



## Lindab **PC6**

Integra - Perforated diffuser



# Integra - Perforated diffuser

# PC6



## Description

PC6 is a circular perforated diffuser that can be used for both supply air and extract air. The diffuser is suitable for the horizontal supply of cooled air. The diffuser can also be used for low impulse and is therefore useful for the supply of replacement air in environments with high rates of air exchange.

Installing a PC6 diffuser in a plenum box type MB can help to achieve a stable flow of air to the diffuser as well as realise the potential for individual adjustment.

Damper type B is a unique linear cone damper which allows to use the full operational area (0-100%) and allows to balance with a high pressure drop over the box with low sound generation. Furthermore the construction of the damper gives an accurate and reliable measurement.

Damper type C and E are with rotating blade dampers for respectively supply and extract air. Typically used in applications that don't require a high balancing pressure in the plenum box.

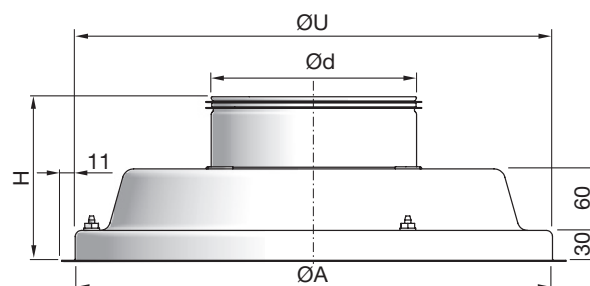
- Suitable for both supply and extract air
- Discrete design
- Can be used for low impulse supply air
- Plenum box with several damper options

## Order code

<b>Product</b>	PC6	a	bbb
<b>Type</b>			
PC6			
<b>Functional use</b>			
S = Supply air			
E = Extract			
L = Low-impulse			
<b>Connection dim.</b>			
Ø125-315			

Example: PC6-S-200

## Dimensions



PC6 Ød	ØA	H	ØU*	m
mm	mm	mm	mm	kg
125	360	140	370	3.90
160	460	140	470	5.30
200	460	140	470	5.40
250	540	140	550	7.40
315	540	140	550	8.10

\* ØU = ceiling grid opening.

Ød 315, No mounting holes for MB !

## PC6-S



## 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

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

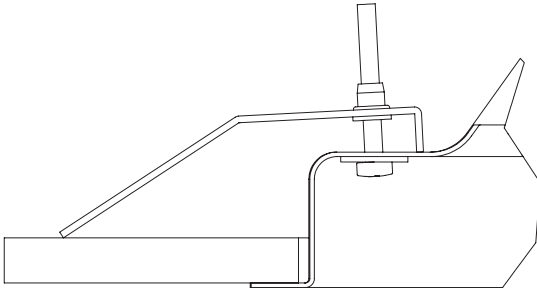
The diffuser is available in other colours. Please contact Lindab's sales department for further information.

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## Accessories

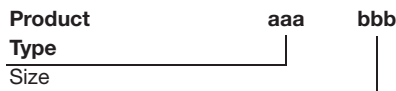
### DCZ - Mounting brackets



### MBZ - Extension piece

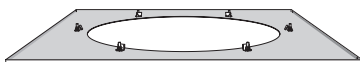


#### Order code - accessories

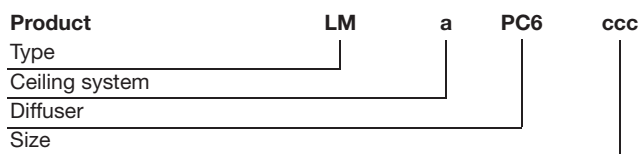


Example: MBZ-200

### LM - Module plate

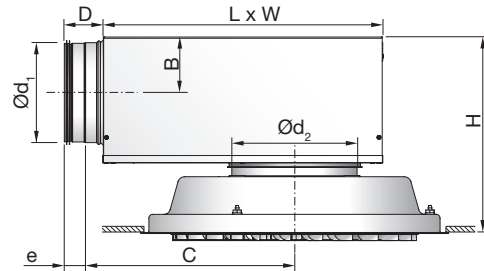


#### Order code - module plate



Example: LM-1-PC6-200  
Ceiling system - see introductory summary

## PC6 + MB plenum box



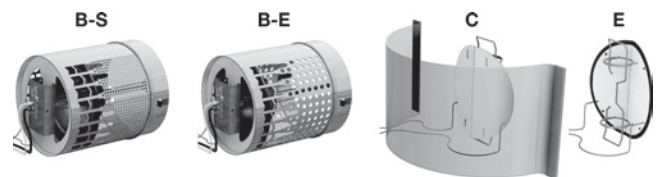
Ød <sub>1</sub> mm	Ød <sub>2</sub> mm	B	C	D	e	H*	L	W
		mm						
100	125	62	245	78	40	256 - 296	310	260
100	160	62	245	78	40	256 - 296	310	260
125	125	75	291	78	40	281 - 321	376	310
125	160	75	291	78	40	281 - 321	376	310
125	200	75	291	78	40	221 - 261	376	310
160	160	92	352	78	40	315 - 355	459	380
160	200	92	352	78	40	315 - 355	459	380
160	250	92	352	78	40	315 - 355	459	380
200	200	112	425	78	40	356 - 396	565	460
200	250	112	425	78	40	356 - 396	565	460
200	315	112	425	78	40	356 - 396	565	460
250	250	137	514	118	60	406 - 446	698	540
250	315	137	514	118	60	406 - 446	698	540
315	315	170	675	118	60	471 - 511	858	540

\* Using accessory MBZ the H dimension will increase:

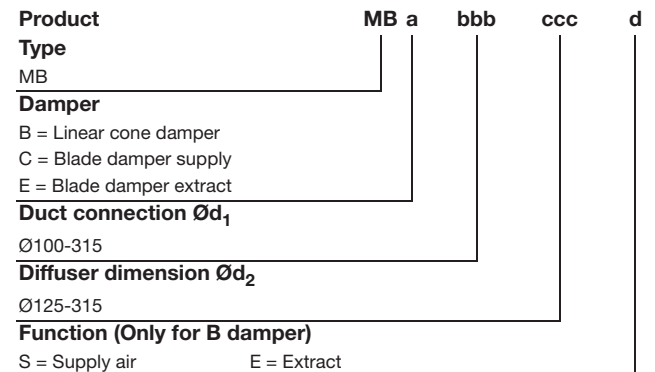
Ød<sub>2</sub> = 100 - 200 mm => H +40 mm

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

## Damper options



## Order code



Example 1: PC6-S-200+MBB-160-200-S

Example 2: PC6-200+MBC-125-200

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## Technical data

Following PC6+plenum box data are valid for MBB-S/-E. For MBC and MBE 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

PC6 + MBB-S		$\Delta p_t \geq 50$ Pa		$\Delta p_t \geq 50$ Pa	
duct	PC6	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	125	32	115	38	137
100	160	39	140	46	166
125	125	39	140	46	166
125	160	48	173	62	223
125	200	56	202	66	238
160	160	53	191	62	223
160	200	66	238	78	281
160	250	74	266	95	342
200	200	71	256	85	306
200	250	92	331	112	403
200	315	113	407	138	497
250	250	110	396	130	468
250	315	122	439	152	547
315	315	156	562	188	677

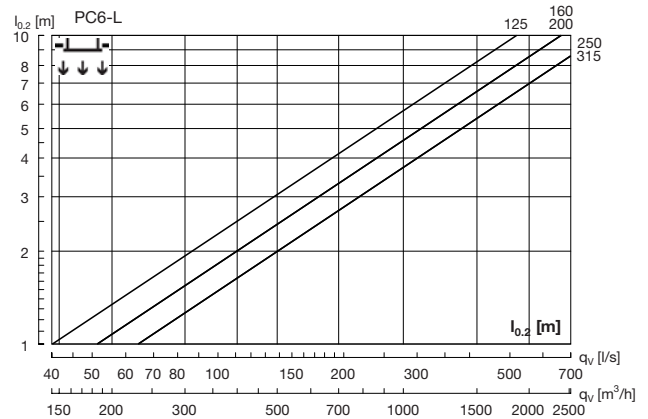
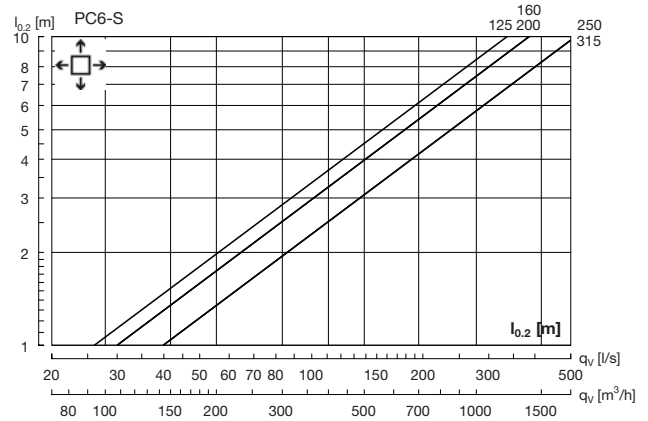
## Low-impulse Correction sound power level ( $L_{WA}$ ) and pressure loss ( $\Delta p_t$ )

On the following pages you can find diagrams for all sizes PC6+MBB supply air. When low-impulse values are wanted use the correction factors in the table below.

PC6-L + MBB-S		Low-impulse Correction factor	
duct	PC6-L	$L_{WA}$	$\Delta p_t$
$\varnothing d_1$	$\varnothing d_2$		
100	125	-1	x 1
100	160	1	x 1
125	125	-4	x 1
125	160	-1	x 1
125	200	-2	x 1
160	160	-5	x 0.9
160	200	-3	x 1
160	250	-2	x 1
200	200	0	x 1
200	250	0	x 1
200	315	-1	x 1
250	250	-5	x 0.9
250	315	-2	x 1
315	315	0	x 1

## Throw $l_{0.2}$

Throw  $l_{0.2}$  [m] is specified at a terminal velocity of 0.2 m/s.



## Sound attenuation

Sound attenuation of the diffusers  $\Delta L$  from duct to room, including and reflection, see table below.

PC6 + MBB-S/-E		Centre frequency Hz							
duct	PC6	63	125	250	500	1K	2K	4K	8K
$\varnothing d_1$	$\varnothing d_2$								
100	125	19	16	7	15	19	18	19	21
100	160	17	15	4	14	17	17	17	18
125	125	17	15	9	19	17	19	18	20
125	160	15	14	8	18	15	16	17	19
125	200	13	11	4	14	13	15	16	17
160	160	15	15	10	21	17	18	19	20
160	200	18	15	8	21	17	17	18	19
160	250	16	14	5	17	13	15	17	18
200	200	13	11	8	16	18	16	19	17
200	250	13	9	5	14	16	15	18	16
200	315	13	8	3	10	16	14	16	16
250	250	14	8	7	15	17	17	18	17
250	315	13	7	6	14	16	15	16	17
315	315	8	9	8	14	17	16	17	21

## Balancing

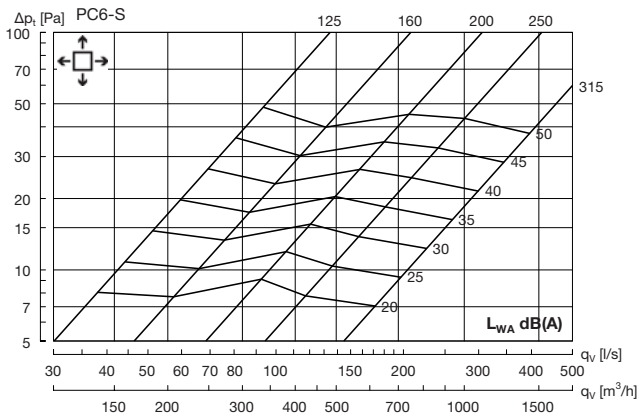
Balancing data is contained in a separate brochure.

# Integra - Perforated diffuser

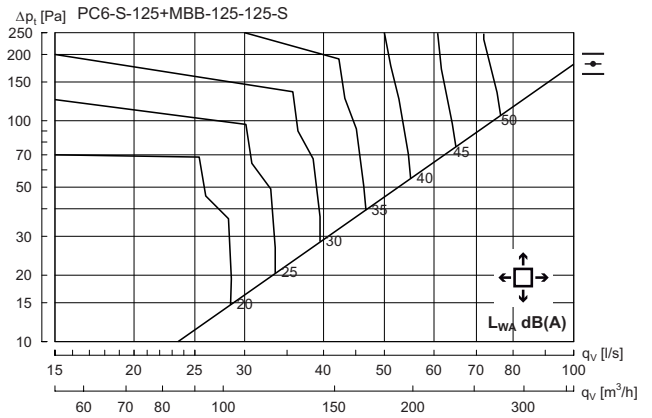
# PC6

## Technical data

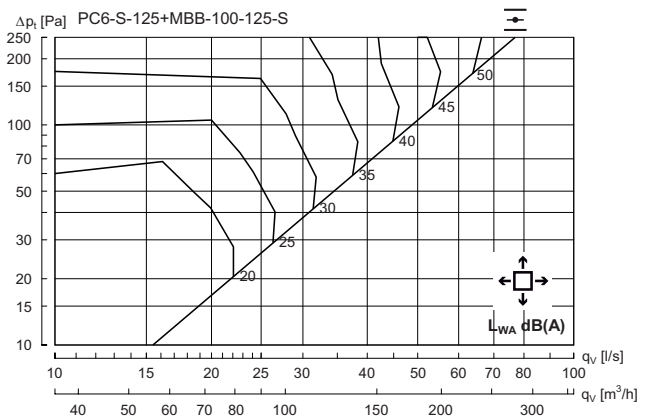
### PC6 without box - Supply air



### PC6 125 + MBB-S - Supply air



<b>Hz</b>	<b>63</b>	<b>125</b>	<b>250</b>	<b>500</b>	<b>1K</b>	<b>2K</b>	<b>4K</b>	<b>8K</b>
<b>K<sub>ok</sub></b>	7	2	-4	0	-4	-14	-23	-32



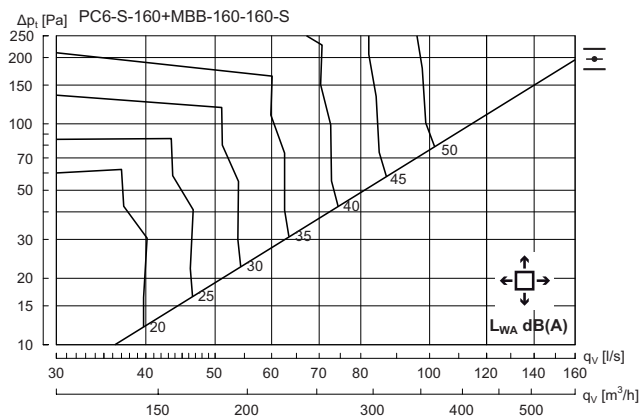
<b>Hz</b>	<b>63</b>	<b>125</b>	<b>250</b>	<b>500</b>	<b>1K</b>	<b>2K</b>	<b>4K</b>	<b>8K</b>
<b>K<sub>ok</sub></b>	10	6	1	-2	-5	-12	-18	-25

# Integra - Perforated diffuser

# PC6

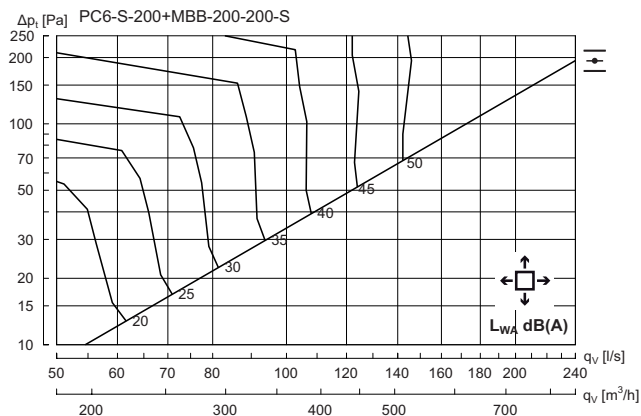
## Technical data

### PC6 - 160 + MBB-S - Supply air

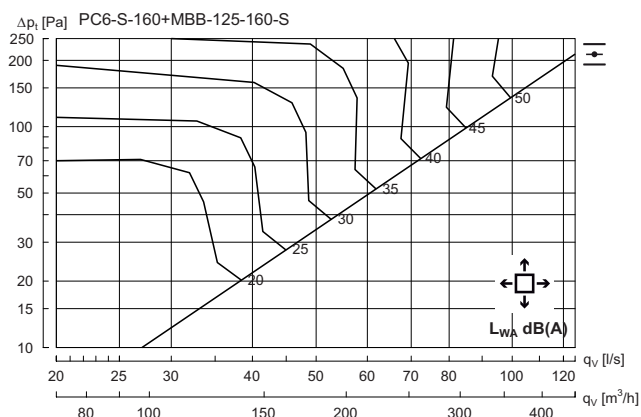


Hz	63	125	250	500	1K	2K	4K	8K
$K_{ek}$	10	3	-5	-1	-3	-15	-23	-29

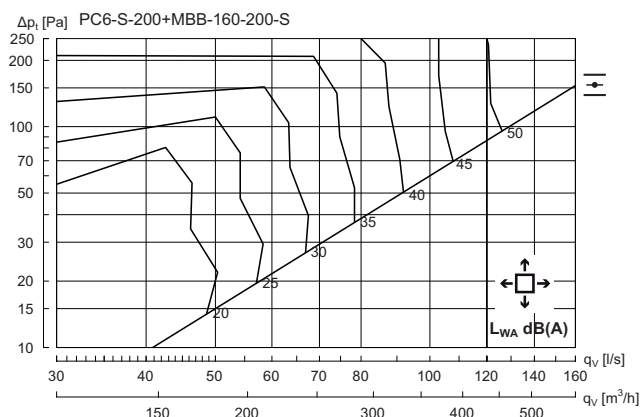
### PC6 - 200 + MBB-S - Supply air



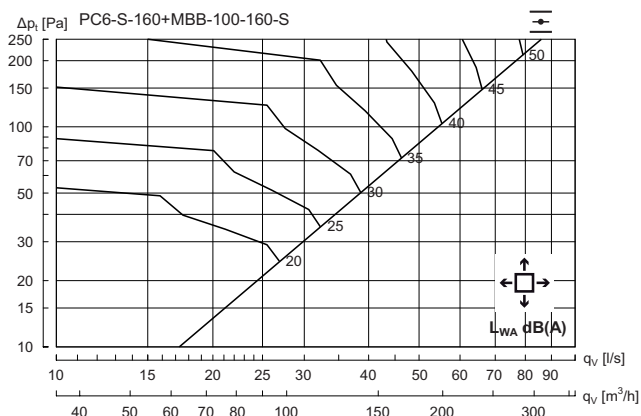
Hz	63	125	250	500	1K	2K	4K	8K
$K_{ek}$	11	2	-5	-1	-4	-15	-22	-27



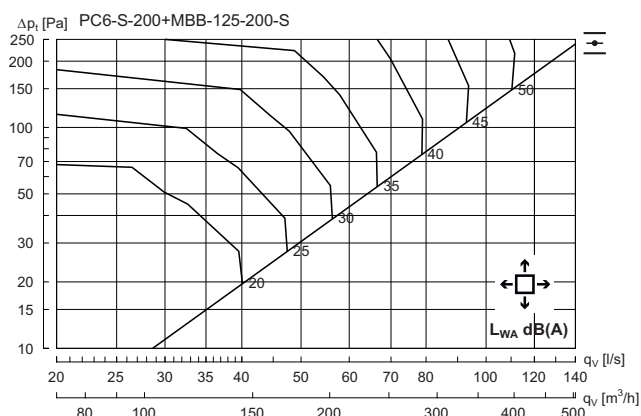
Hz	63	125	250	500	1K	2K	4K	8K
$K_{ek}$	9	5	0	-2	-5	-12	-17	-25



Hz	63	125	250	500	1K	2K	4K	8K
$K_{ek}$	11	4	-2	-2	-3	-12	-20	-27



Hz	63	125	250	500	1K	2K	4K	8K
$K_{ek}$	7	4	0	-1	-5	-11	-16	-22



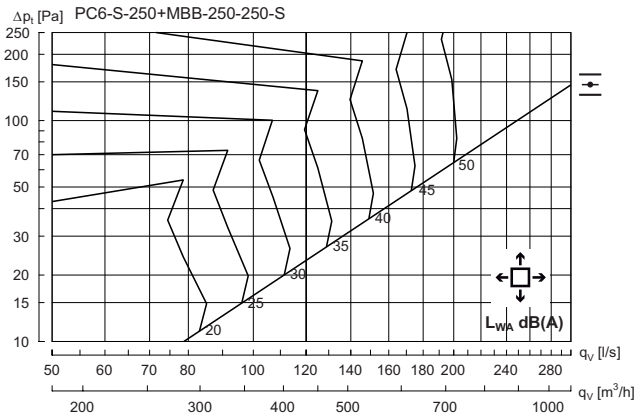
Hz	63	125	250	500	1K	2K	4K	8K
$K_{ek}$	6	5	0	-2	-5	-10	-16	-22

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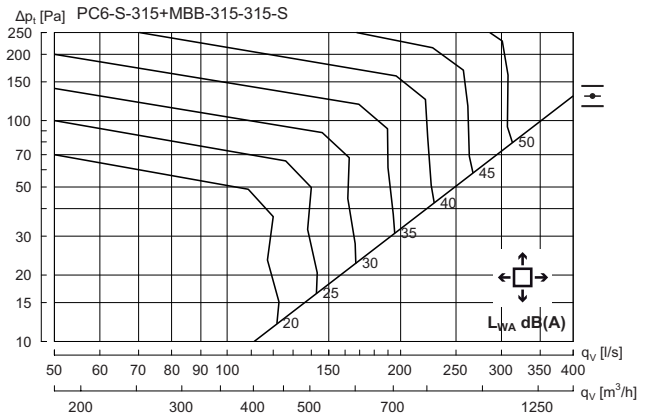
## Technical data

### PC6 - 250 + MBB-S - Supply air

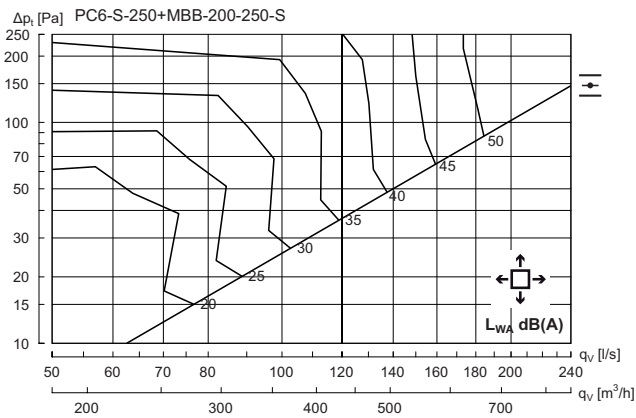


Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	9	-1	-6	0	-4	-16	-25	-30

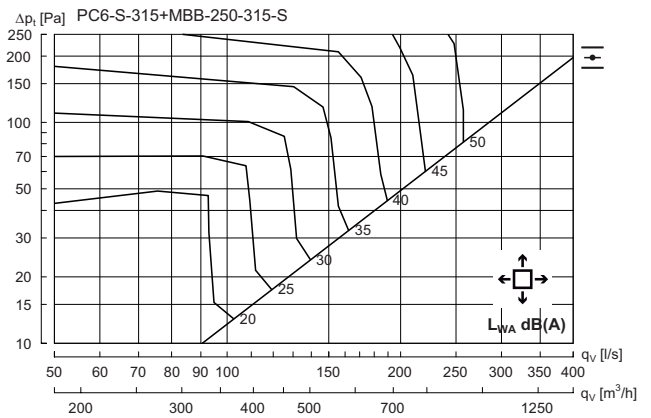
### PC6 - 315 + MBB-S - Supply air



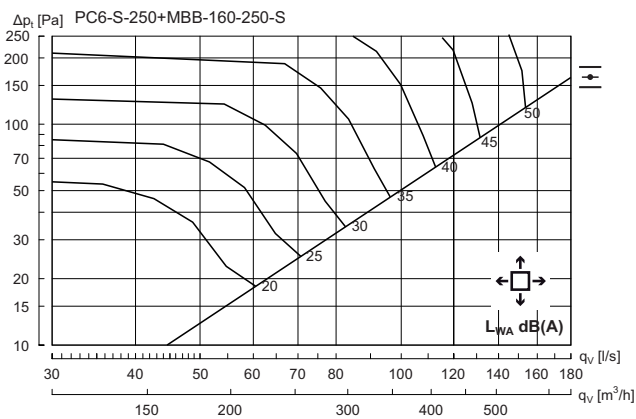
Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	13	1	-2	-2	-4	-13	-23	-29



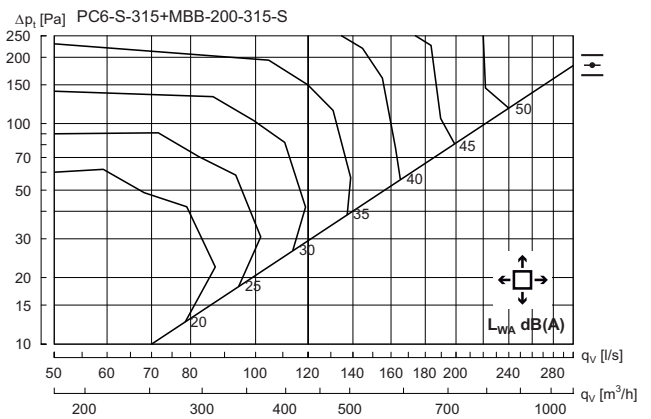
Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	11	3	-3	-2	-3	-14	-22	-29



Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	11	2	-3	-2	-3	-13	-19	-26



Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	12	3	-1	-4	-4	-10	-18	-24



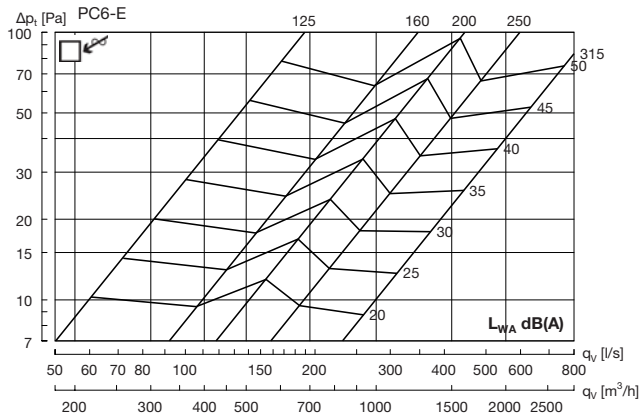
Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	10	6	-1	-2	-4	-12	-20	-26

# Integra - Perforated diffuser

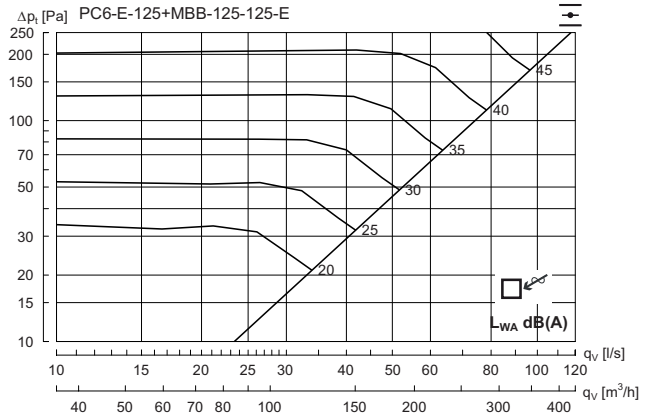
# PC6

## Technical data

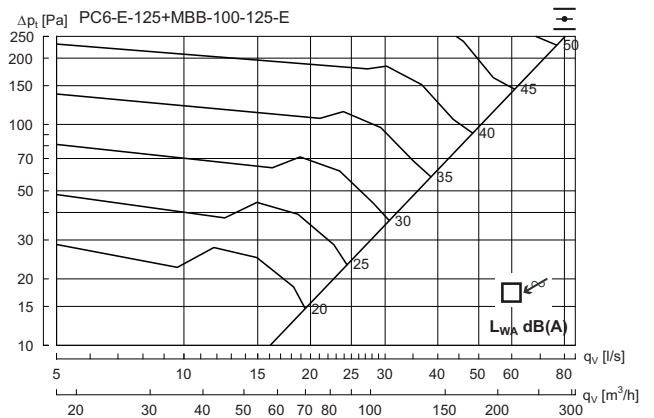
### PC6 without box - Extract air



### PC6 125 + MBB-E - Extract air



Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	12	5	0	-2	-5	-11	-14	-21



Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	11	-1	4	-2	-8	-11	-16	-23

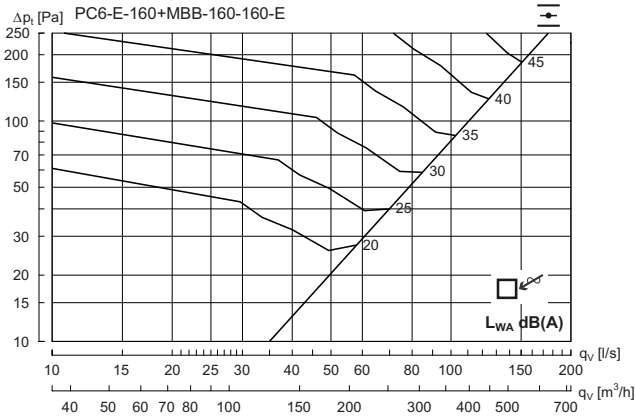


# Integra - Perforated diffuser

# PC6

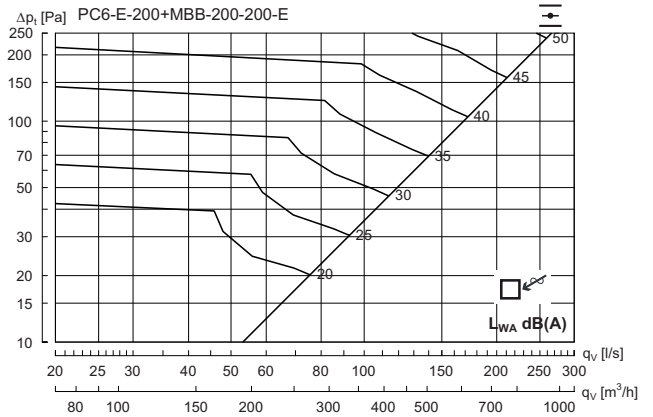
## Technical data

### PC6 160 + MBB-E - Extract air

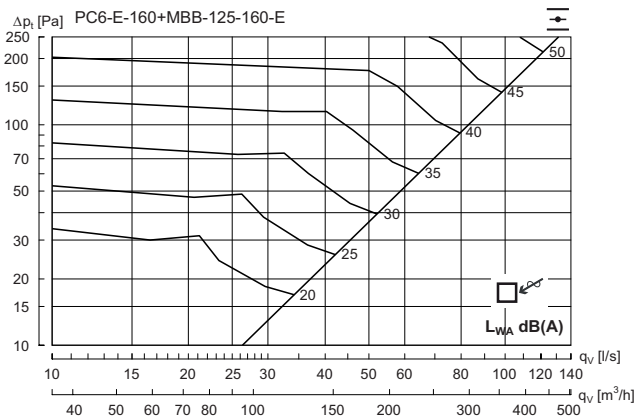


Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	20	8	-1	-4	-6	-12	-18	-21

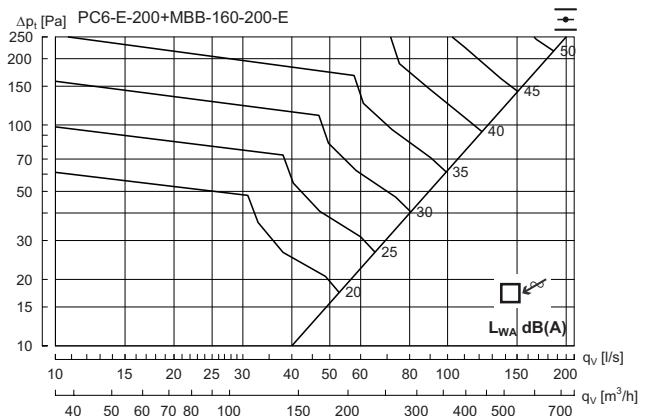
### PC6 200+ MBB-E - Extract air



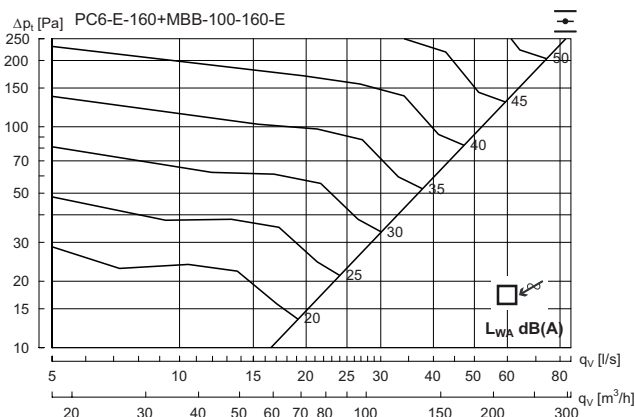
Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	14	4	0	-3	-5	-9	-15	-23



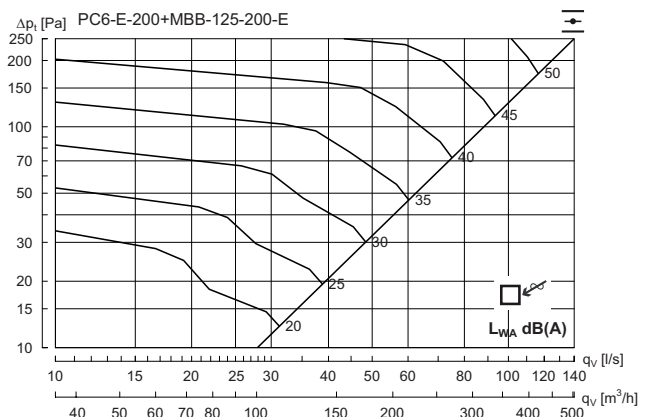
Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	12	6	1	-2	-6	-11	-14	-21



Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	15	6	-1	-3	-5	-9	-15	-21



Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	9	3	3	-1	-8	-11	-16	-22



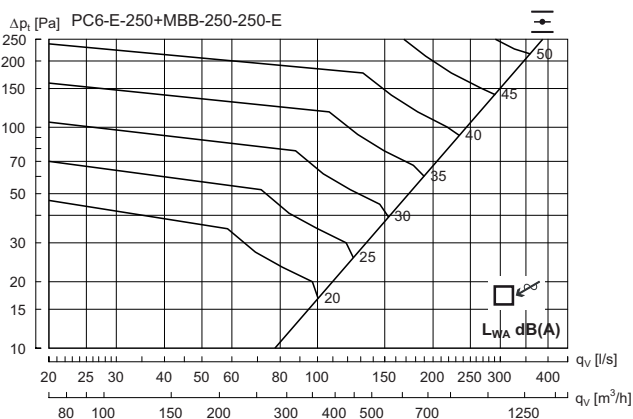
Hz	63	125	250	500	1K	2K	4K	8K
$K_{ok}$	10	3	1	-2	-5	-10	-16	-22

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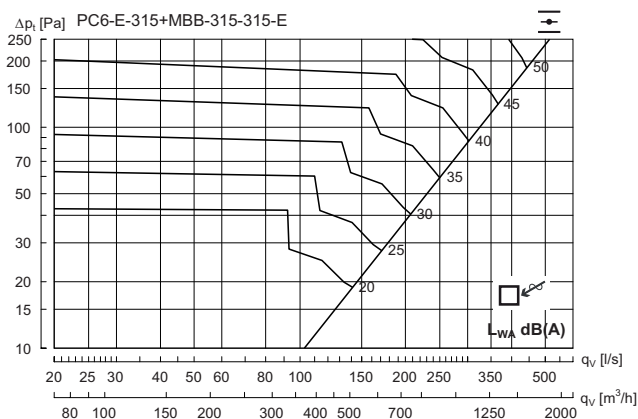
## Technical data

### PC6 250+ MBB\_E - Extract air

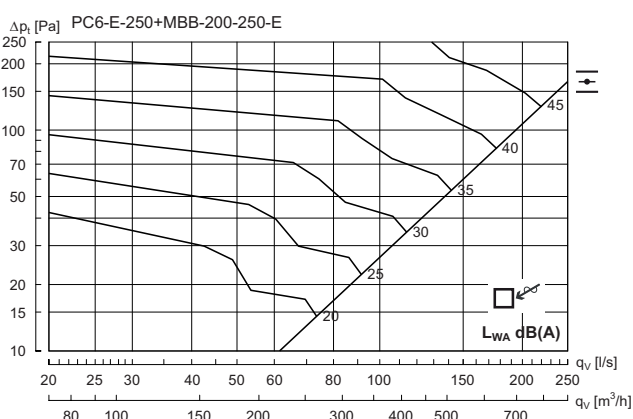


Hz	63	125	250	500	1K	2K	4K	8K
$K_{sk}$	10	5	2	-3	-5	-11	-17	-24

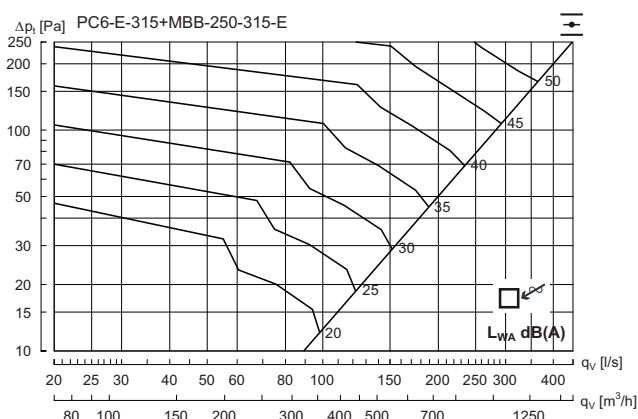
### PC6 315+ MBB-E - Extract air



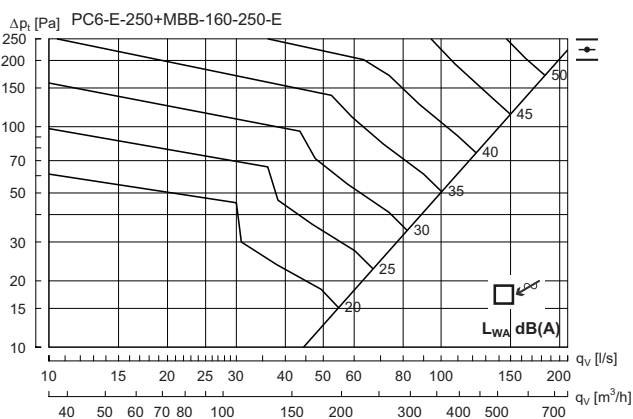
Hz	63	125	250	500	1K	2K	4K	8K
$K_{sk}$	13	5	3	-3	-6	-10	-16	-27



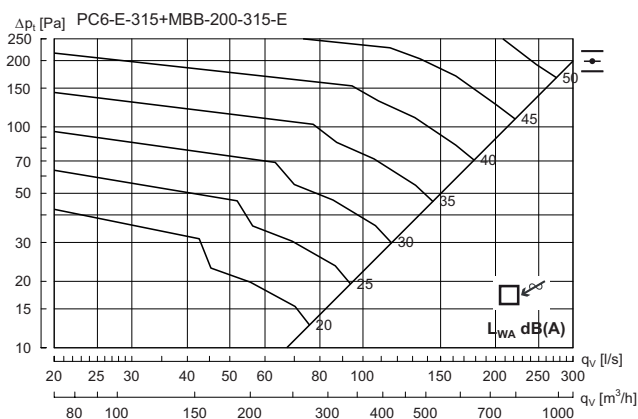
Hz	63	125	250	500	1K	2K	4K	8K
$K_{sk}$	13	4	0	-3	-5	-10	-14	-21



Hz	63	125	250	500	1K	2K	4K	8K
$K_{sk}$	8	5	2	-3	-5	-11	-17	-25



Hz	63	125	250	500	1K	2K	4K	8K
$K_{sk}$	14	6	0	-4	-6	-9	-14	-19



Hz	63	125	250	500	1K	2K	4K	8K
$K_{sk}$	13	5	1	-3	-5	-9	-14	-22



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](#)