klin
SYSTEM

DMT fixed blades return grilles

The **DMT** series grilles are designed for air return in HVAC facilities.

- Mounting on walls, ceilings or false ceilings.
- Fixed blades to guarantee a uniform air return in all the free area.

Product Advantages :

- Fixed blades at 45º to prevent the vision through the grille.
- MOD version for greater integration and faster assembly in technical ceilings.
- FY and KLIN version for easy maintenance.

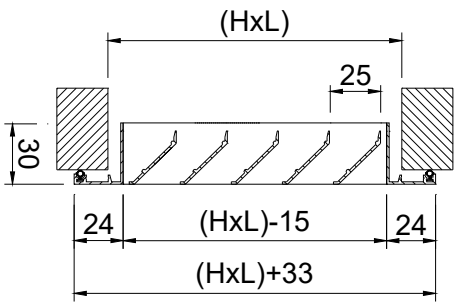
Models:

DMT-AR
DMT-FY
DMT-MOD
DMT-KLIN

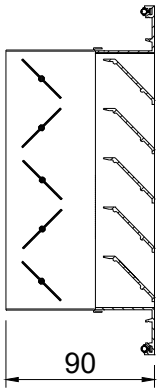
- ❑ Residential
- ❑ Hotels
- ❑ Commercial premises and offices

DMT-AR

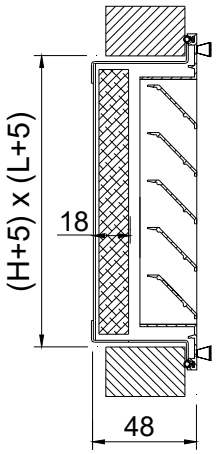
DMT-AR



DMT-AR+SP



DMT-AR+PFT



DMT-AR

CLASSIFICATION

DMT-AR Fixed blades grille at 45º, parallel to the longer side.

EMT-AR Fixed blades grille at 45º, parallel to the shorter side.

MATERIAL

Grilles constructed from extruded aluminium. All 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.

ACCESSORIES

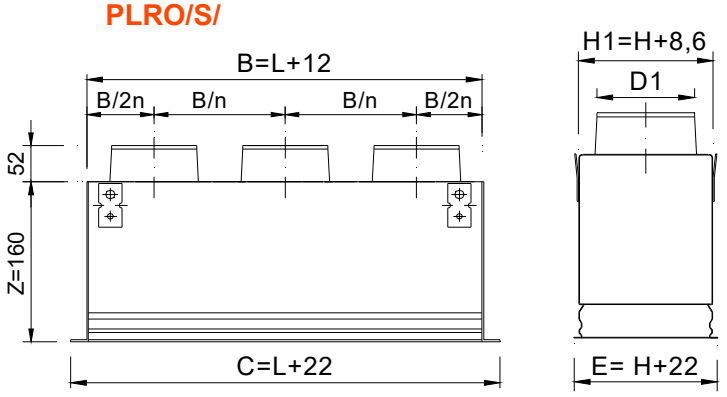
SP Opposed blades damper to regulate the air flow. The damper is operated by an easily accessible key inside the grille. Constructed from zinc plated steel in black colour.

MLL Galvanized mesh of 13x13 fixed to the grille.

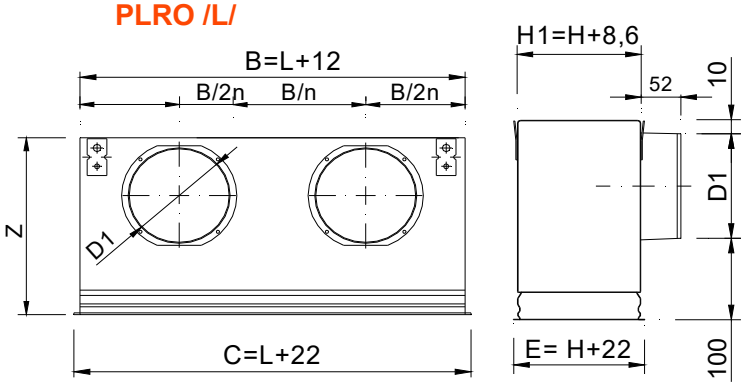
PFT Filter box made in galvanized steel with mesh and filter included (K/8 efficiency EN 779 G3). The grille is held in place by threaded knobs. The opening dimension LxH must be increased by 5 mm.

CM Mounting frame constructed from galvanized steel. It is delivered in 4 linear elements to assemble. The opening dimension LxH must be increased by 8 mm.

PLRO/S/



PLRO /L/



ACCESSORIES – PLENUM BOX

PLRO Plenum box with circular connection, made from galvanized steel. Suitable for both wall and ceiling mounting.
…/S/ Upper circular connection.
…/L/ Lateral circular connection.
…-R Damper in the spigot.
…/AIS/ Plenum box with thermal insulation inside. Foam density 25 kg / m3 ISO 845. Thermal conductivity 10º C_0,040 W / mºK EN 12667. Classified reaction to fire B-s1, d0 EN 13501-1.

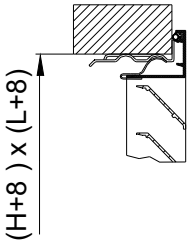
PLRO/S/ (D1)

LxH	100	150	200	250	300
200	1/98	1/123	1/198		
250	1/98	1/123	1/198	1/198	
300	1/98	1/123	1/198	1/248	1/248
350	1/98	1/123	1/198	1/248	1/248
400	1/98	1/123	1/198	1/248	1/248
450	1/98	1/123	1/198	1/248	1/248
500	1/98	1/123	1/198	1/248	1/248
600	2/98	2/123	1/198	1/248	1/248
700	2/98	2/123	1/198	1/248	1/248
800	2/98	2/123	1/198	1/248	1/248
900	2/98	2/123	2/198	1/248	1/248
1000	2/98	2/123	2/198	1/248	2/248

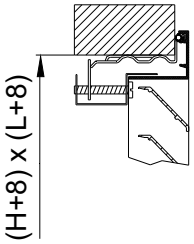
PLRO/L/ (D1)

LxH	100	150	200	250	300
200	1/123	1/158	1/198		
250	1/123	1/198	1/198	1/198	
300	1/158	1/198	1/198	1/198	1/248
350	1/158	1/198	1/198	1/248	1/248
400	1/158	1/198	1/248	1/248	1/248
450	1/198	1/198	1/248	1/248	1/313
500	1/198	1/198	1/248	1/248	1/313
600	1/198	2/198	1/248	1/248	1/313
700	2/198	2/198	2/198	2/248	2/248
800	2/198	2/198	2/198	2/248	2/248
900	2/198	2/198	2/248	2/248	2/313
1000	2/198	2/198	2/248	2/248	2/313

(S)



(O)



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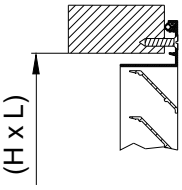
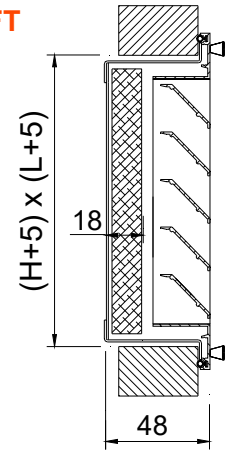


DMT-AR+PFT



FIXING SYSTEMS

(S) The grille is fixed in place with clips. Suitable only for wall mounting. It requires CM mounting frame or PLRO plenum box.

(O) The grille is fixed in place by a hidden screw. Advisable for ceiling mounting. It requires CM mounting frame or PLRO plenum box.

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

1) The filter box is fixed in place with screws or sidepieces. The grille is held to the PFT by threaded knobs. The opening dimension LxH must be increased by 5 mm.

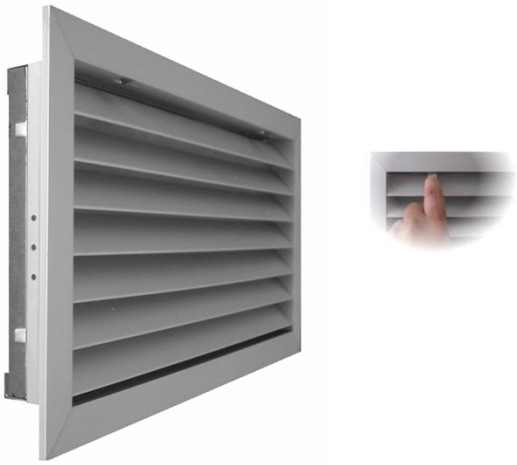
FINISHES

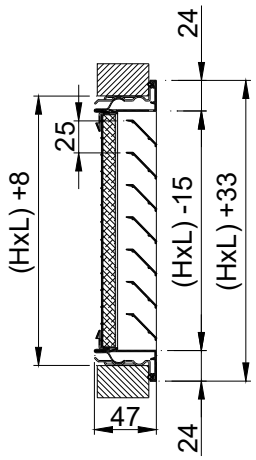
AA Matt silver anodized.
M9016 Pre-lacquered white similar to RAL 9016 (85-95% gloss)
R9010S Painted white RAL 9010 (60-70% gloss)
RAL... Painted in other RAL colours.

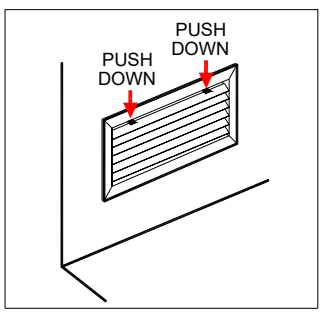
SPECIFICATION TEXT

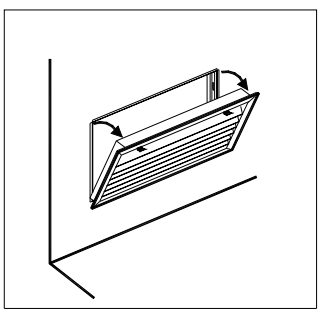
Supply and mounting of air return grille with fixed blades at 45º parallels to the largest side series **DMT-AR+SP+CM (S) R9010S** LxH, constructed from aluminium painted white RAL 9010 (60-70% gloss) with opposed blades volume damper in black colour, invisible fixing by clips and mounting frame. Manufacturer **MADEL**.

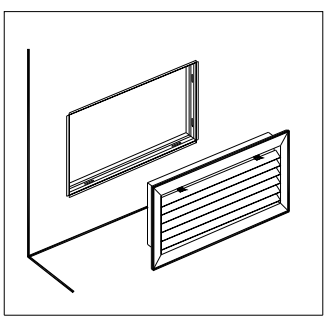
DMT-FY

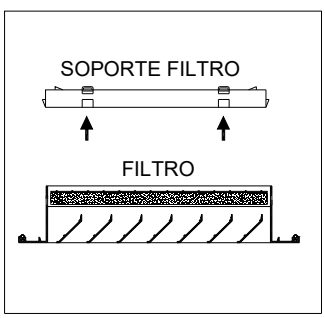












DMT-FY

CLASSIFICATION

DMT-FY Fixed blades grilles at 45º with incorporated filter (K/8 efficiency EN 779 G3) for wall mounting. By pressing on two semi-hidden levers, the grille can be easily removed for maintenance. Blades parallel to the longer side.

EMT-FY Grille with blades parallel to the shorter side.

MATERIAL

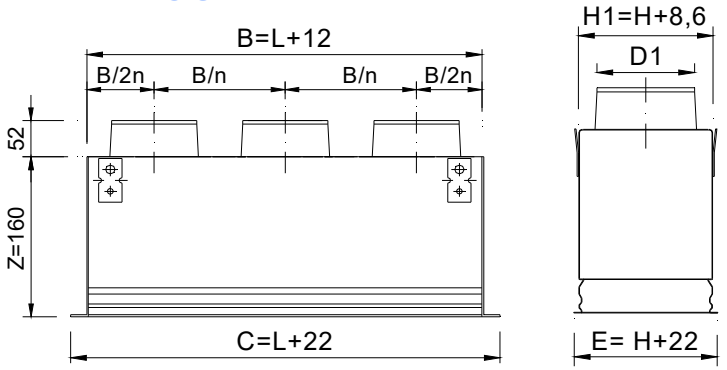
Extruded aluminium grilles, provided with a seal on the back of the frame in order that the perimeter in contact with the wall is airtight.
Filter made of synthetic material, classified F1 in fire resistance, according to the norm DIN 53438.

ACCESSORIES

CM Mounting frame constructed from galvanized steel. It is delivered in 4 linear elements to assemble. The opening dimension LxH must be increased by 8 mm.

PLRO Plenum box with circular connection, made from galvanized steel. Suitable for both wall and ceiling mounting.
…/S/ Upper circular connection.
…/L/ Lateral circular connection.
…-R Damper in the spigot.
…/AIS/ Plenum box with thermal insulation inside. Foam density 25 kg / m3 ISO 845. Thermal conductivity 10º C_0,040 W / mºK EN 12667. Classified reaction to fire B-s1, d0 EN 13501-1.

PLRO/S/



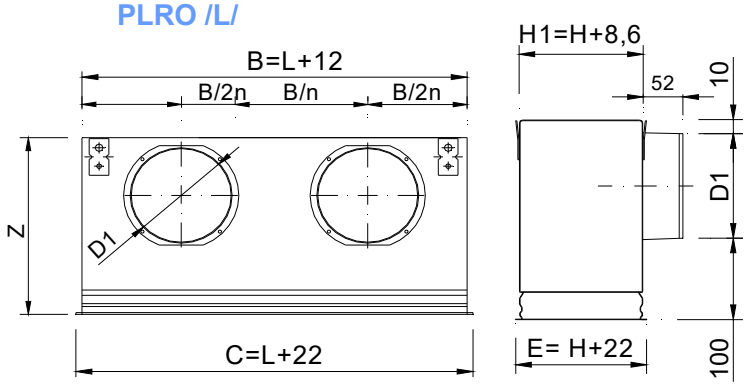
FIXING SYSTEMS

(S) Clips for wall mounting. It requires CM mounting frame or PLRO plenum box.
(O) Hidden screws for ceiling mounting. It requires CM mounting frame or PLRO plenum box.

FINISHES

AA Matt silver anodized.
M9016 Pre-lacquered white similar to RAL 9016 (85-95% gloss)
R9010S Painted white RAL 9010 (60-70% gloss)
RAL... Painted in other RAL colours.

PLRO /L/



SPECIFICATION TEXT

Furniture and mounting of grille with blades fixed at 45º, parallels to the longer side, with filter G3 class incorporated, easily removable by pressing on two semi-hidden levers, model **DMT-FY+CM (S) R9010S** LxH, constructed from aluminium, painted white RAL 9010 (60-70% gloss) Invisible fixing by clips and mounting frame. Manufacturer **MADEL**.

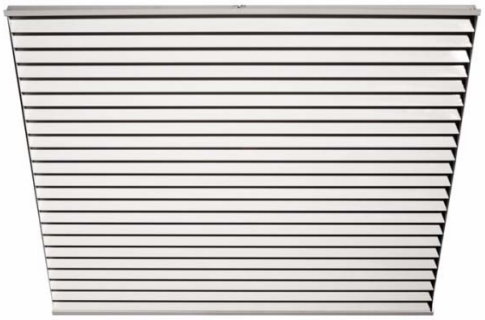
PLRO/S/ (D1)

LxH	100	150	200	250	300
200	1/98	1/123	1/198		
250	1/98	1/123	1/198	1/198	
300	1/98	1/123	1/198	1/248	1/248
350	1/98	1/123	1/198	1/248	1/248
400	1/98	1/123	1/198	1/248	1/248
450	1/98	1/123	1/198	1/248	1/248
500	1/98	1/123	1/198	1/248	1/248
600	2/98	2/123	1/198	1/248	1/248
700	2/98	2/123	1/198	1/248	1/248
800	2/98	2/123	1/198	1/248	1/248
900	2/98	2/123	2/198	1/248	1/248
1000	2/98	2/123	2/198	1/248	2/248

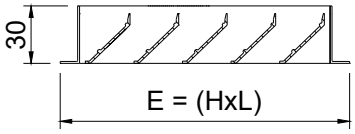
PLRO/L/ (D1)

LxH	100	150	200	250	300
200	1/123	1/158	1/198		
250	1/123	1/198	1/198	1/198	
300	1/158	1/198	1/198	1/198	1/248
350	1/158	1/198	1/198	1/248	1/248
400	1/158	1/198	1/248	1/248	1/248
450	1/198	1/198	1/248	1/248	1/313
500	1/198	1/198	1/248	1/248	1/313
600	1/198	2/198	1/248	1/248	1/313
700	2/198	2/198	2/198	2/248	2/248
800	2/198	2/198	2/198	2/248	2/248
900	2/198	2/198	2/248	2/248	2/313
1000	2/198	2/198	2/248	2/248	2/313

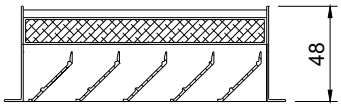
DMT-MOD



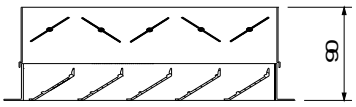
DMT-MOD



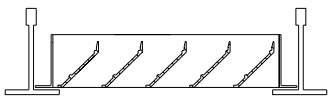
DMT-MOD-PFT



DMT-MOD+SP



(1)



DMT-MOD

CLASSIFICATION

DMT-MOD Modular grilles, designed to replace a false ceiling plate. Blades fixed at 45º, parallel to the longer side.
EMT-MOD Grilles with blades parallel to the shorter side.
…-MOD-PFT Grilles with filter type K/8 efficiency EN 779 G3.

MATERIAL

Grilles constructed from extruded aluminium.

ACCESSORIES

SP Opposed blades damper to regulate the air flow. The damper is operated by an easily accessible key inside the grille. Constructed from zinc plated steel in black colour.

FIXING SYSTEMS

1) Suspended at the false ceiling. Replacing a false ceiling plate.

FINISHES

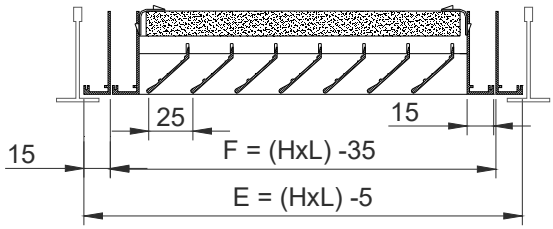
AA Matt silver anodized.
M9016 Pre-lacquered white similar to RAL 9016 (85-95% gloss)
R9010S Painted white RAL 9010 (60-70% gloss)
RAL... Painted in other RAL colours.

SPECIFICATION TEXT

Supply and mounting of air return grille with fixed blades at 45º parallels to the largest side series **DMT-MOD+PFT R9010S** LxH, with filter type K/8 efficiency EN 779 G3, designed to replace a false ceiling plate, constructed from aluminium, painted white RAL 9010 (60-70% gloss)
Manufacturer **MADEL**.

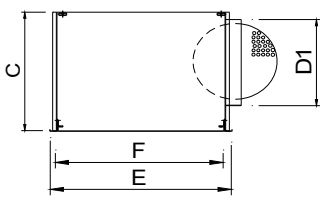
DMT-KLIN

DMT-KLIN / DMT-KLIN+PFT

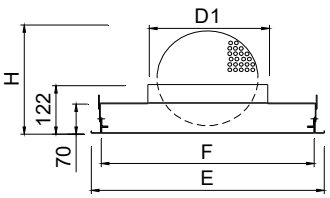


L x H	E	F
600 x 300	595 x 295	565 x 265
625 x 313	620 x 308	605 x 278
675 x 338	670 x 330	640 x 300
600 x 600	595 x 595	565 x 565
625 x 625	620 x 620	605 x 605
675 x 675	670 x 670	640 x 640

PLK/L/…-R



PLK/S/…-R



L x H	E	F	D1	H	C
600 x 300	595 x 295	565 x 265	2/198	353	435
625 x 313	620 x 308	605 x 278	2/198	353	435
675 x 338	670 x 330	640 x 300	2/198	353	435
600 x 600	595 x 595	565 x 565	313	353	435
625 x 625	620 x 620	605 x 605	313	353	435
675 x 675	670 x 670	640 x 640	313	353	435

DMT-KLIN

CLASSIFICATION

DMT-KLIN Grilles with blades fixed at 45º, hinged removable core without tools, by pressing on the invisible PUSH fasteners.
If necessary the core can be easily removed for its maintenance, that conforms with the regulations required for maintenance of HVAC facilities.

MATERIAL

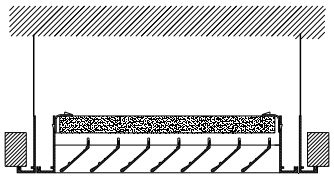
Grilles constructed from extruded aluminium.

ACCESSORIES

PFT K/8 class EN 779 G3 filter incorporated to the grille.

PLK Plenum box fixed to the grille with an upper connection, made in galvanized steel.
…/S/ Plenum box with upper connection.
…/L/ Plenum box with lateral connection.
…-R Plenum box with a flow damper in the spigot.
…/AIS/ Plenum box with thermal insulation inside. Foam density 25 kg / m3 ISO 845. Thermal conductivity 10º C_0,040 W / mºK EN 12667. Classified reaction to fire B-s1, d0 EN 13501-1.

(1)



FIXING SYSTEMS

1) Supports to hang the assembly from the ceiling with drops rods.

FINISHES

M9016 Pre-lacquered white similar to RAL 9016 (85-95% gloss)
RAL... Painted in other RAL colours.

SPECIFICATION TEXT

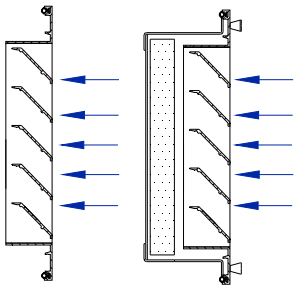
Supply and mounting of air return grille with fixed blades with hinged removable core without tools, by pressing on the invisible PUSH fasteners series **DMT-KLIN+PFT M9016** LxH, with filter type K/8 efficiency EN 779 G3, constructed from aluminium pre-lacquered white similar to RAL 9016 (85-95% gloss) Manufacturer **MADEL**.

DMT

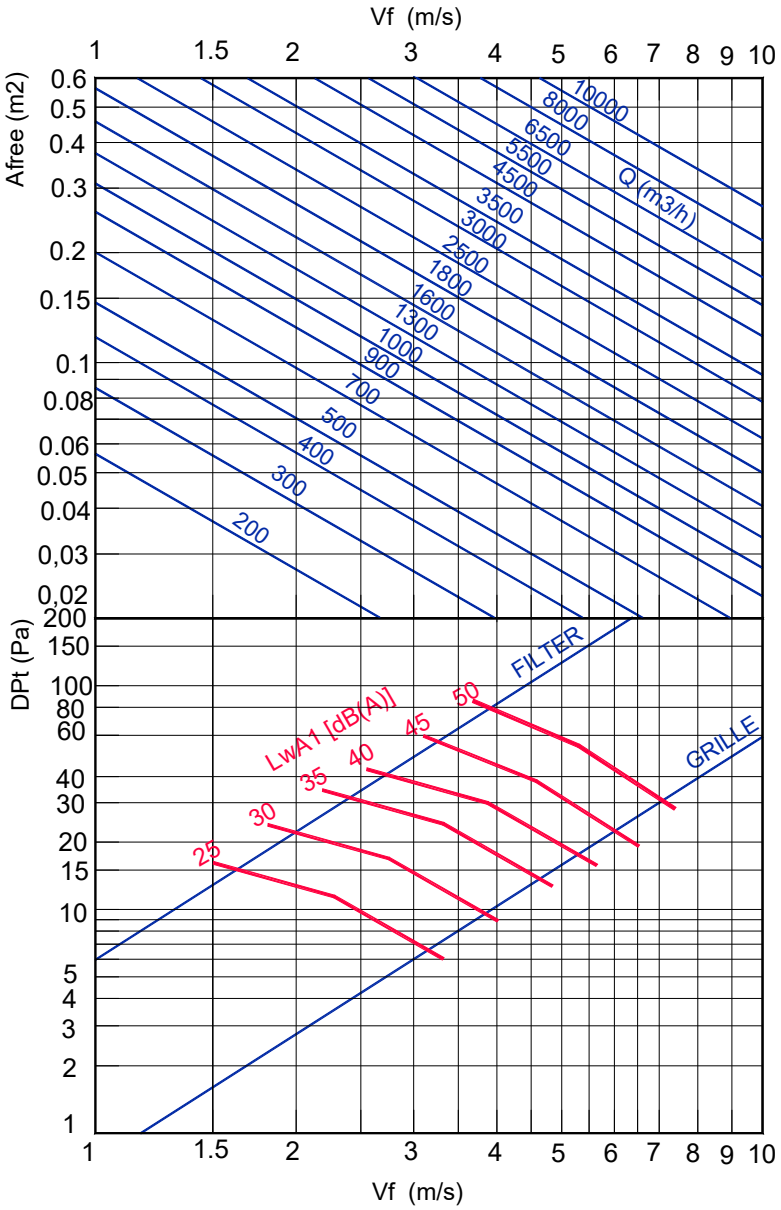
FREE FACE AREA m2.

H \ L	150	200	250	300	350	400	450	500	600	700	800	900	1000
100	0,007	0,011	0,013	0,016	0,018	0,021	0,024	0,027	0,032	0,037	0,043	0,048	0,054
150	0,012	0,016	0,021	0,025	0,029	0,033	0,038	0,042	0,051	0,059	0,068	0,076	0,085
200	0,016	0,022	0,028	0,034	0,040	0,046	0,052	0,057	0,070	0,081	0,093	0,105	0,117
250	0,020	0,028	0,035	0,043	0,050	0,058	0,065	0,073	0,088	0,103	0,118	0,133	0,148
300	0,025	0,034	0,043	0,052	0,061	0,070	0,079	0,088	0,107	0,125	0,143	0,161	0,180
350	0,029	0,040	0,050	0,061	0,072	0,083	0,093	0,104	0,125	0,147	0,168	0,190	0,211
400	0,033	0,046	0,058	0,070	0,083	0,095	0,107	0,120	0,144	0,169	0,193	0,218	0,243
450	0,038	0,052	0,065	0,079	0,093	0,107	0,121	0,135	0,163	0,191	0,218	0,246	0,274
500	0,042	0,057	0,073	0,089	0,104	0,120	0,135	0,151	0,182	0,213	0,244	0,275	0,306
600	0,051	0,069	0,088	0,107	0,125	0,144	0,163	0,182	0,219	0,257	0,294	0,331	0,369

DMT DMT+PFT



FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL.



RECOMMENDED VELOCITY.

Vmin m/s	Vmax m/s
1,5	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.

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.

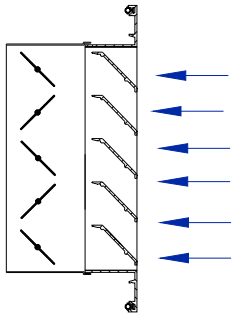
Lwa = Lwa1 + Kf

DMT

FREE FACE AREA m2.

H \ L	150	200	250	300	350	400	450	500	600	700	800	900	1000
100	0,007	0,011	0,013	0,016	0,018	0,021	0,024	0,027	0,032	0,037	0,043	0,048	0,054
150	0,012	0,016	0,021	0,025	0,029	0,033	0,038	0,042	0,051	0,059	0,068	0,076	0,085
200	0,016	0,022	0,028	0,034	0,040	0,046	0,052	0,057	0,070	0,081	0,093	0,105	0,117
250	0,020	0,028	0,035	0,043	0,050	0,058	0,065	0,073	0,088	0,103	0,118	0,133	0,148
300	0,025	0,034	0,043	0,052	0,061	0,070	0,079	0,088	0,107	0,125	0,143	0,161	0,180
350	0,029	0,040	0,050	0,061	0,072	0,083	0,093	0,104	0,125	0,147	0,168	0,190	0,211
400	0,033	0,046	0,058	0,070	0,083	0,095	0,107	0,120	0,144	0,169	0,193	0,218	0,243
450	0,038	0,052	0,065	0,079	0,093	0,107	0,121	0,135	0,163	0,191	0,218	0,246	0,274
500	0,042	0,057	0,073	0,089	0,104	0,120	0,135	0,151	0,182	0,213	0,244	0,275	0,306
600	0,051	0,069	0,088	0,107	0,125	0,144	0,163	0,182	0,219	0,257	0,294	0,331	0,369

DMT+SP



RECOMMENDED VELOCITY.

Vmin m/s	Vmax m/s
1,5	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

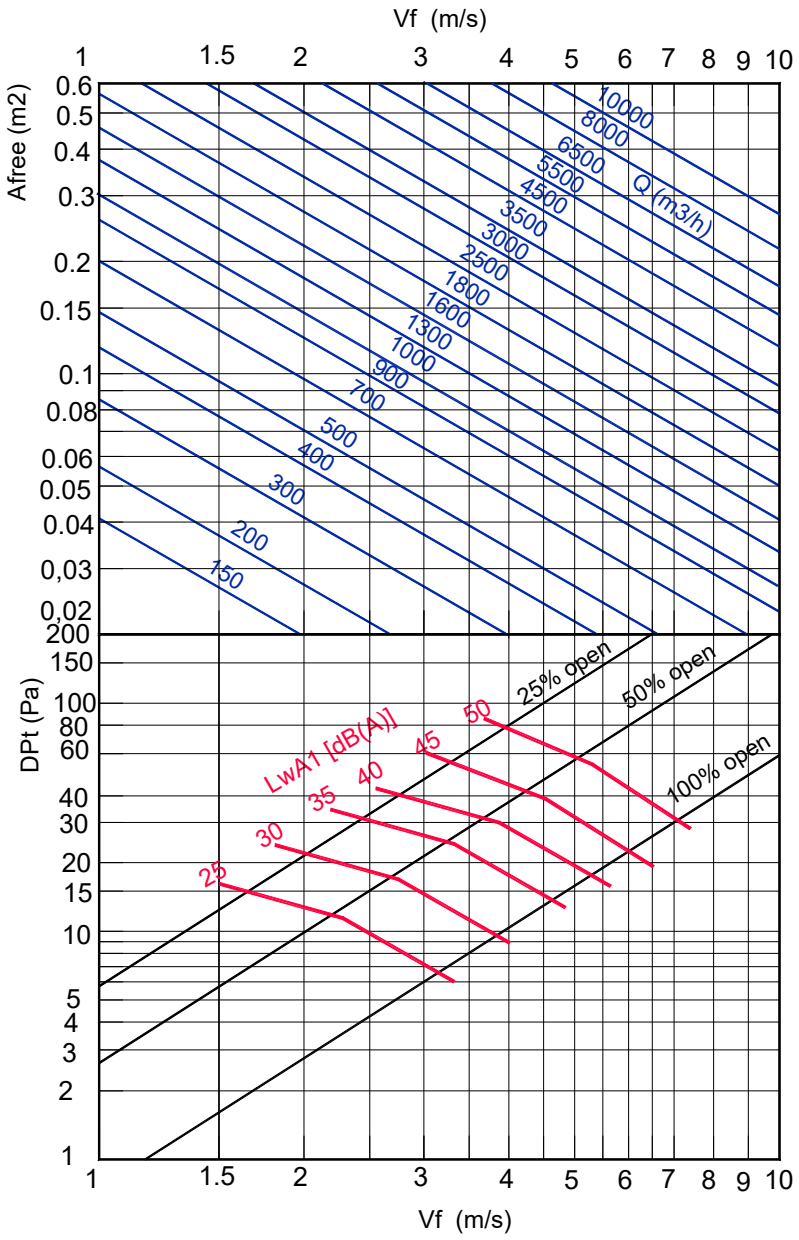
CORRECTION FACTOR FOR Lwa1.

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

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL.



DMT-FY

FREE FACE AREA m2

H \ L	150	200	250	300	350	400	450	500	600	700	800	900	1000
100	0,007	0,011	0,013	0,016	0,018	0,021	0,024	0,027	0,032	0,037	0,043	0,048	0,054
150	0,012	0,016	0,021	0,025	0,029	0,033	0,038	0,042	0,051	0,059	0,068	0,076	0,085
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250	0,020	0,028	0,035	0,043	0,050	0,058	0,065	0,073	0,088	0,103	0,118	0,133	0,148
300	0,025	0,034	0,043	0,052	0,061	0,070	0,079	0,088	0,107	0,125	0,143	0,161	0,180
350	0,029	0,040	0,050	0,061	0,072	0,083	0,093	0,104	0,125	0,147	0,168	0,190	0,211
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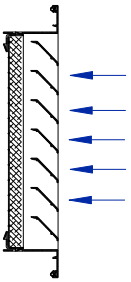
DMT-FY



RECOMMENDED VELOCITY

Vmin m/s	Vmax m/s
1,5	3

Determination of air flow

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CORRECTION FACTOR FOR Lwa1

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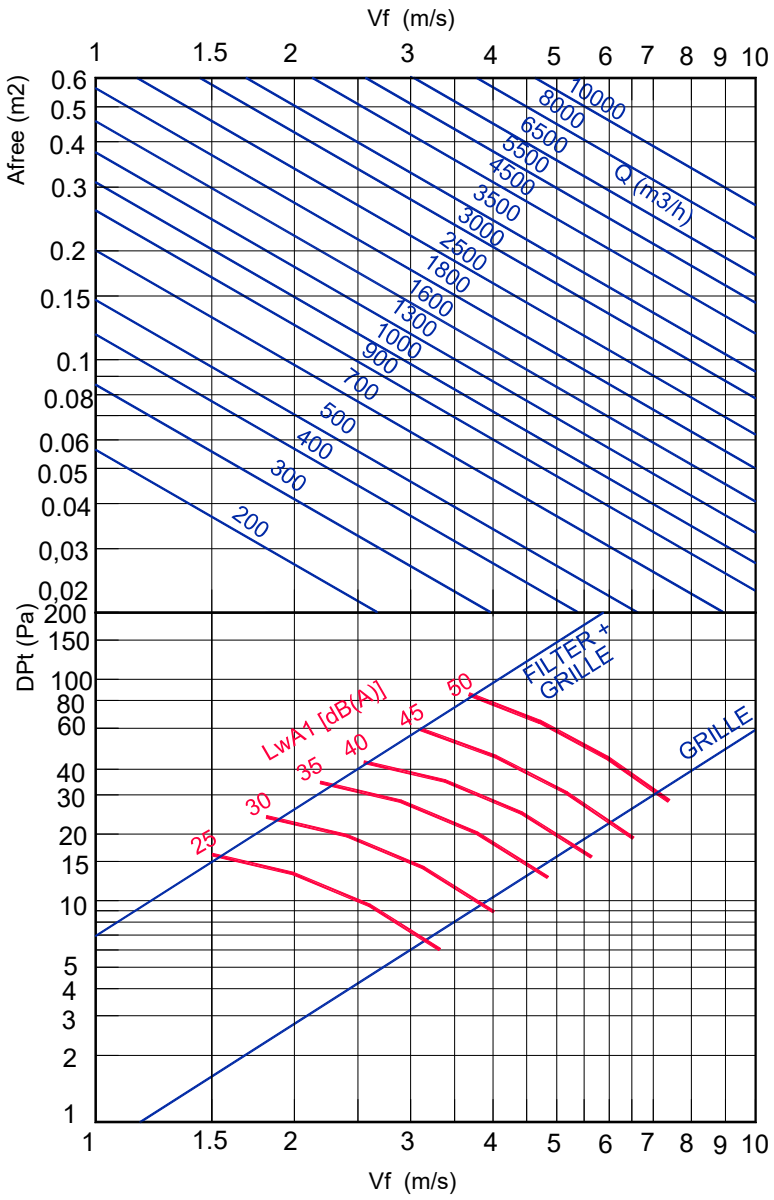
Lwa1(kf)	-9	-6	-3	-	+4	+7

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

Lwa = Lwa1 + Kf

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL

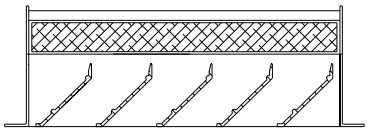


DMT-MOD

FREE FACE AREA m2.

L x H	
595x295	0,107
1195x295	0,215
595x595	0,215
1195x595	0,43
620x620	0,224
670x670	0,242

DMT-MOD + PFT



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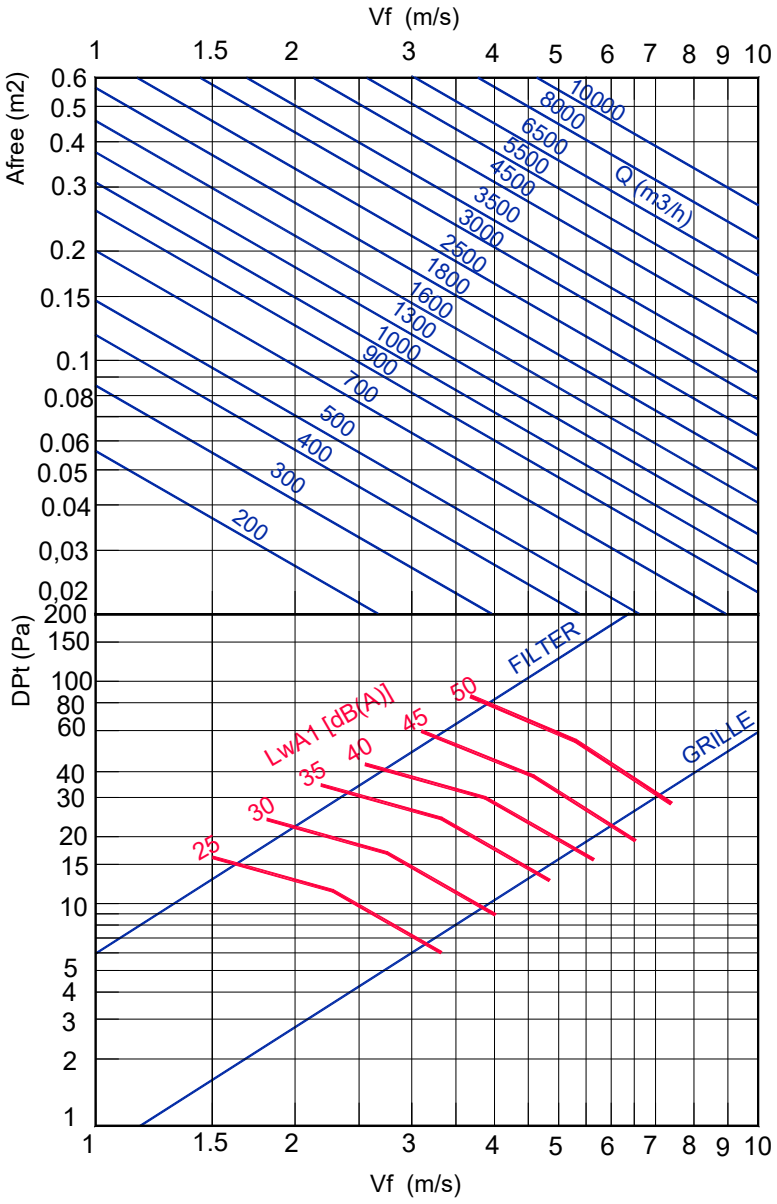
FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL.



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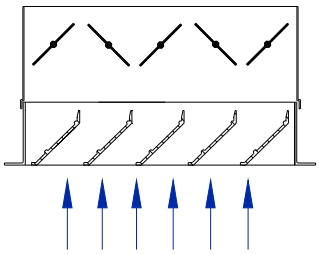
DMT-MOD +SP



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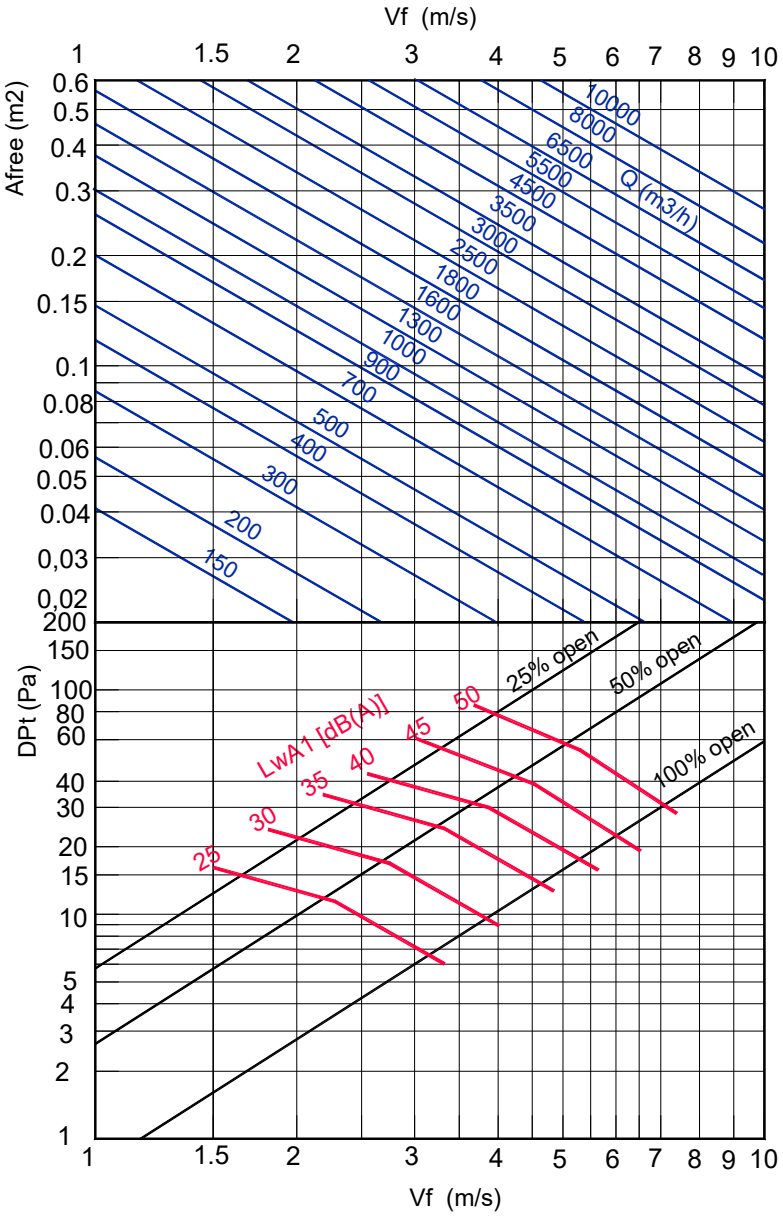
FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL.

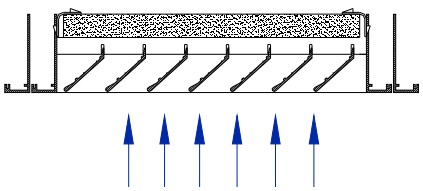


DMT-KLIN

FREE FACE AREA m2.

L x H	
600x600	0,200
625x625	0,208
675x675	0,225
600x300	0,1
625x313	0,108
675x338	0,126

DMT-KLIN + PFT



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