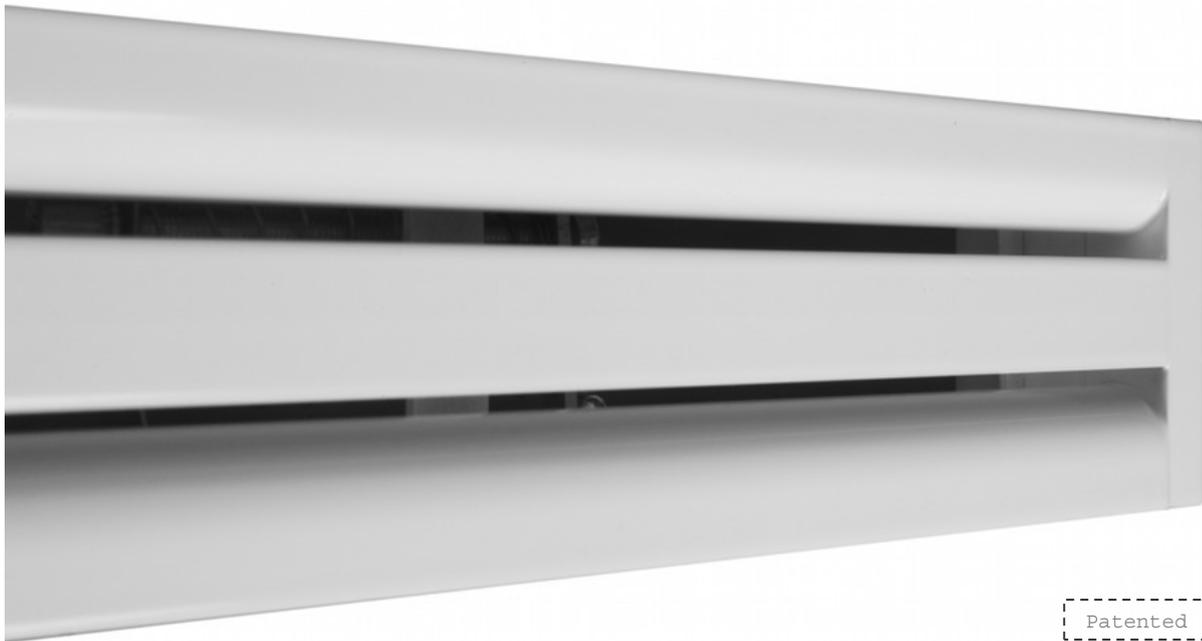
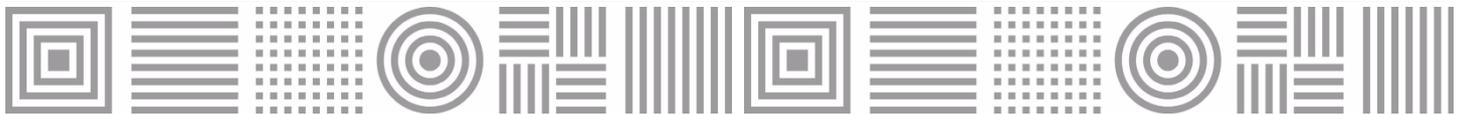


MADEL®



LOF & LAIF fixed linear slot diffusers with minimized frame



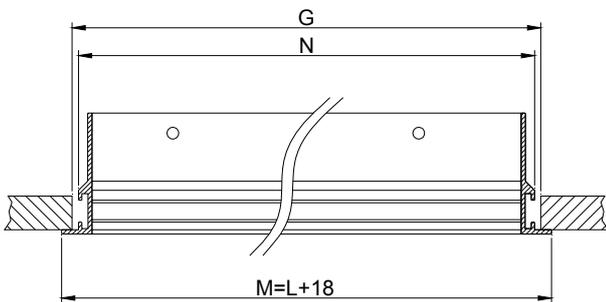
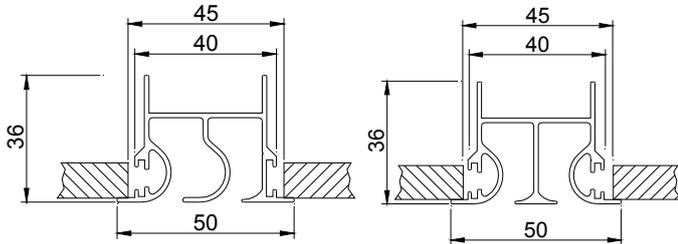
MADEL®

The **LOF&LAIF** series fixed linear slot diffusers are designed to combine the aesthetics with the technical performance. They can be mounted in false ceilings or suspended from the ceiling. They allow the formation of diffuser continuous lines, with active and inactive areas, without breaking the uniformity of the whole. They are suitable both for supply and return. Fixed slots for air supply with ceiling effect in 1-way or 2-way depending on the model.

The **LOF&LAIF** diffusers admit a flow variation of 60% keeping the air stream stable. These diffusers can be used from 2,6 up to 4 metres high and at a temperature differential up to 12° C.

LOF

LAIF



L	M	N	G
500	518	508	513
1000	1018	1008	1013
1200	1218	1208	1213
1500	1518	1508	1513
2000	2018	2008	2013

CLASSIFICATION

LOF-AR Diffuser for air supply in 1-way, end borders included. Suitable for lengths ≤ 2 m.

LAIF-AR Diffuser for air supply in 2-way, end borders included. Suitable for lengths ≤ 2 m.

...-ARI Diffuser with an end border on the left side, required to form lines >2 m.

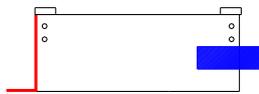
...-ARD Diffuser with an end border on the right side, required to form lines >2 m.

...-INT Diffuser without end borders, required to form lines > 4 m.

MATERIAL

Diffuser constructed from aluminium.

-ARI



-INT

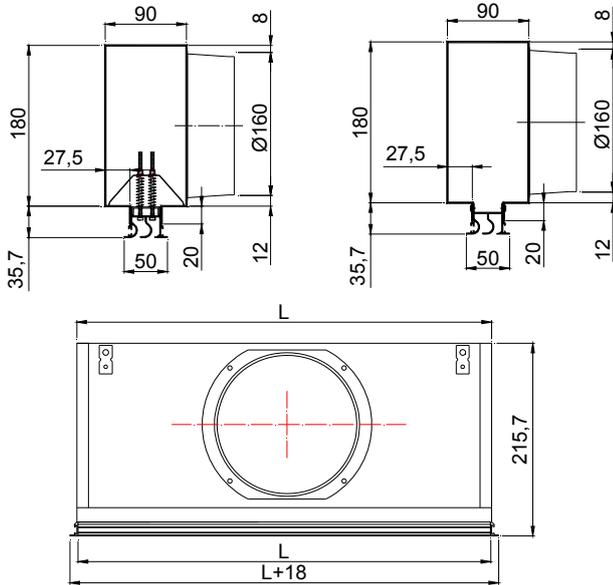


-ARD



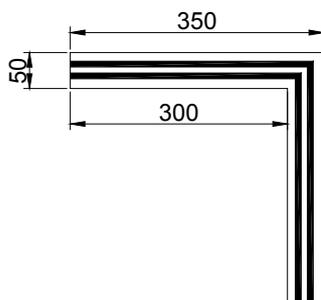
LOF&LAIF-AR (PM) + PLF

LOF&LAIF-AR (D) + PLF



LOF / LAIF			
L < 1500		L ≥ 1500	
n	Ø	n	Ø
1	160	2	160

A90/LOF & LAIF



ACCESSORIES

PLF Plenum box with lateral circular connection. It includes supports to hang from the ceiling. Made in galvanised steel.

...-R Plenum box with a flow damper in the spigot.

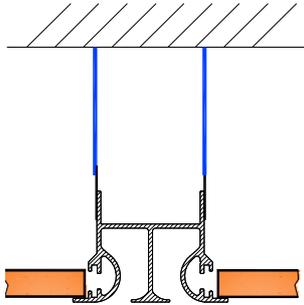
.../AIS/ Plenum box thermo acoustically insulated by a foam with a coefficient of thermal conductivity of 0,04 w/mk. This foam complies with the fire reaction specifications:

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

A90/LOF&LAIF Inactive diffuser without end borders, making a 90° angle.

FIXING SYSTEMS

(D)



(D) Support brackets to hang the diffuser LOF or LAIF from the ceiling or the diffuser riveted to the plenum box LOF or LAIF+PLF.

(PM) Set of crossbars for installation of the diffuser without plenum box in false ceiling or for installation of the diffuser to the plenum box

FINISHES

AA Matt silver anodised.

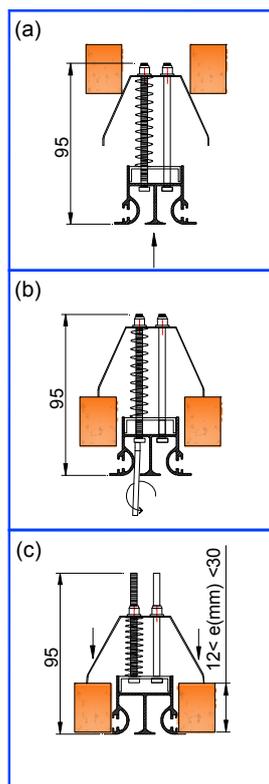
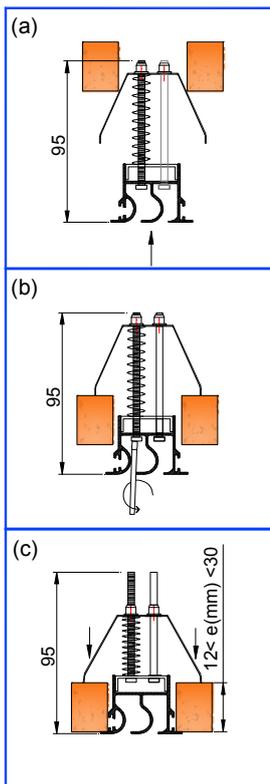
M9016 Painted in white similar to RAL 9016.

R9010 Painted in white RAL 9010.

RAL... Painted in other RAL colours.

LOF-AR (PM)

LAIF-AR (PM)

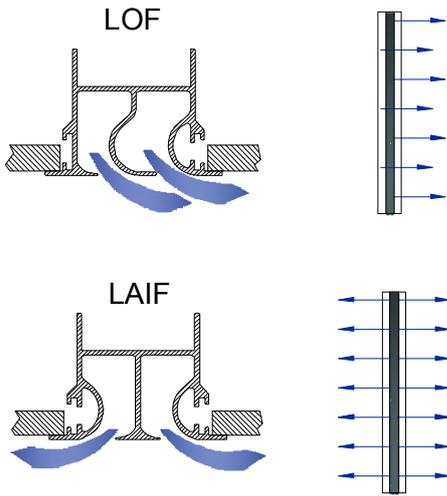


SPECIFICATION TEXT

Supply and mounting of fixed linear slot diffuser for air supply with ceiling effect in 1-way series **LOF-AR (D)+PLF-R AA 2x1000** constructed from aluminium and anodised in matt silver **AA**. With lateral circular connection plenum box and air flow damper in the spigot **PLF-R**.
Manufacturer **MADEL**.

LOF&LAIF

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL, THROW WITH CEILING EFFECT.

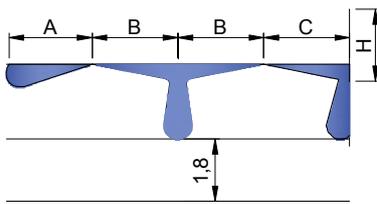


RECOMMENDED VELOCITY.

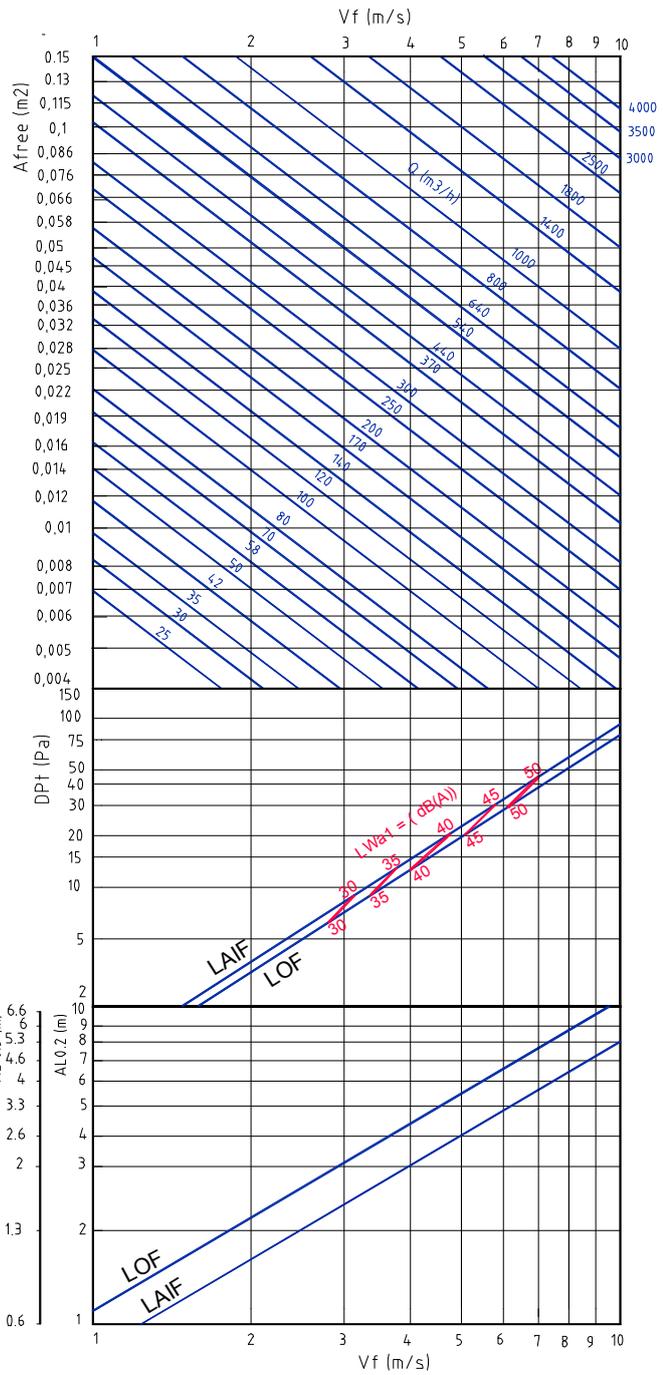
VIAS	Vmin (m/s)	Vmax (m/s)
LOF	2.5	5
LAIF	2.5	6

FREE FACE AREA (m²).

	0.5 m	1 m	1.5 m	2 m
LOF	0.00575	0.0115	0.01725	0.023
LAIF	0.0059	0.0118	0.0177	0.0236

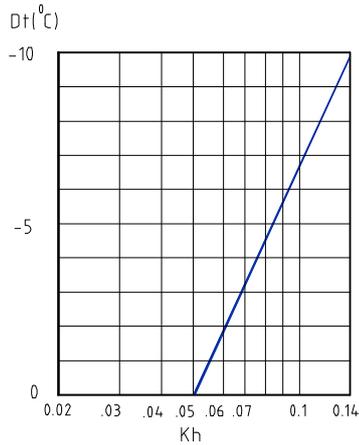


$AL_{0.2} = A$
 $AL_{0.2} = B+H$
 $AL_{0.2} = C+H$



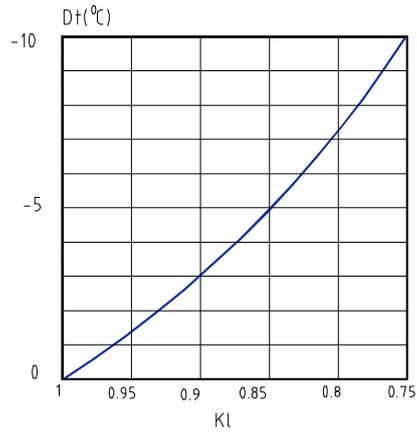
LOF&LAIF

CORRECTION FACTOR FOR VERTICAL DIFFUSION (bv) FOR DT (-).

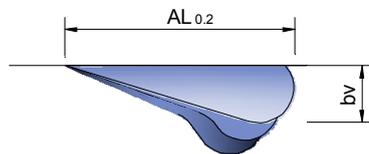


Kh = Correction factor for the vertical diffusion.

CORRECTION FACTOR FOR THROW (L0.2) DT (-).



Kl = Correction factor for the throw.

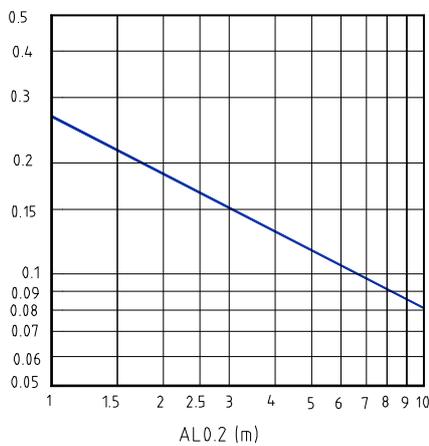


$$bv = Kh \times AL_{0.2}$$

$$AL'_{0.2} (Dt < 0) = Kl \times AL_{0.2}$$

TEMPERATURE RATIO.

$$\frac{Dtl}{Dtz} = \frac{t_{room} - t_x}{t_{room} - t_{supply}}$$



INDUCTION RATIO.

$$i = \frac{Q_r}{Q_0} = \frac{Q_{total\ at\ x}}{Q_{of\ supply}}$$

