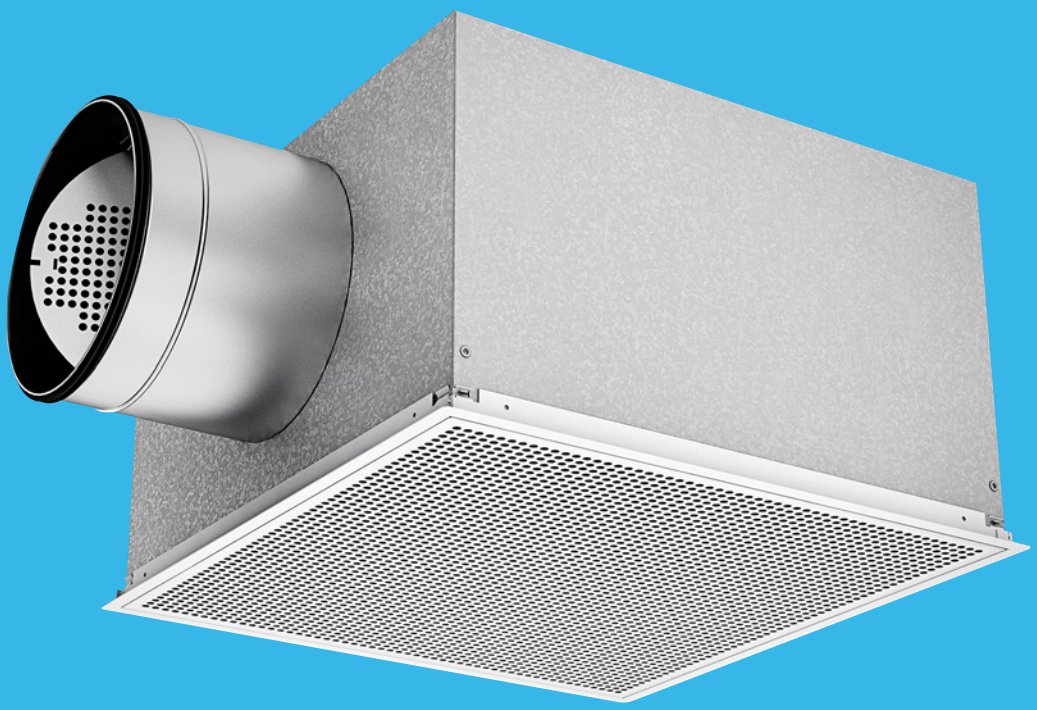


Lindab **PS8**

Versio - Ceiling diffusers

Versio - Ceiling diffusers PS8

PS8 with grille box type V.

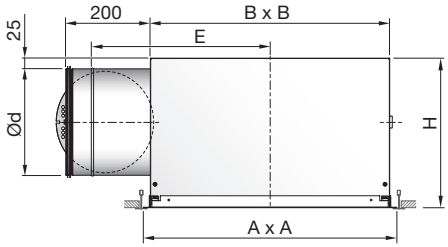
PS8 with plenum box type H.

Description

PS8 is a square perforated diffuser with swirl insert. PS8 fits naturally into the ceiling and maintains the excellent technical properties of swirl diffusers. The swirl pattern ensures high induction and a large dynamic range, and is therefore ideal for the horizontal supply of very cold air.

- Discreet appearance
- Large dynamic range
- High induction
- Ideal for the supply of very cold air
- Plenum box with several damper options

Dimensions



PS8-H

Ød		A	B	H	E	m
mm	Pattern	mm				kg
125	300	*595	382	226	350	5.9
160	400	*595	382	261	350	5.9
200	500	*595	462	301	390	8.5
250	600	*595	562	351	420	12.3
315	600	*595	562	416	420	13.1

* Face plate dimensions A x A shown in table above are valid for ceiling type 1, T24/T15. The A x A dimension depends on ceiling system. See Ceiling tile adaption for detailed dimensions. For further details on plenum boxes, see the following pages. Configure your PS8 in the LindQST airborne calculator .

Maintenance

The face plate can be removed to enable cleaning of internal parts or to gain access to the duct or box. The visible parts of the diffuser can be wiped with a damp cloth.

Order code

Product		PS	a	b	S	d	eee	f
Type								
PS								
Design								
8 - 9 - 10 - 11								
Box type								
V - H - R								
Functional use								
S = Supply air								
Damper								
0 = No damper	(Box	: H, V)						
1 = Damper	(Box	: H, R)						
2 = Damper / Meas.outlets	(Box	: H)						
Connection dim.								
Ø160-315	(Box	: V)						
Ø125-315	(Box	: H)						
200x100 - 500x100	(Box	: R)						
Ceiling system								
1 - 14	Ceiling systems, see ceiling tile adaption							

Example: PS-8-V-S-0-200-1

Materials and finish

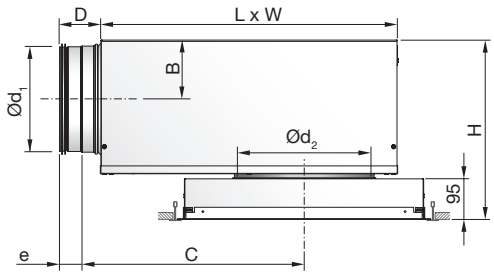
Grille box/plenum box:
Material: Galvanised steel

Face plate:
Material: Galvanised steel
Standard finish: Powder-coated
Standard colours: RAL 9003 or RAL 9010, gloss 30.

The diffuser is available in other colours. Please contact Lindab's sales department for further information.

Versio - Ceiling diffusers PS8

PS8-V + MB plenum box

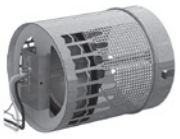


Ød1	Ød2	Pattern	B	C	D	e	H*	L	W
mm			mm						
100	160	300	62	245	78	40	258 - 298	310	260
125	160	300	75	291	78	40	283 - 323	376	310
125	200	400	75	291	78	40	283 - 323	376	310
160	160	300	92	352	78	40	317 - 357	459	380
160	200	400	92	352	78	40	317 - 357	459	380
160	250	500	92	352	78	40	317 - 357	459	380
200	200	400	112	425	78	40	358 - 398	565	460
200	250	500	112	425	78	40	358 - 398	565	460
200	315	600	112	425	78	40	358 - 398	565	460
250	250	500	137	514	118	60	408 - 448	698	540
250	315	600	137	514	118	60	408 - 448	698	540
315	315	600	170	675	118	60	473 - 513	858	540

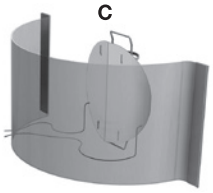
* Using accessory MBZ the H dimension will increase:
$Ød_2$ = 160 - 200 mm => H +40 mm
$Ød_2$ = 250 - 315 mm => H +60 mm

Damper options

B-S



C

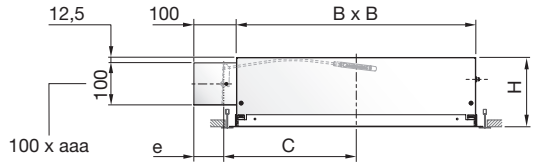


Order code

Product	MB	a	bbb	ccc	S
Type					
MB					
Damper					
B = Linear cone damper					
C = Blade damper supply					
Duct connection $Ød_1$					
Ø100-315					
Diffuser dimension $Ød_2$					
Ø160-315					
Function (Only for B-damper)					
S = Supply air					

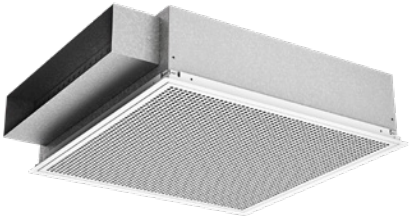
Example 1: PS-8-V-S-0-200-1+MBB-160-200-S
Example 2: PS-8-V-S-0-200-1+MBC-160-200

PS8 + R plenum box



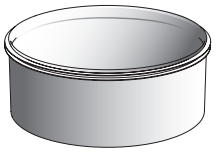
PS8 + R

aaa x 100	Pattern	B	C	H	e
mm		mm			
200 x 100	400	382	221	161	70
300 x 100	400	382	221	161	70
400 x 100	500	462	261	161	70
500 x 100	600	562	311	161	70



Accessories

MBZ - Extension piece



Order code

Product	MBZ	aaa
Type		
Size		

Example: MBZ-200

PBB - Mounting bracket (set)

MHS - Suspension

Order code

Product	aaa
Type	

Example: MHS

Versio - Ceiling diffusers PS8

Technical data

Following PS8-V+plenum box data are valid for MBB-S. For MBB-S and MBC data, go to LindQST airborne calculator.

Capacity

Air flow q_v [l/s] and [m³/h], total pressure Δp_t [Pa], throw $l_{0.2}$ [m] and sound power level L_{WA} [dB(A)] can be seen in the diagrams.

Frequency-related sound power level

The sound power level in the frequency band is defined as $L_{WA}+K_{ok}$. K_{ok} values are specified in charts beneath the diagrams on the following pages.

Quick selection, supply air

PS8-V + MBB-S

PS8-V + MBB-S		$\Delta p_t \geq 50$ Pa		$\Delta p_t \geq 50$ Pa	
duct	PS8-V	30 dB(A)		35 dB(A)	
$Ød_1$	$Ød_2$	l/s	m³/h	l/s	m³/h
100	160	31	112	38	137
125	160	36	130	43	155
125	200	48	173	60	216
160	160	37	133	44	158
160	200	52	187	62	223
160	250	67	241	84	302
200	200	59	212	70	252
200	250	82	295	98	353
200	315	72	259	88	317
250	250	83	299	97	349
250	315	81	292	96	346
315	315	-	-	102	367

Supply air

PS8 + H

PS8 + H		$\Delta p_t \geq 50$ Pa		$\Delta p_t \geq 50$ Pa	
Size Ød	Minimum	30 dB(A)		35 dB(A)	
mm	l/s	m³/h	l/s	m³/h	l/s	m³/h
125	26	93	23	83	29	104
160	33	118	46	166	54	194
200	57	204	61	220	74	266
250	71	254	-	-	106	382
315	95	342	-	-	-	-

Sound attenuation

Sound attenuation of the diffusers ΔL from duct to room, including end reflection - see table below.

PS8-V + MBB-S

PS8-V + MBB-S									
duct	PS8-V	Centre frequency Hz							
$Ød_1$	$Ød_2$	63	125	250	500	1K	2K	4K	8K
100	160	18	16	5	17	20	19	17	21
125	160	16	13	9	19	18	18	18	20
125	200	14	11	5	15	16	17	17	19
160	160	15	16	11	23	20	20	21	21
160	200	15	15	8	22	20	18	20	20
160	250	16	13	5	18	16	16	17	20
200	200	14	11	7	17	21	17	20	18
200	250	14	9	5	14	18	15	18	17
200	315	13	9	3	13	17	15	17	16
250	250	13	8	7	17	18	18	18	18
250	315	16	7	5	16	16	17	17	18
315	315	9	9	9	16	17	17	18	23

PS8 + H

PS8 + H								
Size Ød	Centre frequency Hz							
mm	63	125	250	500	1K	2K	4K	8K
125	18	13	8	19	14	11	12	15
160	18	12	3	14	13	7	7	8
200	14	9	3	14	9	7	8	11
250	14	8	7	10	8	7	9	12
315	12	6	8	13	8	7	10	12

Installation -and balancing instruction

For futher information go to LindQST and get all related documentation including installation -and balancing instruction.

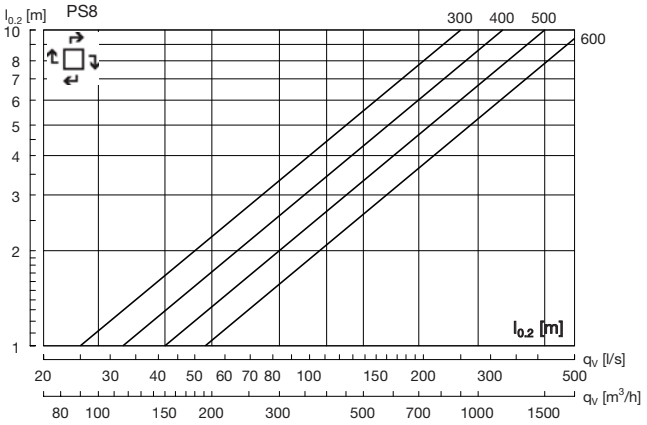
Versio - Ceiling diffusers

PS8

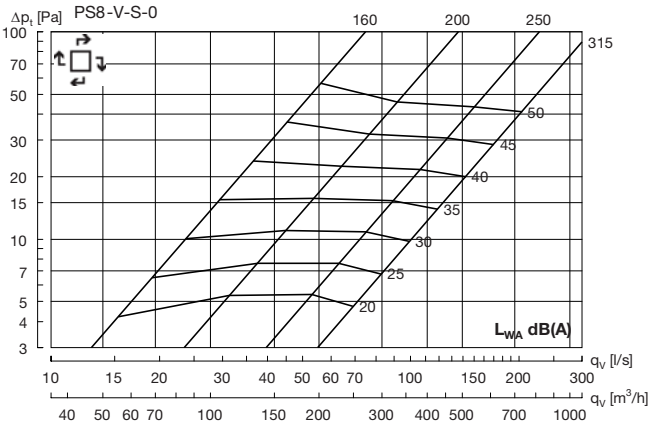
Technical data

Throw $l_{0.2}$

Throw $l_{0.2}$ [m] is specified at a terminal velocity of 0.2 m/s. The designation by the lines specifies the pattern on the face plate.



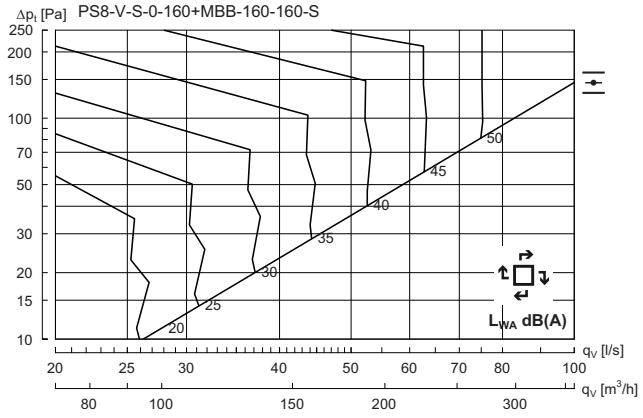
PS8-V without plenum box – Supply air



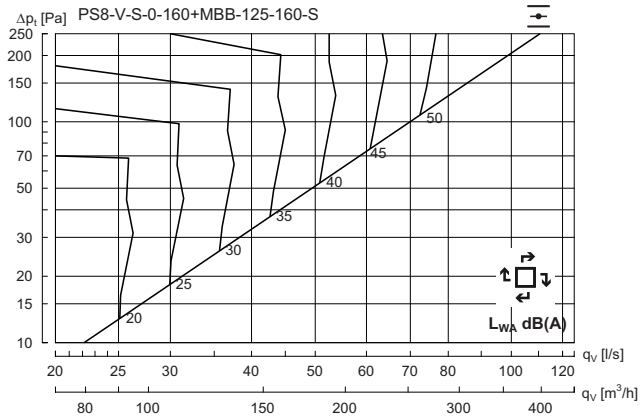
Versio - Ceiling diffusers PS8

Technical data

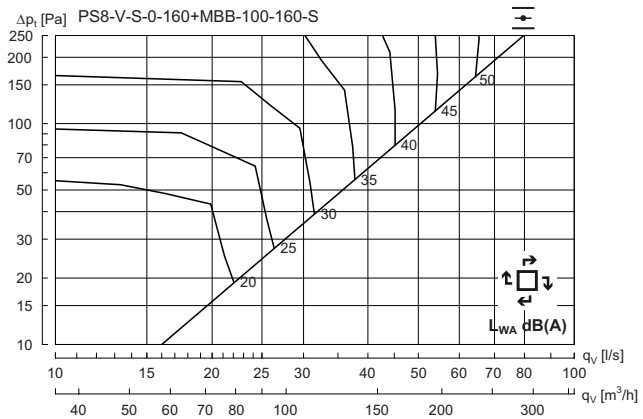
PS8-V 160 + MBB-S - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	9	0	-2	1	-7	-17	-28	-38

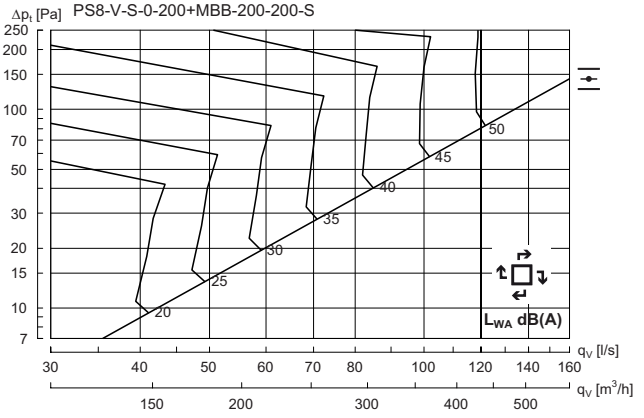


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	3	-1	1	-7	-16	-24	-31

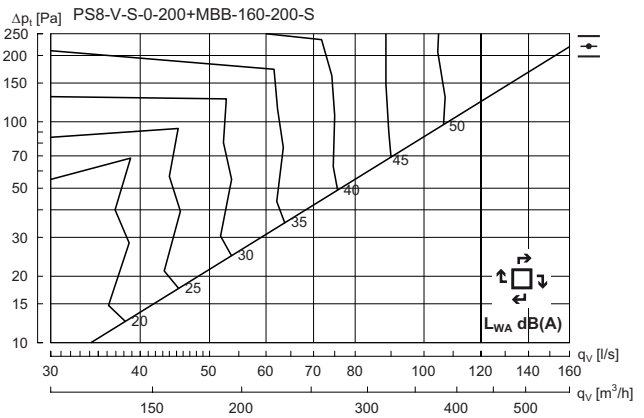


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	3	3	-1	-8	-14	-18	-23

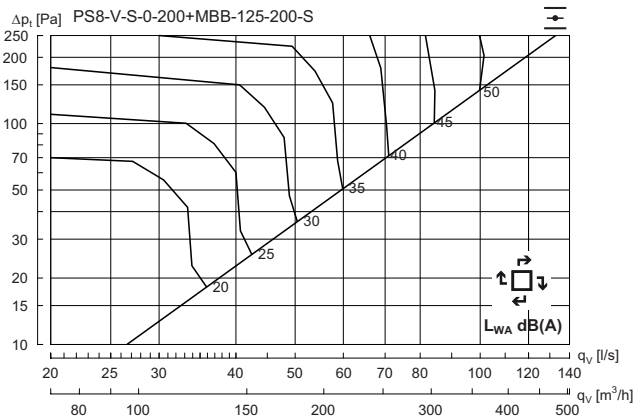
PS8-V 200 + MBB-S - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	13	0	-5	1	-6	-20	-29	-40



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	6	3	-2	1	-6	-16	-22	-30

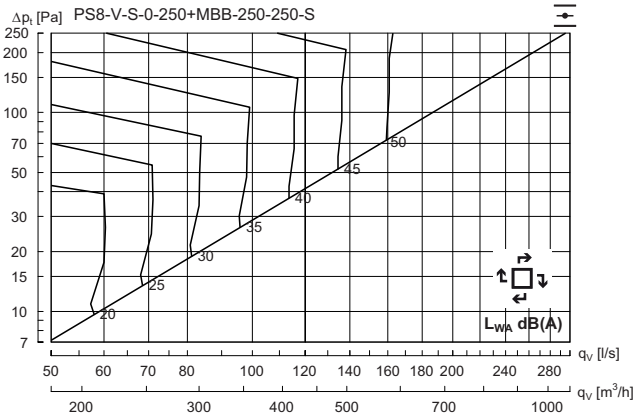


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	6	5	2	-1	-6	-13	-19	-25

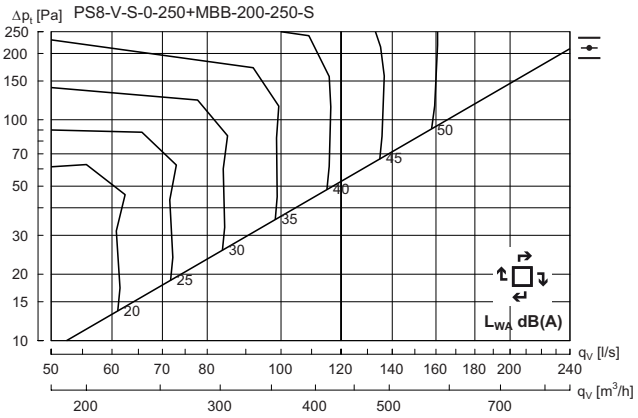
Versio - Ceiling diffusers PS8

Technical data

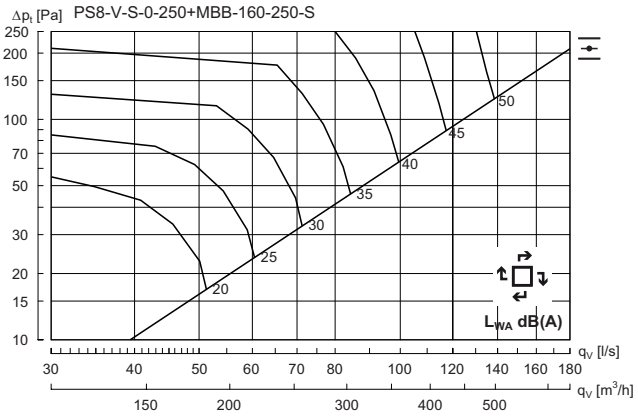
PS8-V 250 + MBB-S - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	0	-5	1	-6	-19	-28	-40

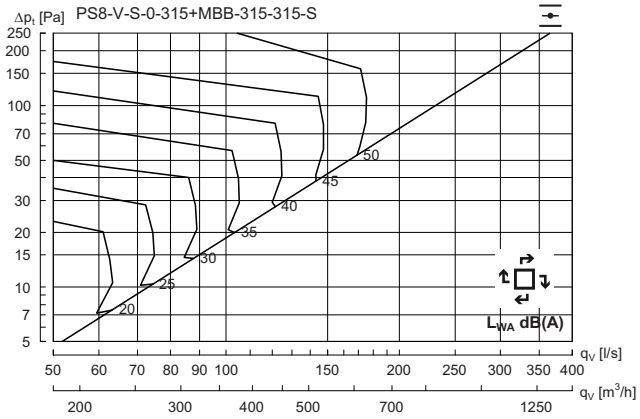


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	12	4	-2	0	-6	-16	-20	-26

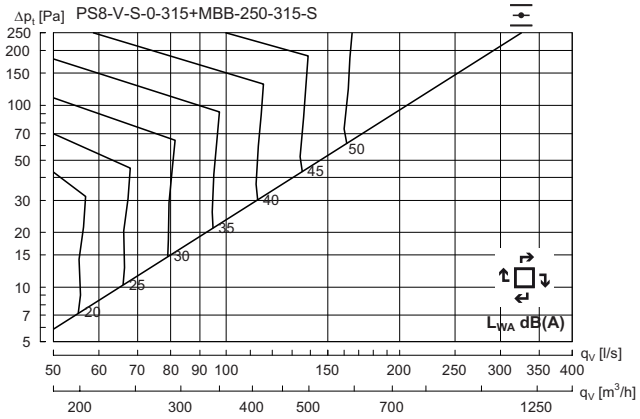


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	15	5	1	-2	-5	-13	-20	-26

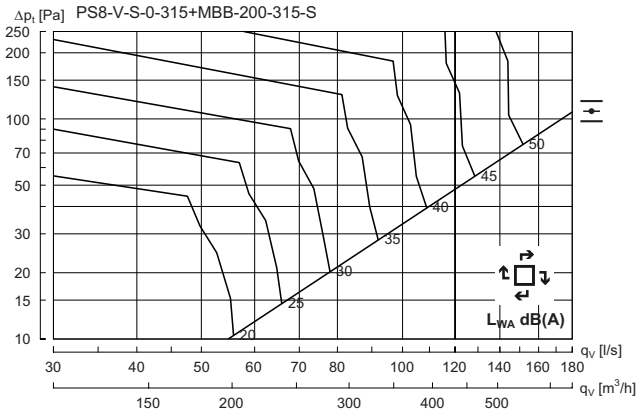
PS8-V 315 + MBB-S - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	-4	-2	1	-7	-21	-26	-35



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	0	-3	2	-8	-21	-29	-39

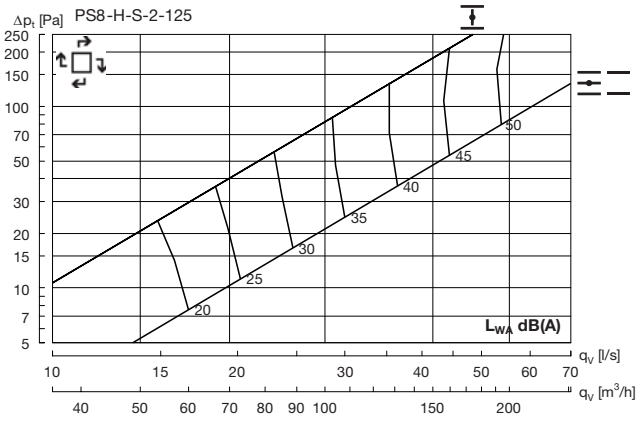


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	2	-1	1	-7	-18	-23	-29

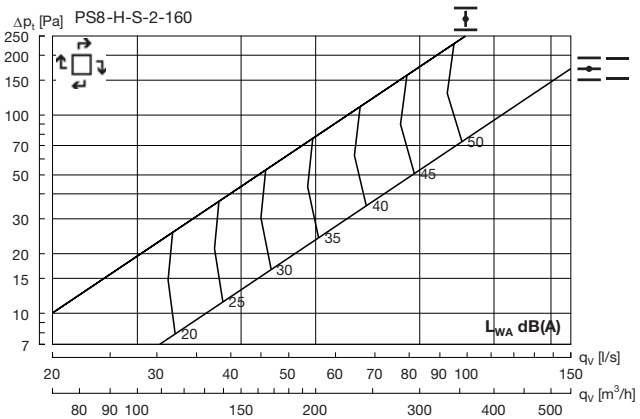
Versio - Ceiling diffusers PS8

Technical data

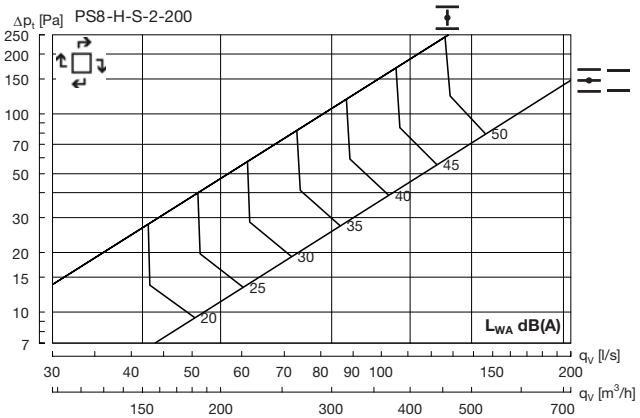
PS8 + H - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	3	4	4	0	-10	-18	-25	-31

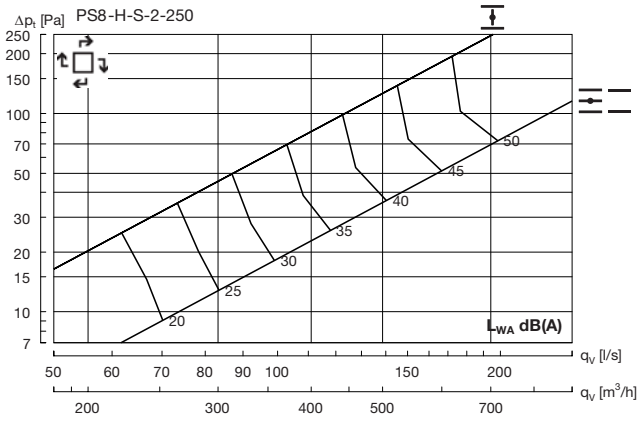


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	1	3	5	-2	-9	-19	-25	-32

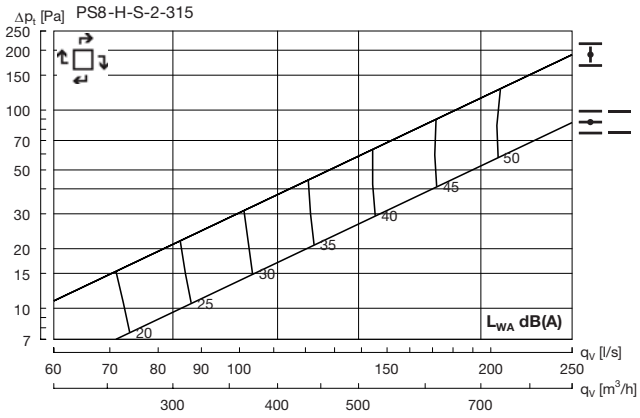


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	7	7	3	-1	-7	-16	-23	-29

PS8 + H - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	5	6	4	-1	-8	-18	-26	-33



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	7	5	3	0	-9	-21	-31	-41

Most of us spend the majority of our time indoors. Indoor climate is crucial to how we feel, how productive we are and if we stay healthy.

We at Lindab have therefore made it our most important objective to contribute to an indoor climate that improves people's lives. We do this by developing energy-efficient ventilation solutions and durable building products. We also aim to contribute to a better climate for our planet by working in a way that is sustainable for both people and the environment.

Lindab | For a better climate