

Air through perfection

Architectural linear diffuser

LINES



ACP
Architectural diffusers

Architectural linear diffuser LINES



Description

LINES is an architectural diffuser with pivoting linear nozzles, used to introduce air.

The product is an ideal ventilation solution for generous spaces being designed with essential features both aesthetically and functionally.

The airflow is directed a long distance to the desired areas.

Technical specifications

Characteristics

The LINES diffuser can be equipped, on request, with a perforated plate mounted on the diffuser connection (LINES-P).

The perforated sheet is painted in RAL9005 and has circular holes with a diameter of 5 mm.

LINES is available with a slot width of 20 or 35 mm.

The nozzles have a pivoting motion within $\pm 30^\circ$ and facilitates the orientation of the air jet in the desired direction.

The design of the nozzles allows the introduction of the long air jet.

Dimensional limits, diffuser length: minimum 0.25m and maximum 1.25m.

The length of the linear nozzle is 250 mm.

The product is delivered with the following elements: mounting bracket, fixing screw and sealing gasket.

The number of mounting systems depends on the length of the product.

Materials

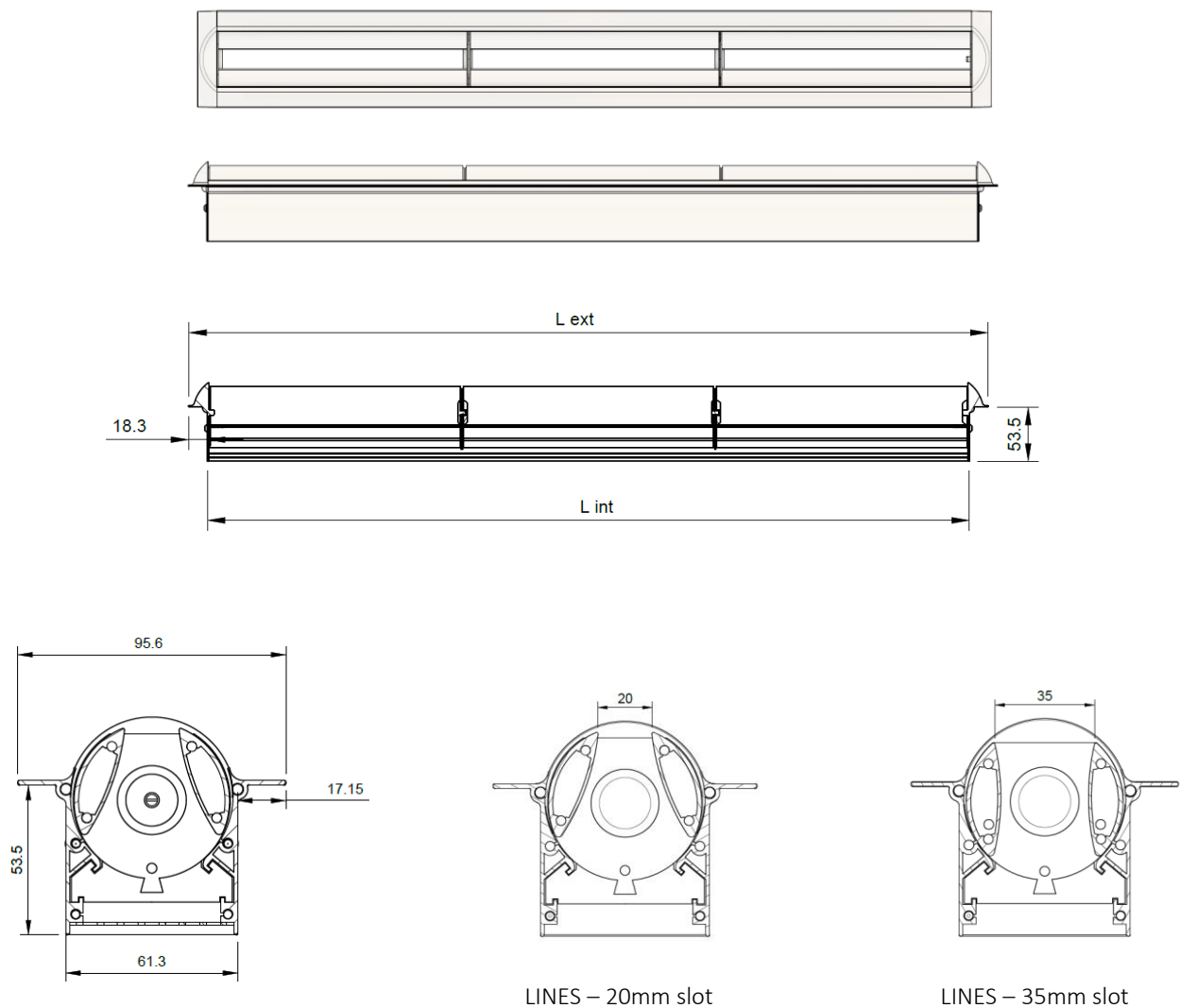
LINES is made of extruded aluminum electrostatic field painted in glossy white RAL 9016.

On request, the LINES diffuser can be delivered in any other shade from the RAL palette.

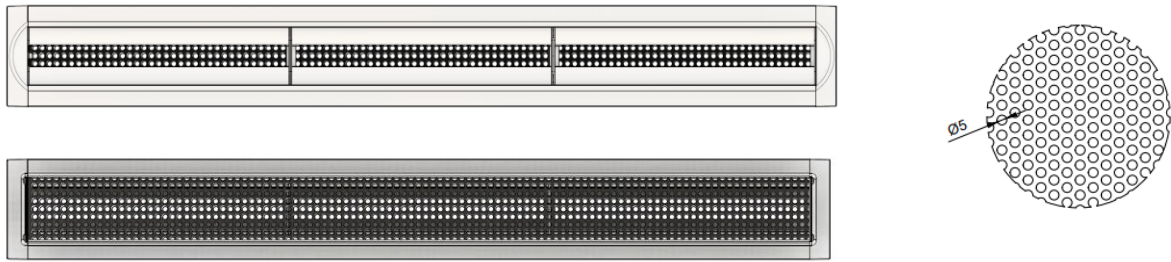
The perforated plate mounted on LINES-P is made of galvanized steel sheet with circular holes D5 mm and is electrostatic field painted in RAL9005.

Technical drawing

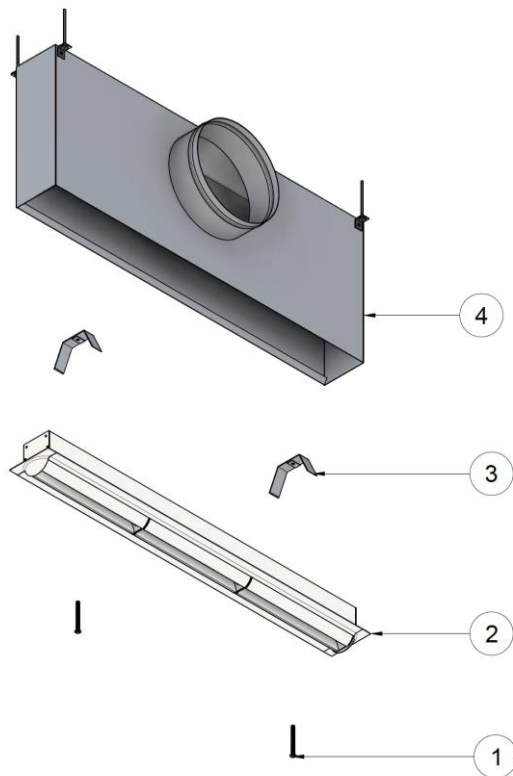
LINES



LINES-P

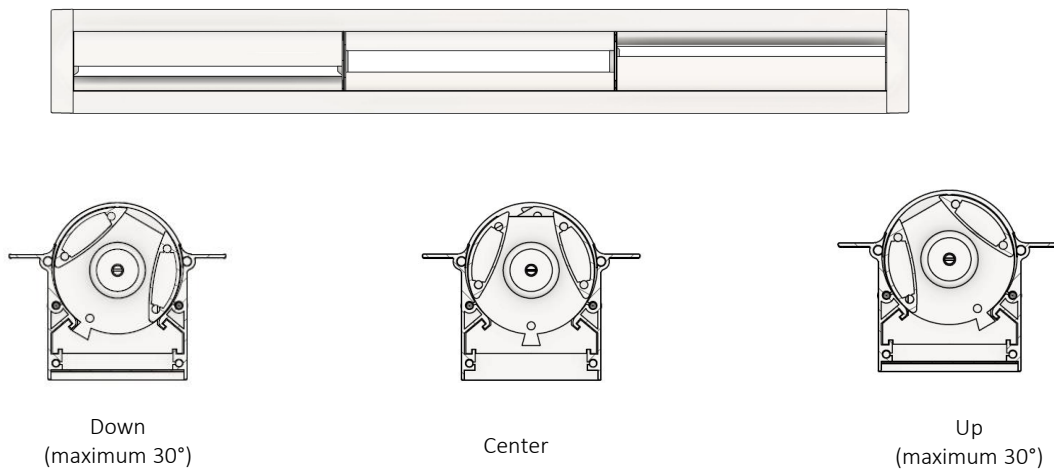


Product specifications



- 1- Fixing screw
- 2- LINES diffuser
- 3 - Bracket ("U" type system)
- 4- Plenum box (optional)

Directing the air jet



Accessories

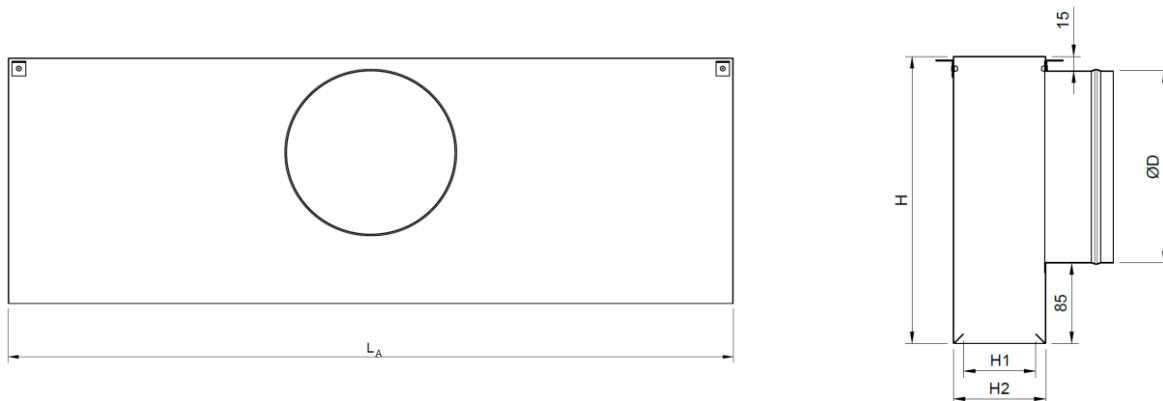
The diffuser can be supplied with a plenum connecting to a circular duct with horizontal connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

The plenum is delivered insulated or uninsulated.

On request, the plenum can be provided with a perforated damper.

Adapter (plenum box)



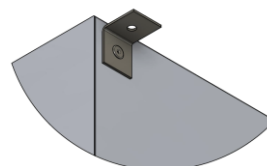
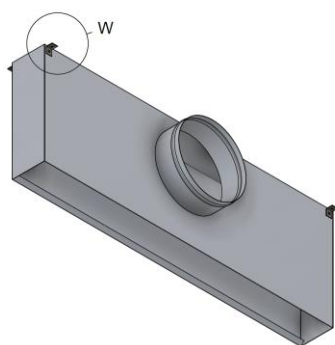
$$L_A = L_{LINES} + 10$$

$$H1 = H \text{ int } LINES + 2$$

$$H2 = H1 + 16$$

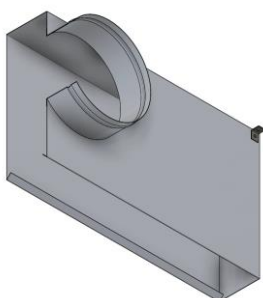
$$H \text{ depending on } \varnothing D$$

The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.

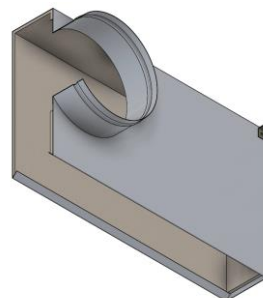


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

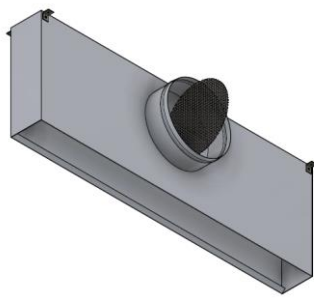


AN - Uninsulated adapter

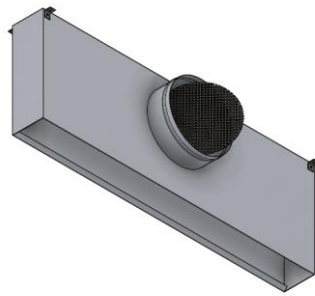


AIZ - Insulated adapter

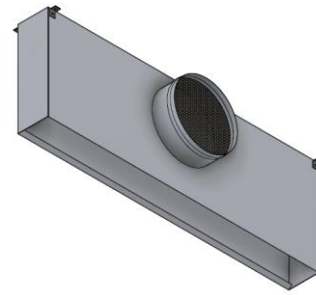
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter spigot and has the role of balancing the air flow.

Functional parameters

Slot dimension [mm]	Air flow [m³/h]	NR [dB(A)]	ΔPt [Pa]	WITH CEILING EFFECT			WITHOUT CEILING EFFECT		
				$X_{0,5}$ [m]	$X_{0,75}$ [m]	$X_{1,0}$ [m]	$X_{0,5}$ [m]	$X_{0,75}$ [m]	$X_{1,0}$ [m]
20	352	25	17,7	12,54	5,58	3,14	6,27	2,79	1,57
	418	30	25,0	17,65	7,86	4,43	8,84	3,93	2,21
	493	35	34,7	>20	10,94	6,16	12,29	5,47	3,08
	579	40	47,9	>20	15,09	8,49	16,90	7,54	4,25
35	536	25	13,6	16,59	7,39	4,16	8,31	3,69	2,08
	637	30	19,3	>20	10,44	5,88	11,73	5,22	2,94
	752	35	26,9	>20	14,54	8,19	16,35	7,27	4,09
	885	40	37,2	>20	>20	11,34	>20	10,07	5,67

Note: The above air flows are given for 1 m linear diffuser.

The legend

NR [dB (A)] - Noise level without room attenuation

ΔPt [Pa] - Pressure loss

$X_{0,5}$ [m] - The length of the air jet at a speed of 0.5 m/s

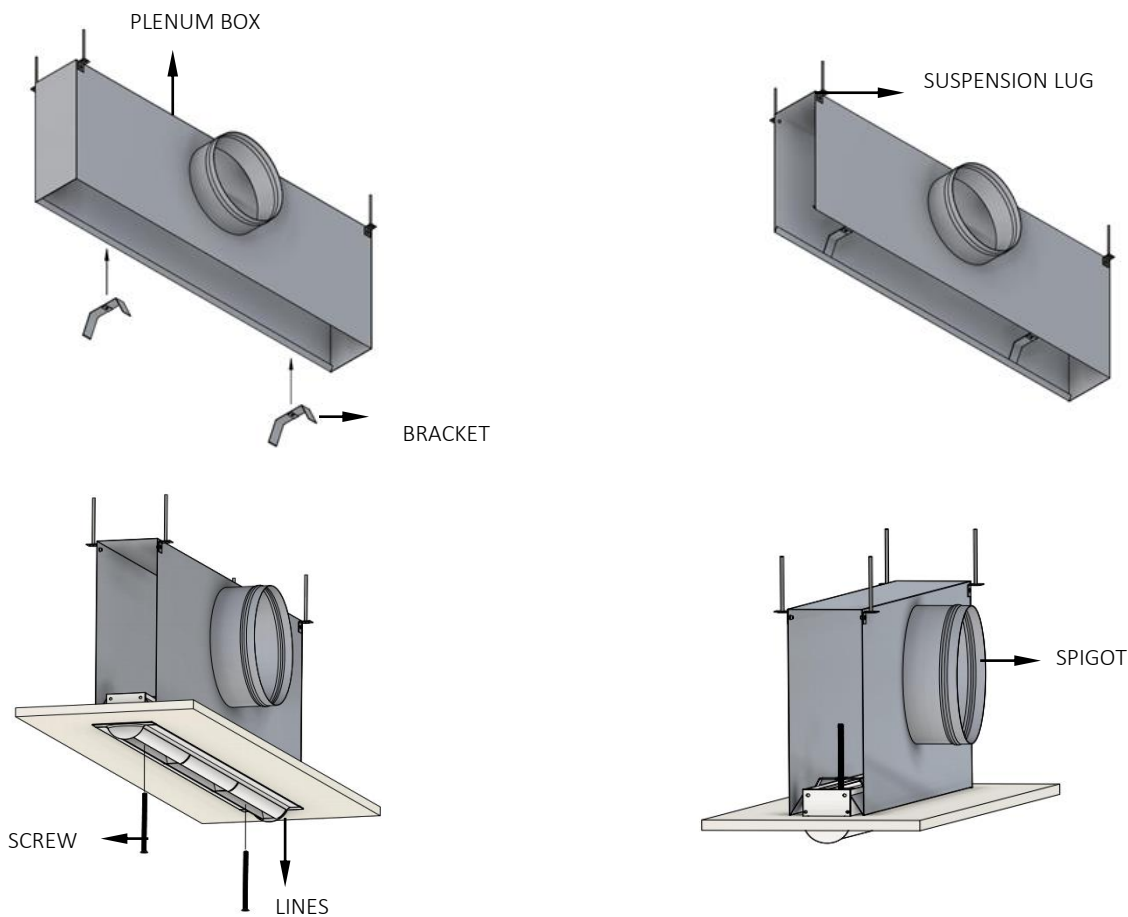
$X_{0,75}$ [m] - The length of the air jet at a speed of 0.75 m/s

$X_{1,0}$ [m] - The length of the air jet at a speed of 1 m/s

Installation

The diffuser is mounted in a false continuous ceiling. The fixing of the plenum diffuser is done by means of “U” type mounting systems (bracket), positioned inside the plenum and the screws.

Installation in continuous ceiling



Order code

Example on how to place an order

Type	Length	Slot	Accessories	Finish
LINES				
LINES-P				
On request				
20, 35 mm				
AIZ - Insulated adapter				
AN - Uninsulated adapter				
Perforated damper (plenum box)				
RAL 9016				
RAL.. -Other RAL colors on request				