• GRILLES

- SQUARE NETTING GRILLES - RMT
- DOUBLE DEFLECTION GRILLES - CMT

REV 0108

RIGHT TO ALTERATIONS RESERVED

SQUARE NETTING GRILLES

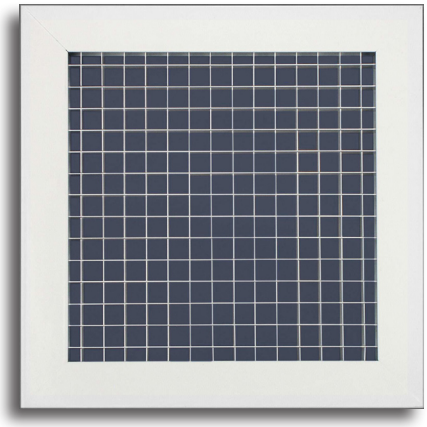
RMT

SQUARE NETTING GRILLES - RMT

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

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

They are mounted on walls or in false ceilings.



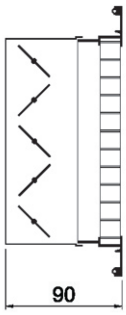
MATERIAL

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.

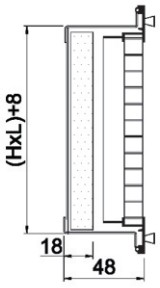
OPTIONAL ACCESSORIES

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.

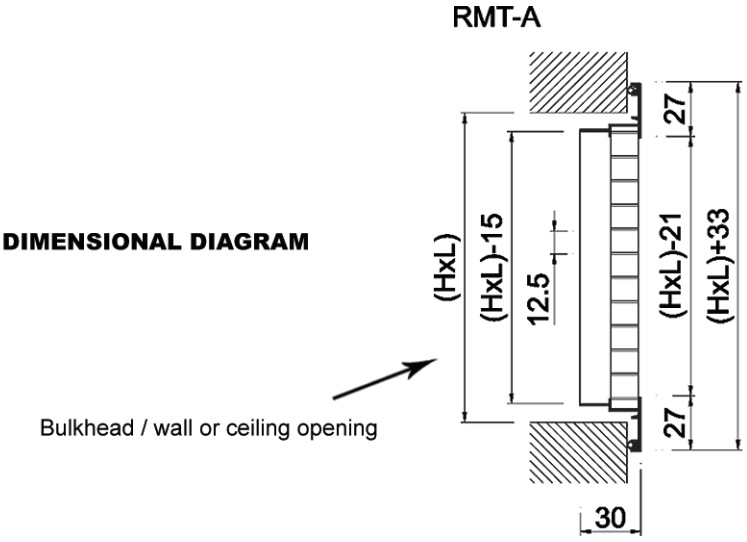
RMT-A+PFT

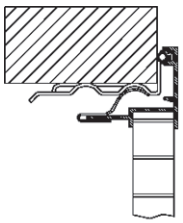


PFT Filter box made of galvanized steel, with mesh and filter included (K/8 efficiency EN 779 G3). The grille is held in place by threaded knobs.

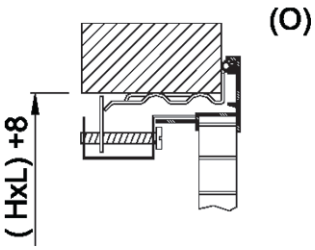
FIXING SYSTEMS

DIMENSIONAL DIAGRAM

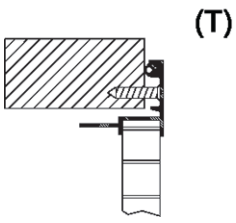




(S) The grille is fixed in place with clips (standar supply). It requires the CM mounting frame. When assembling with the metallic frame measures H and L of dimensional diagram, increase 8mm.



(O) The grille is fixed in place by a hidden screw. It requires the CM mounting frame. When assembling with the metallic frame measures H and L of dimensional diagram, increase 8mm.



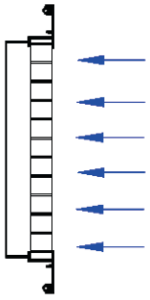
(T) The grille fixed in place with screws.

FINISHES

- Lacquer in white RAL 9010 (Standard).
- Lacquer in other colours (Optional).

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 (l/s) = Vfmed (m/s) * Afree (m2) * 1000
Q (m3/h) = Vfmed (m/s) * Afree (m2) * 3600

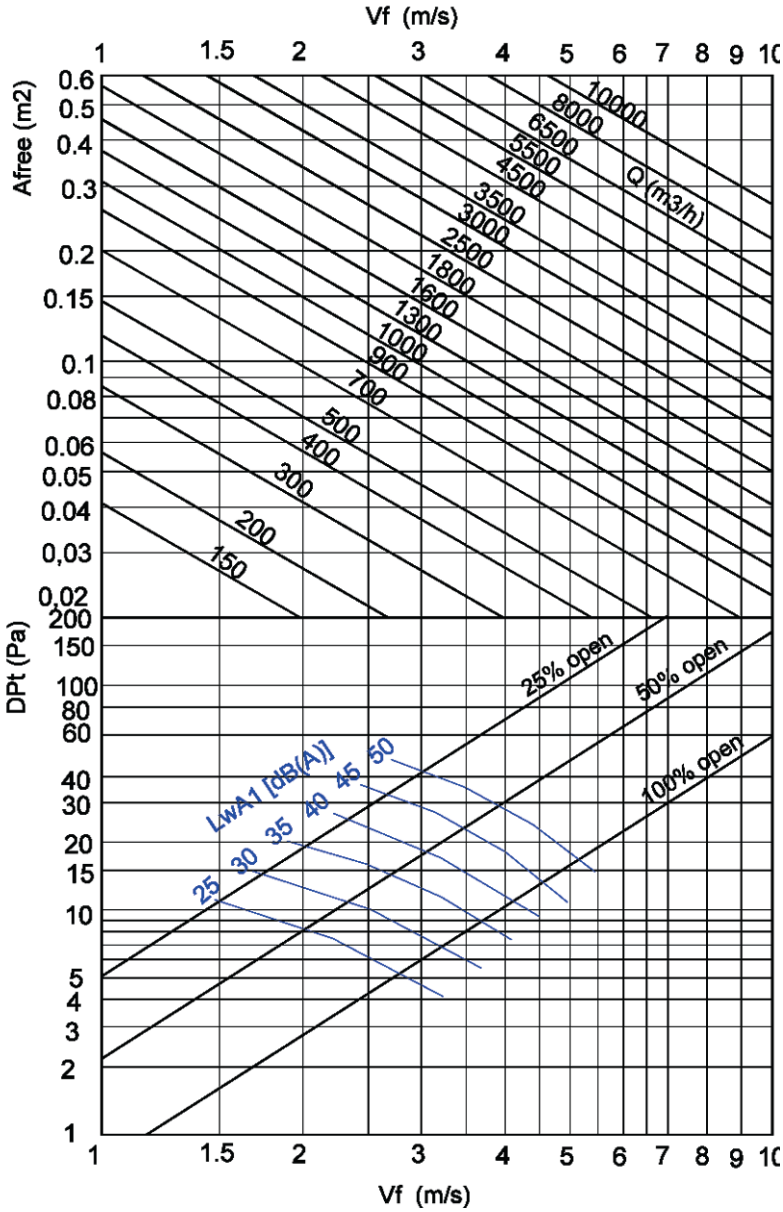
CORRECTION FACTOR FOR Lwa1.

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.



DOUBLE DEFLECTION GRILLES

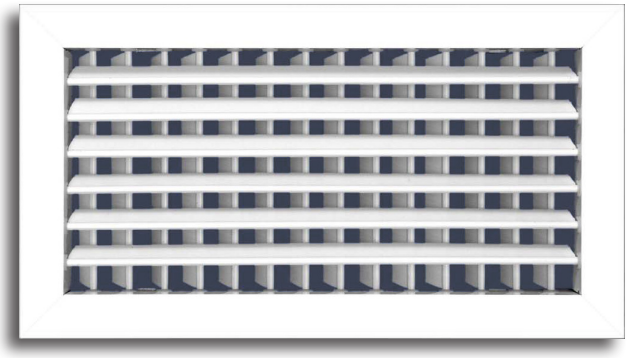
CMT

DOUBLE DEFLECTION GRILLES - CMT

The CTM 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.



CLASIFICATION

▪ ***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.

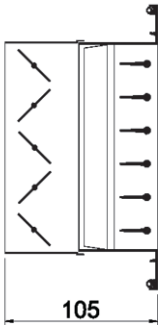
MATERIAL

▪ ***CTM-AN*** Extruded aluminium grilles.
▪ ***CTM-N*** Galvanized 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.

OPTIONAL ACCESSORIES

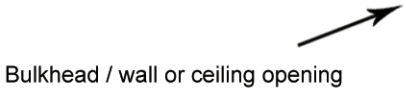
CMT+SP

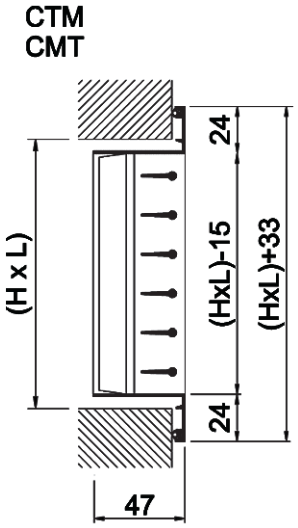


SP Opposed blades damper to regulate the air flow. The damper is operated by an easily accessible key inside the grille. It is entirely constructed from milled aluminium. The damper is held in place by "S" springs.

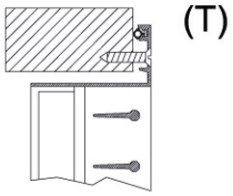
FIXING SYSTEM

DIMENSIONAL DIAGRAM

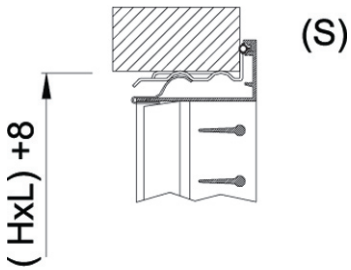




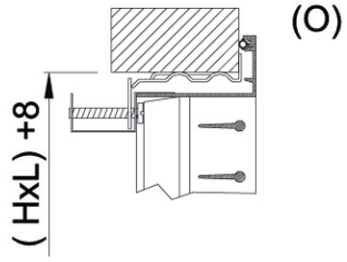
(T) The grille is fixed in place with screws.



(S) The grille is fixed in place with screws. It requires the CM mounting frame. When assembling with metallic frame, measures H and L of dimensional diagram, increase 8 mm.



(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 of dimensional diagram, increase 8 mm.



FINISHES

Aluminium Grilles

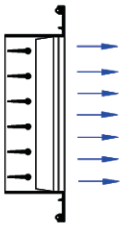
- Lacquer in white RAL 9010 (Standard).
- Anodized in matt silver.
- Lacquer in other colours RAL (optional).

Steel Grilles

- Lacquer in white RAL 9010 (Standard).
- Lacquer in metallic grey colour, similar to RAL 9006.
- Lacquer in other colours RAL (optional).

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 (l/s) = Vfmed (m/s) * Afree (m2) * 1000
Q (m3/h) = Vfmed (m/s) * Afree (m2) * 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.

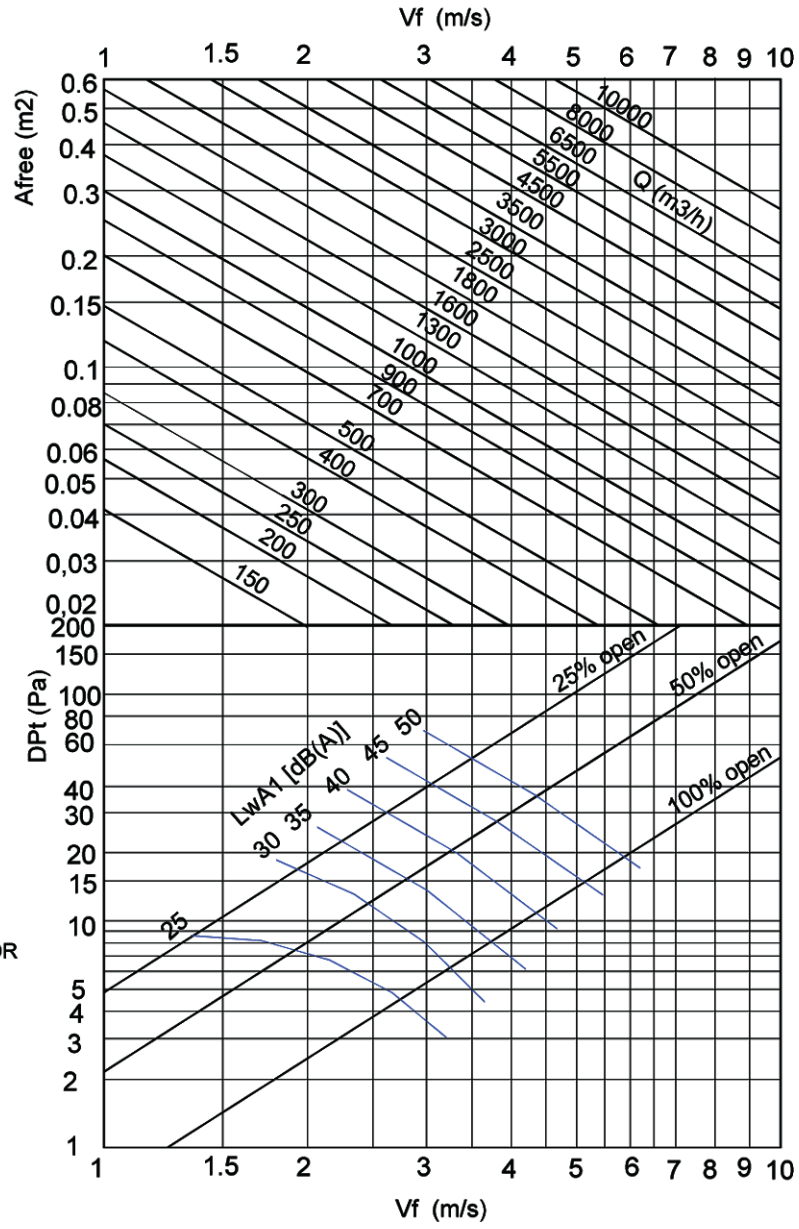
Lwa = Lwa1 + Kf

CORRECTION FACTOR OF PRESSURE LOSS FOR

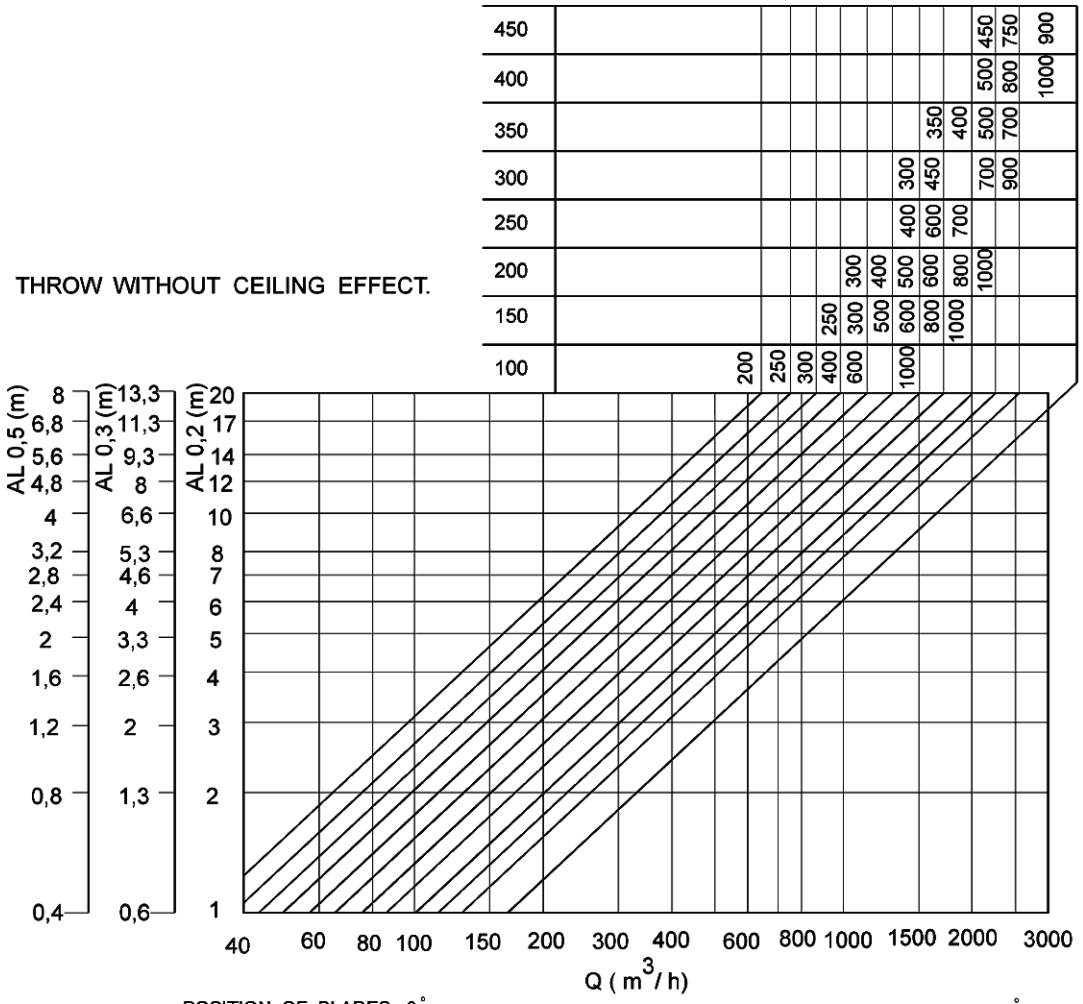
	0°	22°	45°
Kp	1	1,28	1,5

DPt' = Dpt x Kp

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL.



THROW WITHOUT CEILING EFFECT.



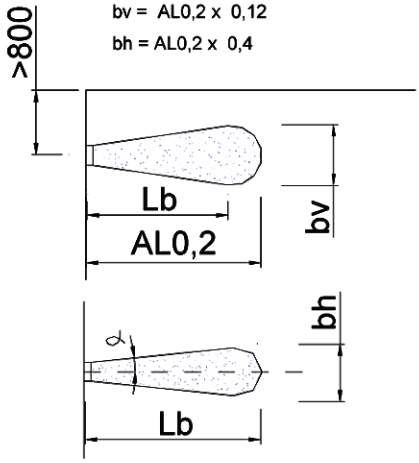
POSITION OF BLADES 0°
WITHOUT CEILING EFFECT.

AL0,2

Lb = AL0,2 x 0,53

bv = AL0,2 x 0,12

bh = AL0,2 x 0,4



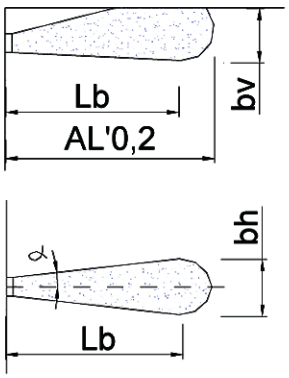
POSITION OF BLADES 0°
WITH CEILING EFFECT.

AL'0,2 = AL0,2 x 1,33

Lb = AL0,2 x 0,7

bv = Al0,2 x 0,106

bh = Al0,2 x 0,53



CORRECTION FACTOR FOR POSITION OF BLADES.

AL0,2(22°) = Al0,2 x 0,8

Lb(22°) = AL0,2 x 0,53

bv(22°) = Al0,2 x 0,096

bh (22°) = Al0,2 x 0,48

AL0,2(45°) = Al0,2 x 0,5

Lb(45°) = AL0,2 x 0,33

bv(45°) = Al0,2 x 0,06

bh(45°) = Al0,2 x 0,6

CORRECTION FACTOR FOR POSITION OF BLADES.

AL0,2(22°) = Al0,2 x 1,064

Lb(22°) = Al0,2 x 0,7

bv(22°) = Al0,2 x 0,08

bh(22°) = Al0,2 x 0,64

Lb(45°)= Al0,2 x 0,66

Lb(45°)= Al0,2 x 0,44

bv(45°) = Al0,2 x 0,054

bh(45°) = Al0,2 x 0,798