



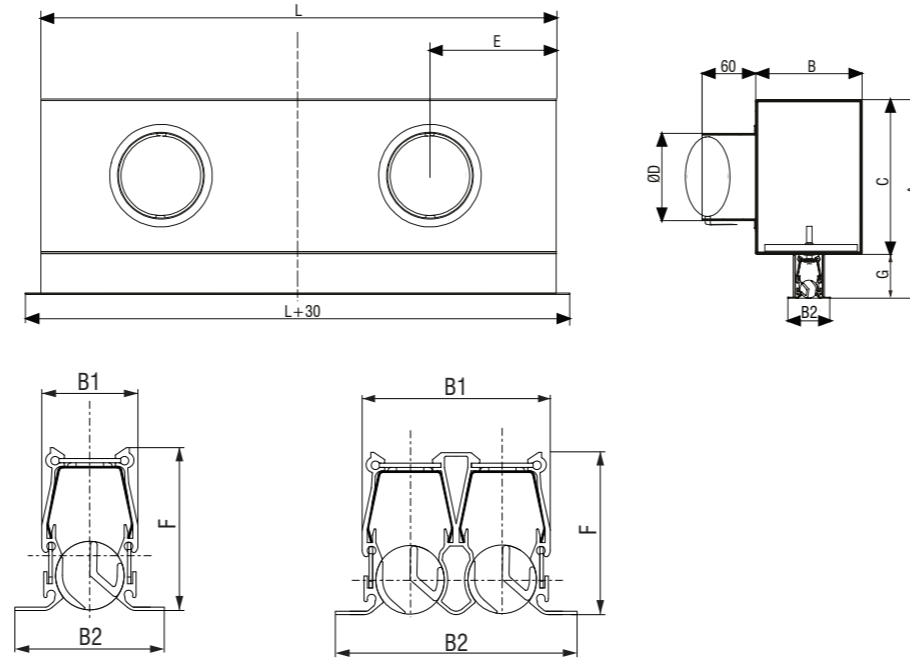
Product manual

Linear diffusers

LDD, LDF, LDM, LDA, LDH

Air distribution

Version 1.1.9.1
Date: 19.05.2021



- ▼ LDD Linear drum diffuser
- ▼ LDF Fixed linear diffuser
- ▼ LDM Slide adjustable linear diffuser
- ▼ LDA Rotate adjustable linear diffuser
- ▼ LDH Flush mounted linear diffuser

LDD

Linear diffusers with 30 mm (LDD-30) and 50 mm (LDD-50) discharge element diameter. Discharge elements are individually adjustable, providing flexibility to meet various space requirements. Linear diffusers LDD are ideal for highly discrete architectural applications, with accessories for easy inline combination of multiple diffusers and plenum boxes.

- Ceiling diffuser for room heights to 4 m
- Made out of anodized aluminium profiles
- 1-row, 2-row, 3-row and 4-row version
- Length from 300 to 2000 mm (step 100 mm)
- Sound and thermal insulation option for plenum boxes
- Possible all standard RAL powder coating options for diffusers

DIFFUSER \ LDD

AIR DISTRIBUTION

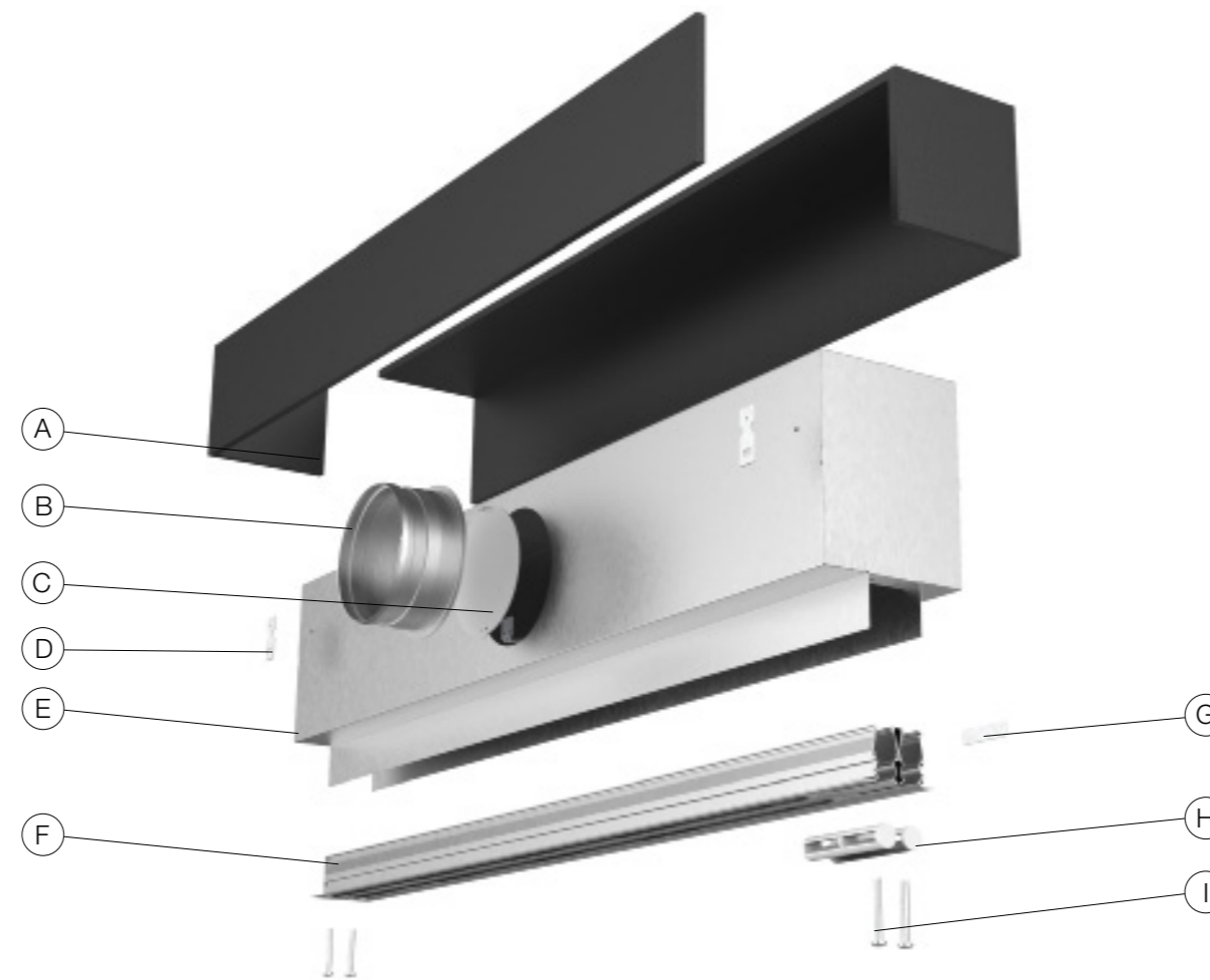
DIMENSIONS

Type	No. of slots	A _{ef} [m ²]	L [mm]	V [m ³ /h]	h [m]	B1 [mm]	B2 [mm]	A [mm]	B [mm]	C [mm]	øD [mm]	No of rollers	E [mm]	F [mm]	G [mm]	
LDD 30	1	0,00752	do 1000	40 -130	2,7 -4,0	28	47,5	221	120	174	98	1	L/2	47		
			1100-1500								98		300			
			1600-2000								123		400			
	2	0,01504	do 1000	70 -240	2,7 -4,5	55	74,5	236	150	189	158	1	L/2	47		
											1100-1500		123			300
											1600-2000		158			400
	3	0,02256	do 1000	120 -320	3,0 -5,0	82	101,5	261	179	215	158	1	L/2	47	47,5	
											1100-1500		158			300
											1600-2000		198			400
	4	0,03008	do 1000	160 -400	3,5 -5,0	109	128,5	301	210	255	198	1	L/2	47		
											1100-1500		158			300
											1600-2000		198			400

Type	No. of slots	A _{ef} [m ²]	L [mm]	V [m ³ /h]	h [m]	B1 [mm]	B2 [mm]	A [mm]	B [mm]	C [mm]	øD [mm]	No of rollers	E [mm]	F [mm]	G [mm]	
LDD 50	1	0,01504	do 1000	75 -210	2,7 -4,0	43,5	71	252	130	195	123	1	L/2	57		
			1100-1500								123		300			
			1600-2000								158		400			
	2	0,03008	do 1000	130 -390	2,7 -4,5	93,5	121	272	180	215	158	1	L/2	57		
											1100-2000		158			300
											1600-2000		198			400
	3	0,04512	do 1000	195 -520	3,0 -5,0	143,5	171	312	230	255	198	1	L/2	57	57,5	
											1100-1500		158			300
											1600-2000		198			400
	4	0,06016	do 1000	260 -650	3,5 -5,0	193,5	221	337	280	280	248	1	L/2	57		
											1100-1500		198			300
											1600-2000		248			400



Easy connection of multiple diffusers in line with serial connection piece



- A 5 side insulation
- B Plenum connection
- C RD regulation damper
- D Mounting suspension
- E Galvanized steel casing
- F LDD diffuser
- G End plates and joints
- H Discharge elements
- I Mounting screw

- ▼ LDD Linear drum diffuser
- ▼ LDF Fixed linear diffuser
- ▼ LDM Slide adjustable linear diffuser
- ▼ LDA Rotate adjustable linear diffuser
- ▼ LDH Flush mounted linear diffuser



ORDERING KEY / LDD

AIR DISTRIBUTION

ORDERING KEY LDD

(1) Diffuser model (2) Number of slots (3) Diffuser length (4) Discharge element color (5) RAL

LDD30	-	2	-	2000	-	S	-	RAL
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- (1) LDD30
LDD50
- (2) 1/2/3/4
- (3) Diffusers length
(500...2000 mm in 100 mm increments)
- (4) C - black discharge elements
B - white discharge elements
S - grey discharge elements
- (5) RAL

ORDERING KEY LDD Plenum box

(1) Plenum box (2) Diffuser model (3) Number of slots (4) Diffuser length (5) Insulation (6) No. of connections / diameter

PBL-D	-	30	-	1	-	500	-	Z	-	1x98
-------	---	----	---	---	---	-----	---	---	---	------

- (1) PBL-D plenum box
- (2) 30 - LDD30
50 - LDD50
- (3) 1/2/3/4
- (4) Diffusers length
(500...2000 mm in 100 mm increments)
- (5) Z - internal insulation
- (6) 1x98 2x98
1x123 2x123
1x158 2x158
1x198 2x198
1x248 2x248

* Diffuser comes standard with two alignment pins



End profile L



A Connection seal
B Corner section

- ▼ LDD Linear drum diffuser
- ▼ LDF Fixed linear diffuser
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- ▼ LDH Flush mounted linear diffuser

⊕ ACCESSORIES / LDD

AIR DISTRIBUTION

ORDERING KEY Connection seal

(1) Connection seal (2) Plenum box diameter [mm]

LDD -A-SL	-	98
(1) SL		
(2) 98		
123		
158		
198		
248		

ORDERING KEY End profile

(1) Connection seal (2) Diffuser model (3) Number of slots (4) RAL

LDD-A-L	-	30	-	2	-	RAL
(1) L - End profile		(3) Number of slots (1, 2, 3, 4)				
(2) 30 - LDD30		(4) RAL				
50 - LDD50						

ORDERING KEY Corner section

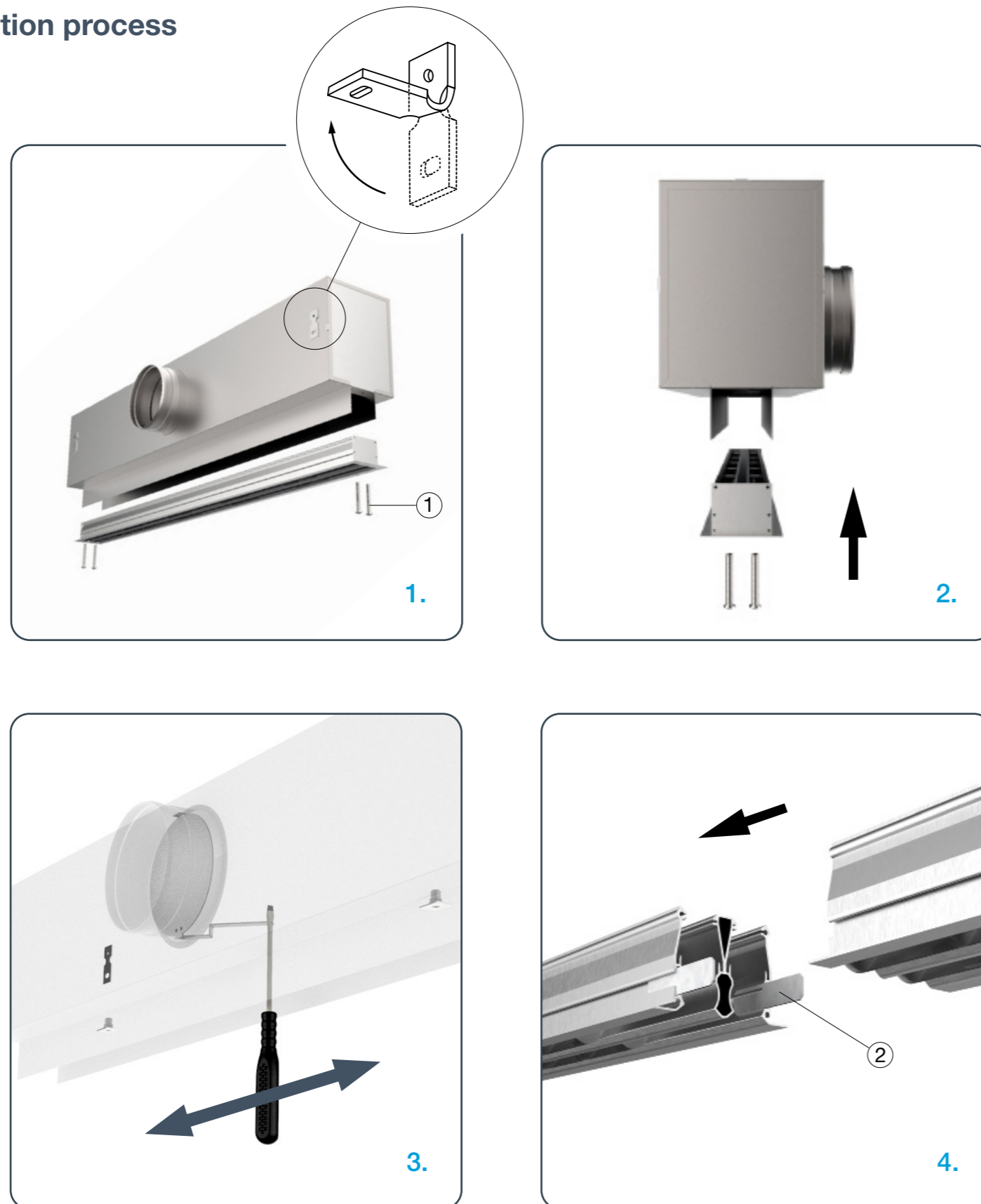
(1) Corner section (2) Number of slots (3) Diffuser angle (4) Discharge element color (5) RAL

LDD-A-CS- 30	-	2	-	90°	-	B	-	RAL	-
(1) LDD-A-CS-30 LDD-A-CS-50						(4) C - black discharge elements B - white discharge elements S - grey discharge elements			
(2) 1/2/3/4						(5) RAL			
(3) 90°									

Corner section LDD

- Angular blind joints do not have the function of air flow
- External dimensions: - L=300 x 300 mm
- angle 90°

Installation process LDD



- ▼ LDD Linear drum diffuser
- ▼ LDF Fixed linear diffuser
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- ▼ LDH Flush mounted linear diffuser



LDD DIFFUSER

1. Inspect the products before the installation for transport damage and shortcomings. In case of any damage or shortcomings, immediately contact your supplier.

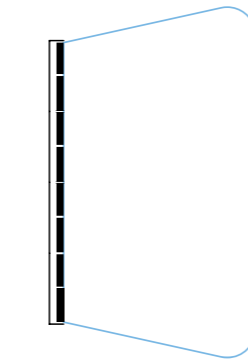
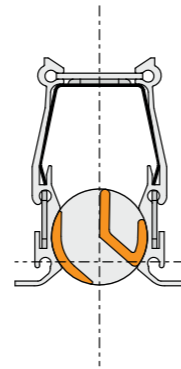
Locate the four mounts on the sides of PBL-D box and bend them 90°. Suspend the box on the drop rods (8/10 mm) on the wanted height.

2. Install the plenum box flush with the ceiling and suspend it appropriately. Fix the diffuser with screws (1) in the plenum box.

3. To adjust airflow, insert screwdriver into PBL-D box and move RD damper handle left or right.

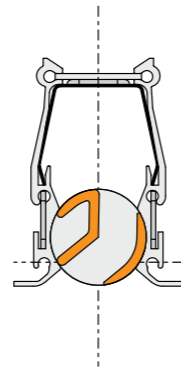
4. For installation of multiple diffusers in line, alignment pins (2) are provided with the diffuser. Insert a alignment pin (2 each per diffuser) on one side, then connect the next diffuser to it.

* Lengths >1500 mm have cross-bar in the middle of the diffuser!



One-way horizontal air discharge to the right

- ▼ LDD Linear drum diffuser
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One-way horizontal air discharge to the left

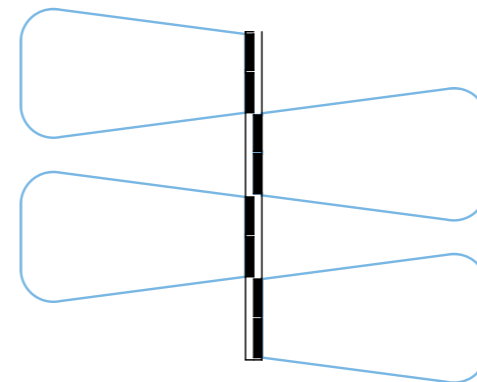
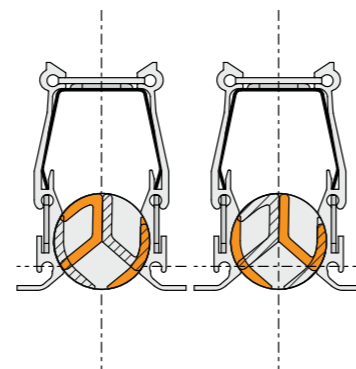


LDD DIFFUSER

Setting of the discharge patterns

Individual diffusion elements can be manually adjusted according to the needs in the room. Depending on the setting air discharge can be directed with all discharge elements on one side or alternating with discharge on both sides.

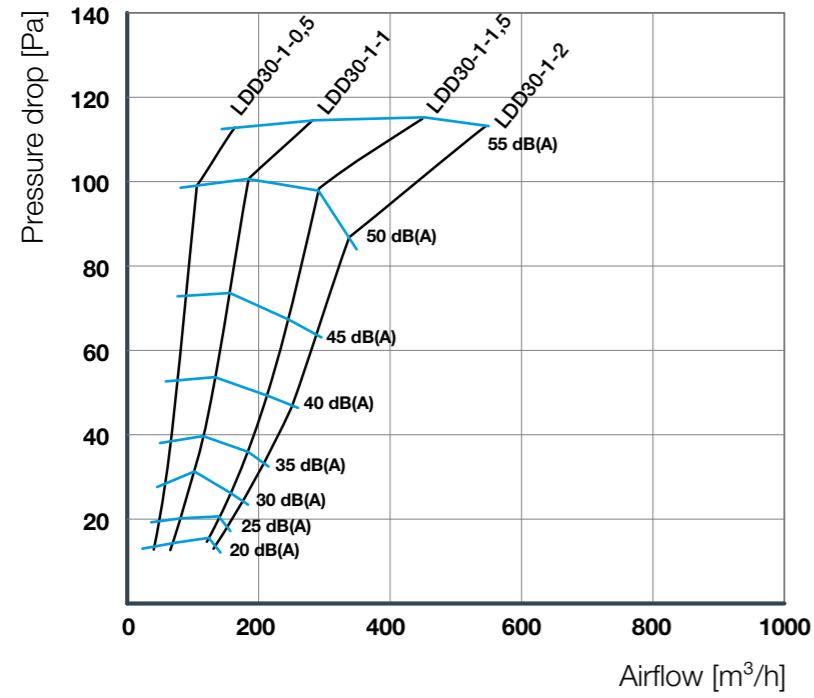
When the diffuser is used for a supply air, usual discharge angles are from 0° to 40° respective to the ceiling.



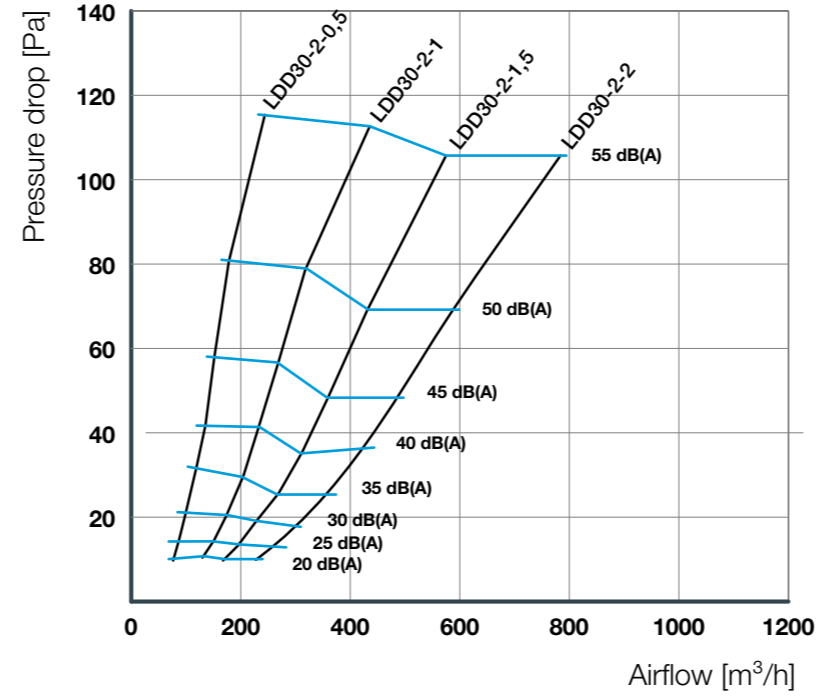
Alternating air control elements (every second element different)

Sound and pressure drop LDD30

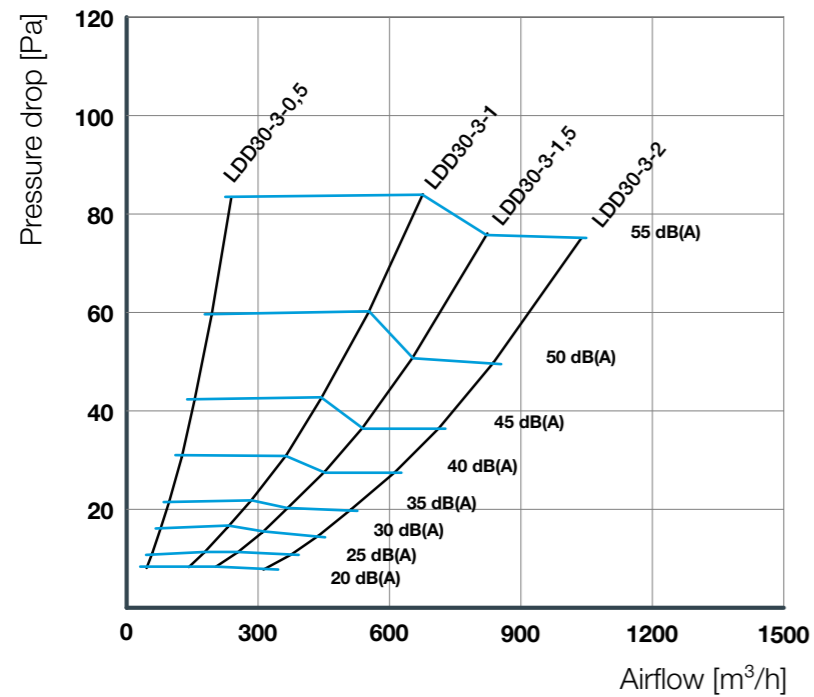
LDD30-1



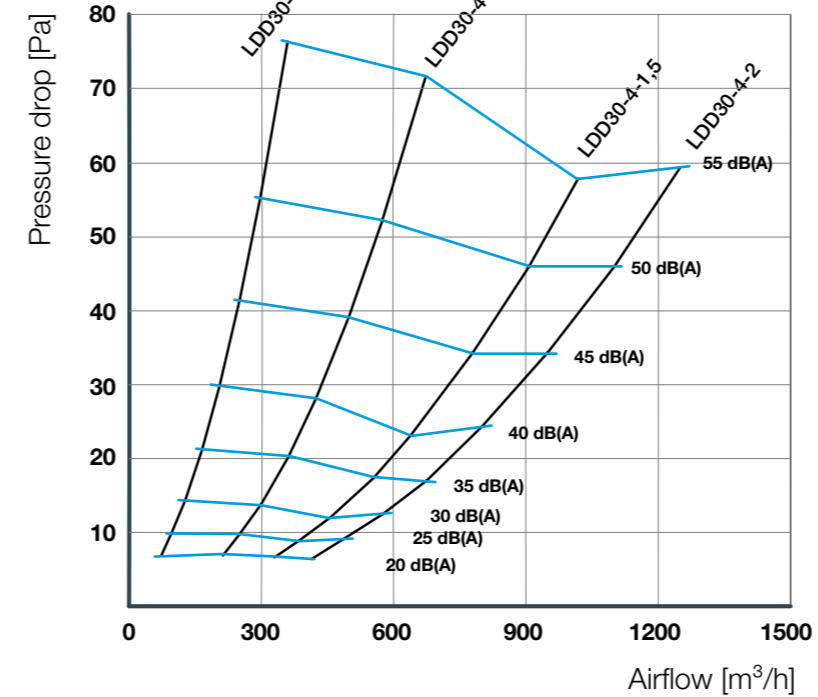
LDD30-2



LDD30-3



LDD30-4



- ▼ LDD Linear drum diffuser
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[SolveAir link](#)

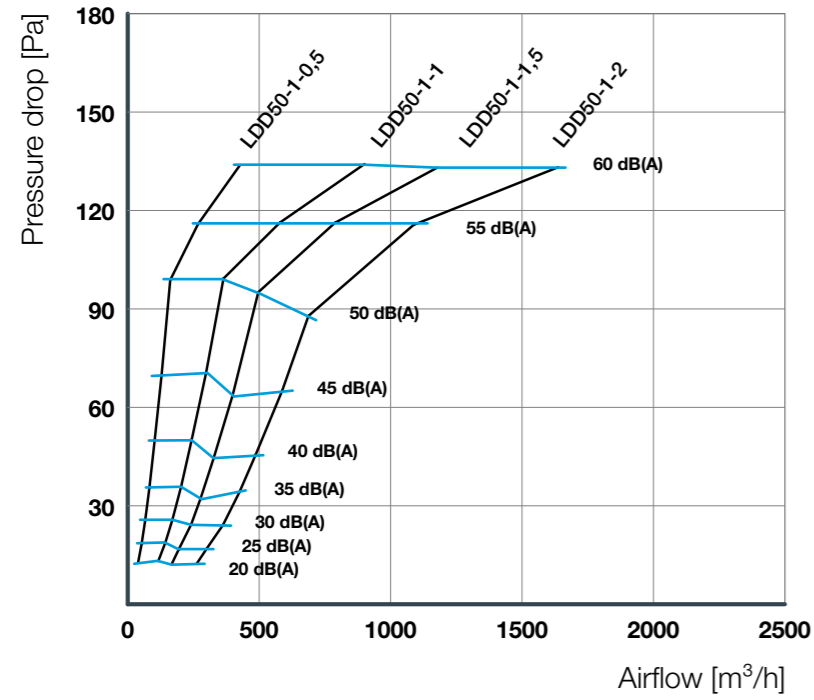


DIAGRAMS

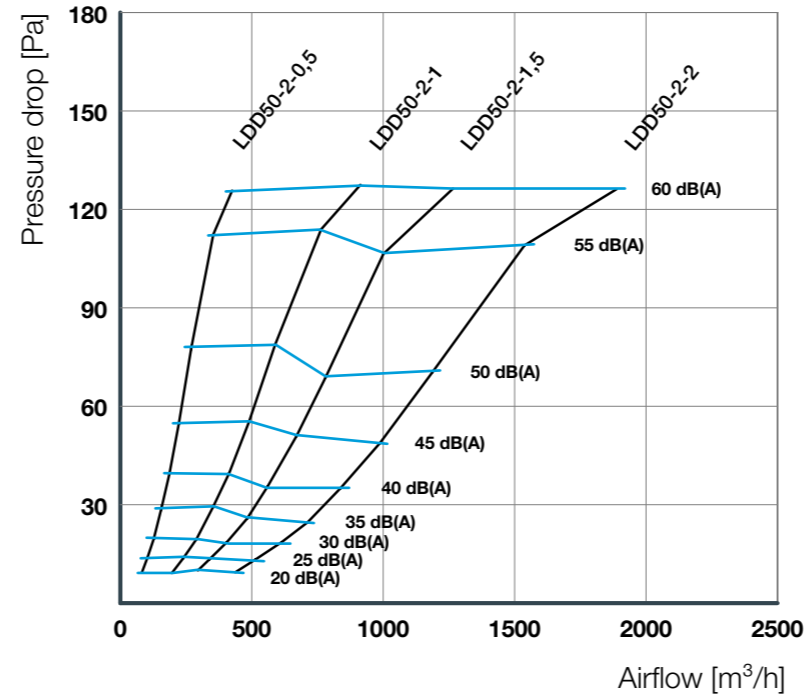
LDD DIFFUSER

Sound and pressure drop LDD50

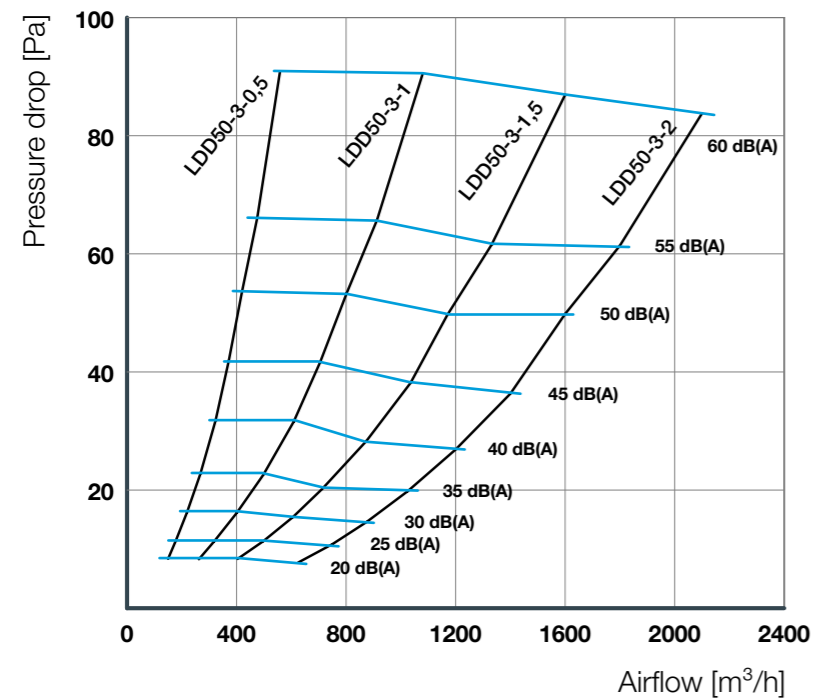
LDD50-1



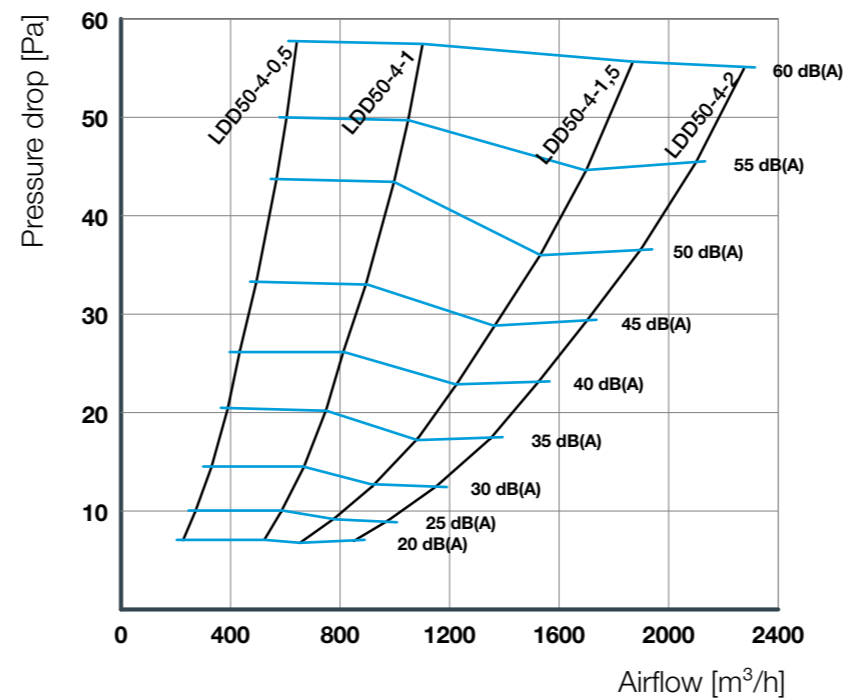
LDD50-2



LDD50-3



LDD50-4



- ▼ LDD Linear drum diffuser
- ▼ LDF Fixed linear diffuser
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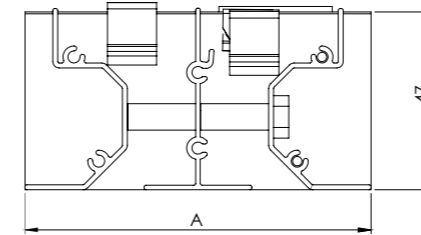
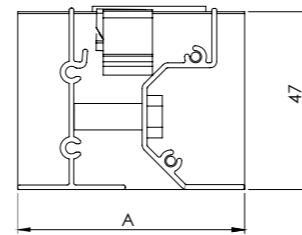
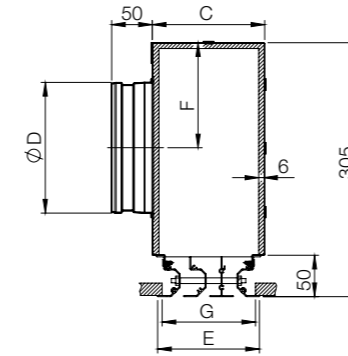
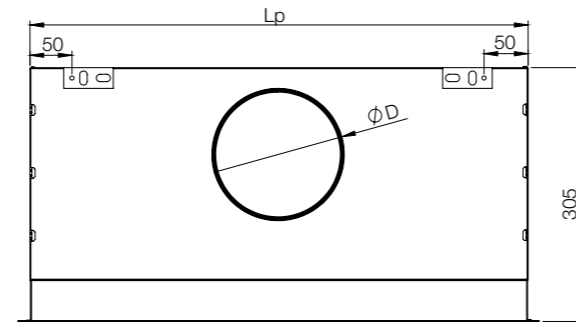


[SolveAir link](#)



DIAGRAMS

LDD DIFFUSER

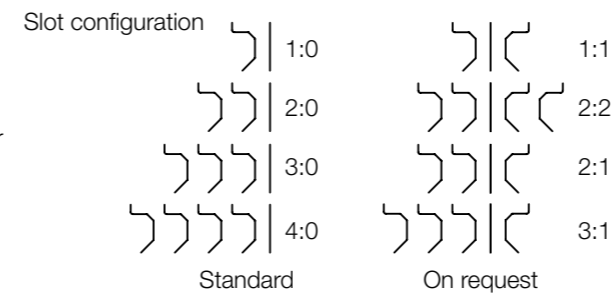


- ▼ LDD Linear drum diffuser
- ▼ LDF Fixed linear diffuser
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- ▼ LDA Rotate adjustable linear diffuser
- ▼ LDH Flush mounted linear diffuser

LDF

Linear diffuser with fixed horizontal air jet.
Suitable for horizontal supply and variable flow: when the flow is low, the air stream follows the contours of the diffuser (Coanda effect). Usable up to 25% of maximum flow rate.

- Diffuser:
- Casing and frame in extruded aluminium
 - Finish: painted aluminium, matt white RAL 9003
- Plenum: galvanized steel
- Version removable plenum (clips), supplied not fitted to diffuser
 - Plenum with integrated damper
- Options:
- Other RAL colours



DIFFUSER \ LDF

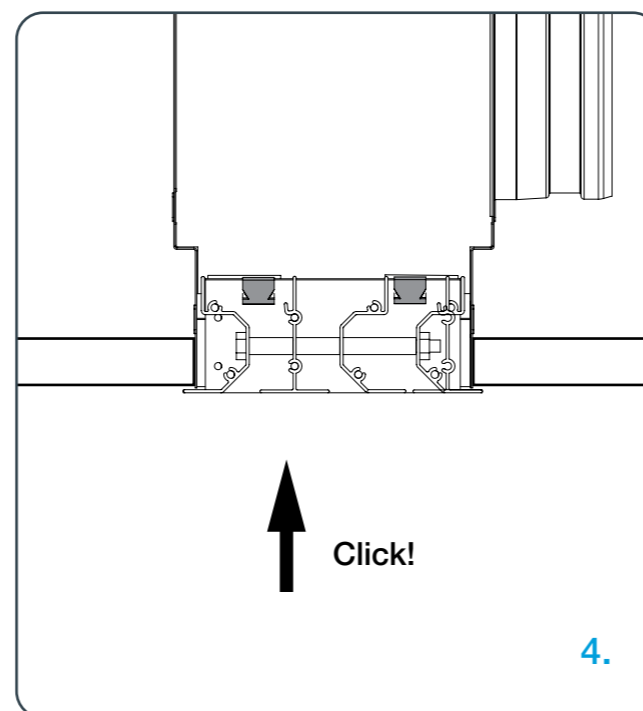
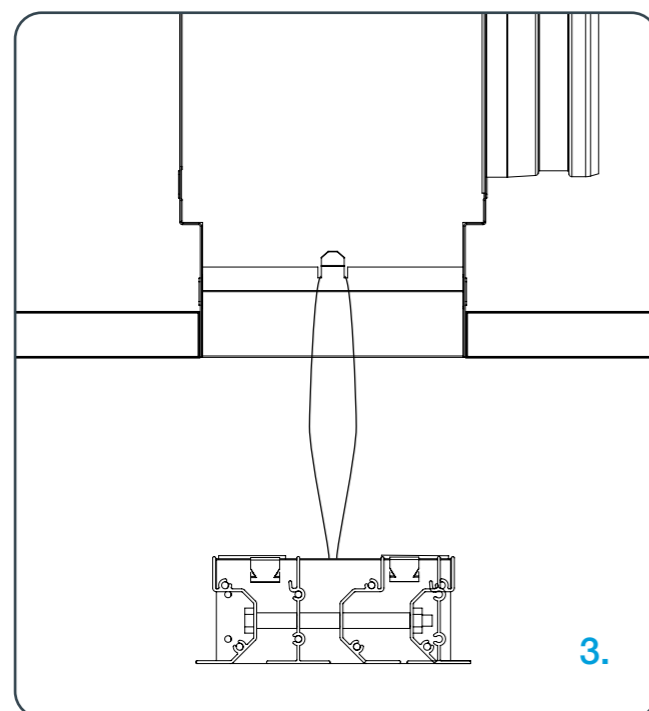
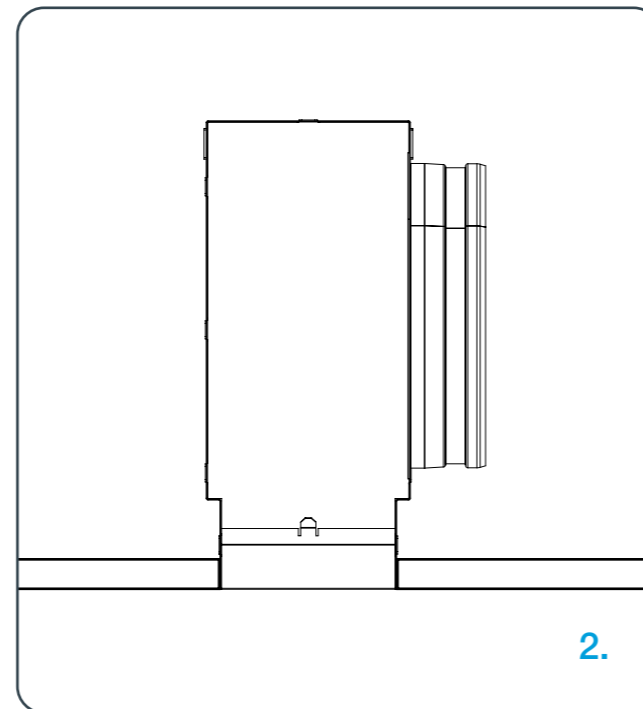
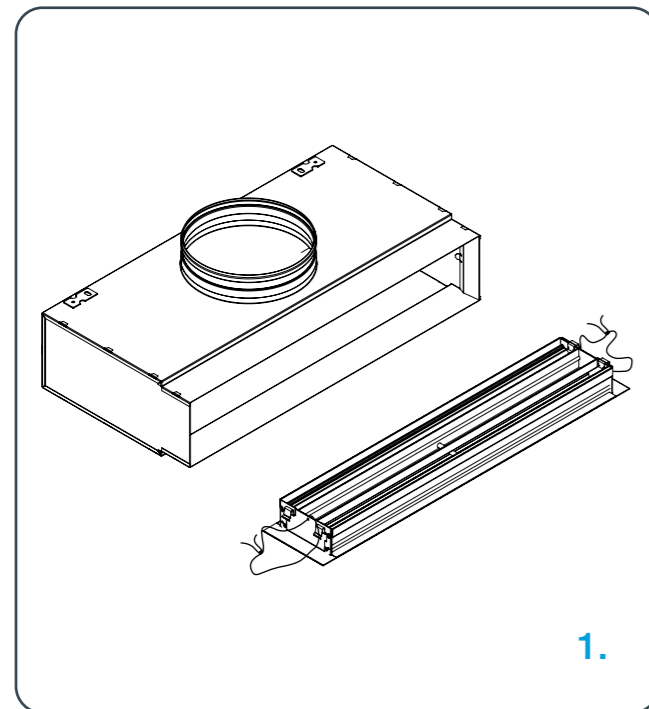
AIR DISTRIBUTION

DIMENSIONS	Type	No. of slots	Slot lay-out	L [mm]	B [mm]	E [mm]	G [mm]	Lp [mm]	C [mm]	No. of spigots	Ø D [mm]	F [mm]				
LDF	1	1:0		275	330	60	50	300	79	1	100	77				
				575	630			600		1	125	89,5				
				875	930			900		1	160	107				
				1175	1230			1200		1	200	107				
	2	2:0			275	330	91,5	81,5	300	99	1	125	107			
					575	630			600		1	200	127			
					875	930			900		1	200	127			
					1175	1230			1200		1	200	127			
		1:1				575			630	123	113	600	105	2	200	127
						875			930			900		1	200	127
						1175			1230			1200		1	200	127
						1200			2			200		127		
	3	3:0			275	330	154,5	144,5	300	131	1	160	107			
					575	630			600		2	200	127			
					875	930			900		1	200	127			
					1175	1230			1200		2	200	127			
		2:1				275			330	169		300	137	1	200	127
						575			630			600		2	200	127
						875			930			900		1	200	127
						1175			1230			1200		2	200	127
4	3:1 - 2:2			275	330	163		300	163	1	200	127				
				575	630			600		2	200	127				
	4:0				875			930		900	1	200	127			
					1175			1230		1200	2	200	127			

ORDERING KEY

(1) Diffuser model	(2) Number of slots	(3) Diffuser length	(4) RAL	(5) Plenum box	(6) Insulation
LDF	- 2	- 1175	- RAL		
(1) LDF				PBL-F	Z
(2) 1 (1:0) 2 (2:0, 1:1) 3 (3:0, 2:1) 4 (4:0, 3:1, 2:2)				(5) PBL-F	
(3) Diffusers length: 275 575 875 1175					(6) Internal insulation
(4) RAL					

Installation process LDF



- ▼ LDD Linear drum diffuser
- ▼ LDF Fixed linear diffuser
- ▼ LDM Slide adjustable linear diffuser
- ▼ LDA Rotate adjustable linear diffuser
- ▼ LDH Flush mounted linear diffuser



LDF DIFFUSER

1. Inspect the products before the installation for transport damage and shortcomings. In case of any damage or shortcomings, immediately contact your supplier.
2. Install the plenum box flush with the ceiling and suspend it appropriately
3. Secure the diffuser to the plenum box using the strings provided with the diffuser
4. Gently push the diffuser in the plenum box until you hear the "click" sound that the diffuser is set properly in the plenum box.

Sound and pressure drop LDF

Airflow rate [m³/h]	Size A _{ef} [m²]	275-1	275-2 575-1	275-3 875-1	275-4 575-2 1175-1	575-3 875-2	575-4 1175-2	875-3	875-4 1175-3	1175-4
50	X [m]	1,9								
	Pt [Pa]	11								
	NR	< 20								
100	X [m]	3,8	2,6	2,1	1,9					
	Pt [Pa]	44	10	4	3					
	NR	30	< 20	< 20	< 20					
150	X [m]	5,7	4,0	3,2	2,8					
	Pt [Pa]	99	23	10	6					
	NR	41	27	< 20	< 20					
200	X [m]		5,3	4,3	3,7	3,0	2,6	2,5	2,1	
	Pt [Pa]		40	17	10	4	2	2	1	
	NR		35	27	22	< 20	< 20	< 20	< 20	
300	X [m]			6,4	5,6	4,5	3,9	3,7	3,2	2,8
	Pt [Pa]			39	23	10	5	4	2	1
	NR			38	33	25	< 20	< 20	< 20	< 20
400	X [m]			8,5	7,5	6,0	5,2	4,9	4,3	3,7
	Pt [Pa]			69	40	17	10	8	4	2
	NR			46	41	33	27	25	< 20	< 20
500	X [m]				9,3	7,6	6,5	6,2	5,3	4,6
	Pt [Pa]				63	27	15	12	7	4
	NR				47	41	33	31	26	20
600	X [m]					9,1	7,8	7,4	6,4	5,5
	Pt [Pa]					39	22	17	10	5
	NR					44	38	36	31	25
700	X [m]					10,6	9,1	8,6	7,5	6,5
	Pt [Pa]					53	29	24	13	7
	NR					48	43	41	35	29
900	X [m]						11,7	11,1	9,6	8,3
	Pt [Pa]						49	39	22	12
	NR						50	48	42	36
1000	X [m]								10,6	9,2
	Pt [Pa]								27	15
	NR								45	39
1200	X [m]									11,1
	Pt [Pa]									22
	NR									44
1400	X [m]									12,9
	Pt [Pa]									29
	NR									49

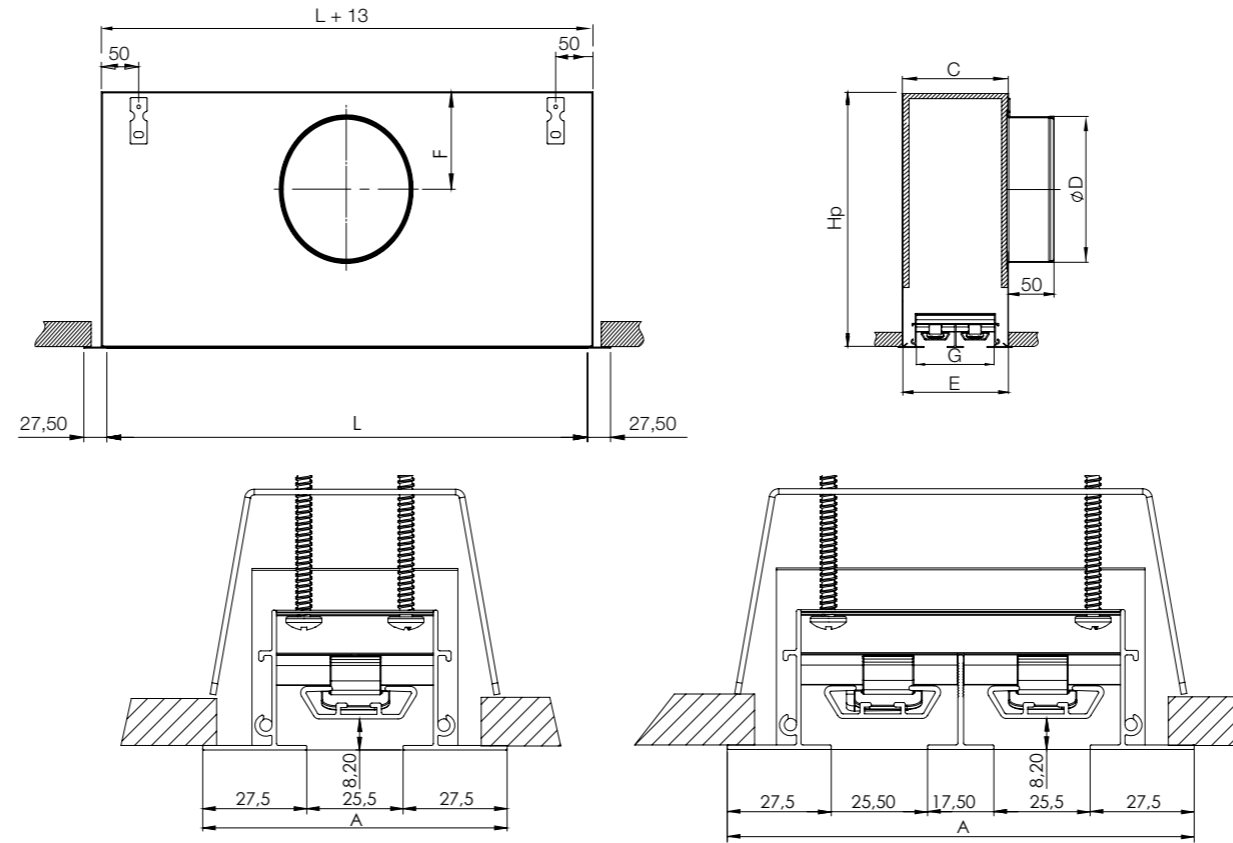
	NR < 25
	25 NR < 35
	35 NR < 45
	NR 45

X (m): range for a maximum velocity in the occupied space of Vt = 0,25 m/s.
Pt (Pa): Total pressure.
NR: Noise Rating. Sound power without attenuation in the room Lw = NR + 5 dB(A) approx.

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 DIAGRAMS

LDF DIFFUSER



LDM

Specially designed for ceiling installation, the diffusers allow direction of the air jet over 180° (horizontal or vertical supply). Small change in pressure drop with change in the direction of the air jet.

- Attractive appearance: slots concealed by the deflectors
- Can be used for high airflows
- (RAL) on request
- Number of slots: 1 to 6
- Option to assemble several units to make an attractive linear strip (max.: 20 m)
- Angled pieces for creating corners

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DIFFUSER \ LDM

AIR DISTRIBUTION

DIMENSIONS	Type	No. of slots	L [mm]	E [mm]	G [mm]	Hp [mm]	C [mm]	F [mm]	No. of spigots
LDM	1	1	575	80	73	275	70	87	1 x Ø 125
			875						1 x Ø 125
			1175						2 x Ø 125
			1475						2 x Ø 160
			575						1 x Ø 160
			875						1 x Ø 160
	2	2	1175	123	116	275	113	105	2 x Ø 160
			1475						2 x Ø 160
			575						1 x Ø 200
			875						1 x Ø 200
			1175						2 x Ø 200
			1475						2 x Ø 200
	3	3	575	166	159	325	156	125	1 x Ø 200
			875						1 x Ø 200
			1175						2 x Ø 200
			1475						2 x Ø 200
			575						1 x Ø 200
			875						1 x Ø 200
	4	4	1175	209	202	325	199	125	1 x Ø 200
			1475						2 x Ø 200
			575						1 x Ø 250
			875						1 x Ø 250
			1175						2 x Ø 250
			1475						2 x Ø 250
5	5	575	252	243	375	242	150	1 x Ø 250	
		875						1 x Ø 250	
		1175						2 x Ø 250	
		1475						2 x Ø 250	
		575						1 x Ø 250	
		875						1 x Ø 250	
6	6	1175	295	288	375	285	150	1 x Ø 250	
		1475						2 x Ø 250	
		575						1 x Ø 250	
		875						1 x Ø 250	

ORDERING KEY

(1) Diffuser model	(2) Number of slots	(3) Diffuser length	(4) RAL	(5) Plenum box	(6) Insulation
LDM	2	1175	RAL		
(1) LDM				PBL-M	Z
(2) 1/2/3/4/5/6				(5) PBL-M	
(3) Diffusers length:		575 875 1175 1475			(6) Internal insulation
(4) RAL					

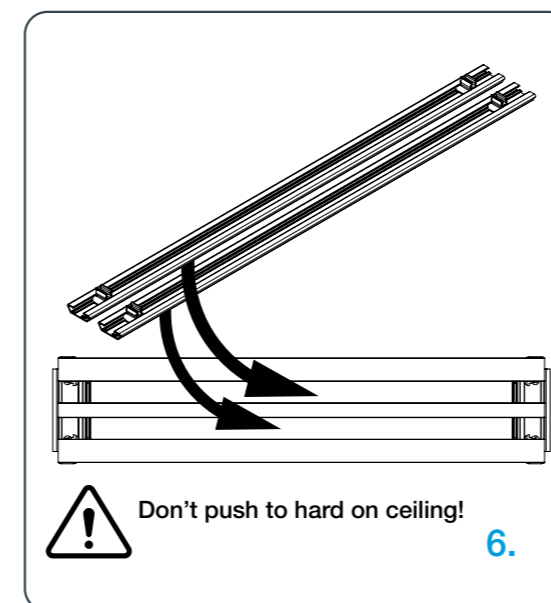
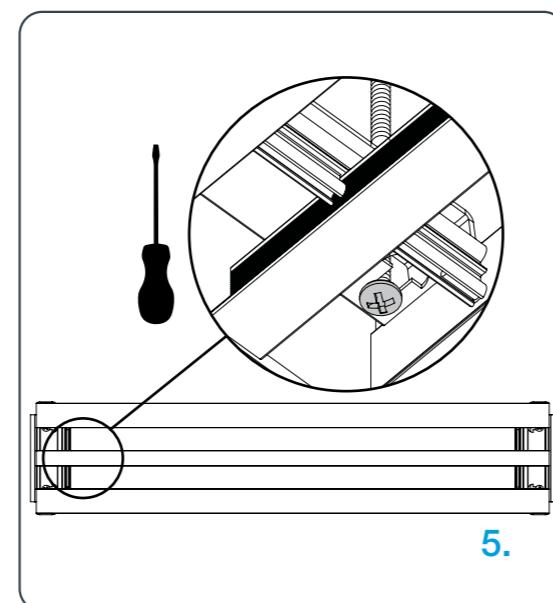
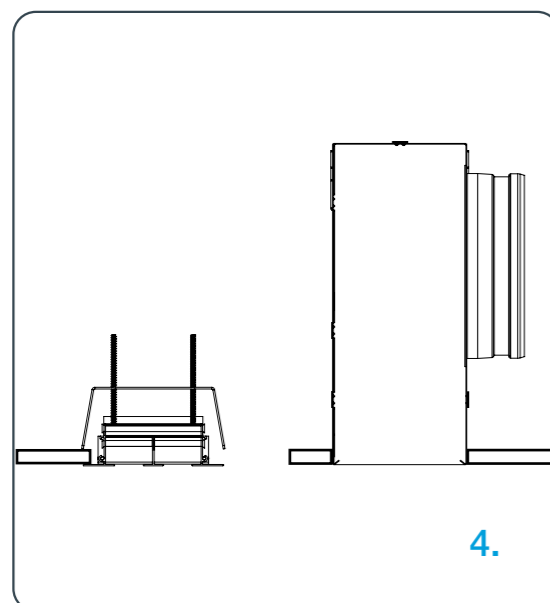
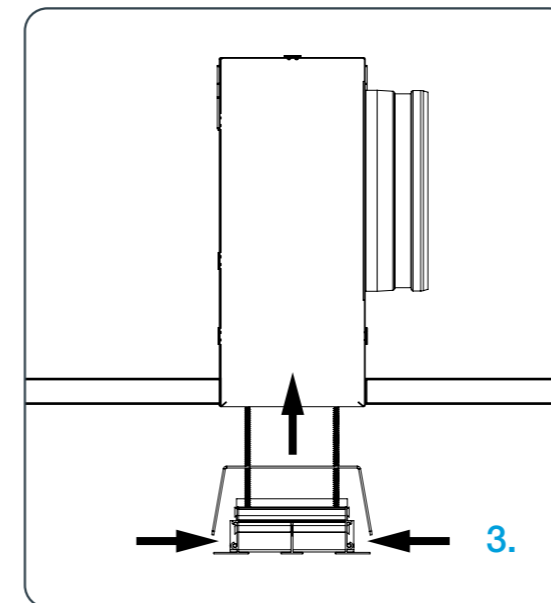
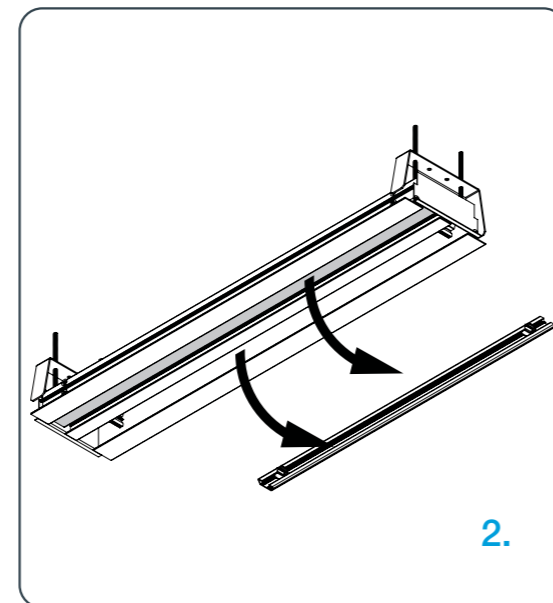
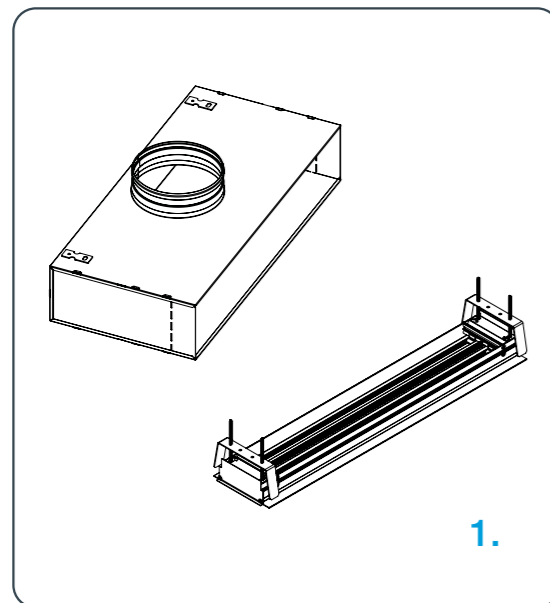
Installation process LDM

- ▼ LDD Linear drum diffuser
- ▼ LDF Fixed linear diffuser
- ▼ LDM Slide adjustable linear diffuser
- ▼ LDA Rotate adjustable linear diffuser
- ▼ LDH Flush mounted linear diffuser



LDM DIFFUSER

1. Inspect the products before the installation for transport damage and shortcomings. In case of any damage or shortcomings, immediately contact your supplier.
2. Take out the deflectors from the diffuser
3. In case of diffuser installation without a plenum box, adjust the clips to the thickness dimension of the ceiling boards.
4. Tighten the diffuser to the ceiling or the plenum box with the screwdriver
5. Reinstall back the deflectors by attaching them to the appropriate pins in diffuser



Sound and pressure drop LDM

Airflow rate [m³/h]	Size A _{ef} [m²]	575-1 0,0066	875-1 0,0101	1175-1 0,0133	575-2 0,0135	1475-1 0,0170	575-3 0,0199	875-2 0,0202	575-4 0,0265	875-3 0,0303	1475-2 0,0340	875-4 0,0404	1175-3 0,0406	1475-3 0,0510	1475-3 0,0510	1175-4 0,0542	1175-4 0,0680
50	X [m]	1,4	1,1														
	Pt [Pa]	8	3														
	NR	< 20	< 20														
100	X [m]	2,8	2,3	2,0	2,0	1,8	1,6	1,6									
	Pt [Pa]	31	13	6	7	5	3	3									
	NR	29	20	< 20	< 20	< 20	< 20	< 20									
150	X [m]		3,4	3,0	3,0	2,6	2,4	2,4	2,1	2,1	2,0	1,9					
	Pt [Pa]		30	13	17	11	6	6	3	3	3	2					
	NR		30	24	23	< 20	< 20	< 20	< 20	< 20	< 20	< 20					
200	X [m]		4,6	4,0	4,0	3,5	3,3	3,2	2,8	2,8	2,6	2,5	2,3	2,3	2,0		
	Pt [Pa]		54	24	30	19	11	10	6	6	5	4	3	3	2		
	NR		37	31	30	25	22	21	< 20	< 20	< 20	< 20	< 20	< 20	< 20		
300	X [m]			6,0	5,9	5,3	4,9	4,9	4,2	4,2	4,0	3,7	3,4	3,4	3,1	3,0	2,6
	Pt [Pa]			54	67	43	24	23	13	13	10	8	6	6	4	3	2
	NR			41	40	35	32	31	25	25	22	< 20	< 20	< 20	< 20	< 20	< 20
400	X [m]					7,1	6,5	6,5	5,7	5,6	5,3	5,0	4,6	4,6	4,1	4,0	3,5
	Pt [Pa]					76	42	41	24	23	18	15	10	10	6	6	4
	NR					42	39	38	32	32	29	27	23	23	< 20	< 20	< 20
500	X [m]						8,2	8,1	7,1	7,0	6,6	6,2	5,7	5,7	5,1	4,9	4,4
	Pt [Pa]						66	64	37	36	28	23	16	16	10	9	6
	NR						44	44	37	37	35	32	28	28	23	22	< 20
600	X [m]						9,8	9,7	8,5	8,4	7,9	7,5	6,9	6,9	6,1	5,9	5,3
	Pt [Pa]						95	93	54	51	41	33	23	23	15	13	8
	NR						48	48	42	41	39	36	33	32	27	26	21
700	X [m]								9,9	9,8	9,3	8,7	8,0	8,0	7,1	6,9	7,9
	Pt [Pa]								73	70	56	44	32	31	20	18	18
	NR								46	45	43	40	36	36	31	30	31
900	X [m]										11,9	11,2	10,3	10,3	9,2	8,9	7,9
	Pt [Pa]										93	73	52	51	33	29	18
	NR										49	46	42	42	37	36	31
1000	X [m]											12,5	11,5	11,4	10,2	9,9	8,8
	Pt [Pa]											91	64	64	40	36	23
	NR											49	45	45	40	38	33
1200	X [m]																
	Pt [Pa]																
	NR																
1400	X [m]																
	Pt [Pa]																
	NR																
1800	X [m]																
	Pt [Pa]																
	NR																
2000	X [m]																
	Pt [Pa]																
	NR																

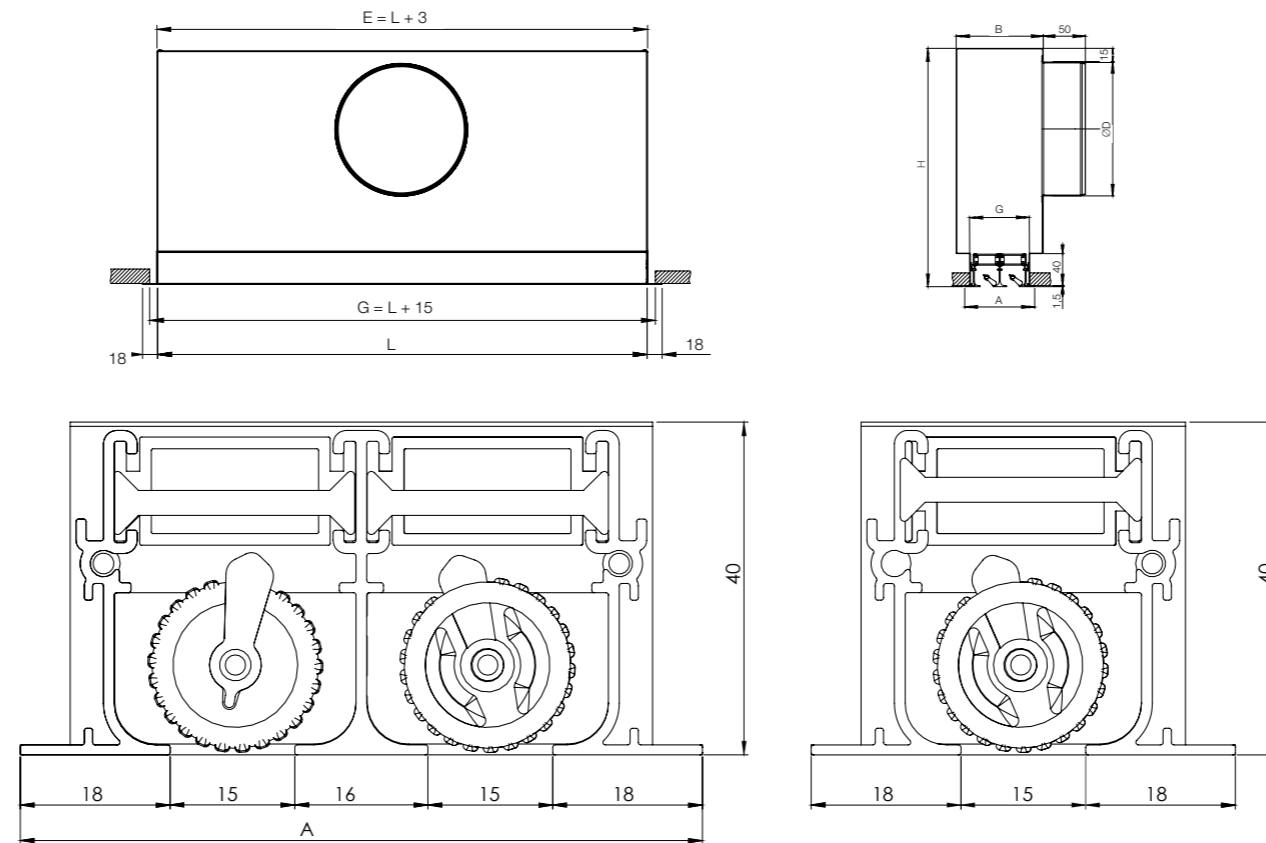
- LDD Linear drum diffuser
- LDF Fixed linear diffuser
- LDM Slide adjustable linear diffuser
- LDA Rotate adjustable linear diffuser
- LDH Flush mounted linear diffuser



LDM DIFFUSER

- NR < 25
- 25 NR < 35
- 35 < NR < 45
- NR > 45

X (m): range for a maximum velocity in the occupied space of V_t = 0,25 m/s.
 Pt (Pa): Total pressure.
 NR: Noise Rating. Sound power without attenuation in the room
 L_w = NR +5 dB(A) approx.



- ▼ LDD Linear drum diffuser
- ▼ LDF Fixed linear diffuser
- ▼ LDM Slide adjustable linear diffuser
- ▼ LDA Rotate adjustable linear diffuser
- ▼ LDH Flush mounted linear diffuser

LDA

Linear diffuser with thin slots, horizontal or vertical airflow. Specially designed for ceiling installation. LDA airflow can be adjusted manually by rotating the directable deflector. Casing and frame are made of aluminium and directable deflectors in matt white RAL 9003 aluminium.

- Number of slots: 1 to 4
- 6 slot lengths as standard: 585, 885, 1000, 1185, 1485 and 1785 mm
- Deflector direction can be adjusted by thumb-wheel
- Non standard RAL on request

DIFFUSER \ LDA

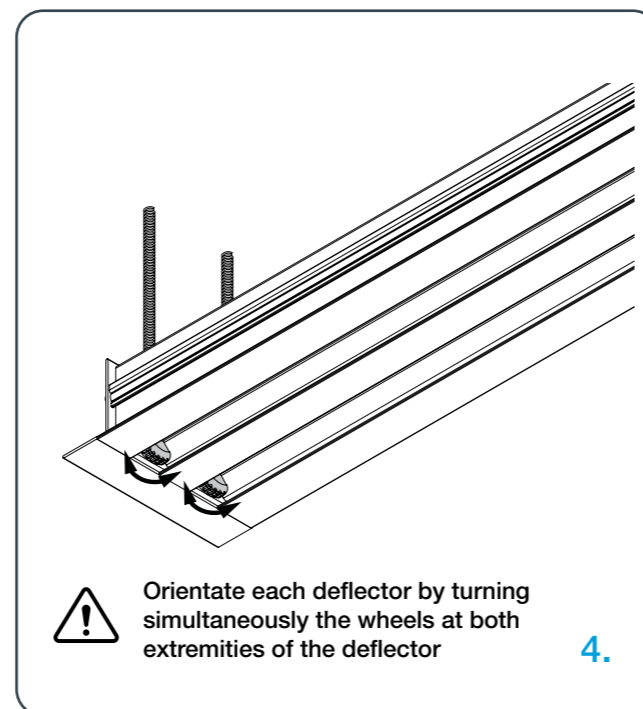
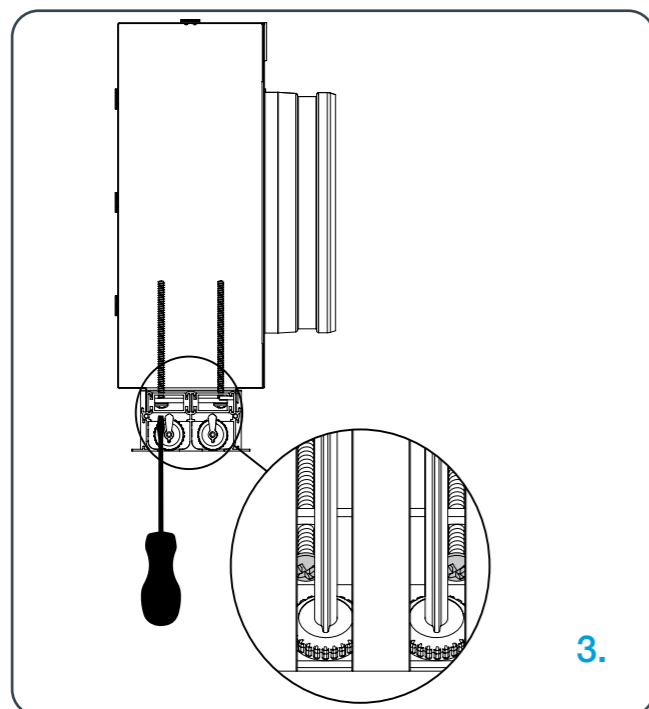
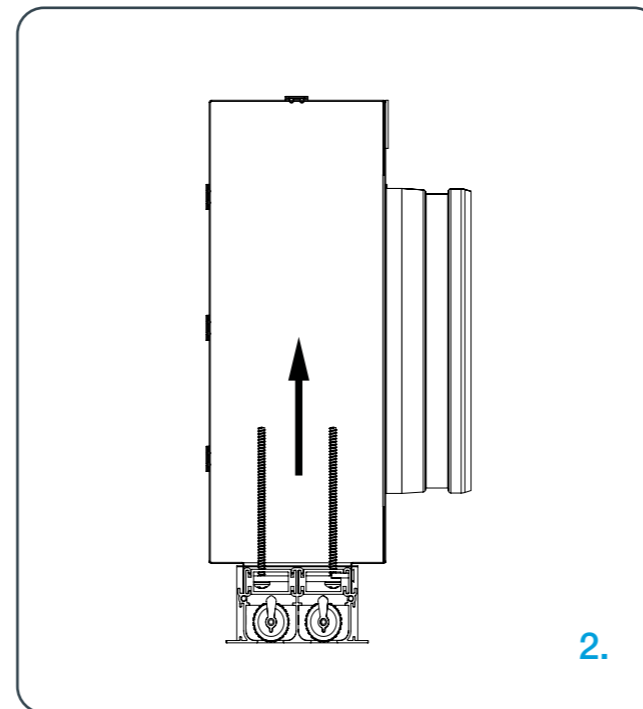
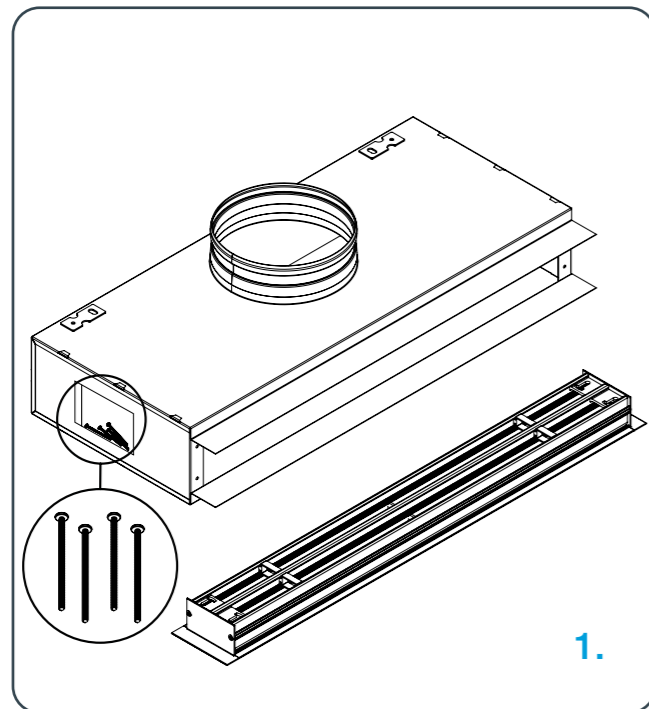
AIR DISTRIBUTION

DIMENSIONS	Type	No. of slots	L [mm]	V [m³/h]	H [mm]	B [mm]	G [mm]	A [mm]	No. of spigots
LDA	1		585	40 - 300	240	72	43	51	1 x Ø 125
			885						1 x Ø 125
			1 000						1 x Ø 125
			1 185						1 x Ø 160
			1 485						2 x Ø 125
			1 785						2 x Ø 125
	2		585	40 - 400	280	102	74	82	1 x Ø 160
			885						1 x Ø 160
			1 000						1 x Ø 160
			1 185						1 x Ø 200
			1 485						2 x Ø 160
			1 785						2 x Ø 160
	3		585	50 - 600	325	132	105	113	1 x Ø 160
			885						1 x Ø 200
			1 000						1 x Ø 200
			1 185						1 x Ø 200
			1 485						2 x Ø 160
			1 785						2 x Ø 160
	4		585	50 - 800	325	162	136	144	1 x Ø 200
			885						1 x Ø 200
1 000			1 x Ø 200						
1 185			1 x Ø 200						
1 485			2 x Ø 160						
1 785			2 x Ø 200						

ORDERING KEY

(1) Diffuser model	(2) Number of slots	(3) Diffuser length	(4) RAL	(5) Plenum box	(6) Insulation
LDA	- 2	- 1000	- RAL		
(1) LDA				PBL-A	- Z
(2) 1/2/3/4				(5) PBL-A	
(3) Diffusers length:		585 885 1000 1185 1485 1785			(6) Internal insulation
(4) RAL					

Installation process LDA



- ▼ LDD Linear drum diffuser
- ▼ LDF Fixed linear diffuser
- ▼ LDM Slide adjustable linear diffuser
- ▼ LDA Rotate adjustable linear diffuser
- ▼ LDH Flush mounted linear diffuser



LDA DIFFUSER

1. Inspect the products before the installation for transport damage and shortcomings. In case of any damage or shortcomings, immediately contact your supplier. Find the screws delivered with the product on the side of the plenum box.
2. Install the diffuser in the plenum box
3. Tighten the diffuser with the screwdriver
4. Adjust the deflectors by turning the wheels at the corners of the deflectors

Sound and pressure drop LDA

Airflow rate [m³/h]	Size A _{ef} [m²]	585-1	885-1	585-2 1185-1	1485-1	585-3 885-2 1485-1	585-4 1185-2	885-3	1485-2	885-4 1185-3	1485-3	1185-4	1785-3	1485-4	1785-4
				0,0070	0,0106	0,0140	0,0178	0,0211	0,0281	0,0319	0,0356	0,0425	0,0535	0,0569	0,0643
40	X [m]	2,3	1,9	1,7	1,5										
	Pt [Pa]	4,2	1,8	1,1	0,7										
	NR	< 20	< 20	< 20	< 20										
50	X [m]	2,9	2,4	2,1	1,8	1,7	1,5								
	Pt [Pa]	6,6	2,9	1,6	1,0	0,7	0,4								
	NR	< 20	< 20	< 20	< 20	< 20	< 20								
60	X [m]	3,5	2,8	2,5	2,2	2,0	1,8	1,6	1,6	1,4					
	Pt [Pa]	9,5	4,1	2,4	1,5	1,1	0,6	0,5	0,4	0,3					
	NR	23	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20					
80	X [m]	4,7	3,8	3,3	2,9	2,7	2,3	2,2	2,1	1,9					
	Pt [Pa]	16,8	7,4	4,2	2,6	1,9	1,1	0,8	0,7	0,5					
	NR	29	23	< 20	< 20	< 20	< 20	< 20	< 20	< 20					
100	X [m]	5,8	4,7	4,1	3,7	3,4	2,9	2,7	2,6	2,4	2,1	2,0	1,9	1,8	1,7
	Pt [Pa]	26,3	11,5	6,6	4,1	2,9	1,6	1,3	1,0	0,7	0,5	0,4	0,3	0,3	0,2
	NR	34	28	23	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
150	X [m]		7,1	6,2	5,5	5,1	4,4	4,1	3,9	3,6	3,2	3,1	2,9	2,7	2,5
	Pt [Pa]		25,8	14,8	9,2	6,6	3,7	2,9	2,3	1,6	1,0	0,9	0,7	0,6	0,4
	NR		37	32	28	26	21	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
200	X [m]			8,3	7,3	6,7	5,8	5,5	5,2	4,7	4,2	4,1	3,9	3,7	3,3
	Pt [Pa]			26,3	16,3	11,7	6,6	5,1	4,1	2,9	1,8	1,6	1,3	1,0	0,7
	NR			39	35	32	28	25	24	21	< 20	< 20	< 20	< 20	< 20
250	X [m]				9,2	8,4	7,3	6,8	6,5	5,9	5,3	5,1	4,8	4,6	4,2
	Pt [Pa]				25,5	18,3	10,3	8,0	6,4	4,5	2,8	2,5	2,0	1,6	1,1
	NR				40	37	32	30	29	26	22	21	< 20	< 20	< 20
300	X [m]					10,1	8,8	8,2	7,8	7,1	6,3	6,1	5,8	5,5	5,0
	Pt [Pa]					26,3	14,8	11,5	9,2	6,5	4,1	3,6	2,8	2,3	1,6
	NR					41	36	34	33	30	26	25	23	22	< 20
350	X [m]						10,2	9,6	9,1	8,3	7,4	7,2	6,8	6,4	5,8
	Pt [Pa]						20,1	15,6	12,5	8,8	5,6	4,9	3,8	3,1	2,2
	NR						40	38	36	33	30	29	27	25	22
400	X [m]								10,4	9,5	8,5	8,2	7,7	7,3	6,7
	Pt [Pa]								16,3	11,5	7,3	6,4	5,0	4,1	2,8
	NR								39	36	32	31	30	28	25
500	X [m]										10,6	10,2	9,6	9,2	8,4
	Pt [Pa]										11,3	10,0	7,8	6,4	4,4
	NR										37	36	34	33	30
600	X [m]												11,6	11,0	10,0
	Pt [Pa]												11,3	9,2	6,4
	NR												38	37	34
700	X [m]														11,7
	Pt [Pa]														8,6
	NR														37
800	X [m]														13,4
	Pt [Pa]														11,3
	NR														40

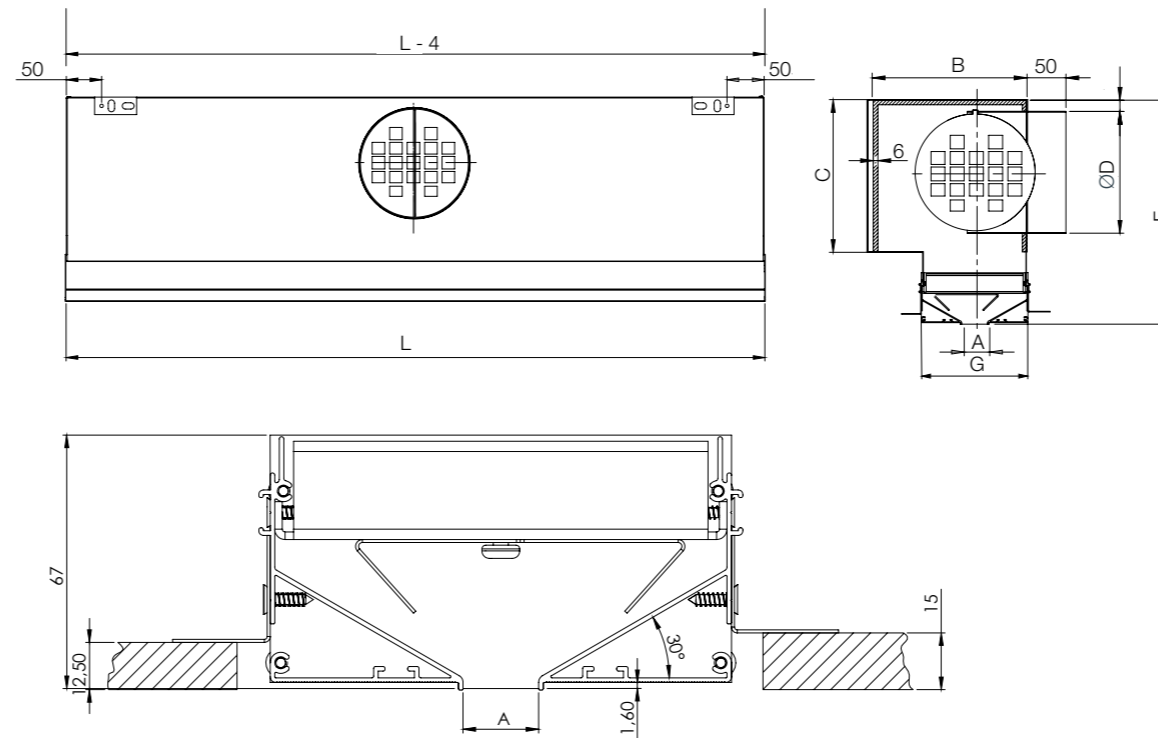
- LDD Linear drum diffuser
- LDF Fixed linear diffuser
- LDM Slide adjustable linear diffuser
- LDA Rotate adjustable linear diffuser
- LDH Flush mounted linear diffuser

DIAGRAMS

LDA DIFFUSER

NR < 25
 25 ≤ NR < 35
 35 ≤ NR < 45

X (m): range for a maximum velocity in the occupied space of $V_t = 0,25$ m/s.
 Pt (Pa): Total pressure.
 NR: Noise Rating. Sound power without attenuation in the room $L_w = NR + 5$ dB(A) approx.



- ▼ LDD Linear drum diffuser
- ▼ LDF Fixed linear diffuser
- ▼ LDM Slide adjustable linear diffuser
- ▼ LDA Rotate adjustable linear diffuser
- ▼ LDH Flush mounted linear diffuser

LDH

Linear diffuser for plaster-in installation. LDH airflow can be adjusted manually by rotating the directable deflector. Ideal for reception areas in hotels. Casing and frame are made off steel.



DIFFUSER \ LDH

AIR DISTRIBUTION

DIMENSIONS

Type	Diffuser			Plenum			øD [mm]
	L [mm]	A [mm]	G [mm]	B [mm]	C [mm]	F [mm]	
LDH	500	33	150	202	198	292	1 x Ø160
	800						
	1000						
	500	40	157	209	238	332	1 x Ø160
	800						
	1000						
	500						
	800						
	1000						
	1000						

ORDERING KEY

(1) Diffuser model (2) Slots widths (3) Diffuser length (4) Spigot diameter (5) RAL (6) Insulation

LDH - 33 - 1000 - 160 - RAL - Z

(1) **LDH**

(2) Slots widths: **33**
40

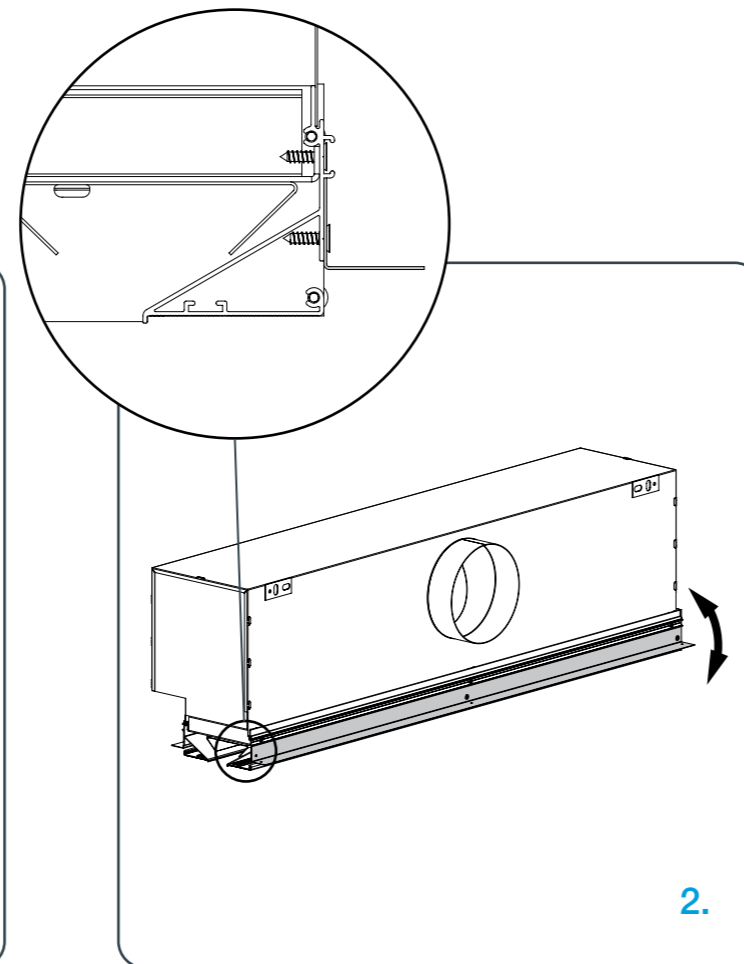
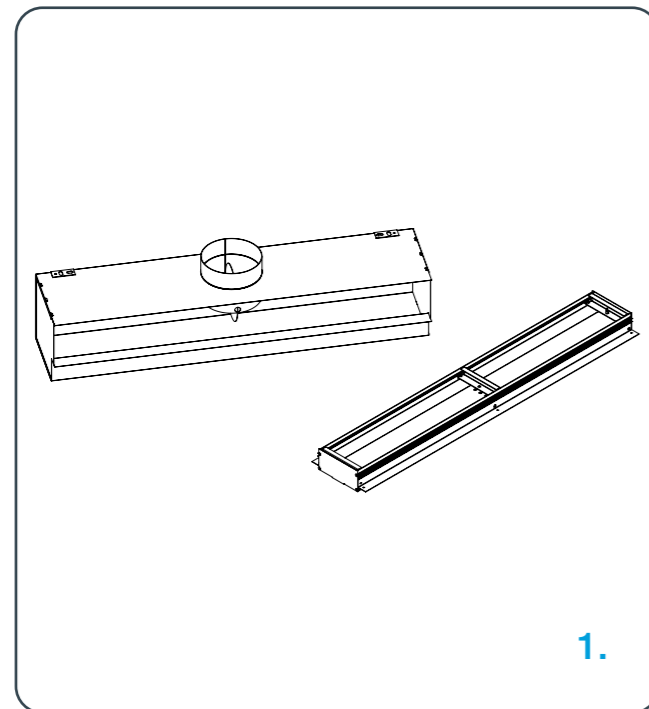
(3) Diffusers length: **500**
800
1000

(4) Spigot diameter: **160**
200

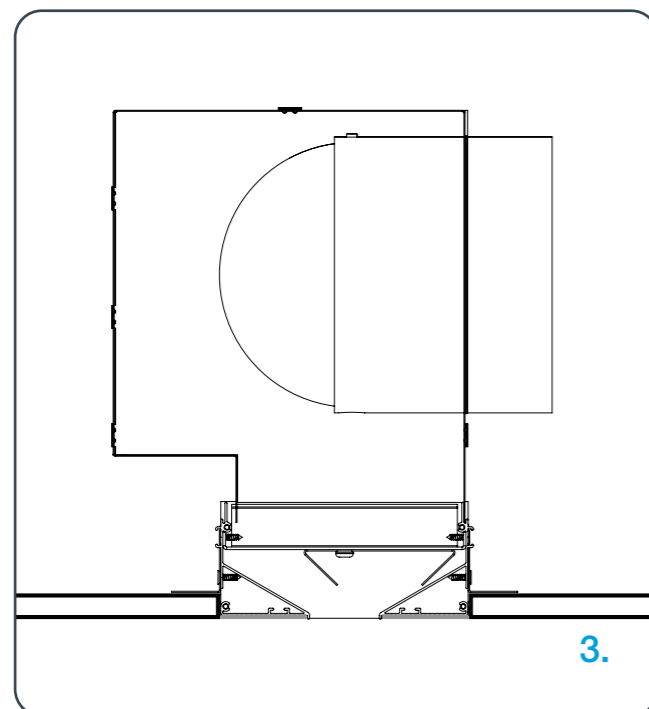
(5) **RAL**

(6) Internal insulation

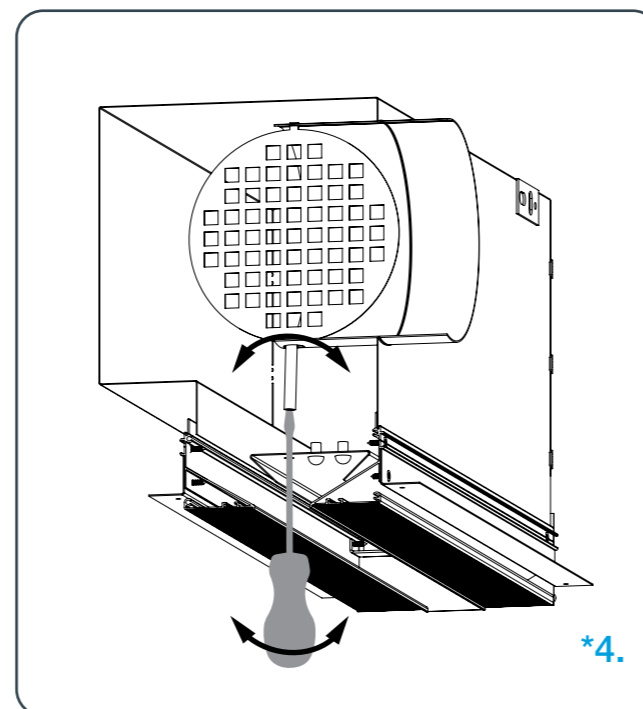
Installation process LDH



Turn the mounting profile according to the type of gypsum board (12,5 mm / 15 mm)!



Place on ceiling and close with plaster mesh!



*Rotation directable deflector!

- ▼ LDD Linear drum diffuser
- ▼ LDF Fixed linear diffuser
- ▼ LDM Slide adjustable linear diffuser
- ▼ LDA Rotate adjustable linear diffuser
- ▼ LDH Flush mounted linear diffuser



LDH DIFFUSER

1. Inspect the products before the installation for transport damage and shortcomings. In case of any damage or shortcomings, immediately contact your supplier. Find the screws delivered with the product on the side of the plenum box.
2. Install the diffuser in the plenum box
3. Place the diffuser and plenum on the ceiling and close the installation with plaster mesh.
4. Adjust the airflow volume by turning the regulating damper inside the plenum box with a screwdriver

Sound and pressure drop LDH

Airflow rate [m ³ /h]	Size A [m ²]	1000-33 0,0248	1000-40 0,0300
100	X [m]	3	3
	Pt [Pa]	2	1
	NR	< 20	< 20
150	X [m]	4,6	3,9
	Pt [Pa]	5	3
	NR	< 20	< 20
200	X [m]	6,1	5,3
	Pt [Pa]	8	5
	NR	21	< 20
250	X [m]	7,6	6,6
	Pt [Pa]	13	7
	NR	25	21
300	X [m]	9,1	7,9
	Pt [Pa]	19	11
	NR	29	25
400	X [m]	12,1	10,5
	Pt [Pa]	34	19
	NR	36	31
500	X [m]	15,2	13,2
	Pt [Pa]	52,9	29,7
	NR	44	41
600	X [m]	18,2	15,8
	Pt [Pa]	76,1	42,8
	NR	45	41
700	X [m]		18,4
	Pt [Pa]		58
	NR		43
800	X [m]		21
	Pt [Pa]		76
	NR		46

	NR < 25
	25 ≤ NR < 35
	35 ≤ NR

X (m): range for a maximum velocity in the occupied space of $V_t = 0,25$ m/s.
Pt (Pa): Total pressure.
NR: Noise Rating. Sound power without attenuation in the room $L_w = NR + 5$ dB(A) approx.

- ▼ LDD Linear drum diffuser
- ▼ LDF Fixed linear diffuser
- ▼ LDM Slide adjustable linear diffuser
- ▼ LDA Rotate adjustable linear diffuser
- ▼ LDH Flush mounted linear diffuser

 DIAGRAMS

LDH DIFFUSER



AIR DISTRIBUTION

Projektiranje, proizvodnja i održavanje opreme za klimatizaciju, ventilaciju i čiste prostore.
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