIFICATION



RMT-A Square netting grille of 12,7x12,7 mm.

When assembly with metallic frame, measures H and L increase 8 mm

RMT-A-MOD



DMT-AR-MOD	EMT-AR-MOD
595x295	595x1195
595x595	
1195x595	

RMT-A-MOD Grille specially designed to replace a 600x600 false ceiling tile.

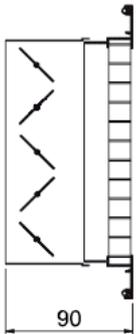
MATERIAL

Frame in extruded aluminium and netting in strips of laminated aluminium.

All the grilles are provided with a seal on the back of the frame in order that the perimeter in contact with walls, ceiling, ducts, etc... is airtight.

Additional Accessories

RMT-A+SP



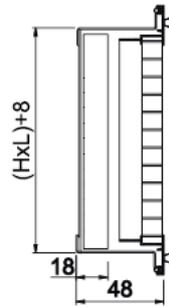
SP Opposed blades damper to regulate the air flow.

The damper is held in place by an easily accessible key inside the grille.

It is entirely constructed from milled aluminium.

The damper is held in place by "S" springs.

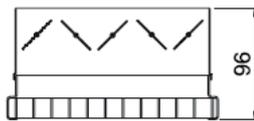
RMT-A+PFT



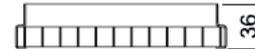
PFT Filter box made of galvanised steel, with mesh and filter included (K/8 efficiency EN 779 G3).

The grille is held in place by threaded knobs.

RMT-A-MOD+SP

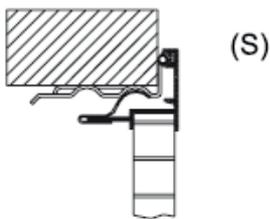


RMT-A-MOD+PFT



RMT-A-MOD+PFT Grille and filter box made of galvanised steel, with mesh and filter included (K/8 efficiency EN 779 G3).

Fixing Systems

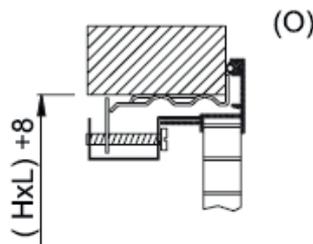


(S)

(S) The grille is fixed in place with clips (standard supply).

It requires the CM mounting frame.

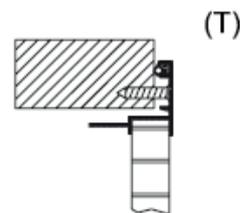
When assembling with the metallic frame, measures H and L increase 8 mm.



(O)

(O) The grille is fixed in place by a hidden screw.

It requires the CM mounting frame. When assembling with metallic frame, measures H and L increase 8 mm.



(T)



(T) The grille fixed in place with screws.

Designed to replace a 600x600 false ceiling tile (standard for MOD versions).

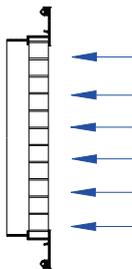
FINISHES
AA Anodised in matt silver.

RAL... Lacquer in other colours (RAL specifications).

RMT SERIES

FREE FACE AREA m2.

H \ L	150	200	250	300	350	400	450	500	600
100	0,009	0,013	0,017	0,021	0,025	0,028	0,032	0,036	0,043
150	0,016	0,022	0,028	0,034	0,040	0,046	0,052	0,058	0,070
200	0,022	0,030	0,038	0,047	0,055	0,064	0,072	0,080	0,097
250	0,028	0,038	0,049	0,06	0,071	0,081	0,092	0,103	0,124
300	0,034	0,047	0,060	0,073	0,086	0,099	0,112	0,125	0,151
350	0,040	0,055	0,071	0,086	0,101	0,117	0,132	0,147	0,178
400	0,046	0,064	0,081	0,099	0,117	0,134	0,152	0,169	0,205
450	0,052	0,072	0,092	0,112	0,132	0,152	0,172	0,192	0,232
500	0,058	0,080	0,103	0,125	0,147	0,169	0,192	0,214	0,258
600	0,070	0,097	0,124	0,151	0,178	0,205	0,231	0,258	0,312



RECOMMENDED VELOCITY.

Vmin m/s	Vmax m/s
2	3

Determination of air flow.
Measuring the Vf in different points of the grille, we find the Vfmed.

$$Q \text{ (l/s)} = V_{fmed} \text{ (m/s)} * A_{free} \text{ (m}^2) * 1000$$

$$Q \text{ (m}^3\text{/h)} = V_{fmed} \text{ (m/s)} * A_{free} \text{ (m}^2) * 3600$$

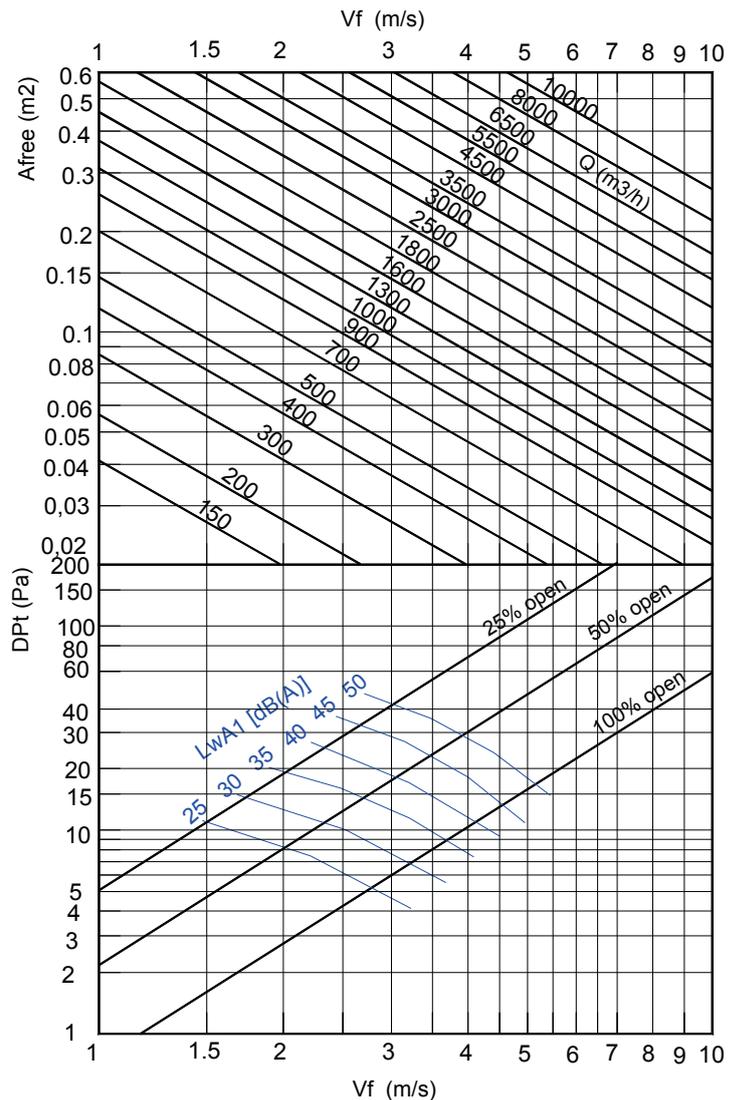
CORRECTION FACTOR FOR Lwa1.

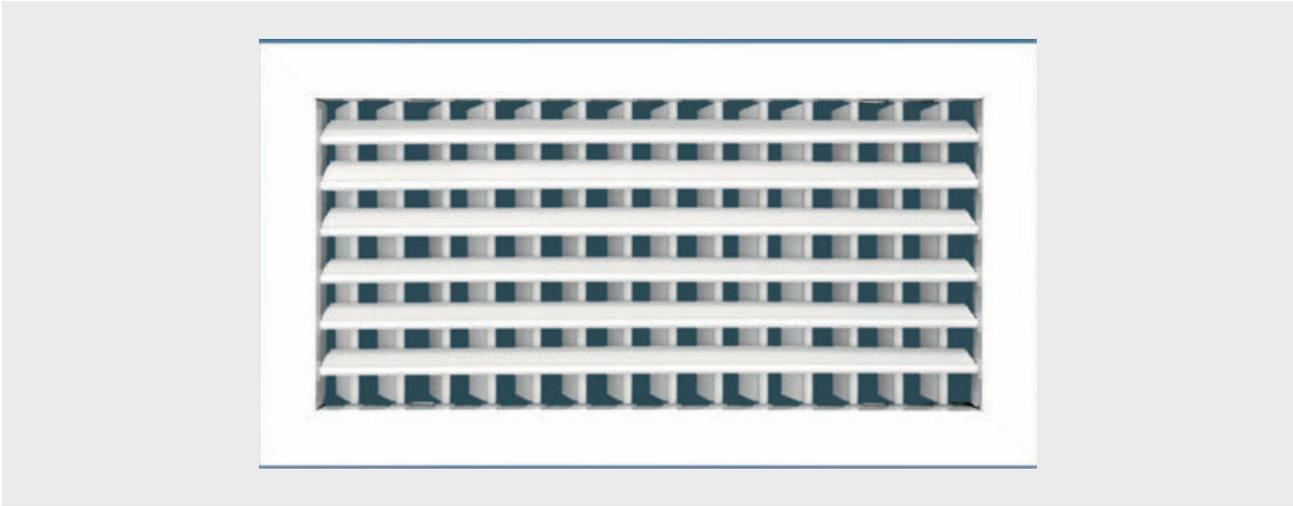
Lwa1(kf)	-9	-6	-3	-	+4	+7
Afree m2	0,01	0,02	0,05	0,1	0,2	0,4

Weighted noise level related to
Afree = 0,1m2.

$$Lwa = Lwa1 + Kf$$

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL.





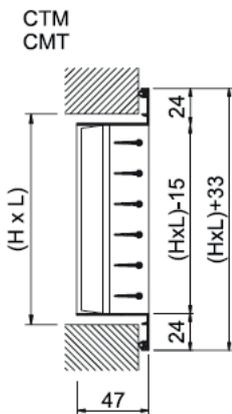
CMT DOUBLE DEFLECTION GRILLES

The CMT series grilles are designed to be used in air-conditioning, ventilation and heating.

They are mounted on walls or in false ceilings.

The direction of the blades can be altered, making it possible to graduate the extent, the height and the width of the air stream.

CMT - CLASSIFICATION



CTM Double deflection grilles with moveable blades parallel to the longer side in front and parallel to the shorter side rear.

CMT Double deflection grilles with moveable blades parallel to the shorter side in front and parallel to the longer side rear.

MATERIAL

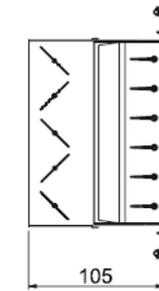
CTM-AN Extruded aluminium grilles.

CTM-N Galvanised steel grilles.

All grilles are provided with seal on the back of the frame in order that the perimeter in contact with walls, ceiling, ducts, etc... is airtight.

CMT - ADDITIONAL ACCESSORIES

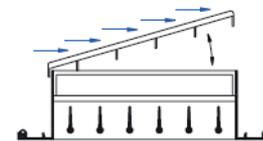
CMT+SP



SP Opposed blades damper to regulate the air flow. The damper is operated by an easily accessible key inside the grille. It is entirely constructed from milled aluminium. The damper is held in place by "S" springs.

SPM-C Operated by means of an external key.

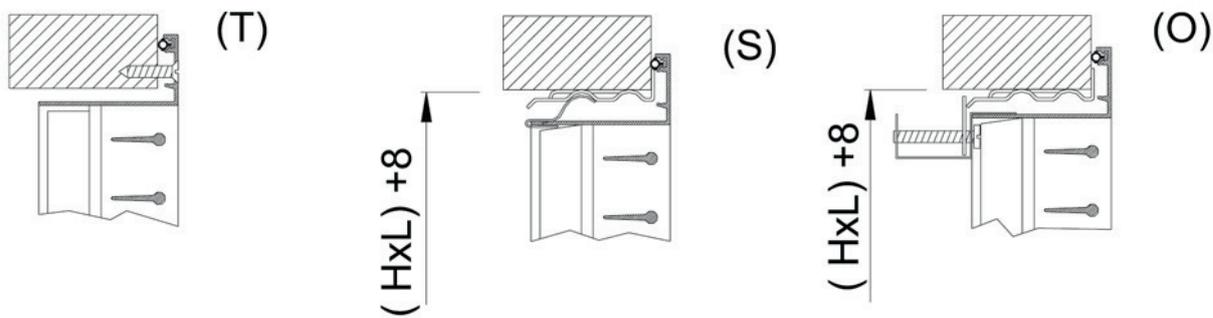
CMT-FD



FD Flap damper with inclined moveable control.

Constructed in galvanised steel with black enamel.

Fixing Systems



(T) The grille is fixed in place with screws.

(S) The grille is fixed in place with screws.

(O) The grille is fixed in place by a hidden screw.

It requires the CM mounting frame. When assembling with metallic frame, measures H and L increase 8 mm.

It requires the CM mounting frame. When assembling with metallic frame, measures H and L increase 8 mm.

Finishes

Aluminium Grilles:
AA Anodised in matt silver..

M9016 Lacquer in white colour similar to RAL 9016.

RAL... Lacquer in other colours (RAL specifications).

Steel Grilles:
M9006 Lacquer in metallic grey colour, similar to RAL 9006.

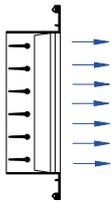
R9010 Lacquer in white colour RAL 9010.

RAL... Lacquer in other colours (RAL specifications).

CTM SERIES

FREE FACE AREA m2.

H \ L	150	200	250	300	350	400	450	500	600	700	800	900	1000
100	0,008	0,012	0,015	0,018	0,022	0,025	0,028	0,031	0,037	0,044	0,051	0,057	0,063
150	0,013	0,019	0,024	0,029	0,034	0,037	0,044	0,049	0,060	0,070	0,080	0,090	0,101
200	0,018	0,026	0,033	0,040	0,047	0,054	0,061	0,068	0,082	0,096	0,110	0,124	0,138
250	0,024	0,033	0,042	0,051	0,059	0,056	0,077	0,086	0,104	0,122	0,140	0,159	0,175
300	0,029	0,040	0,050	0,062	0,072	0,083	0,094	0,105	0,126	0,148	0,169	0,191	0,213
350	0,034	0,047	0,059	0,072	0,085	0,098	0,110	0,123	0,148	0,174	0,199	0,225	0,250
400	0,039	0,054	0,058	0,083	0,098	0,112	0,127	0,142	0,171	0,200	0,229	0,258	0,287
450	0,044	0,061	0,077	0,094	0,110	0,127	0,143	0,160	0,193	0,226	0,259	0,292	0,325
500	0,049	0,068	0,086	0,105	0,123	0,142	0,160	0,178	0,215	0,252	0,289	0,325	0,362
600	0,059	0,082	0,104	0,126	0,149	0,171	0,193	0,215	0,259	0,304	0,348	0,393	0,438



RECOMMENDED VELOCITY.

Vmin m/s	Vmax m/s
2	3.5

Determination of air flow.

Measuring the Vf in different points of the grille, we find the Vfmed.

$$Q \text{ (l/s)} = V_{\text{fmed}} \text{ (m/s)} \cdot A_{\text{free}} \text{ (m}^2\text{)} \cdot 1000$$

$$Q \text{ (m}^3\text{/h)} = V_{\text{fmed}} \text{ (m/s)} \cdot A_{\text{free}} \text{ (m}^2\text{)} \cdot 3600$$

CORRECTION FACTOR FOR Lwa1.

Afree m2	0,01	0,02	0,05	0,1	0,2	0,4
Lwa1(kf)	-9	-6	-3	-	+4	+7

Weighted noise level related to Afree = 0,1m2.

$$L_{\text{wa}} = L_{\text{wa1}} + K_{\text{f}}$$

CORRECTION FACTOR OF PRESSURE LOSS FOR

	0°	22°	45°
Kp	1	1,28	1,5

$$DPT' = Dpt \cdot Kp$$

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL.

