



DMT-FY fixed blades return grilles with filter



MADEL®

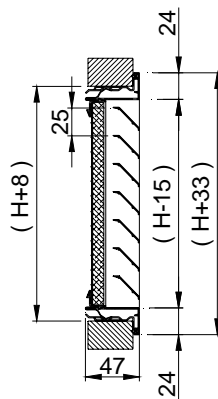
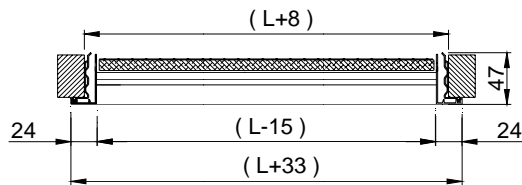
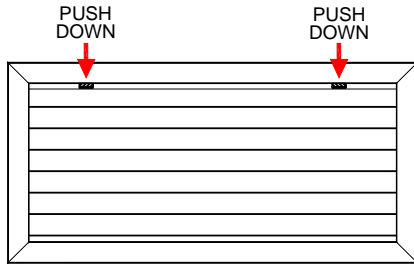
The grilles with filter of series **DMT-FY** are designed for air return in air conditioning, ventilation and heating systems. Grilles proposed for wall mounting.

By pressing on two semi-hidden levers, the **DMT-FY** can be easily removed from its mounting frame, for washing or filter replacement in compliance with the regulations required for maintenance of HVAC installations.

Comparing to the classic grilles with filter box, accessible by means of threaded knobs or visible nuts, the **FY system** means so much an economy of time in the installation like in the later maintenances, as well as an aesthetic evolution.



DMT-FY



CLASSIFICATION

DMT-FY Grille with blades fixed at 45°, parallels to the longer side (size L) with filter G3 class according to the norm EN 779.

EMT-FY Grille with blades fixed at 45°, parallels to the shorter side (size H) with filter G3 class according to the norm EN 779.

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 galvanised steel.

PLRX Plenum box with an upper circular connection, constructed from galvanised steel.

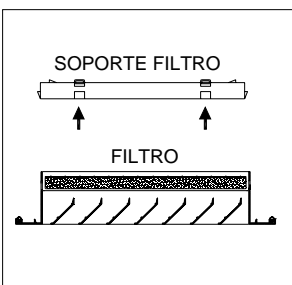
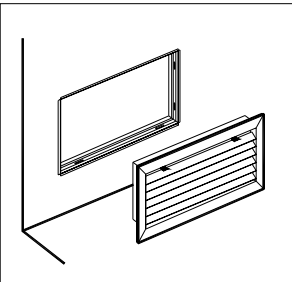
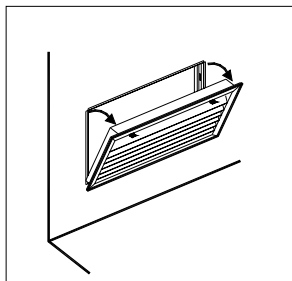
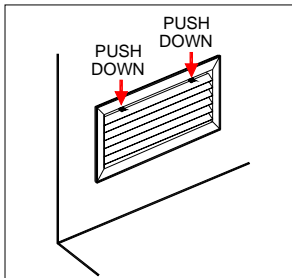
.../L/ Lateral circular connection.

...-R Flow damper in the spigot.

.../AIS/ Thermo acoustically insulated by a foam with a coefficient of thermal conductivity of 0,04 w/mk. This foam complies with the fire specifications:

- UNE 23-727 M2
- NFP 92-501 M2
- DIN 4102 M2

(more info in **PLRX** PDF file)



FIXING SYSTEMS

(S) Invisible fixing by means of pressure clips. It requires **CM** mounting frame or **PLRX** plenum box.

FINISHES

AA Matt silver anodised.

M9016 Lacquer in white similar to RAL 9016.

RAL... Lacquer other RAL colours.

SPECIFICATION TEXT

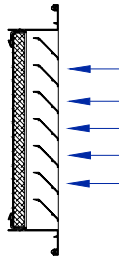
Furniture and mounting of grille with blades fixed at 45°, parallels to the longer side, with filter G3 class incorporated, easily removable by pressing on two semi-hidden levers, model **DMT-FY+CM (S) M9016** size **LxH**, constructed from aluminium paint in **white M9016**. Invisible fixing by clips **(S)** and **CM** mounting frame. **MADEL** trademark.

DMT-FY SERIES

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-FY



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.

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

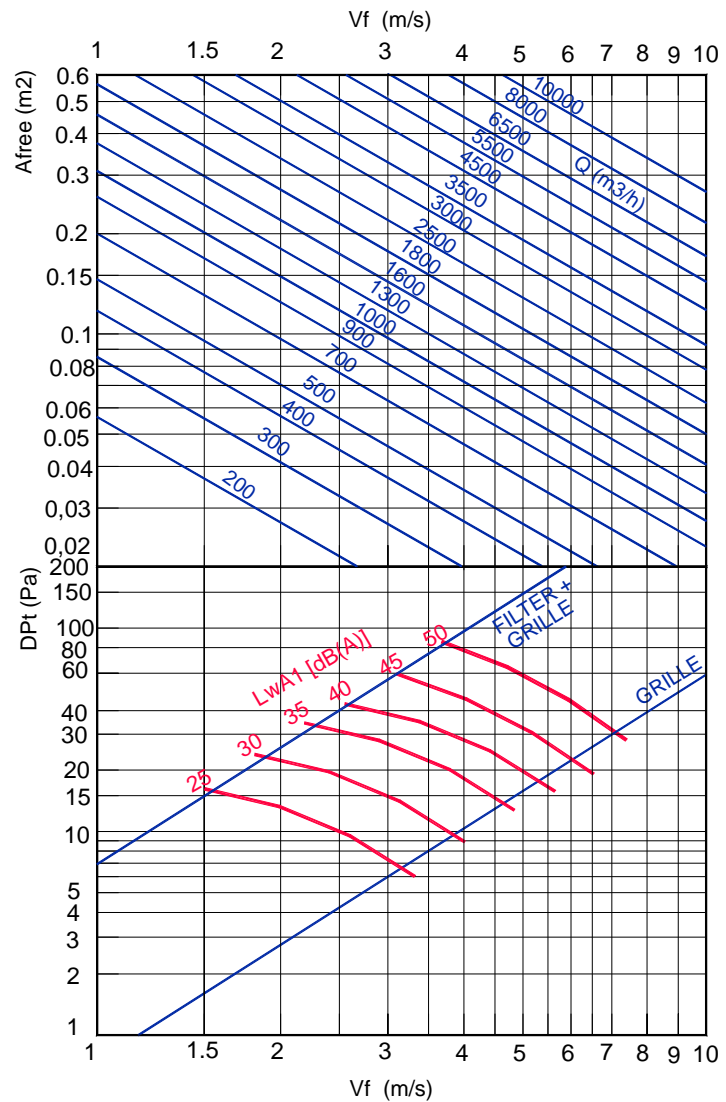
$$Q \text{ (m}^3\text{/h)} = V_{fmed} \text{ (m/s)} * A_{free} \text{ (m}^2\text{)} * 3600$$

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-FY-GR1-09/06