



Serie **DFH**



NON-OVERLAPPING
LINEAR DIFFUSER



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NON-OVERLAPPING LINEAR DIFFUSER SERIES DFH



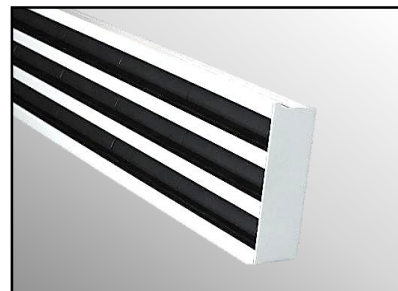
MODELS



DFH10 Lx1V

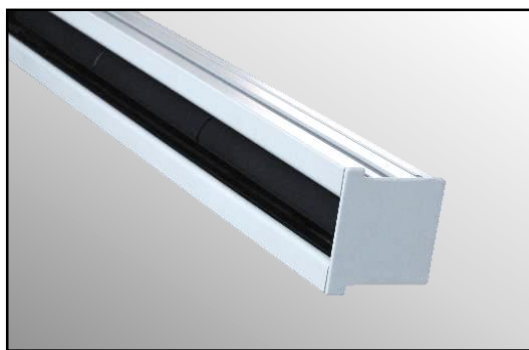


DFH10 Lx2V



DFH10 Lx3V

DFH10 Lx1V



- **DFH10 Lx1V**
1-slot non-overlapping linear diffuser.
- **DFH10-P Lx1V**
1-slot non-overlapping linear diffuser with plenum box (without damper).
- **DFH10-PA Lx1V**
1-slot non-overlapping linear diffuser with insulated plenum box (without damper).
- **DFH10-CP Lx1V**
1-slot non-overlapping linear diffuser with plenum box and damper (in plenum connection port), accessible from the drop ceiling, with the option of being accessible from inside the premises.
- **DFH10-CPA Lx1V**
1-slot non-overlapping linear diffuser with insulated plenum box and damper (in plenum connection port), accessible from the drop ceiling, with the option of being accessible from inside the premises.

NON-OVERLAPPING LINEAR DIFFUSER SERIES DFH

MODELS

- **DFH10 Lx2V:**

2-slot non-overlapping linear diffuser.

- **DFH10-P Lx2V:**

2-slot non-overlapping linear diffuser with plenum box (without damper).

- **DFH10-PA Lx2V:**

2-slot non-overlapping linear diffuser with insulated plenum box (without damper).

- **DFH10-CP Lx2V:**

2-slot non-overlapping linear diffuser with plenum box and damper (in plenum connection port), accessible from the drop ceiling, with the option of being accessible from inside the premises.

- **DFH10-CPA Lx2V:**

2-slot non-overlapping linear diffuser with insulated plenum box and damper (in plenum connection port), accessible from the drop ceiling, with the option of being accessible from inside the premises.

DFH10 Lx2V



- **DFH10 Lx3V:**

3-slot non-overlapping linear diffuser.

- **DFH10-P Lx3V:**

3-slot non-overlapping linear diffuser with plenum box (without damper).

- **DFH10-PA Lx3V:**

3-slot non-overlapping linear diffuser with insulated plenum box (without damper).

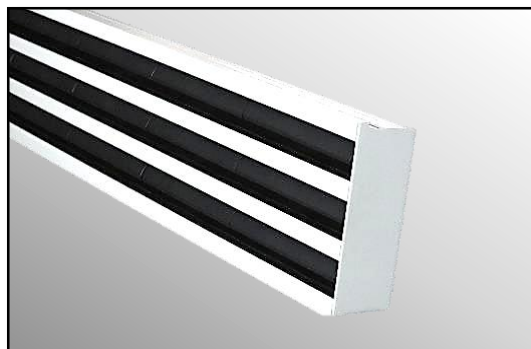
- **DFH10-CP Lx3V:**

3-slot non-overlapping linear diffuser with plenum box and damper (in plenum connection port), accessible from the drop ceiling, with the option of being accessible from inside the premises.

- **DFH10-CPA Lx3V:**

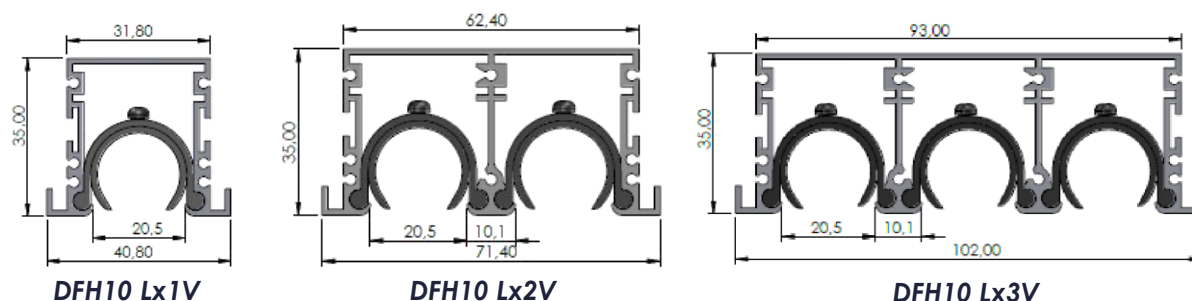
3-slot non-overlapping linear diffuser with insulated plenum box and damper (in plenum connection port), accessible from the drop ceiling, with the option of being accessible from inside the premises.

DFH10 Lx3V



NON-OVERLAPPING LINEAR DIFFUSER SERIES DFH

DIMENSIONS



ACCESSORIES

On request, the **DFH10** non-overlapping linear diffusers can be equipped with the following accessories:

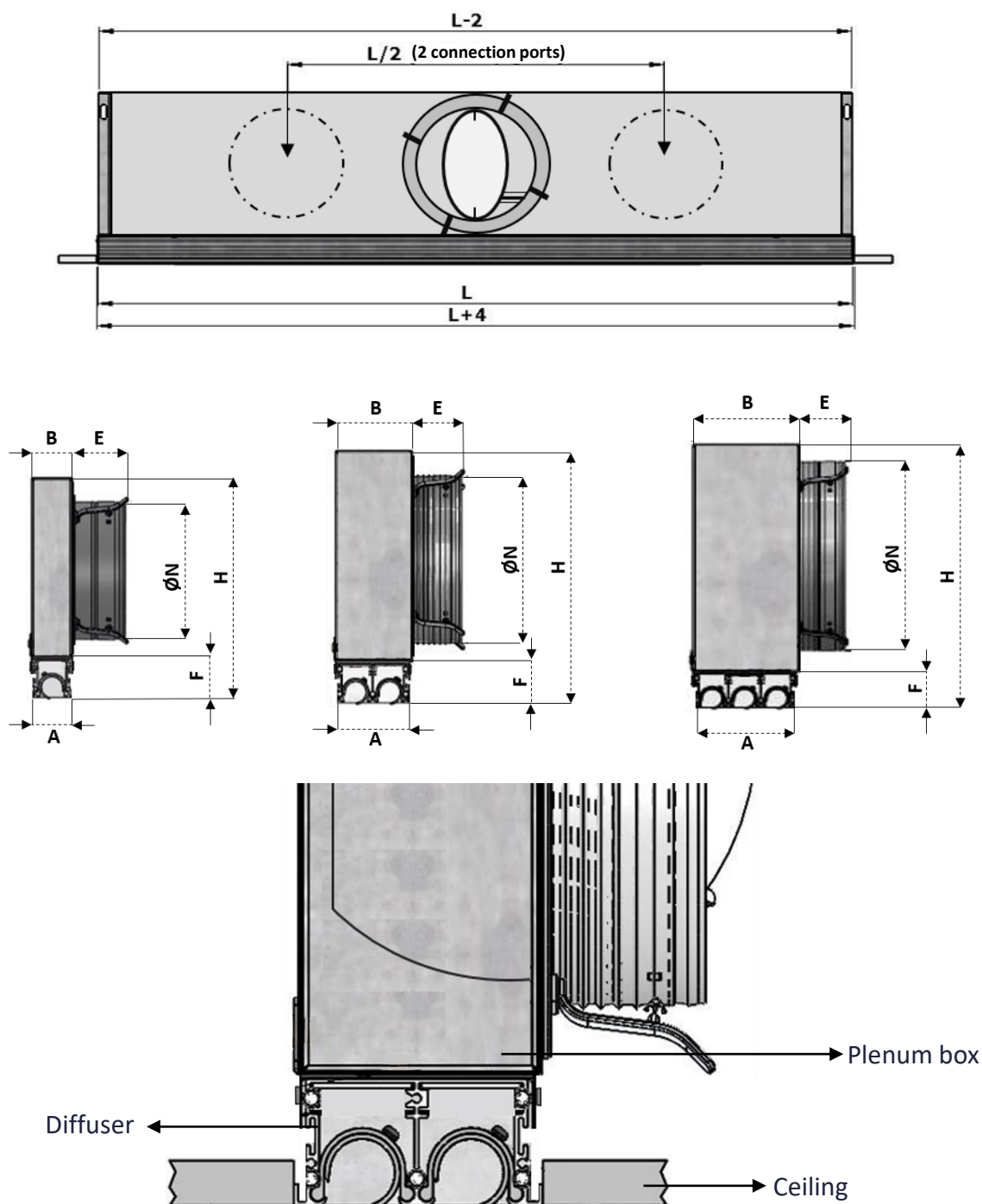
- ❖ Pair of end caps for 1-, 2-, and 3-slots models.
- ❖ Mounting crossbar for 1-, 2-, and 3-slots models.
- ❖ Side profile.
- ❖ Connection kit.

FINISH (Diffuser)

- ❖ Diffuser made of ANODIZED ALUMINUM.
- ❖ Diffuser made of WHITE-PAINTED ALUMINUM (RAL 9010).
- ❖ On request, it can be manufactured in lacquered aluminum according to the RAL color chart.
- ❖ BLACK rollers/deflectors.
- ❖ WHITE rollers/deflectors.

NON-OVERLAPPING LINEAR DIFFUSER SERIES DFH

DIFFUSER WITH PLENUM BOX AND DAMPER

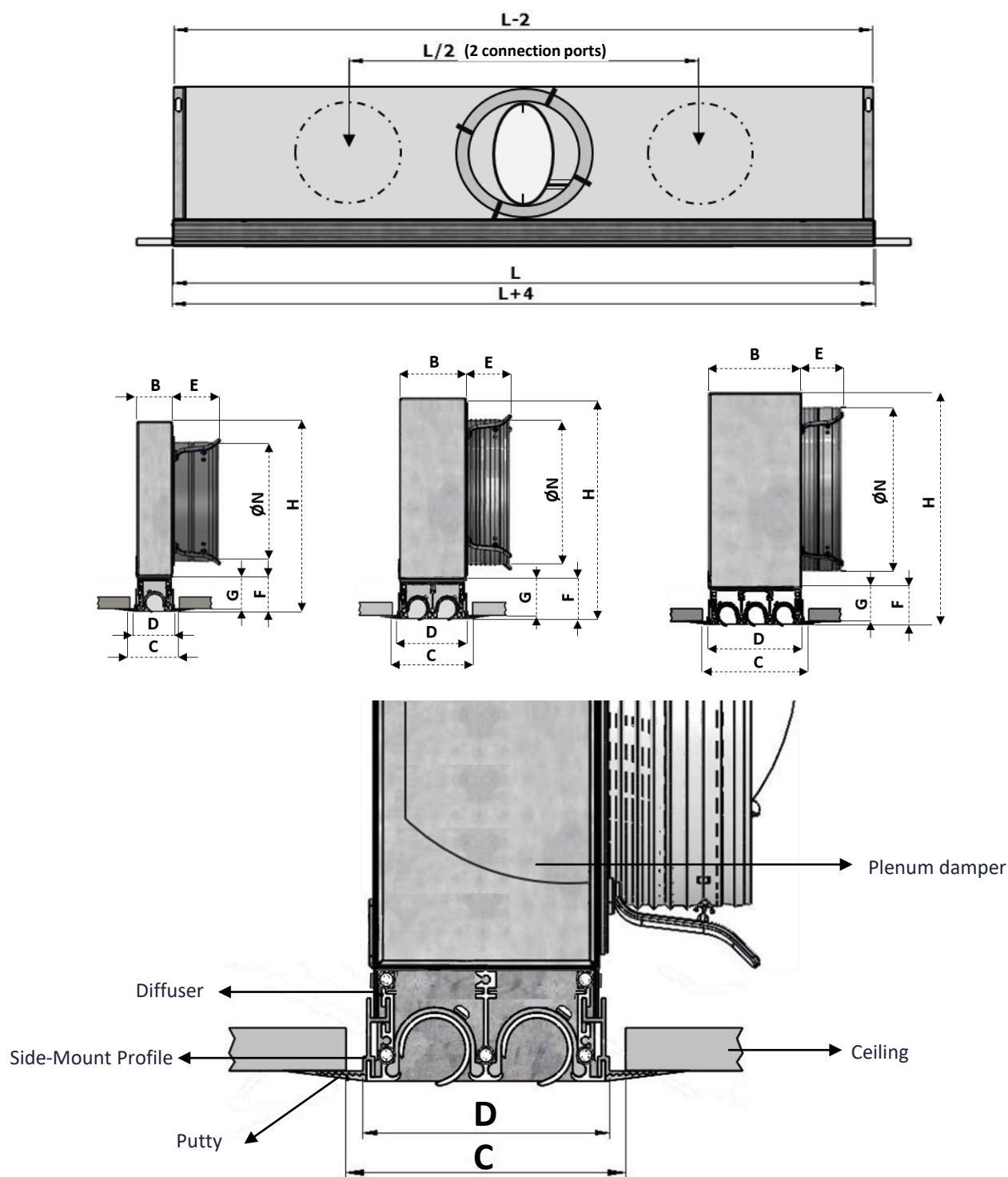


Millimeters (mm)								
MODEL	A	B	H	E	F	$\varnothing N$	L	L+4
1-slot	40,8	35	201	46	36	125	Diffuser Length	Diffuser Length + End Caps
2-slot	71,4	65	236	46	36	160	Diffuser Length	Diffuser Length + End Caps
3-slot	102,0	95	276	46	36	200	Diffuser Length	Diffuser Length + End Caps

For lengths ≥ 1200 mm $\rightarrow$ 2 connection ports in the plenum box

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DIFFUSER WITH SIDE PROFILE FOR SUSPENDED CEILING

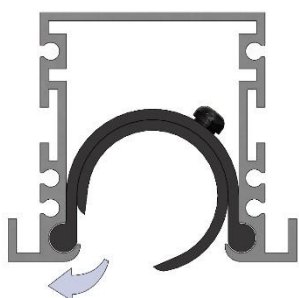


Millimeters (mm)										
MODEL	D	C	B	H	E	F	G	ØN	L	L+4
1-slots	44	53	35	201	46	36	33	125	Diffuser Length	Diffuser Length + End Caps
2-slots	74	83	65	236	46	36	33	160	Diffuser Length	Diffuser Length + End Caps
3-slots	105	114	95	276	46	36	33	200	Diffuser Length	Diffuser Length + End Caps

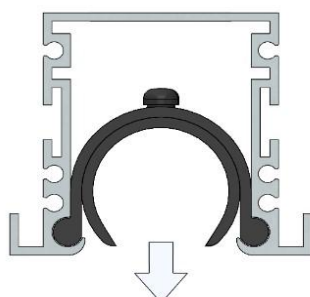
For lengths ≥ 1200 mm → 2 connection ports in the plenum box

NON-OVERLAPPING LINEAR DIFFUSER SERIES DFH

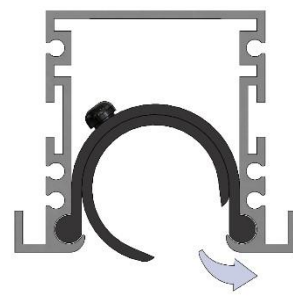
AIRFLOW CONTROL MANAGEMENT



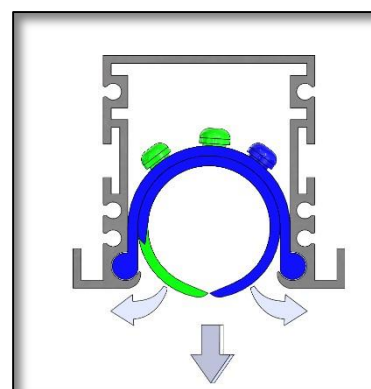
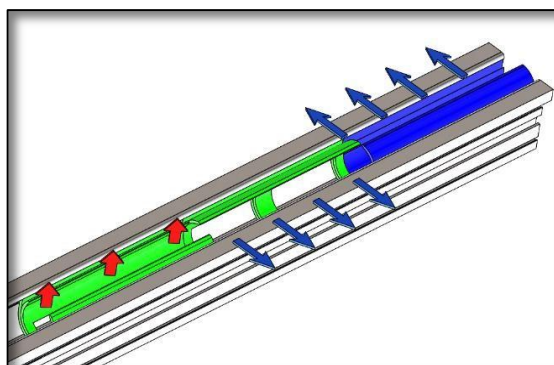
LEFT AIR FLOW



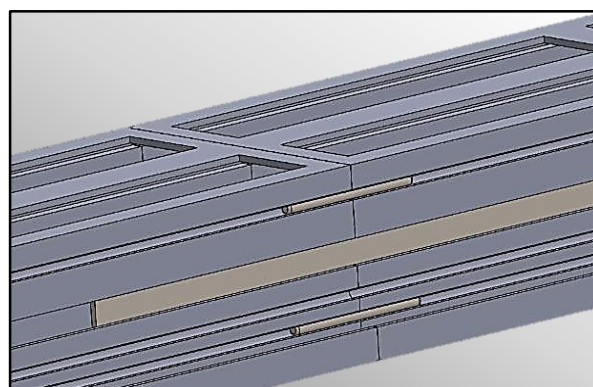
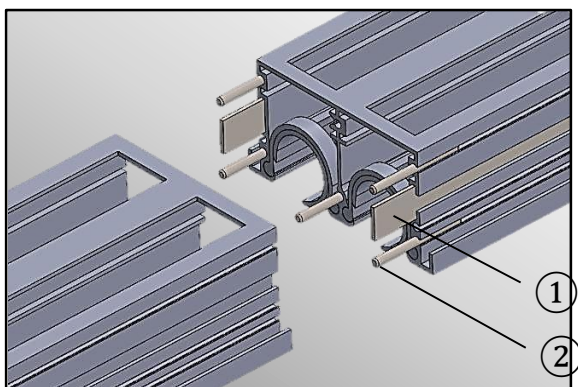
VERTICAL AIR FLOW



RIGHT AIR FLOW



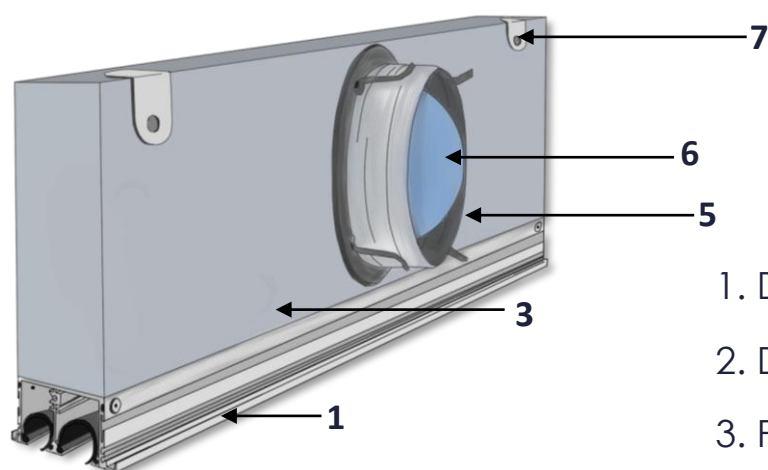
LINEAR DIFFUSER SEGMENTS



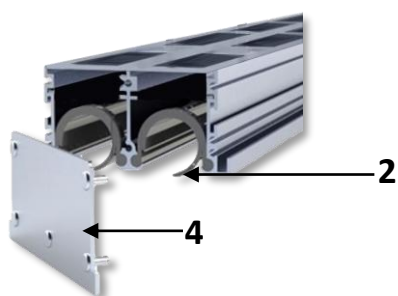
1. Alignment Plate
2. Spring pins

KUH Linear Kit, which includes alignment plates and spring pins. KUH 1V, KUH 2V, and KUH 3V.

NON-OVERLAPPING LINEAR DIFFUSER SERIES DFH

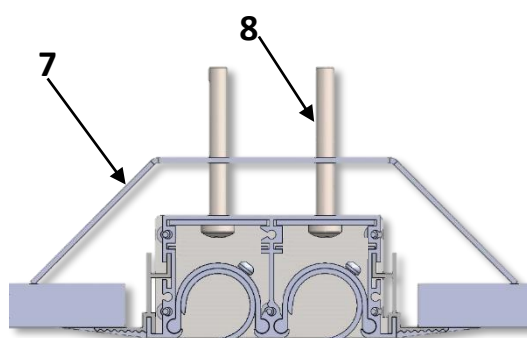
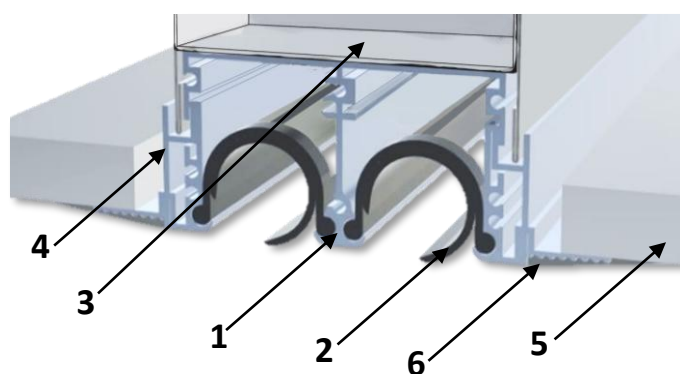


- 1. Diffuser
- 2. Deflector rollers
- 3. Plenum box
- 4. Pair of end caps
- 5. Connection port
- 6. Damper at the plenum connection port
- 7. Mounting brackets



Closed-ceiling Configuration

- 1. Diffuser
- 2. Deflector rollers
- 3. Plenum box
- 4. Profile for suspended ceiling installation
- 5. Ceiling
- 6. Putty
- 7. Ceiling-mounted crossbar without plenum box
- 8. Screws for a mounting crossbar without a plenum box



NON-OVERLAPPING LINEAR DIFFUSER SERIES DFH

DFH10 1V QUICK SELECTION TABLES

Values for dT:		+10k							-10k						
		Vertical Propulsion							Horizontal Propulsion						
Q	Dim	600 -1V	800 -1V	1000 -1V	1200 -1V	1500 -1V	1800 -1V	2000 -1V	600 -1V	800 -1V	1000 -1V	1200 -1V	1500 -1V	1800 -1V	2000 -1V
(m³/h)	Ak(m²)	0,008	0,011	0,014	0,017	0,021	0,025	0,028	0,008	0,011	0,014	0,017	0,021	0,025	0,028
60	Vk (m/s)	2	1,5	1,2	1	0,8			2	1,5	1,2	1	0,8		
	X0,25 (m)	1,1	0,9	0,7	0,6	0,5			2,4	2	1,8	1,6	1,4		
	Ps(Pa)	7	<5	<5	<5	<5			8	5	<5	<5	<5		
	Lw(A)	26	20	<20	<20	<20			25	20	<20	<20	<20		
80	Vk (m/s)	2,6	2	1,5	1,3	1	0,9	0,8	2,6	2	1,5	1,3	1	0,9	0,8
	X0,25 (m)	1,6	1,2	1	0,8	0,7	0,6	0,5	3,2	2,8	2,4	1,9	1,9	1,6	1,5
	Ps(Pa)	13	7	5	<5	<5	<5	<5	15	8	5	<5	<5	<5	<5
	Lw(A)	34	27	23	<20	<20	<20	<20	32	27	24	<20	<20	<20	<20
100	Vk (m/s)	3,3	2,5	2	1,6	1,3	1,1	1	3,3	2,5	2	1,6	1,3	1,1	1
	X0,25 (m)	2	1,6	1,3	1	0,9	0,7	0,6	4	3,5	3	2,7	2,4	2,1	2
	Ps(Pa)	20	11	7	5	<5	<5	<5	23	13	8	6	<5	<5	<5
	Lw(A)	39	33	28	24	20	<20	<20	38	33	30	26	22	<20	<20
120	Vk (m/s)	4	3	2,4	2	1,6	1,3	1,2	4	3	2,4	2	1,6	1,3	1,2
	X0,25 (m)	2,5	1,9	1,5	1,3	1,1	0,9	0,8	5	4	3,7	3,3	2,9	2,5	2,4
	Ps(Pa)	29	16	10	7	5	<5	<5	34	19	12	8	5	<5	<5
	Lw(A)	44	38	33	29	24	20	<20	43	38	35	31	27	24	22
150	Vk (m/s)	5	3,7	3	2,5	2	1,6	1,5	5	3,7	3	2,5	2	1,6	1,5
	X0,25 (m)	3,2	2,4	2	1,7	1,3	1,1	1	6	5,3	4,6	4,1	3,6	3,2	3
	Ps(Pa)	45	25	16	11	7	5	<5	53	30	19	13	8	6	5
	Lw(A)	50	44	39	35	30	26	24	49	44	40	37	33	30	28
200	Vk (m/s)			4	3,3	2,6	2,2	2			4	3,3	2,6	2,2	2
	X0,25 (m)			2,7	2,2	1,8	1,5	1,4			6,2	5,5	4,8	4,3	4
	Ps(Pa)			29	20	13	9	8			34	23	15	10	8
	Lw(A)			46	42	38	34	31			48	44	40	37	36
250	Vk (m/s)			5	4,1	3,3	2,8	2,5				4,1	3,3	2,8	2,5
	X0,25 (m)			3,4	2,9	2,3	2	1,8				7	6	5,4	5
	Ps(Pa)			45	31	20	14	11				36	26	16	13
	Lw(A)			52	48	43	39	37				50	46	43	42

Vertical propulsion multiplication factor

DT	+10	+8	+4	1
KX	1	1,12	1,6	3,1

$$L_{DT+8} = L_{DT+10} * 1,12$$

Horizontal propulsion multiplication factor

DT	-10	-8	-4	0	+5	+10
KX	1	1,05	1,15	1,3	1,4	1,5

$$L_{DT-8} = L_{DT-10} * 1,05$$

Noise level in the room without sound absorption in Lw (dBA)

Legend:

Q: Air flow rate in m³/h

Ak: Effective discharge area in m²

Vk: Effective discharge speed in m/s

X: Air stream reach in m

Ps: Total pressure drop in Pa

Lw(A): Sound power level in dB(A)

NON-OVERLAPPING LINEAR DIFFUSER SERIES DFH

DFH10 2V QUICK SELECTION TABLES

Values for dT:		+ 10k							-10k						
Q	Dim	Vertical Propulsion							Horizontal Propulsion						
		600 - 2V	800 - 2V	1000 - 2V	1200 - 2V	1500 - 2V	1800 - 2V	2000 - 2V	600 - 2V	800 - 2V	1000 - 2V	1200 - 2V	1500 - 2V	1800 - 2V	2000 - 2V
(m³/h)	Ak(m²)	0,017	0,022	0,028	0,034	0,042	0,050	0,056	0,017	0,022	0,028	0,034	0,042	0,050	0,056
100	Vk (m/s)	1,6	1,2	1					1,6	1,2	1	0,8			
	X0,25 (m)	1,1	0,9	0,7					3,4	2,4	1,7	1,3			
	Ps(Pa)	4	<5	<5					10	6	<5	<5			
	Lw(A)	24	<20	<20					30	24	21	<20			
120	Vk (m/s)	2	1,5	1,2	1	0,8			2	1,5	1,2	1	0,8		
	X0,25 (m)	1,3	1	0,8	0,7	0,5			4,7	3,3	2,4	1,9	1,4		
	Ps(Pa)	6	<5	<5	<5	<5			15	8	5	<5	<5		
	Lw(A)	29	23	<20	<20	<20			34	29	25	22	<20		
150	Vk (m/s)	2,5	1,9	1,5	1,2	1	0,8	0,7	2,5	1,9	1,5	1,2	1	0,8	0,7
	X0,25 (m)	1,7	1,3	1	0,8	0,7	0,6	0,5	6,6	4,8	3,6	2,8	2	1,6	1,3
	Ps(Pa)	9	5	<5	<5	<5	<5	<5	23	13	8	6	<5	<5	<5
	Lw(A)	35	29	24	20	<20	<20	<20	40	35	31	28	24	21	<20
200	Vk (m/s)	3,3	2,5	2	1,6	1,3	1,1	1		2,5	2	1,6	1,3	1,1	1
	X0,25 (m)	2,2	1,7	1,4	1,2	1	0,8	0,7		7,5	5,9	4,7	3,5	2,7	2,3
	Ps(Pa)	17	9	6	<5	<5	<5	<5		23	15	10	7	5	<5
	Lw(A)	42	36	31	27	22	<20	<20		42	39	36	31	28	27
250	Vk (m/s)	4,1	3,1	2,5	2	1,6	1,4	1,2			2,5	2	1,6	1,4	1,2
	X0,25 (m)	2,8	2,1	1,8	1,5	1,2	1	0,9			8,3	6,7	5,1	4	3,4
	Ps(Pa)	26	15	9	7	<5	<5	<5			23	16	10	7	6
	Lw(A)	48	42	37	33	28	24	22			44	41	37	34	32
300	Vk (m/s)	5	3,7	3	2,5	2	1,6	1,5			3	2,5	2	1,6	1,5
	X0,25 (m)	3,3	2,6	2,1	1,8	1,5	1,2	1,1			10,8	9	6,9	5,5	4,7
	Ps(Pa)	38	21	14	9	6	<5	<5			33	23	15	10	8
	Lw(A)	53	47	42	38	33	29	27			49	46	42	39	37
350	Vk (m/s)		4,3	3,5	2,9	2,3	1,9	1,7				2,9	2,3	1,9	1,7
	X0,25 (m)		3,1	2,5	2	1,7	1,5	1,3				11	8,8	7	6,1
	Ps(Pa)		29	18	13	8	6	5				31	20	14	11
	Lw(A)		51	46	42	37	33	31				50	46	43	41
400	Vk (m/s)			4	3,3	2,6	2,2	2				3,3	2,6	2,2	2
	X0,25 (m)			2,8	2,4	2	1,65	1,5				13	10,8	8,7	7,7
	Ps(Pa)			24	17	11	7	6				41	26	18	15
	Lw(A)			49	45	40	37	34				54	49	46	45

Vertical propulsion multiplication factor

DT	+10	+8	+4	1
KX	1	1,12	1,6	3

$$L_{DT+8} = L_{DT+10} * 1,12$$

Horizontal propulsion multiplication factor

DT	-10	-8	-4	0	+5	+10
KX	1	1,1	1,25	1,4	1,6	1,8

$$L_{DT-8} = L_{DT-10} * 1,1$$

Noise level in the room without sound absorption in Lw (dBA)

Legend:

Q: Air flow rate in m³/h

Ak: Effective discharge area in m²

Vk: Effective discharge speed in m/s

X: Air stream reach in m

Ps: Total pressure drop in Pa

Lw(A): Sound power level in dB(A)

NON-OVERLAPPING LINEAR DIFFUSER SERIES DFH

DFH10 3V QUICK SELECTION TABLES

Values for dT:		+10k Vertical Propulsion							-10k Horizontal Propulsion						
Q	Dim	600 -3V	800 -3V	1000 -3V	1200 -3V	1500 -3V	1800 -3V	2000 -3V	600 -3V	800 -3V	1000 -3V	1200 -3V	1500 -3V	1800 -3V	2000 -3V
(m³/h)	Ak(m²)	0,025	0,034	0,042	0,050	0,063	0,076	0,084	0,025	0,034	0,042	0,050	0,063	0,076	0,084
200	Vk (m/s)	2,2	1,6	1,3	1,1	0,9			2,2	1,6	1,3	1,1	0,9		
	X0,25 (m)	1,5	1,2	0,9	0,8	0,6			8,1	5,6	4,6	3,9	3,2		
	Ps(Pa)	7	<5	<5	<5	<5			8	5	<5	<5	<5		
	Lw(A)	33	27	22	<20	<20			30	26	23	<20	20		
250	Vk (m/s)	2,8	2	1,6	1,4	1,1	0,9		2,8	2	1,6	1,4	1,1	0,9	0,8
	X0,25 (m)	2	1,5	1,2	1,1	0,8	0,6		15	8,1	6,1	5,2	4,2	3,6	3,1
	Ps(Pa)	11	6	<5	<5	<5	<5		13	7	5	<5	<5	<5	<5
	Lw(A)	39	33	28	24	<20	<20		36	31	28	24	20	<20	<20
300	Vk (m/s)	3,3	2,5	2	1,6	1,3	1,1	1		2,5	2	1,6	1,3	1,1	1
	X0,25 (m)	2,3	1,8	1,5	1,3	1	0,9	0,7		12,4	8,2	6,6	5,3	4,5	4,1
	Ps(Pa)	16	9	6	<5	<5	<2	<5		11	7	5	<5	<5	<5
	Lw(A)	44	37	32	28	24	20	<20		36	33	29	25	22	21
350	Vk (m/s)	3,9	2,9	2,3	1,9	1,5	1,3	1,2			2,3	1,9	1,5	1,3	1,2
	X0,25 (m)	2,7	2,1	1,7	1,4	1,2	1	0,9			11,4	8,5	6,6	5,5	5
	Ps(Pa)	22	12	8	6	<5	<5	<5			9	6	<5	<5	<5
	Lw(A)	48	41	36	32	28	24	21			37	33	29	26	25
400	Vk (m/s)	4,4	3,3	2,6	2,2	1,8	1,5	1,3			2,6	2,2	1,8	1,5	1,3
	X0,25 (m)	3,1	2,4	2	1,7	1,4	1,1	1			16,4	11	8	6,6	6
	Ps(Pa)	29	16	10	7	5	<5	<5			12	8	5	<5	<5
	Lw(A)	51	45	40	36	31	27	25			41	36	32	30	29
450	Vk (m/s)		3,7	3	2,5	2	1,6	1,5				2,5	2	1,6	1,5
	X0,25 (m)		2,8	2,2	1,9	1,6	1,3	1,2				14,7	9,7	7,7	7
	Ps(Pa)		21	13	9	6	<5	<5				11	7	5	<5
	Lw(A)		48	43	39	34	30	28				39	36	33	32
500	Vk (m/s)		4,1	3,3	2,7	2,2	1,8	1,6				2,7	2,2	1,8	1,6
	X0,25 (m)		3	2,5	2,1	1,7	1,4	1,3				20	12	9,1	8,1
	Ps(Pa)		25	16	11	7	5	<5				13	8	6	5
	Lw(A)		51	46	42	37	33	31				42	38	36	34

Vertical propulsion multiplication factor

DT	+10	+8	+4	0
KX	1	1,1	1,5	3

$$L_{DT+8} = L_{DT+10} * 1,1$$

Noise level in the room without sound absorption in Lw (dBA)

Horizontal propulsion multiplication factor

DT	-10	-8	-4	0	+5	+10
KX	1	1,1	1,25	1,4	1,6	1,8

$$L_{DT-8} = L_{DT-10} * 1,1$$

Legend:

Q: Air flow rate in m³/h

Ak: Effective discharge area in m²

Vk: Effective discharge speed in m/s

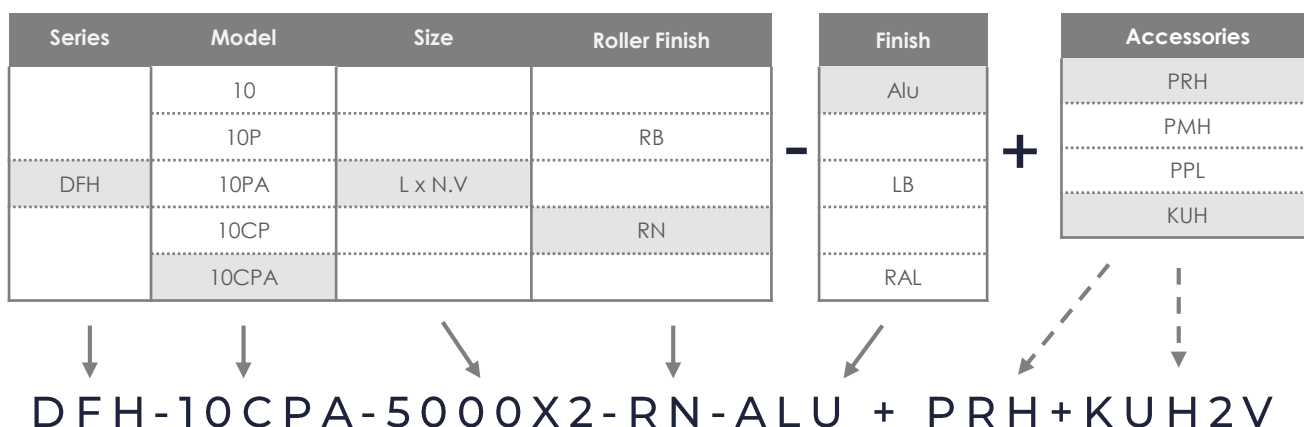
X: Air stream reach in m

Ps: Total pressure drop in Pa

Lw(A): Sound power level in dB(A)

NON-OVERLAPPING LINEAR DIFFUSER SERIES DFH

GRAPHICAL DESCRIPTION



SERIES

- DFH: Non-overlapping linear diffuser

MODEL (1, 2 or 3 slots)

- DFH10CPA: non-overlapping linear diffuser with insulated plenum box and damper (in plenum connection port)

Size (mm.l)

- LxN.V: 5000 x 2-slots.

FINISH

- RN: Black rollers/deflectors.
- ALU: Anodized aluminum.

ACCESSORIES (Optional for 1, 2 and 3-slots)

- PRH 2V: Pair of end caps.
- KUH 2V: Connection kit for 2-slots.

Order example: DFH10CPA 5000x2 RN ALU + PRH+KUH2V

- To order a 5,000-mm, 2-slots, non-overlapping linear diffuser with an insulated plenum and control damper, anodized aluminum with black deflectors, you should request:

Order	Description
2 Diffusers DFH10CPA 2000x2 RN	2 x 2000mm, 2-slots non-overlapping linear diffusers with an insulated plenum and control damper, anodized aluminum with black deflectors.
1 Diffuser DFH10CPA 1000x2 RN	1 x 1000mm, 2-slots non-overlapping linear diffusers with an insulated plenum and control damper, anodized aluminum with black deflectors.
1 Pair of end caps PRH2V	Pair of end caps for 2-slots DFH10.
2 Kits KUH2V	2 Crossbars for 2-slot DFH1.

Order example: DFH10 3000x1 RN ALU +PPL+KUH1V+PMH

- To order 3000-mm, 1-slot, non-overlapping linear diffuser without a plenum and flush-mount side profiles, made of anodized aluminum with black deflectors and a mounting crossbar, you should request:

Order	Description
2 Diffusers DFH10 1500x1V RN	2 x 1500mm non-overlapping 1-slot linear diffusers without a plenum, and flush-mount side profiles, made of anodized aluminum with black deflectors.
2 Pair of end caps PPL1500	2 Pairs of end caps for 1-slot DFH10.
1 Kit KUH1V	Connection kit for 1-slot DFH10.
6 Crossbar PMH1V	6 Crossbars for 1-slot DFH10.

Note:

- For each continuous line of installed diffusers, a pair of end caps must be ordered to cover both ends of the diffuser.
- For diffusers without a plenum box (up to 1,500 mm), they must include two screw-mounted crossbars for ceiling installation, in addition to the side profiles for the suspended ceiling.
- Two plenum connection ports will be installed for diffusers 1,200 mm or longer (min. 500 mm; max. 2,000 mm per diffuser).



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