



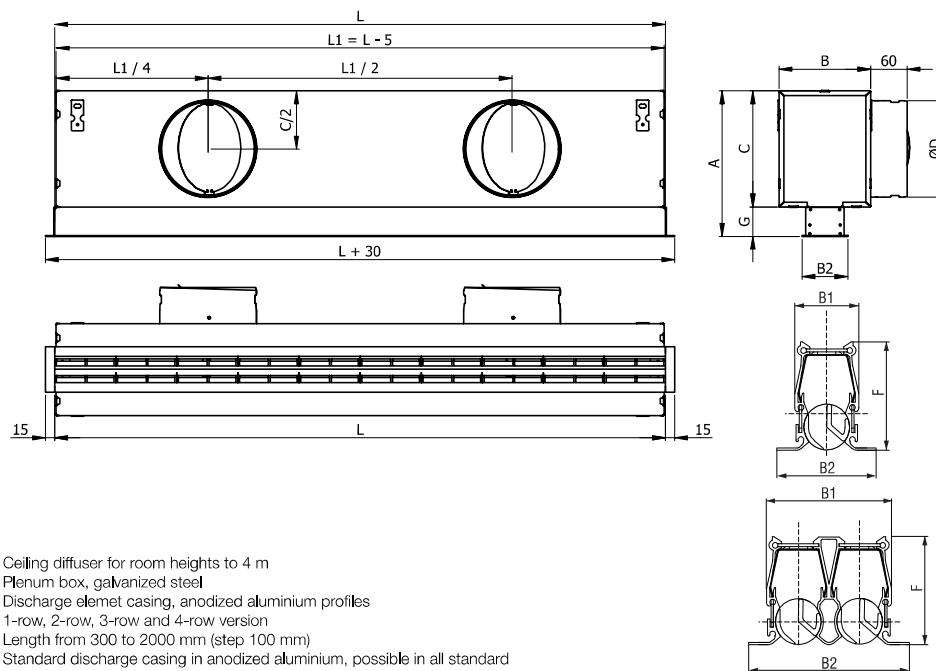
Product manual

Linear diffusers

LDD, LDF, LDM, LDA, LDH

Air distribution

Version 1.2.2
Date: 09.11.2023.



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
- Plenum box, galvanized steel
- Discharge element casing, anodized aluminium profiles
- 1-row, 2-row, 3-row and 4-row version
- Length from 300 to 2000 mm (step 100 mm)
- Standard discharge casing in anodized aluminium, possible in all standard RAL powder coating options for diffusers

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



DIFFUSER \ LDD

AIR DISTRIBUTION

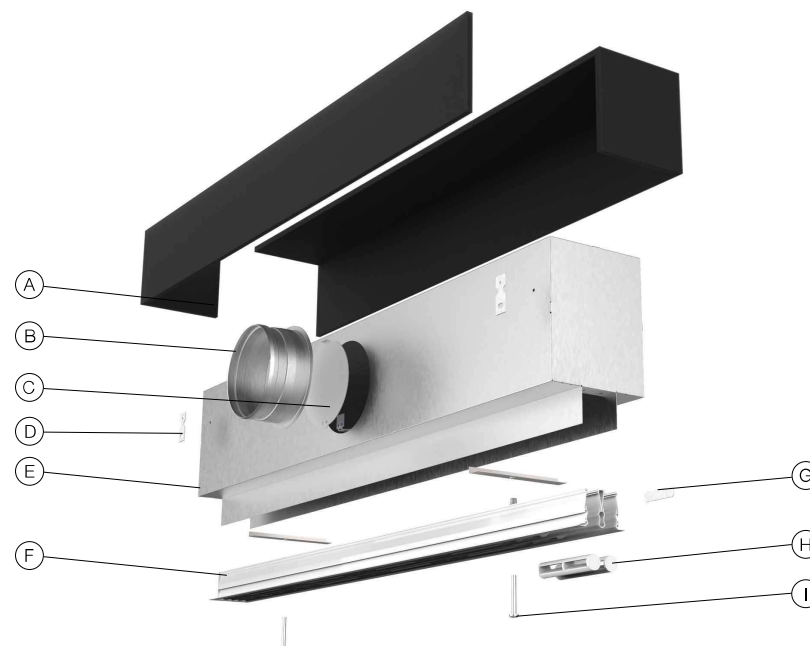
DIMENSIONS

Type	No. of slots	A_w [m ² /m]	L [mm]	V [m ³ /h]	h [m]	B1 [mm]	B2 [mm]	A [mm]	B [mm]	C [mm]	øD [mm]	Connection diameter	No. of connections	F [mm]	G [mm]
LDD 30	1	0,00752	do 1000	40 -130	2,7 -4,0	28	47,5	223	120	175	98	100	1	48	
			1100-1500								98	100	2		
			1600-2000								123	125	2		
	2	0,01504	do 1000	70 -240	2,7 -4,5	55	74,5	238	150	190	158	160	1	47,5	48
			1100-1500								123	125	2		
			1600-2000								158	160	2		
	3	0,02256	do 1000	120 -320	3,0 -5,0	82	101,5	263	180	215	158	160	1	48	
			1100-2000								158	160	2		
			do 1000								198	200	1		
	4	0,03008	do 1000	160 -400	3,5 -5,0	109	128,5	303	210	255	158	160	2	48	
			1100-1500								158	160	2		
			1600-2000								198	200	2		

Type	No. of slots	A_w [m ² /m]	L [mm]	V [m ³ /h]	h [m]	B1 [mm]	B2 [mm]	A [mm]	B [mm]	C [mm]	øD [mm]	Connection diameter	No. of connections	F [mm]	G [mm]
LDD 50	1	0,01504	do 1000	75 -210	2,7 -4,0	43,5	71	253	130	195	123	125	1	58	
			1100-1500								123	125	2		
			1600-2000								158	160	2		
	2	0,03008	do 1000	130 -390	2,7 -4,5	93,5	121	273	180	215	158	160	1	57,5	58
			1100-2000								158	160	2		
			1600-2000								198	200	1		
	3	0,04512	do 1000	195 -520	3,0 -5,0	143,5	171	313	230	255	158	160	2	58	
			1100-1500								158	160	2		
			1600-2000								198	200	2		
	4	0,06016	do 1000	260 -650	3,5 -5,0	193,5	221	338	280	280	248	250	1	58	
			1100-1500								198	200	2		
			1600-2000								248	250	2		



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

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DIFFUSER \ LDD

AIR DISTRIBUTION

ORDERING KEY LDD

(1) Diffuser model	(2) Number of slots	(3) Diffuser length	(4) Discharge element color	(5) RAL				
LDD-30	-	2	-	2000	-	S	-	RAL
(1) LDD-30 LDD-50			(4) B - black discharge elements W - white discharge elements G - grey discharge elements			(5) RAL		
(2) 1/2/3/4								
(3) Diffusers length (500...2000 mm in 100 mm increments)								

* Diffuser comes standard with two alignment pins

ORDERING KEY LDD + PBL-D

(1) Diffuser model	(2) Number of slots	(3) Diffuser length	(4) Discharge element color	(5) Plenum box	(6) No. of conections / diameter	(7) Insulation	(8) RAL							
LDD-30	-	2	-	2000	-	S	-	PBL-D	-	1x100	-	Z	-	RAL
(1) LDD-30 LDD-50			(4) B - black discharge elements W - white discharge elements G- grey discharge elements		(6) No. of connections/ diameter (see table pg.2)			(7) Z - internal insulation						
(2) 1/2/3/4				(5) PBL-D plenum box	(8) RAL									
(3) Diffusers length (500...2000 mm in 100 mm increments)														

ORDERING KEY LDD Plenum box

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	- 1x100
(1) PBL-D plenum box							(5) Z - internal insulation		
(2) 30 - LDD30 50 - LDD50							(6) No. of connections/ diameter (see table pg. 2)		
(3) 1/2/3/4									
(4) Diffusers length (500...2000 mm in 100 mm increments)									



A Connection seal
B Corner section

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⊕ 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			

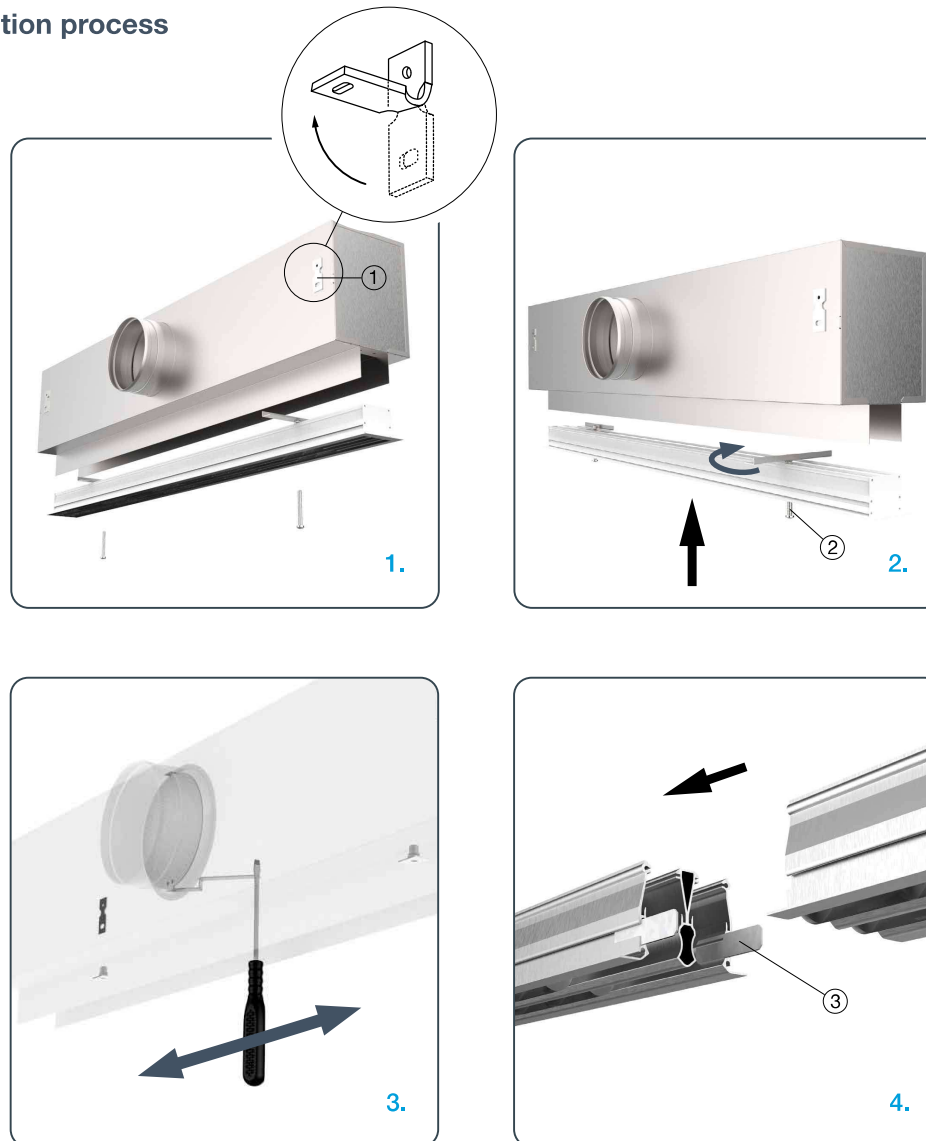
ORDERING KEY Corner section

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

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



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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 (1) 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 (2) 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 (3) 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!

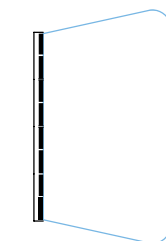
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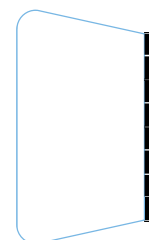
Setting of the discharge patterns

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.

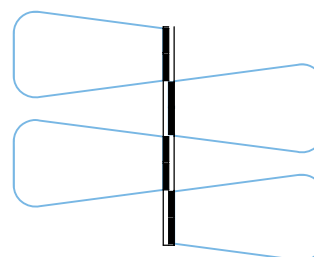
When the diffuser is used for a supply air, usual discharge angles are from 0° to 40° respective to the ceiling.



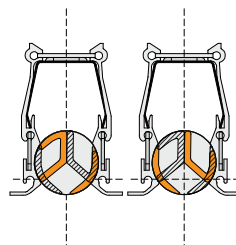
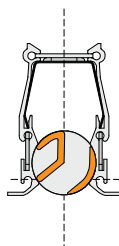
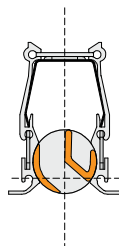
One-way horizontal
air discharge to the right



One-way horizontal
air discharge to the left

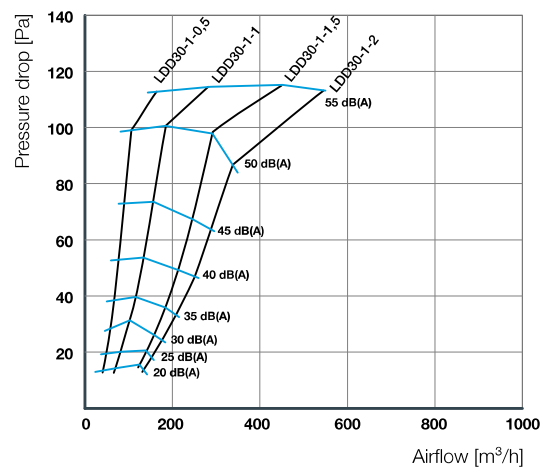


Alternating air control elements (every
second element different)

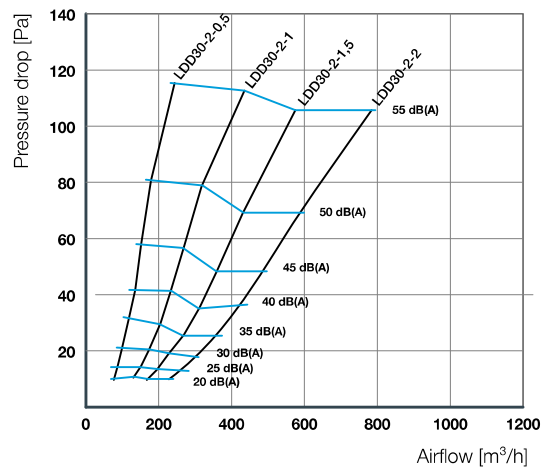


Sound and pressure drop LDD30

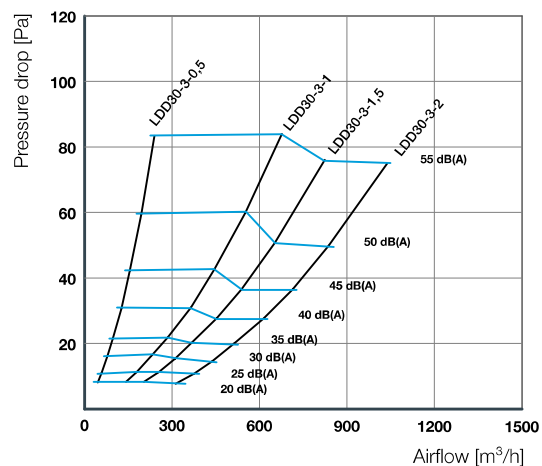
LDD30-1



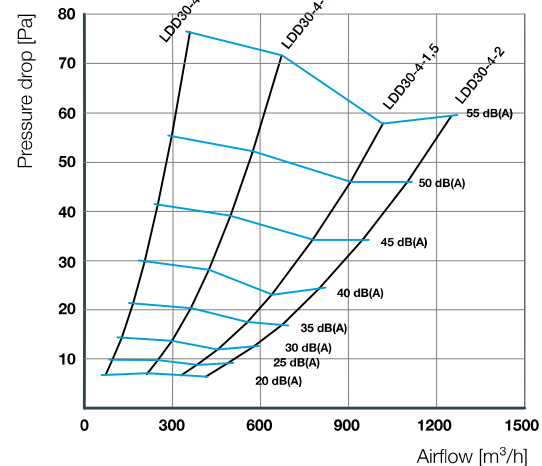
LDD30-2



LDD30-3



LDD30-4

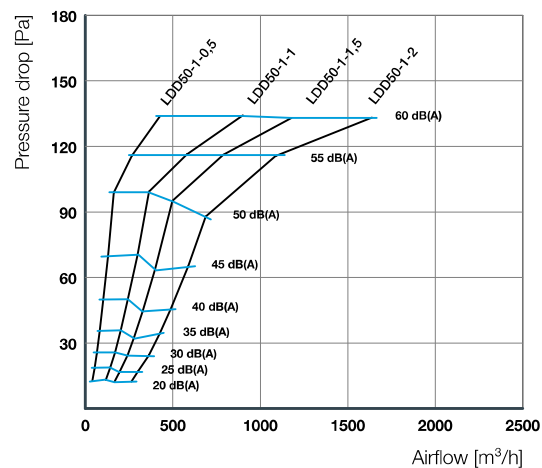


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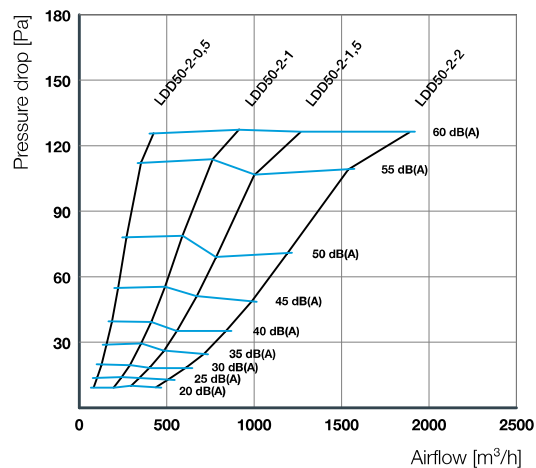


Sound and pressure drop LDD50

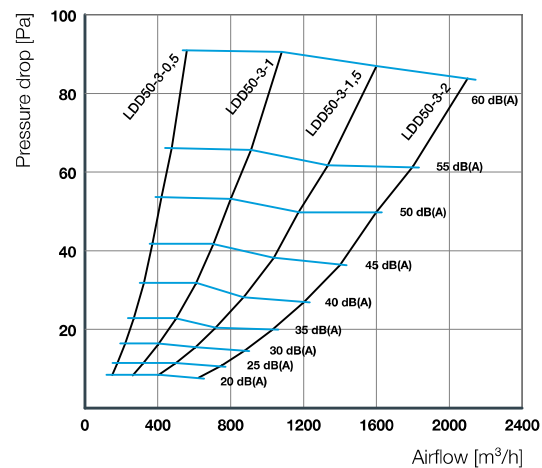
LDD50-1



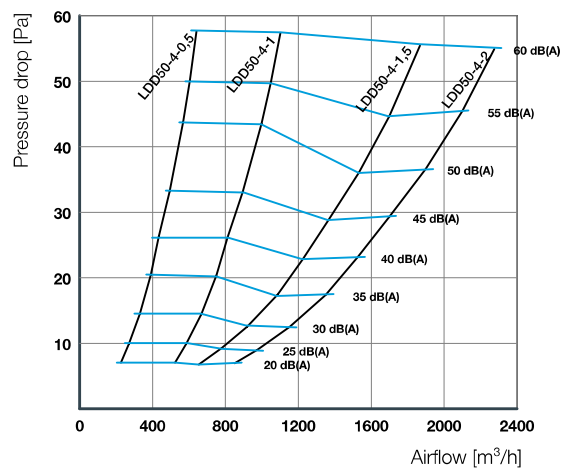
LDD50-2



LDD50-3



LDD50-4



- ▶ LDD Linear drum diffuser
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DIAGRAMS

LDD DIFFUSER