

# Versio

# PS8



PS8 with grille box type V

## 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

## Order code

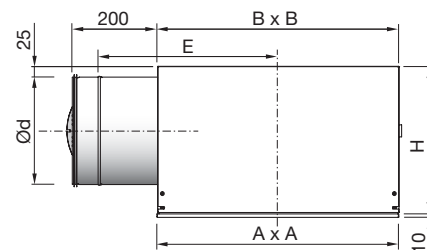
<b>Product</b>		<b>PS</b>	<b>a</b>	<b>b</b>	<b>S</b>	<b>d</b>	<b>eee</b>	<b>f</b>
<b>Type</b>								
PS								
<b>Design</b>								
8 - 9 - 10 - 11								
<b>Box type</b>								
V - H - R								
<b>Functional use</b>								
S = Supply air								
<b>Damper</b>								
0 = No damper (Box : H, V)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

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



PS8 with plenum box type H

## Dimensions



PS8-H	Ød	Pattern	A mm	B mm	H mm	E mm	m kg
	125	300	*-	380	215	350	5.9
	160	400	*-	380	250	350	5.9
	200	500	*-	460	290	390	8.5
	250	600	*-	560	340	420	12.3
	315	600	*-	560	405	420	13.1

\* Face plate dimension depends on ceiling system. See "Ceiling adjustment" for detailed dimensions. For further details on plenum box - see "Plenum boxes".

## 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.

## Materials and finish

### Grille box/plenum box:

Material: Galvanised steel

### Face plate:

Material: Galvanised steel

Standard finish: Powder-coated

Standard colours: RAL 9003 and RAL 9010, gloss 30

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

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## Accessories

### Extension piece



**MBZ**

### Order code

**Product** MBZ    **aaa**  
 Type \_\_\_\_\_  
 Size \_\_\_\_\_

Example: MBZ-200

### Mounting bracket



**PBB**

### Suspension



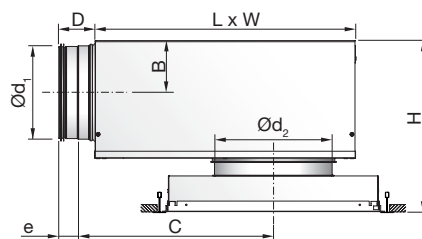
**MHS**

### Order code

**Product** \_\_\_\_\_ **aaa**  
 Type \_\_\_\_\_

Example: MHS

### PS8-V + MB plenum box



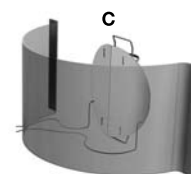
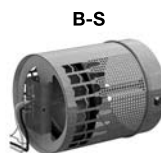
Ød <sub>1</sub> mm	Ød <sub>2</sub> mm	Pattern	B	C	D	e	H*	L	W
100	160	300	62	245	78	40	255 - 295	310	260
125	160	300	75	291	78	40	280 - 320	376	310
125	200	400	75	291	78	40	280 - 320	376	310
160	160	300	92	352	78	40	314 - 354	459	380
160	200	400	92	352	78	40	314 - 354	459	380
160	250	500	92	352	78	40	314 - 354	459	380
200	200	400	112	425	78	40	355 - 395	565	460
200	250	500	112	425	78	40	355 - 395	565	460
200	315	600	112	425	78	40	355 - 395	565	460
250	250	500	137	514	118	60	405 - 445	698	540
250	315	600	137	514	118	60	405 - 445	698	540
315	315	600	170	675	118	60	470 - 510	858	540

\* Using accessory MBZ the H dimension will increase:

Ød<sub>2</sub> = 160 - 200 mm => H +40 mm

Ød<sub>2</sub> = 250 - 315 mm => H +60 mm

### Damper options



### Order code

**Product** MB a    **bbb**    **ccc**    **S**  
**Type** MB \_\_\_\_\_  
**Damper** B = Linear cone damper  
 C = Blade damper supply  
**Duct connection Ød<sub>1</sub>** \_\_\_\_\_  
 Ø100-315  
**Diffuser dimension Ød<sub>2</sub>** \_\_\_\_\_  
 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

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## Technical data

Following PS8-V+plenum box data are valid for MBB-S.  
**For MBC data, go to [www.lindQST.com](http://www.lindQST.com) .**

### Capacity

Air flow  $q_v$  [l/s] and [m<sup>3</sup>/h], total pressure  $\Delta p_t$  [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)	
$\varnothing d_1$	$\varnothing d_2$	l/s	m <sup>3</sup> /h	l/s	m <sup>3</sup> /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	Minimum		$\Delta p_t \geq 50$ Pa		$\Delta p_t \geq 50$ Pa		
	Size $\varnothing d$	l/s	m <sup>3</sup> /h	30 dB(A)	35 dB(A)	l/s	m <sup>3</sup> /h
mm				l/s	m <sup>3</sup> /h	l/s	m <sup>3</sup> /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  $\Delta L$  from duct to room, including end reflection - see table below.

#### PS8-V + MBB-S

PS8-V + MBB-S		Centre frequency Hz							
duct	PS8-V	63	125	250	500	1K	2K	4K	8K
$\varnothing d_1$	$\varnothing d_2$								
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		Centre frequency Hz							
Size $\varnothing d$	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 further information go to [www.lindQST.com](http://www.lindQST.com) and Installation -and balancing instruction.

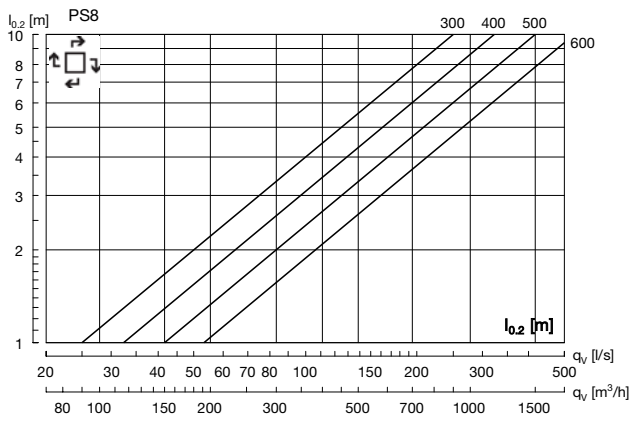
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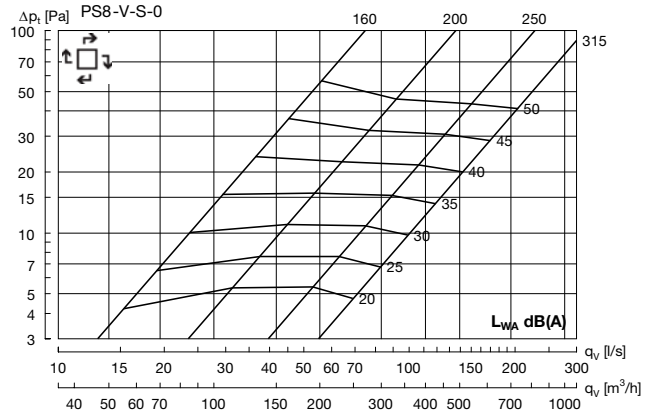
## Technical data

### 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

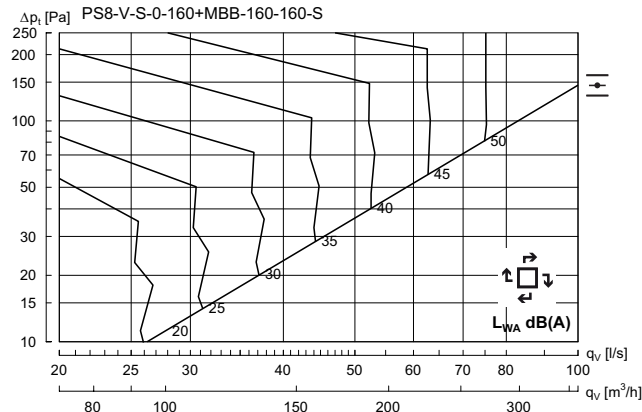


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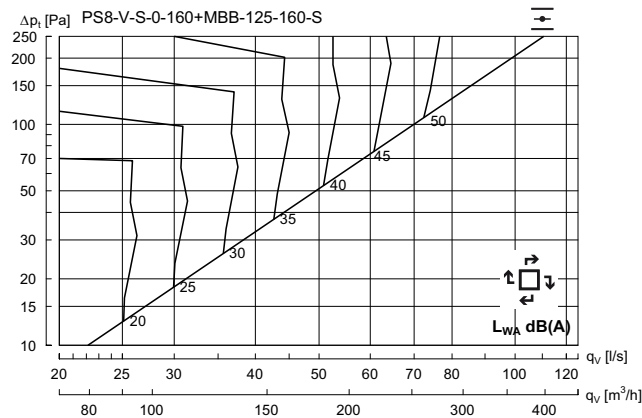
# PS8

## Technical data

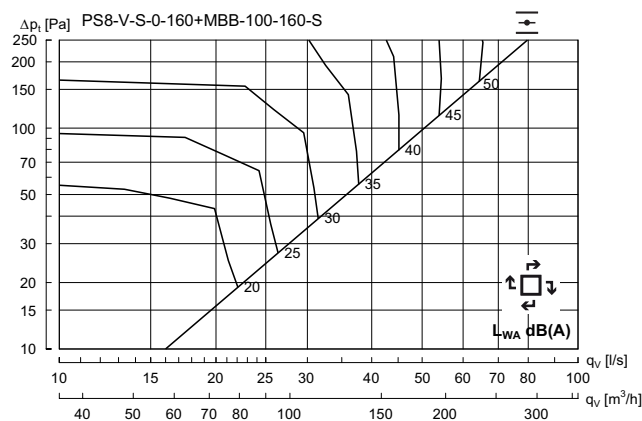
### PS8-V 160 + MBB-S - Supply air



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

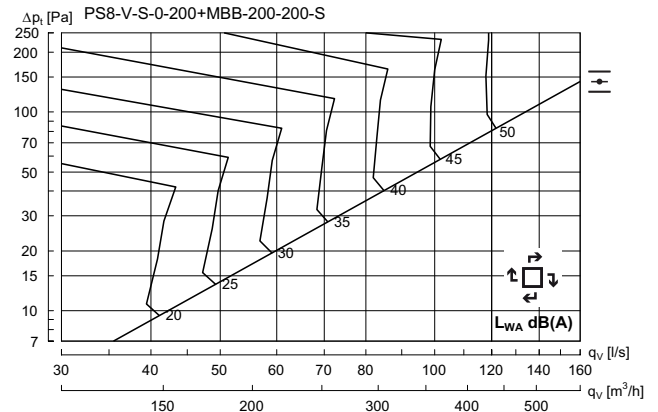


Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	8	3	-1	1	-7	-16	-24	-31

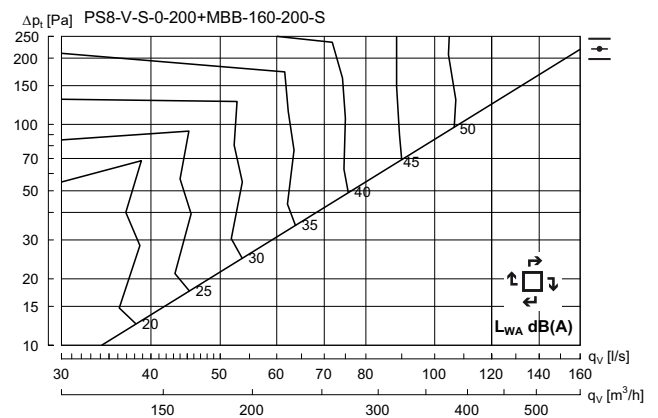


Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	10	3	3	-1	-8	-14	-18	-23

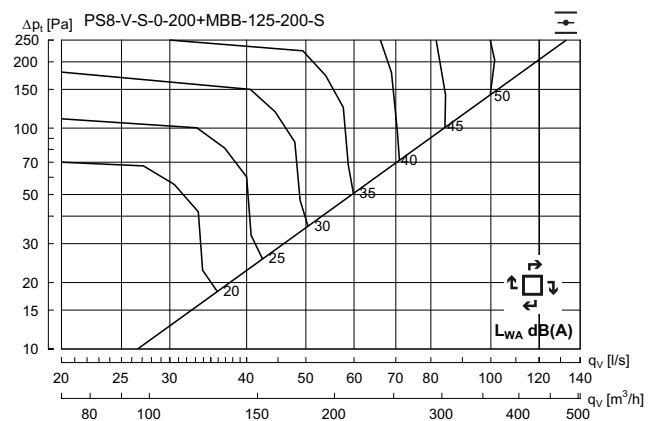
### PS8-V 200 + MBB-S - Supply air



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



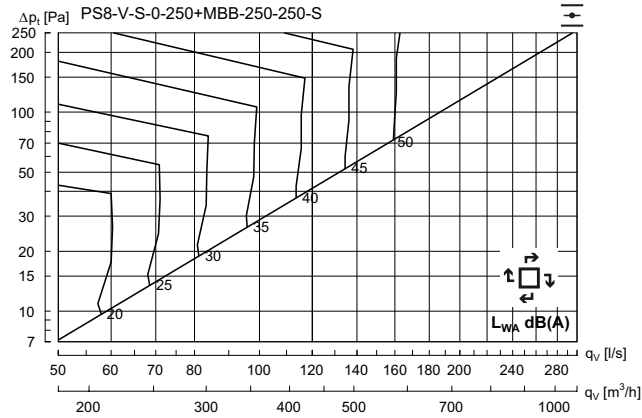
Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	6	5	2	-1	-6	-13	-19	-25

# Versio

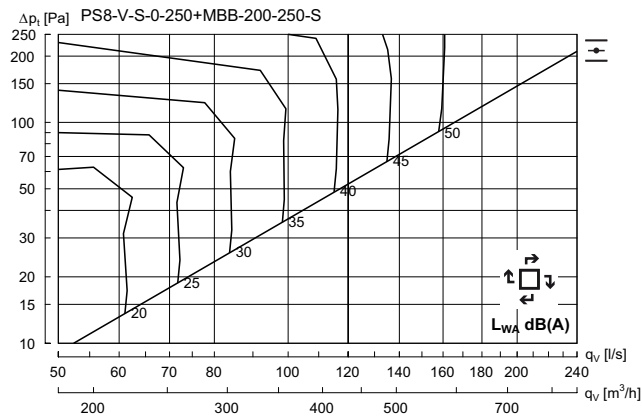
# PS8

## Technical data

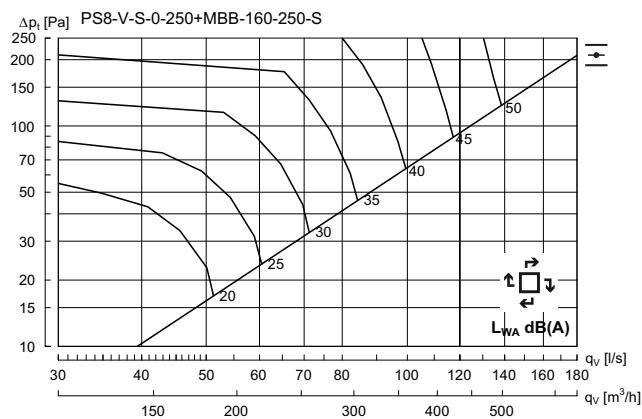
### PS8-V 250 + MBB-S - Supply air



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

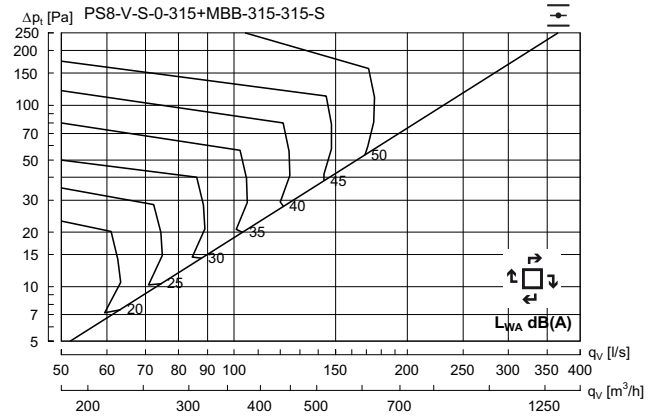


Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	12	4	-2	0	-6	-16	-20	-26

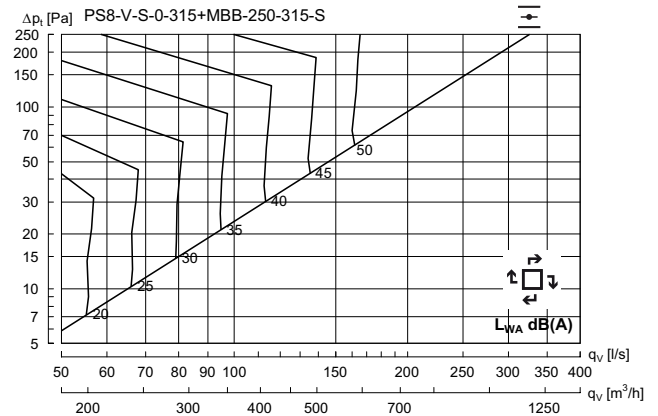


Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	15	5	1	-2	-5	-13	-20	-26

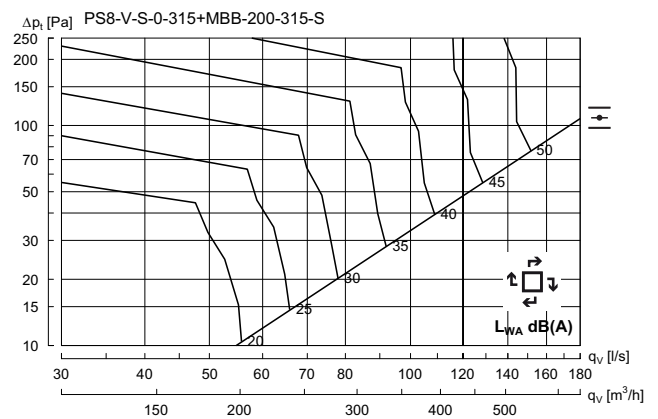
### PS8-V 315 + MBB-S - Supply air



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



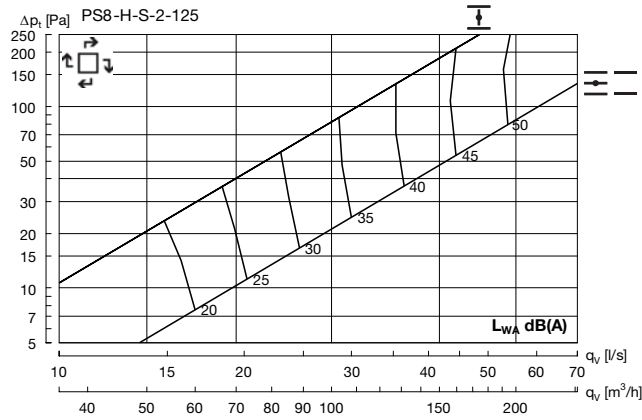
Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	10	2	-1	1	-7	-18	-23	-29

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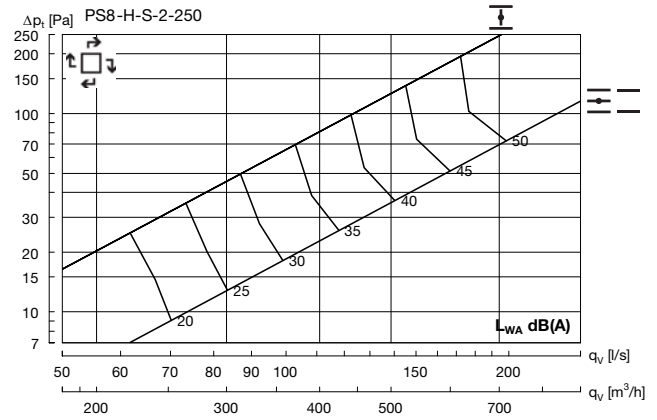
## Technical data

### PS8 + H - Supply air

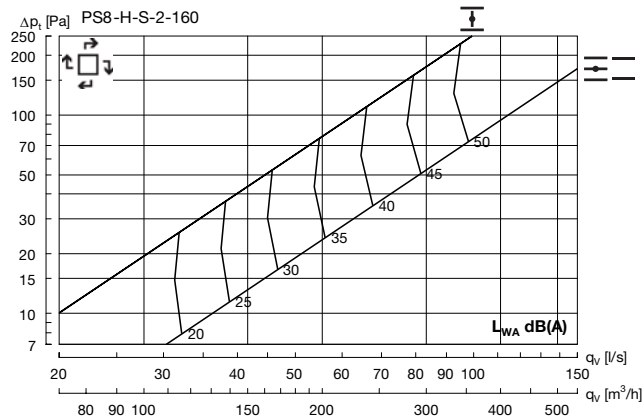


Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	3	4	4	0	-10	-18	-25	-31

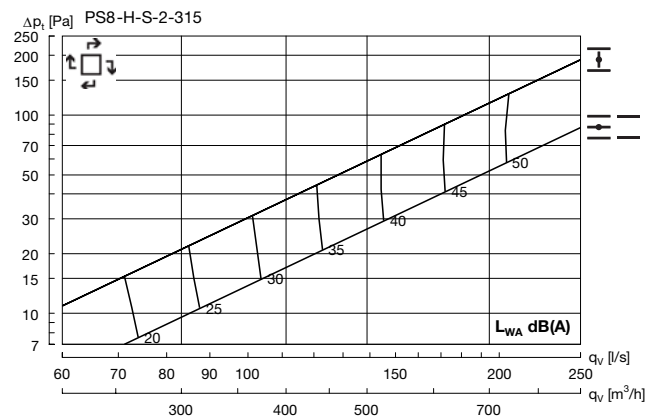
### PS8 + H - Supply air



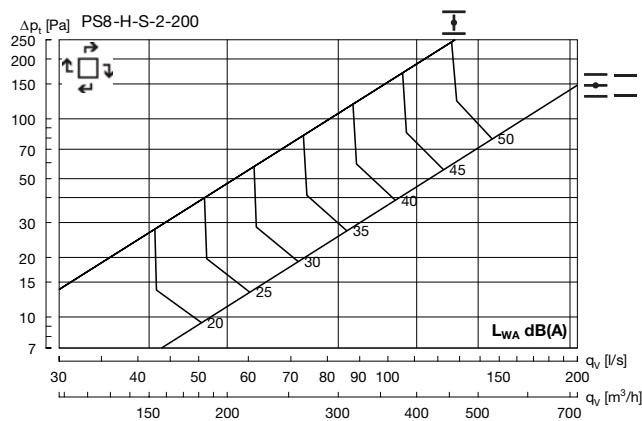
Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	5	6	4	-1	-8	-18	-26	-33



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



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



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