

Diffusers with adjustable aluminium slots

LINED



- LINED Linear series
- Assemblies
- LINED TP series
- LINED Slim series
- Connection plenum
- LINED Combined series
- Fixings
- Range
- Graphs
- Selection



Diffusers with adjustable aluminium slots

LINED Linear series - aluminium



LINED S

LINED S with plenum

USE

- Air supply or exhaust depending on model.
- Adjustable diffusion using dirigible deflector in the centre of each slot. Vertical airflow possible.
- Opening exhaust models with filter to replace that of ducted convector fan.
- Ceiling-mounted.
- Possibility of aesthetic linear strips (except opening versions).

CONSTRUCTION

- Body and deflectors made of extruded aluminium.
- Frame 25 mm wide. Slot 25 mm wide.
- LINED S: air supply model with dirigible deflectors.
- LINED E: exhaust model with fixed deflectors.
- LINED EO: exhaust model with fixed deflectors and opening central core for access to filter located in connection plenum. Hinged core, push-push closure mechanism (from three slots upwards only).

FINISH

- Anodised aluminium body, natural satin finish or painted white RAL 9010 30% matt.
- Aluminium deflectors, painted anthracite grey RAL 7024 or white RAL 9010.
- Paint finish from RAL colour chart Consult the list of available colours attached in the Compulsor.

MOUNTINGS

- Concealed attachment to plenum, either adjustable and accessible below the diffuser (type S3), or directly using self-tapping screws on the sides of the plenum (type S2)

Comment: the S2 attachment method is recommended for suspended ceilings and incompatible with non-removable ceilings (plaster or BA13 plasterboard).

ACCESSORIES

- Connection plenum made of galvanised steel with side branch connection. Simple or insulated version (acoustic or thermo-acoustic insulation). Equipped with brackets for attachment to concrete slab.
- G3 M1 filter included in plenum for opening exhaust diffusers.
- Spade damper fitted in plenum branch connection. Adjustable from front of diffuser.

For more information, see the connection plenum page.

STANDARD DIMENSIONS

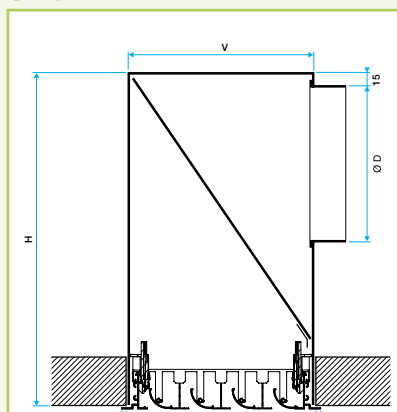
- Available with one to eight slots (three to five slots in opening filter holder models).
- Lengths 300 to 2000 mm in 5 mm increments (opening model limited to 1500 mm). Beyond this distance, the diffuser is made up of middle sections.

For further information, please refer to the RANGE and ASSEMBLIES pages below.

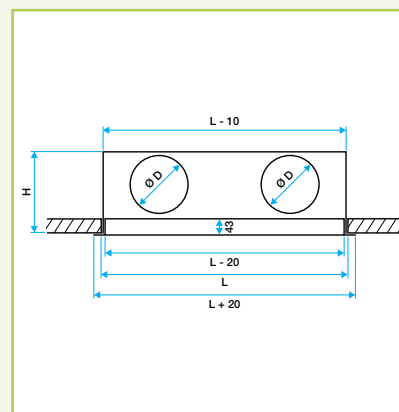
TECHNICAL CHARACTERISTICS

- See selection tables and straight scales on next pages.

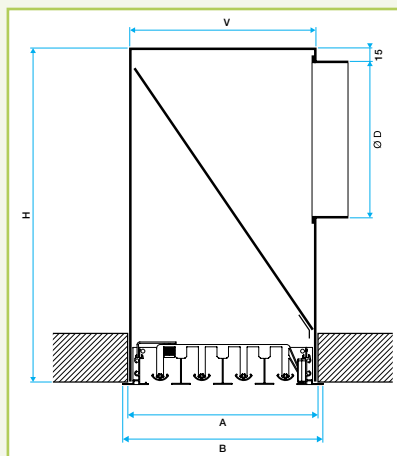
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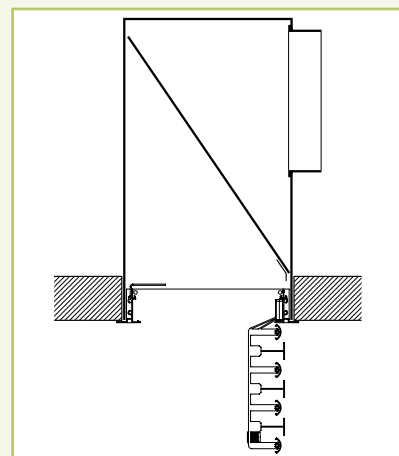
LINED S with plenum.
S3 attachment (for non-removable ceilings).



Diffuser with S2 or S3 attachment.



LINED EO with plenum.
Closed position with filter. Fixings - S2



LINED EO with plenum.
Open position with filter. Fixings - S2

Number of slots	Recess A (mm)	B (mm)	V (mm)	H (mm)	D* (mm)
1	67	81	65	245	160
2	112	126	110	285	200**
3	157	171	151	285	200**
4	202	216	200	335	250**
5	247	261	245	335	250**
6	292	306	290	400	315
7	333	351	335	400	315
8	382	396	380	400	315

Recess in the ceiling = LxA.

(*) Based on 1 branch connection per metre. Other configurations: please contact us. See selection tables.

(**) Available in oblong branch connections to reduce the height H. (See connection plenum page.)

Comment: Opening models available with three to five slots.

Diffusers with adjustable aluminium slots

LINED Linear series - assemblies



LINED S

LINEAR STRIPS

- Possibility of creating linear strips (alignment profiles supplied) or continuous arrangements with aesthetic corner pieces (non-diffusing).
- Beyond 2000 mm, the diffuser is made up of 2000 middle sections with two ends of equal length always between 1000 and 2000 mm.

For an order for a full linear strip:

- $L = L_m + 2 \times L_{gd}$.
- Overall = $L_m + 2 \times L_{gd} + a$.

For an order for separate components:

- Overall middle section = L_m .
- Overall left or right section = $L_{gd} + a/2$.

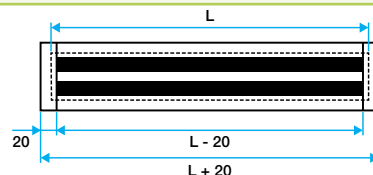
Note:

LINED profile: $a=20$.

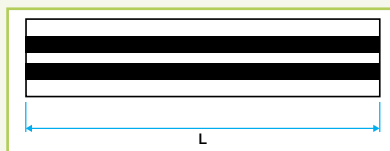
$L_m > 2000$ mm.

$1000 > L_{gd} > 2000$.

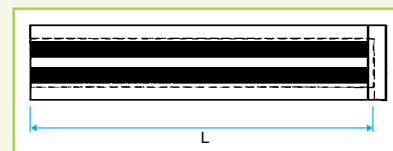
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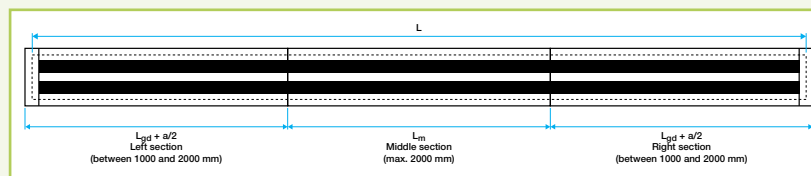
Whole section



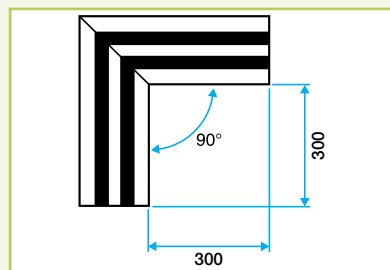
Middle section without end pieces
L nominal dimension.



Section with end piece
(right or left). L nominal dimension.



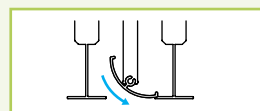
Full linear strip.



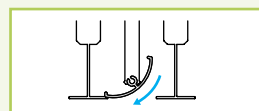
90° corner piece. Available with 1 to 4 slots

AIR SUPPLY DIRECTIONS

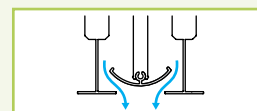
- Each slot is fitted with a deflector to use in setting the airflow direction.



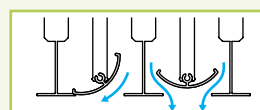
Right horizontal.



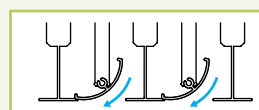
Left horizontal.



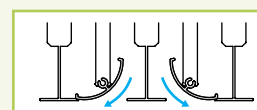
Vertical.



Left vertical and horizontal.



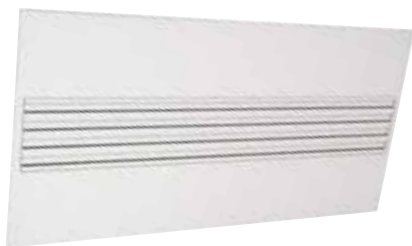
Two left horizontal slots.



Right and left horizontal.

Diffusers with adjustable aluminium slots

LINED TP series - aluminium



LINED S TP diffuser

USE

- Air supply or exhaust depending on model.
- Adjustable diffusion using dirigible deflector in the centre of each slot. Vertical airflow possible.
- Opening exhaust models with filter to replace that of ducted convector fan.
- Diffusers planned to replace a standard suspended ceiling tile, Tbar or Fine-line.

CONSTRUCTION

- Body and deflectors made of extruded aluminium.
- Ceiling compensation plate, galvanised steel.
- Slot width 25 mm.
- LINED S TP: air supply model with dirigible deflectors.
- LINED E TP: exhaust model with fixed deflectors.
- LINED EO TP: exhaust model with fixed deflectors and opening central core for access to filter located in connection plenum. Hinged core, push-push closure mechanism (from three slots upwards only).

FINISH

- Epoxy paint, colour white RAL9010 30% matt.
- Aluminium deflectors, painted anthracite grey RAL7024 or white RAL 9010.
- Paint finish from RAL colour chart Consult the list of available colours in the Compulsor.
- Protective film upon request.

MOUNTINGS

- S2: concealed attachment using a screw accessible by the sides of the diffuser.

For more information, see the attachments page.

ACCESSORIES

- Connection plenum made of galvanised steel with side branch connection. Simple or insulated version (acoustic or thermo-acoustic insulation). Equipped with brackets for attachment to concrete slab.

NB: the weight of the diffuser must not be borne by the suspended ceiling framework.

- G3 M1 filter included in plenum for opening exhaust diffusers.
- Spade damper fitted in plenum branch connection. Adjustable from front of diffuser.

For more information, see the connection plenum page.

STANDARD DIMENSIONS

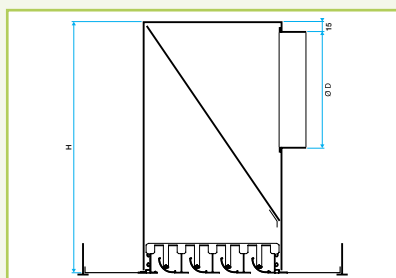
- Width of one to eight slots (three to five in opening filter holder models).
- Suitable for ceilings 600 x 300 to 1350 x 675 mm.

For more information, see the RANGE page.

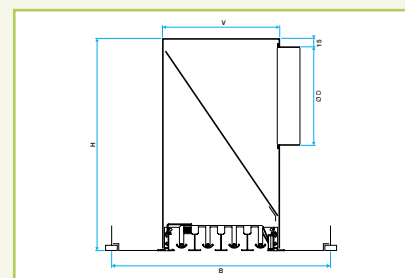
TECHNICAL CHARACTERISTICS

- See selection tables and straight scales on next pages.

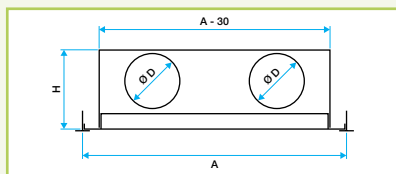
Size



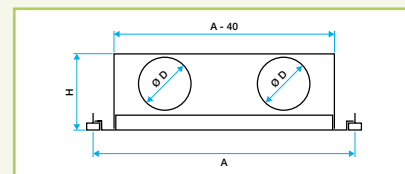
Ceiling-mounted with T framework (air supply model).



Ceiling-mounted with Fine-Line framework (exhaust model with filter).



Ceiling-mounted with T framework.



Ceiling-mounted with Fine Line framework.

Dimensions

Number of slots	V (mm)	H (mm)	D (mm)
1	65	247	160
2	110	287	200
3	155	287	200
4	200	337	250
5	245	337	250
6	290	402	315
7	335	402	315
8	380	402	315

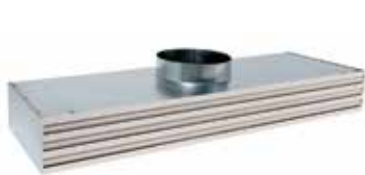
Available ceiling dimensions

A x B*	Number of slots			
	Fixed		Opening	
	Maximum number of slots	Minimum number of slots	Maximum number of slots	Minimum number of slots
	Tbar or Fine line	Tbar or Fine line	Tbar or Fine line	Tbar or Fine line
600 x 300	5	1	5	3
1200 x 300	5	1	5	3
1350 x 300	5	1	5	3
1500 x 300	5	1	5	3
1800 x 300	5	1	5	3
600 x 600	8	1	8	3
1200 x 600	8	1	8	3
1350 x 600	8	1	8	3
1500 x 600	8	1	8	3
1800 x 600	8	1	8	3

* Nominal ceiling tile dimensions.

Diffusers with adjustable aluminium slots

LINED Slim series - aluminium



LINED Slim with plenum



LINED Slim

USE

- Air supply or exhaust.
- Adjustable diffusion using dirigible deflector in the centre of each slot. Vertical airflow possible,
- Opening exhaust models with filter to replace that of ducted convector fan,
- Ceiling-mounted,
- Possibility of aesthetic linear strips (except opening versions),
- Diffuser designed without frame for perfect integration in metal ceilings.

CONSTRUCTION

- Body and deflectors made of extruded aluminium,
- Slot width 25 mm,
- LINED Slim: air supply model with dirigible deflectors,
- LINED E Slim: exhaust model with fixed deflectors,
- LINED EO Slim: exhaust model with fixed deflectors and opening central core for access to filter located in connection plenum. Hinged core, push-push closure mechanism (from three slots upwards only).

FINISH

- Aluminium body, colour white RAL 9010
- Aluminium deflectors, painted anthracite grey RAL 7024 or white RAL 9010.
- Paint finish from RAL colour chart Consult the list of available colours attached in the air diffusion compulсор.

ATTACHMENTS

- Concealed attachment to plenum, either adjustable and accessible below the diffuser (type S3), or directly using self-tapping screws on the sides of the plenum (type S2)

Comment: the S2 attachment method is recommended for suspended ceilings and incompatible with non-removable ceilings (plaster or BA13 plasterboard).

ACCESSORIES

- Connection plenum made of galvanised steel with side branch connection. Simple or insulated version (acoustic or thermo-acoustic insulation). Equipped with brackets for attachment to concrete slab,
- G3 M1 filter included in plenum for opening exhaust diffusers,
- Spade damper fitted in plenum branch connection. Adjustable from front of diffuser.

For more information, see the connection plenum page.

STANDARD DIMENSIONS

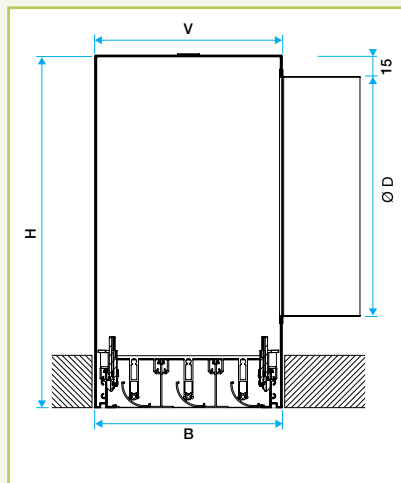
- Available with one to eight slots (three to five slots in opening filter holder models).
- Lengths 300 to 2000 mm in 5 mm increments (model limited to 1500 mm). Beyond this distance, the diffuser is made up of middle sections.

For further information, please refer to the RANGE and ASSEMBLIES pages.

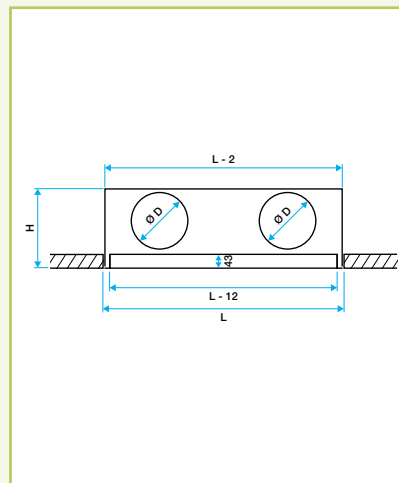
TECHNICAL CHARACTERISTICS

- See selection tables and straight scales on next pages.

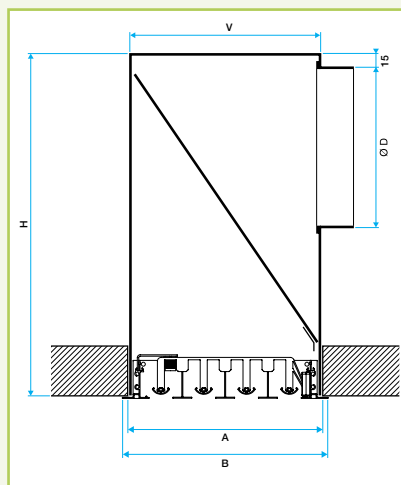
Dimensions (mm)



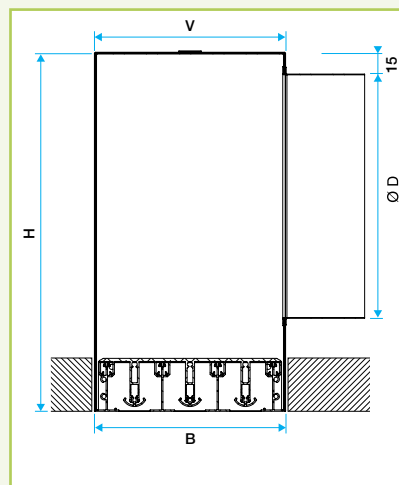
LINED S Slim with plenum.
S3 attachment (for non-removable ceilings).



Diffuser with S2 or S3 attachment.



LINED EO Slim with plenum.
Closed position with filter. Fixings - S2



LINED E Slim with plenum.
Fixings - S2

Number of slots	Recess A (mm)	B (mm)	V (mm)	H (mm)	D* (mm)
1	67	65	65	250	160
2	112	110	110	290	200**
3	157	155	155	290	200**
4	202	200	200	340	250**
5	247	245	245	340	250**
6	292	290	290	405	315
7	337	335	335	405	315
8	382	380	380	405	315

Recess in the ceiling = LxA

(*) Based on 1 branch connection per metre. Other configurations: please contact us. See selection tables.

(**) Available in oblong branch connections to reduce the height H. See connection plenum page.

Comment: Opening models available with three to five slots.

Diffusers with adjustable aluminium slots

LINED - LINED TP - LINED Slim series - Connection plenum - steel



Plenum

USE

- Plenums for slot diffusers LINED, LINED TP AND LINED SLIM series.
- Air supply or exhaust.
- Ceiling-mounted.
- Possibility of linear strips.

CONSTRUCTION

- Made of galvanised steel sheet.
- At base supply branch connection 300 to 1500 mm long and two supply branch connections 1505 to 2000 mm long.
- Possibility of adding connections upon request.

ATTACHMENTS

- S2: concealed attachment of the diffuser to the plenum using a screw accessible by the sides of the diffuser.

Caution: this attachment is not compatible with plaster or BA13 plasterboard ceilings.

- S3: concealed attachment of the diffuser to the plenum using screws and clips accessible by the underside of the diffuser (not available in LINED TP).

- Attachment to concrete ceiling using brackets on the plenum.

NB: the weight of the diffuser must not be borne by the ceiling framework.

OPTIONS

- Spade damper fitted in plenum branch connection.

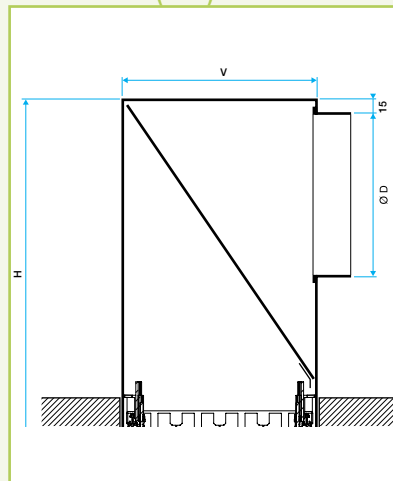
NB: Not available for one slot. Not available in models with filter.

- Height H special.
- Special branch connection diameter (circular or oblong equivalent Ø 200 mm or Ø 250 mm).
- Additional branch connections (one or two in addition to the standard per section).
- Flat filter G3 rating for exhaust (M1 fire rating). Positioned diagonally in the plenum for a maximum filtering surface. Attached with pegs.
- Additional branch connection for dealing with fresh air. Available in 80, 100 and 125. (Positioned opposite the standard branch connection(s)).
- Possibility of fitting longer diffusers than the plenum to create linear strips with inactive diffusion areas (for aesthetic reasons).
- Acoustic or thermo-acoustic insulation on request.
 - Acoustic: 1 20 mm melamine face located on branch connection face.
 - Thermo-acoustic: 1 melamine face + 4 foam faces 5 mm.
- M1 fire rating.

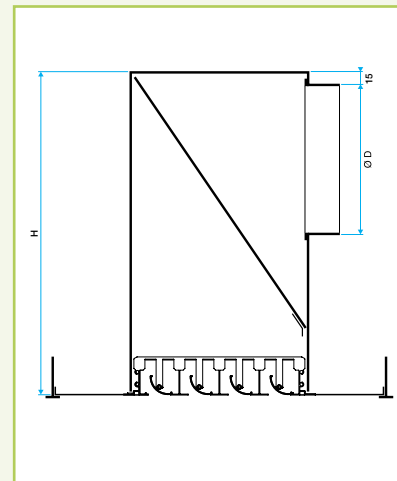
STANDARD DIMENSIONS

- Available with one to eight slots (three to five slots in opening filter holder models).
- LINED Linear, LINED SLIM: length 300 to 2000 mm in 5 mm increments. Beyond this distance, the plenum is made up of 2000 middle sections with two ends of equal length always between 1000 and 2000 mm.
- LINED TP: 600 to 1800 mm compatible with the slab dimensions.
- Number of standard branch connections: Two per middle section and one for each end (two if more than 1500 mm).

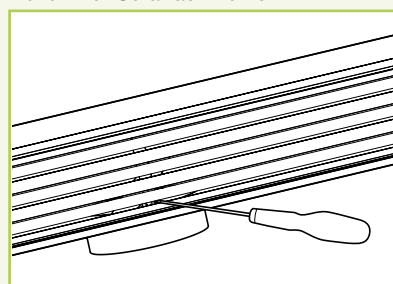
Dimensions (mm)



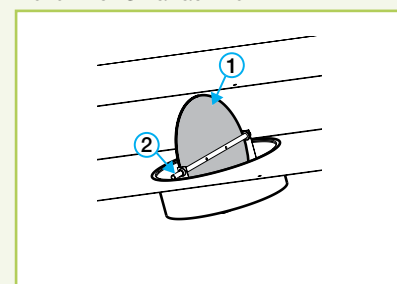
Plenum for S3 attachments.



Plenum for S2 attachment.



Setting of the damper through the slot branch connection side.



1. Damper.
2. Adjustment axis.

Dimensions with circular branch connection

Number of slots	H (mm)	D standard (mm)
1*	250	160
2	290	200
3	290	200
4	340	250
5	340	250
6	405	315
7	405	315
8	405	315

* Damper not available

Dimensions with oblong branch connections

Number of slots	H (mm)	D standard oblongs (mm)
2	225	230 x 130 equivalent Ø 200
3	225	230 x 130 equivalent Ø 200
4	255	297 x 160 equivalent Ø 250
5	255	297 x 160 equivalent Ø 250

Diffusers with adjustable aluminium slots

LINED Combined series - aluminium



LINED SO

USE

- Combined air supply and exhaust for all ventilation and air conditioning applications
- Adjustable diffusion using dirigible deflector in the centre of each slot. Vertical airflow possible,
- Possibility of adding a filter on the exhaust section to replace, for example, that of the connected ducted convector fan,
- Ceiling-mounted,
- Diffuser designed for simultaneous air supply and exhaust thanks to its specific plenum (see next page).

CONSTRUCTION

- Body and deflectors made of extruded aluminium,
- Slot width: 25 mm
- LINED SO: LINED linear air supply + exhaust model (opening for access to the filter),
- LINED SO Slim: LINED Slim air supply + exhaust model (opening for access to the filter),
- LINED SO TP: LINED TP air supply + exhaust model (opening for access to the filter),

NB: all the other LINED air supply models (LINED S, LINED S Slim, LINED S TP) are available in Combined version with the specific plenum.

FINISH

- Anodised aluminium body, natural satin finish or painted white RAL 9010 30% matt.
- Aluminium deflectors, painted anthracite grey RAL 7024 or white RAL 9010.
- Paint finish from RAL colour chart Consult the list of available colours attached in the air diffusion Compulsor.

ATTACHMENTS

- Concealed attachment to plenum, either adjustable and accessible below the diffuser (type S3), or directly using self-tapping screws on the sides of the plenum (type S2)

ACCESSORIES

- Connection plenum made of galvanised steel fitted with a dividing partition between the air supply and exhaust flows. Simple or insulated version (acoustic or thermo-acoustic insulation). Equipped with brackets for attachment to concrete slab,
- G3 M1 filter included in the exhaust section of the plenum for the opening diffusers,

For more information, see the combined plenum page below.

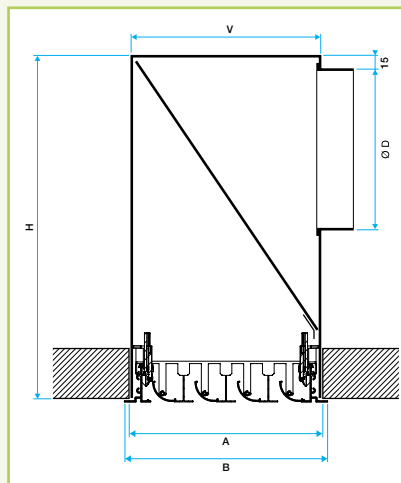
STANDARD DIMENSIONS

- Three to five slots in opening filter holder models.
 - Length 600 to 1500 mm in 5 mm increments.
- For more information, see the RANGE page below.

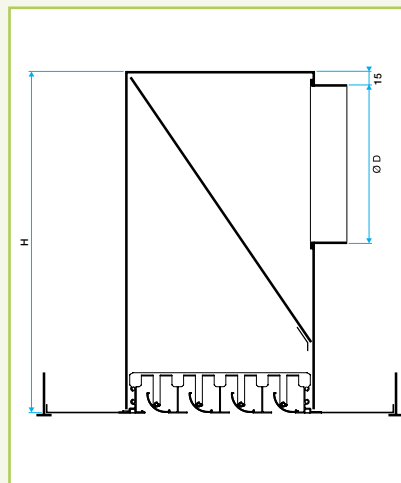
TECHNICAL CHARACTERISTICS

- See selection tables and straight scales on next pages.

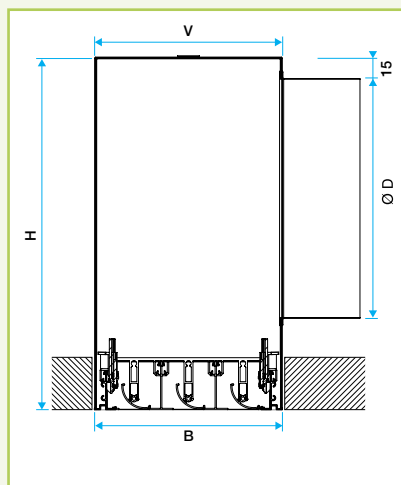
Dimensions (mm)



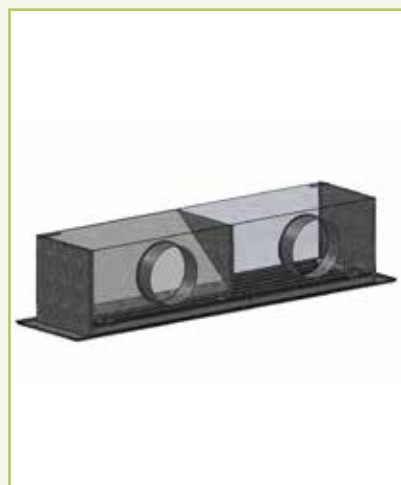
LINED Combined SO.



LINED Combined SO TP.



LINED Combined SO Slim.



LINED Combined SO with plenum.
Closed position.

Number of slots	LINED SO dimensions (mm)	Dimensions LINED SO TP (mm)	Dimensions LINED SO Slim (mm)	V (mm)	H (mm)	D* (mm)
3	See page 3.	See page 5.	See page 6.	155	290	200**
4				200	340	250**
5				245	340	250**

(**) Available in oblong branch connections to reduce the height H.
(See plenum page.)

Diffusers with adjustable aluminium slots

LINED Combined series - steel connection plenum



Plenum

USE

- Plenums for slot diffusers LINED Combined series,
- Combined air supply and exhaust,
- Ceiling-mounted.

CONSTRUCTION

- Plenum specific to the LINED Combined performing air supply and exhaust simultaneously.
- The plenum is divided into two for the air supply and exhaust,
- The exhaust section is fitted with a filter that can be accessed from the front panel of the diffuser,
- Made of galvanised steel sheet.
- An air supply branch connection and an exhaust branch connection of same diameter.

ATTACHMENTS

- S2: concealed attachment of the diffuser to the plenum using a screw accessible by the sides of the diffuser,

CAUTION: this attachment is not compatible with plaster or BA13 plasterboard ceilings.

- S3: concealed attachment of the diffuser to the plenum using screws and clips accessible by the underside of the diffuser,

- Attachment to concrete ceiling using brackets on the plenum,

CAUTION: the weight of the diffuser must not be borne by the ceiling framework.

OPTIONS

- Height H special.
- Special branch connection diameter (circular or oblong equivalent Ø 200 mm or Ø 250 mm).
- Flat filter G3 rating for exhaust section (M1 fire rating). Positioned diagonally in the plenum for a maximum filtering surface. Attached with pegs.
- Additional branch connection for dealing with fresh air. Available in 80, 100 and 125. (Positioned opposite the exhaust branch connection).
- Possibility of fitting longer diffusers than the plenum to create installations with inactive diffusion areas (for aesthetic reasons).
- Acoustic or thermo-acoustic insulation on request (air supply section only).

- Acoustic: 1 20 mm melamine face located on branch connection face.

- Thermo-acoustic: 1 melamine face + 4 foam faces 5 mm.

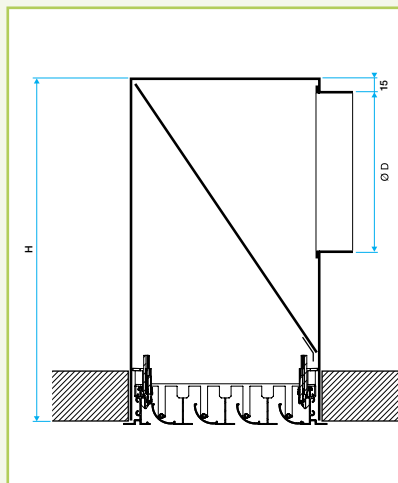
- M1 fire rating.

STANDARD DIMENSIONS

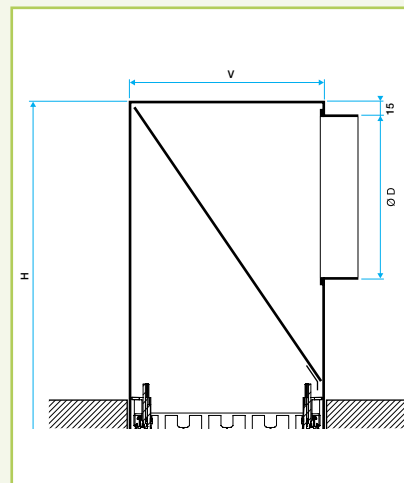
- Three to five slots in opening filter holder models.
- Length 600 to 1500 mm in 5 mm increments.

For more information, see the RANGE page below.

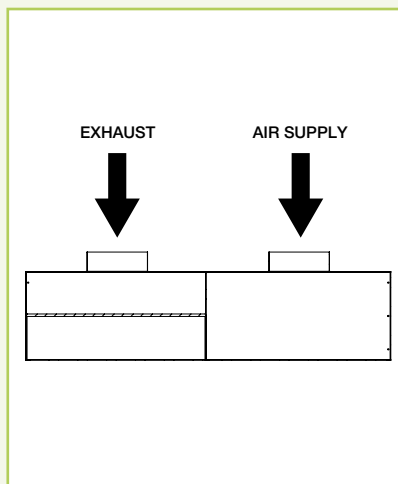
Dimensions (mm)



View of plenum exhaust side.



View of plenum air supply side.



LINED Combined SO with plenum.
Open position.

Dimensions with circular branch connection

Number of slots	H (mm)	D standard (mm)
1*	250	160
2	290	200
3	290	200
4	340	250
5	340	250
6	405	315
7	405	315
8	405	315

* Damper not available

Dimensions with oblong branch connections

Number of slots	H (mm)	D standard oblongs (mm)
2	225	230 x 130 equivalent Ø 200
3	225	230 x 130 equivalent Ø 200
4	255	297 x 160 equivalent Ø 250
5	255	297 x 160 equivalent Ø 250

Diffusers with adjustable aluminium slots

LINED - LINED TP - LINED Slim - LINED Combined series attachments and filter replacement



LINED diffuser

S2 ATTACHMENT

- Attachment by self-tapping screws on the sides of the plenum.

NB: this attachment method is recommended for suspended ceilings and incompatible with non-removable ceilings (plaster or BA13 plasterboard).

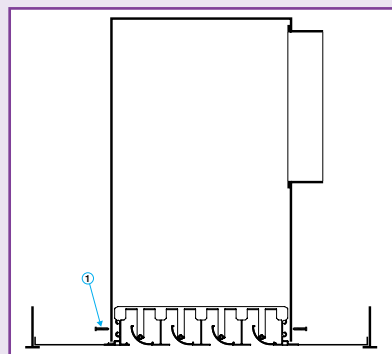
S3 ATTACHMENT

- Concealed attachment to plenum adjustable and accessible via the underside of the diffuser.

NB: this attachment allows simple and rapid installation, with the possibility of adjusting the position of the diffuser to pin it against the ceiling. it is recommended for plaster or BA13 plasterboard ceilings.

INSTALLATION

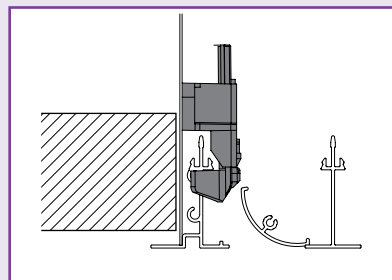
S2 attachment



Air supply diffuser with S2 attachment.

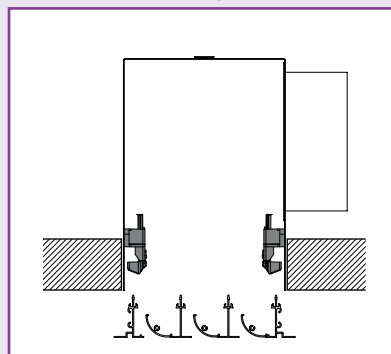
① Self-tapping screw.

S3 attachment - stage 2



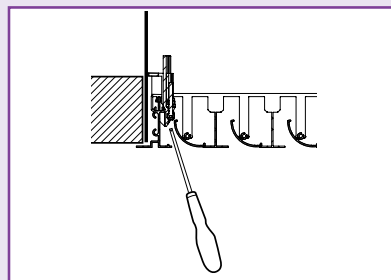
Push and clip at four attachments.

S3 attachment - stage 1



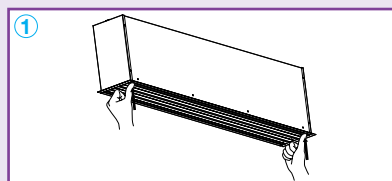
Install the diffuser underneath the plenum.

S3 attachment - stage 3

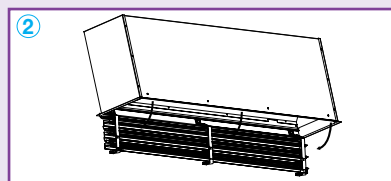


Screw to pin the diffuser to the plaster.

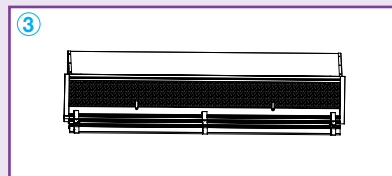
PROCEDURE TO FOLLOW



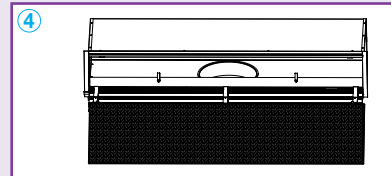
The opening of the core is push-push, by pushing on the two ends.
Make sure that the diffuser is fitted properly in the plenum with the core hinges opening pegs side.



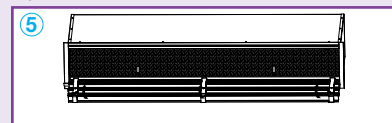
Opening of the diffuser core.



Raise the pegs to release the filter being replaced.



Insert the new filter by pressing the hinges on either side of the plenum and lower the pegs again.



Close the core again by pushing on the two push-push.

Diffusers with adjustable aluminium slots

LINED - LINED TP - LINED Slim - LINED Combined series

RANGE WITH CHOICE OF OPTIONS

Linear model	Code	TP Model	Code	Slim model	Code
LINED S	11002297	LINED TP S	11002307	LINED Slim S	11002294
LINED E	11002298	LINED TP E	11002308	LINED Slim E	11002295
LINED EO	11002299	LINED TP EO	11002309	LINED Slim EO	11002296
Plenum for LINED	11002135	Plenum for LINED TP	11002114	Plenum for LINED Slim	11002136

Combined opening model	Code	Combined plenum	Code
LINED SO	11002377	LINED Combined Linear plenum	11002197
LINED Slim SO	11002378	LINED Combined Slim plenum	11002198
LINED TP SO	11002379	LINED Combined TP plenum	11002199

Combined fixed model	Code	Combined plenum	Code
LINED S	11002297	LINED Combined Linear plenum	11002197
LINED S Slim	11002294	LINED Combined Slim plenum	11002198
LINED TP S	11002307	LINED Combined TP plenum	11002199

Model	Code
LINED KS Angle 90°	11002289
LINED KE Angle 90°	11002290

USE DIMENSIONS LINED LINEAR - SLIM SERIES

H/L (mm)	600	800	1000	1200	1400	1600	1800	2000
1	x	x	x	x	x	x	x	x
2	x	x	x	x	x	x	x	x
3	•	•	•	•	•	x	x	x
4	•	•	•	•	•	x	x	x
5	•	•	•	•	•	x	x	x
6	x	x	x	x	x	x	x	x
7	x	x	x	x	x	x	x	x
8	x	x	x	x	x	x	x	x

• Dimensions available on models LINED EO - LINED Slim EO - LINED SO - LINED Slim SO - Filter holder exhaust.

AVAILABLE OPTIONS

Mounting	Finish	Diffuser	Plenum
<ul style="list-style-type: none"> S2: attachment by self-tapping screws on the sides of the plenum. S3: concealed attachment to plenum adjustable and accessible via the underside of the diffuser. 	<ul style="list-style-type: none"> Anodisation natural satin-finish or white RAL 9010 30% Anthracite grey or white deflectors. Epoxy paint as per RAL colour chart. 	<ul style="list-style-type: none"> Whole section. Left or right end. Middle section. 	<ul style="list-style-type: none"> Special depth. Special diameter on branch connection. Additional branch connection.* Fresh air branch connection Ø 80, 100 or 125 mm. Acoustic or thermo-acoustic insulation. Plenum shorter than the diffuser (for inactive areas).* Damper fitted in plenum branch connection.** G3 filter built in.

* Not available for LINED Combined.

** Not available in models with filter.

USE DIMENSIONS LINED TP SERIES

H/AxB (mm)	600x300	1200x300	1350x300	1500x300	1800x300	600x600	1200x600	1350x600	1500x600	1800x600
1	x	x	x	x	x	x	x	x	x	x
2	x	x	x	x	x	x	x	x	x	x
3	•	•	•	•	x	•	•	•	•	x
4	•	•	•	•	x	•	•	•	•	x
5	•	•	•	•	x	•	•	•	•	x
6	x	x	x	x	x	x	x	x	x	x
7	-	-	-	-	-	x	x	x	x	x
8	-	-	-	-	-	x	x	x	x	x

• Dimensions available on models LINED TP EO - LINED TP SO - Filter holder exhaust.

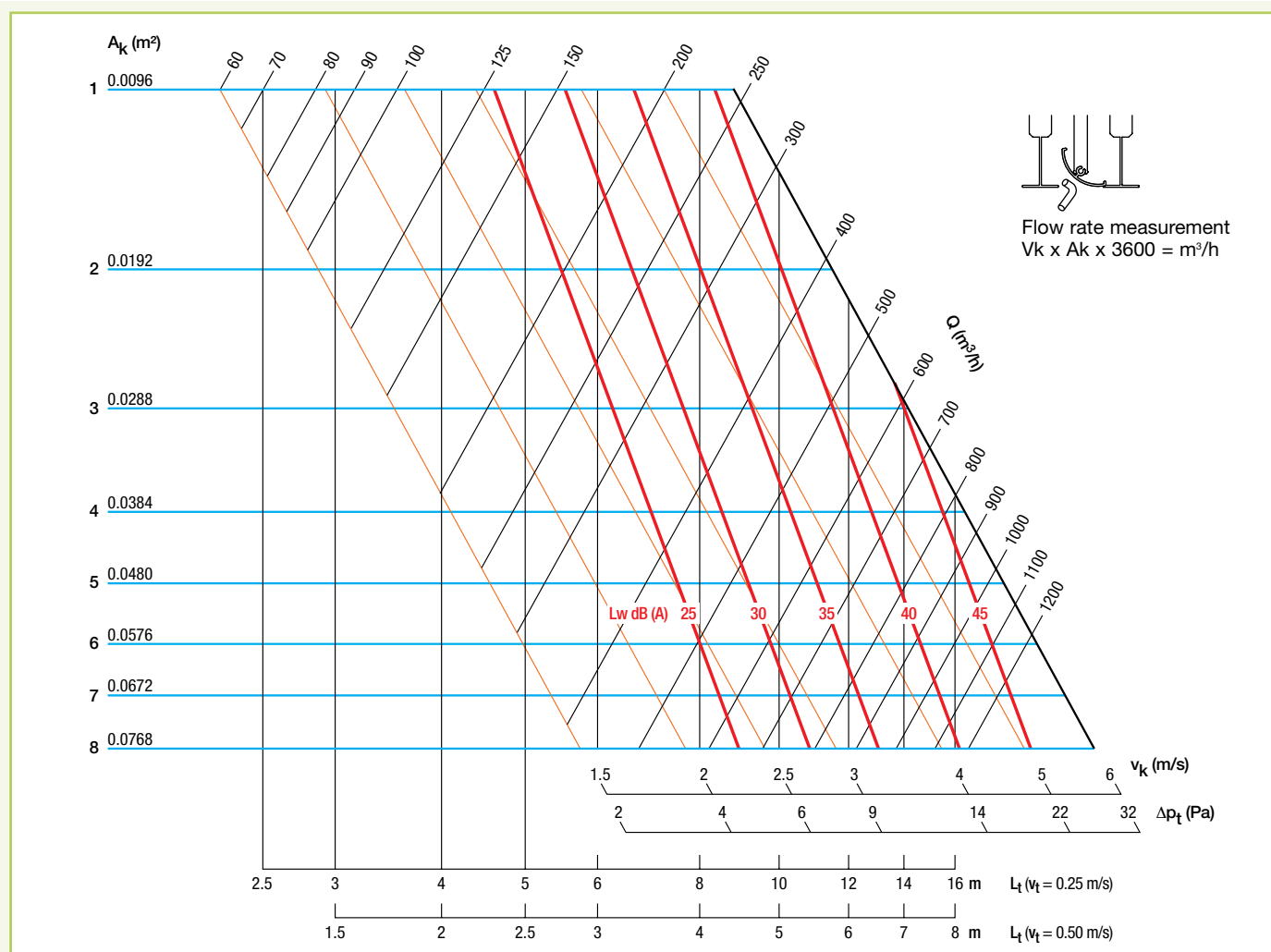
AVAILABLE OPTIONS

Mounting	Finish	Diffuser	Plenum
<ul style="list-style-type: none"> S2: attachment by self-tapping screws on the sides of the plenum. 	<ul style="list-style-type: none"> Painted white RAL 9010 30% Anthracite grey or white deflectors. Epoxy paint as per RAL colour chart. 	<ul style="list-style-type: none"> For Tbar or Fine-Line suspended ceilings Protective film. 	<ul style="list-style-type: none"> Special depth. Special diameter on branch connection. Additional branch connection. Fresh air branch connection Ø 80, 100 or 125 mm. Acoustic or thermo-acoustic insulation. Damper fitted in plenum branch connection.** G3 filter built in.

** Not available in models with filter.

Diffusers with adjustable aluminium slots

LINED - LINED TP - LINED Slim series - Air supply with ceiling effect - Length 1 m



The values L_w (dB (A)) do not take into account any attenuation by the building itself. Tests conducted with the standard plenum.

CORRECTIONS FOR OTHER VT

Vt (m/s)	0.25	0.37	0.5	0.63
Lt	x 1	x 0.67	x 0.5	x 0.4

CORRECTIONS FOR OTHER LENGTHS

L (m)	1	1.5	2	2.5	3	4	5	6	8	10
Lt (m)	x1	x1.05	x1.10	x1.10	x1.10	x1.10	x1.10	x1.10	x1.15	x1.15
Lw (dB(A))	0	+2	+3	+4	+5	+6	+7	+8	+9	+10

CORRECTIONS FOR DAMPER

No damper	Damper 100% open.	Damper 50% open.	Damper 25% open.
$\Delta P_t \times 1.00$	$\Delta P_t \times 1.00$	$\Delta P_t \times 2.25$	$\Delta P_t \times 5.90$
$L_w + 0$	$L_w + 0$	$L_w + 10$	$L_w + 20$

CORRECTIONS FOR VERTICAL AIR SUPPLY

$\Delta T^\circ(\text{K})$	-20	-15	-10	-5	0	+5	+10	+15	+20
Lt	x2.3	x1.84	x1.56	x1.2	x0.92	x0.64	x0.46	x0.37	x0.3

CORRECTIONS KOCT (DB) AND ATTENUATION L (DB) PER THIRDS OF OCTAVES

Slots	Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000
1		-9	-10	-11	-12	-7	-1.4	-1	-3	-8	-13	-15	-14	-18	-19	-20	-16	-24	-28	-32	-33	-35
2		-5	-7	-4	-6	-6	-5	-5	-4	-7	-9	-14	-10	-16	-20	-22	-24	-25	-29	-30	-32	-34
3		-3	-5	-5	-2	0	-2	-5	-6	-10	-7	-9	-11	-13	-14.5	-17	-19	-20.5	-25	-26	-33	-33.5
4		-2	-3	-2	2	-2	-6	-7	-12	-9	-11	-14	-14	-15	-18.5	-20	-26	-30	-31	-32	-32	-34
5		-1	-1	-1	5	-2	-7	-8	-11	-10	-13	-15	-16	-15	-21	-23	-31	-30	-33	-35	-37	-38
6		-1	-2	-1	7	-3	-8	-8	-12	-12	-14	-16	-17	-16	-23	-24	-33	-38	-34	-36	-36	-38
7		-1	-2	-1	8	-4	-9	-10	-13	-13	-15	-17	-18	-17	-24	-25	-34	-40	-36	-38	-40	-42
8		-1	-2	-1	10	-5	-10	-12	-14	-15	-17	-18	-19	-18	-25	-26	-36	-40	-38	-40	-41	-43
Tolerance +/-		1	1	2	0.5	0.5	0	1	1	1	1	1	2	2	3	4	3	4	4	3	1	1
Attenuation*		0	1	0	1	2	3	4	5	6	5	6	4	6	7	7	9	8	8	8	8	9

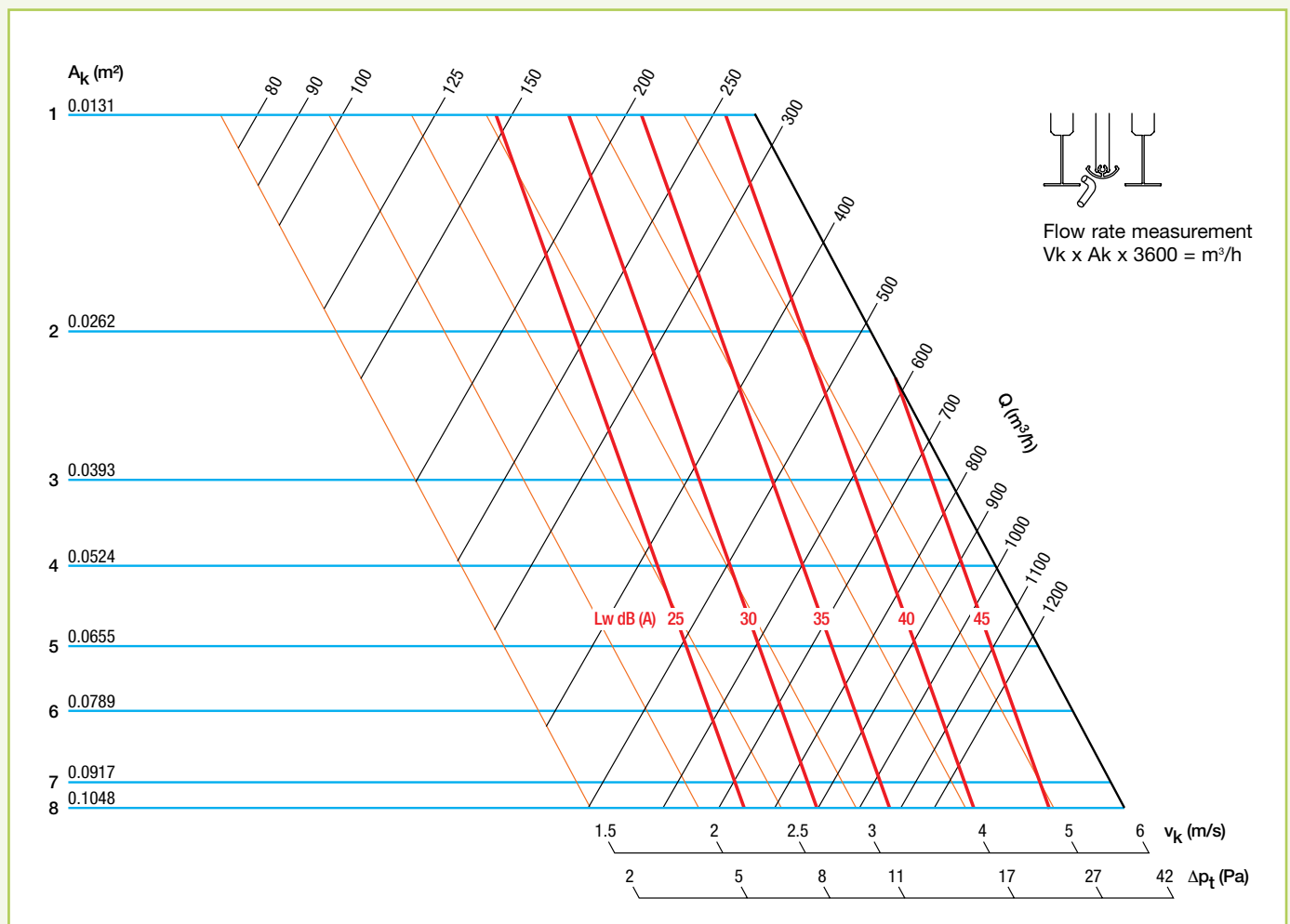
$L_{w\text{oct}} = L_w \text{ (dB(A))} + K_{\text{oct}} \text{ (dB)}$

$L_{w\text{oct attenuated}} = L_{w\text{oct}} - \Delta L$

*With acoustic or thermo-acoustic insulation of the plenum.

Diffusers with adjustable aluminium slots

LINED - LINED TP - LINED Slim series - Exhaust - Length 1 m



The values L_w (dB (A)) do not take into account any attenuation by the building itself. Tests conducted with the standard plenum.

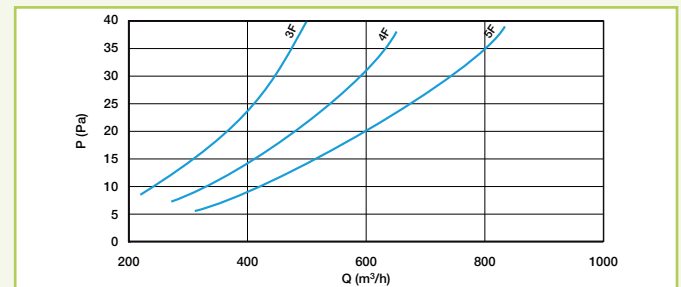
CORRECTIONS FOR OTHER LENGTHS

L (m)	1	1.5	2	2.5	3	4	5	6	8	10
L_w (dB(A))	0	+ 2	+ 3	+ 4	+ 5	+ 6	+ 7	+ 8	+ 9	+ 10

CORRECTIONS FOR DAMPER

No damper	Damper 100 % open.	Damper 50 % open.	Damper 25 % open.
$\Delta P_t \times 1.00$	$\Delta P_t \times 1.00$	$\Delta P_t \times 2.25$	$\Delta P_t \times 5.90$
$L_w + 0$	$L_w + 0$	$L_w + 10$	$L_w + 20$

HEAD LOSSES WITH FILTER G3 INCLUDED



CORRECTIONS KOCT (DB) AND ATTENUATION L (DB) PER THIRDS OF OCTAVES

Slots	Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000
1		-5	-3	-4	-4	-3	-2	-1	-5	-7	-9	-14	-15	-19	-20	-22	-23	-24	-22	-23	-24	-27
2		-3	-5	-5	-2	0	-2	-5	-6	-10	-7	-9	-11	-13	-14.5	-17	-19	-20.5	-25	-26	-27	-24
3		-2	-3	-2.5	-2	3	-3	-7	-9	-10	-15	-15	-12	-15	-15	-19	-21	-24	-26	-25	-26	-25
4		3	0	1	1	1	-3	-6	-8	-10	-12	-12	-13	-16	-20	-22	-24	-25	-20	-20	-17	-15
5		-1	-2	-1	7	-3	-8	-8	-12	-12	-14	-16	-17	-16	-23	-24	-33	-38	-34	-35	-35	-36
6		0	-1	0	8	-2	-7	-7	-12	-11	-12	-15	-16	-15	-22	-23	-33	-37	-33	-34	-37	-40
7		0	-1	0	8	-2	-7	-7	-11	-11	-13	-15	-16	-15	-22	-23	-32	-37	-33	-35	-34	-36
8		1	0	1	9	-1	-6	-6	-10	-10	-12	-14	-15	-14	-21	-22	-31	-36	-32	-35	-37	-38
Tolerance +/-		-0.4	1	1	0.4	0.3	4.3	0.4	0.5	1.3	1.2	1.2	2.4	2.2	2.1	2.8	3.4	1.6	1.2	0.3	0.3	0.2
Attenuation*		0	1	1	0	0	4	0	1	1	1	1	2	2	2	3	3	2	1	0	0	0

$L_{w\text{oct}} = L_w \text{ (dB(A))} + K_{\text{oct}} \text{ (dB)}$

$L_{w\text{oct attenuated}} = L_{w\text{oct}} - \Delta L$

*With acoustic or thermo-acoustic insulation of the plenum.

Diffusers with adjustable aluminium slots

LINED - LINED TP - LINED Slim series

SELECTION - AIR SUPPLY FOR LENGTH 1 M WITH CEILING EFFECT

Ak (m²)	Number of slots	Flow rate (m³/h)	100	150	200	250	300	400	500	600	800	1000	1200
0.0096	1	Lw (dB (A))	25	32	40	45							
		ΔP (Pa)	9	19	34	52							
		Lt (m)	3	4	5	7							
0.0192	2	Lw (dB (A))		25	25	30	35	42	48				
		ΔP (Pa)		5	9	14	19	34	52				
		Lt (m)		3	4	5	6	7	9				
0.0288	3	Lw (dB (A))				25	26	33	39	44			
		ΔP (Pa)				6	9	15	24	34			
		Lt (m)				4	5	6	8	9			
0.0384	4	Lw (dB (A))					25	27	33	38	45		
		ΔP (Pa)					5	9	14	19	34		
		Lt (m)					4	5	7	8	10		
0.0480	5	Lw (dB (A))						25	28	33	39	46	
		ΔP (Pa)						6	9	12	22	34	
		Lt (m)						5	6	7	9	12	
0.0576	6	Lw (dB (A))							25	29	36	42	47
		ΔP (Pa)							6	9	15	24	34
		Lt (m)							5	6	9	11	13
0.0672	7	Lw (dB (A))							25	25	33	39	43
		ΔP (Pa)							5	7	11	18	25
		Lt (m)							5	6	8	10	12
0.0768	8	Lw (dB (A))								25	30	36	40
		ΔP (Pa)								5	9	14	19
		Lt (m)								6	7	9	11

The values Lw (dB (A)) do not take into account any attenuation by the building itself. Vt = 0.37 m/s. Tests conducted with the standard plenum.

SELECTION - EXHAUST FOR A LENGTH OF 1 M

Ak (m²)	Number of slots	Flow rate (m³/h)	100	150	200	250	300	400	500	600	800	1000	1200
0.0131	1	Lw (dB (A))	25	29	37	43	47						
		ΔP (Pa)	7	15	27	42	60						
		ΔP2 (Pa)	-	-	-	-	-						
0.0262	2	Lw (dB (A))		25	25	27	32	40	45	50			
		ΔP (Pa)		4	7	11	15	27	42	60			
		ΔP2 (Pa)		-	-	-	-	-	-	-			
0.0393	3	Lw (dB (A))				25	25	31	36	41	49		
		ΔP (Pa)				5	7	12	19	27	47		
		ΔP2 (Pa)				10	14	24	38	54	95		
0.0524	4	Lw (dB (A))					25	25	30	35	42	48	
		ΔP (Pa)					4	7	11	15	27	42	
		ΔP2 (Pa)					8	14	21	31	54	84	
0.0655	5	Lw (dB (A))						25	25	30	37	43	48
		ΔP (Pa)						5	7	10	18	27	39
		ΔP2 (Pa)						9	14	20	35	54	77
0.0786	6	Lw (dB (A))							25	26	33	39	44
		ΔP (Pa)							5	7	12	19	27
		ΔP2 (Pa)							10	14	24	38	54
0.0917	7	Lw (dB (A))							25	25	30	36	40
		ΔP (Pa)							4	5	9	14	20
		ΔP2 (Pa)							7	10	18	28	40
0.1048	8	Lw (dB (A))								25	27	33	37
		ΔP (Pa)								4	7	11	15
		ΔP2 (Pa)								8	14	21	31

The values Lw (dB (A)) do not take into account any attenuation by the building itself. ΔP2=with filter G3 included. Tests conducted with the standard plenum.

Diffusers with adjustable aluminium slots

LINED Combined series

SELECTION - AIR SUPPLY + EXHAUST FOR LENGTH 1 M WITH CEILING EFFECT

Ak (m²)	Number of slots	Flow rate (m³/h)	100	150	200	250	300	400	500	600
0.0096	1	Lw (dB (A))	40							
		ΔP1 (Pa)	34							
		ΔP2 (Pa)	42							
		ΔP3 (Pa)	-							
		Lt (m)	5							
0.0192	2	Lw (dB (A))	25	35	42	48				
		ΔP1 (Pa)	9	19	34	52				
		ΔP2 (Pa)	11	24	41	64				
		ΔP3 (Pa)	-	-	-	-				
		Lt (m)	4	6	7	9				
0.0288	3	Lw (dB (A))		26	33	39	44			
		ΔP1 (Pa)		9	15	24	34			
		ΔP2 (Pa)		11	19	29	41			
		ΔP3 (Pa)		17	31	50	-			
		Lt (m)		5	6	8	9			
0.0384	4	Lw (dB (A))		25	27	33	38	45		
		ΔP1 (Pa)		5	9	14	19	34		
		ΔP2 (Pa)		6	11	17	24	41		
		ΔP3 (Pa)		11	19	26	39	-		
		Lt (m)		4	5	7	8	10		
0.0480	5	Lw (dB (A))			25	28	33	39	46	
		ΔP1 (Pa)			6	9	12	22	34	
		ΔP2 (Pa)			7	11	15	27	42	
		ΔP3 (Pa)			11	19	25	44	-	
		Lt (m)			5	6	7	9	12	
0.0576	6	Lw (dB (A))				23	29	36	42	47
		ΔP1 (Pa)				6	9	15	24	34
		ΔP2 (Pa)				8	11	19	29	41
		ΔP3 (Pa)				-	-	-	-	-
		Lt (m)				5	6	9	11	13
0.0672	7	Lw (dB (A))				20	24	33	39	43
		ΔP1 (Pa)				5	7	11	18	25
		ΔP2 (Pa)				6	8	14	21	31
		ΔP3 (Pa)				-	-	-	-	-
		Lt (m)				5	6	8	10	12
0.0768	8	Lw (dB (A))					21	30	36	40
		ΔP1 (Pa)					5	9	14	19
		ΔP2 (Pa)					6	11	17	24
		ΔP3 (Pa)					-	-	-	-
		Lt (m)					6	7	9	11

Data valid for a diffuser with centred partition (air supply length = exhaust length). Please consult us for other configurations.
The values Lw (dB (A)) do not take into account any attenuation by the building itself. Tests conducted with the standard plenum.

ΔP1 = air supply only

ΔP2 = exhaust only

ΔP3 = exhaust with filter

SPECIFICATION TEXT

- The ceiling diffusers will be linear with slots 25 mm wide and with adjustable deflectors allowing horizontal or vertical diffusion or air exhaust.
- They may be opening with push-push system for easy access to the filter placed in the plenum.
- The Combined versions operation air supply and exhaust with a single diffuser.
- The deflectors will be positioned in the centre of each slot providing both excellent air diffusion by Coanda effect and appearance.
- The linear models will be installed in the plaster ceilings using a simple and rapid clip system.
- The SLIM models will have a thin frame for perfect integration in the ceilings.
- The TP models will be installed in the place of a standard suspending ceiling tile.
- They may be fitted with a damper built into the plenum, accessible from the front panel of the diffuser.
- They will be in anodised aluminium or painted white RAL 9010 matt or another other RAL as chosen by the architect.
- LINED type, Aldes brand.

Diffusers with adjustable aluminium slots

LINED



Advantages

- Elegant, sober design.
- Identical aesthetics for air supply and exhaust.
- Adjustable air diffusion.
- Filtration possible on exhaust.
- Replaces a standard suspended ceiling tile.
- Suited to T frame or Fine-Line frameworks.
- Combined air supply + exhaust version in the same diffuser.

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