Perforated diffuser PCS

Description

PCS is a circular diffuser with integrated box for visible installation. The diffuser has a perforated face plate and can be used for both supply and extract air.

The diffuser has a built-in damper and a measuring device for adjustment. PCS is equipped with a M8 threaded rod at the top for suspending the diffuser.

The diffuser is suitable for the horizontal supply of cooled air.

- Can be used for both supply and extract air.
- Can be connected regardless of straight ducting before the diffuser.
- Supplied with integrated M8 rivet nut for suspension.
- Detachable damper for cleaning of duct.

Maintenance

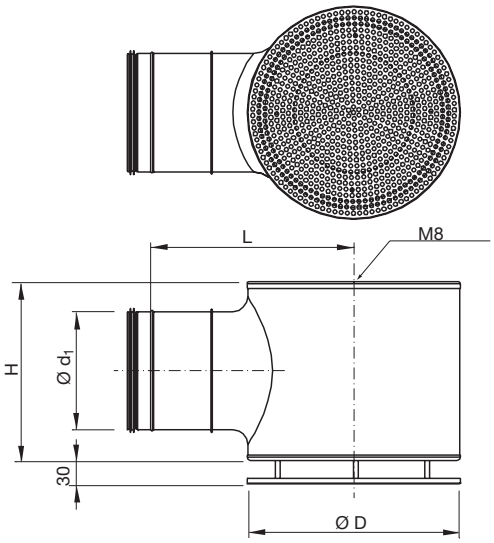
The face plate can be detached and the damper removed to enable cleaning of the internal parts or the duct. The visible parts of the diffuser can be wiped with a damp cloth.

Order code

Product	**PCS 2**	**aaa**	**A**
Type			
PCS 2			
Size			
Ø125-315			
Version			
A			

Example: PCS 2 - 160 - A

Dimensions



Size	ØD	Ød$_1$	L	H	Weight
mm	mm	mm	mm	mm	kg
125	240	125	340	215	3.4
160	300	160	360	260	4.6
200	360	200	390	300	6.9
250	460	250	420	350	9.6
315	540	315	460	420	11.4

Materials and finish

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

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

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Technical data

Capacity

Volume 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 effect level

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

Quick selection

Supply air

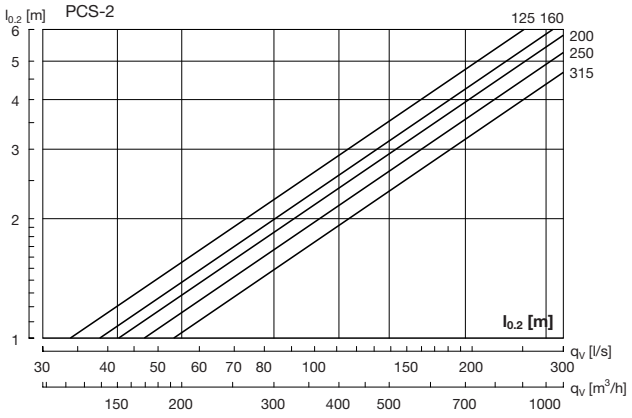
	Minimum P_i=5 Pa		p_t=50 Pa L_{WA}=30dB(A)		p_t=50 Pa L_{WA}=35dB(A)	
Size	l/s	m³/h	l/s	m³/h	l/s	m³/h
125	20	73	30	106	36	131
160	34	122	48	173	59	212
200	53	190	65	235	81	292
250	79	286	109	393	135	484
315	121	437	-	-	188	675

Extract

	Minimum P_i=5Pa		P_t=50 Pa L_{WA}= 30 dB(A)		P_t=50 Pa L_{WA}= 35 dB(A)	
Size	l/s	m³/h	l/s	m³/h	l/s	m³/h
125	20	73	29	104	43	156
160	34	122	32	117	62	222
200	53	190	63	225	104	376
250	79	286	109	391	146	525
315	121	437	-	-	191	687

Throw $l_{0.2}$

The throw is specified at a terminal velocity of 0.2 m/s.



Sound attenuation

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

	Centre frequency Hz							
Size	63	125	250	500	1K	2K	4K	8K
125	21	16	6	19	14	12	11	17
160	15	11	9	21	15	12	13	16
200	12	8	6	15	15	9	11	14
250	19	15	12	17	12	9	11	14
315	16	13	11	14	12	9	12	13

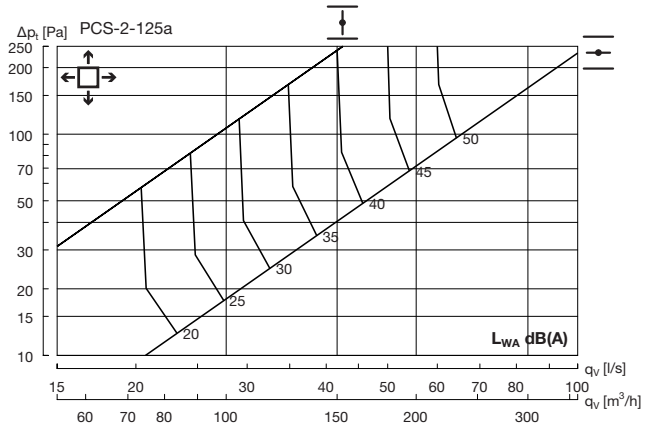
Balancing

Balancing data is contained in a separate brochure.

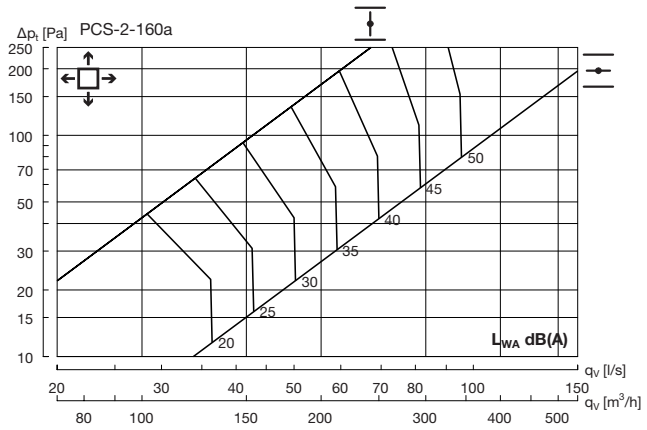
Perforated diffuser PCS

Technical data

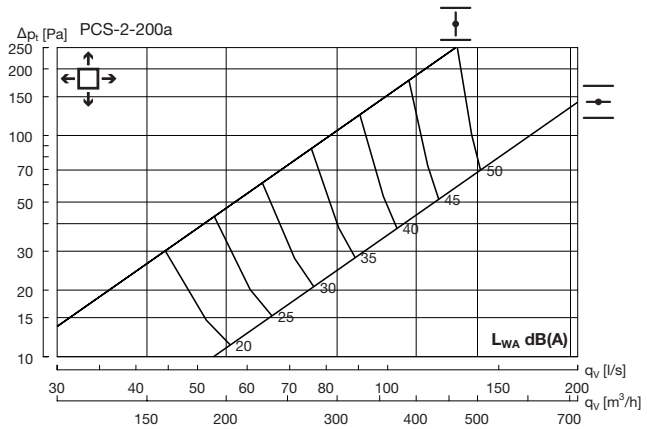
Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	6	3	1	-4	-5	-10	-15	-17

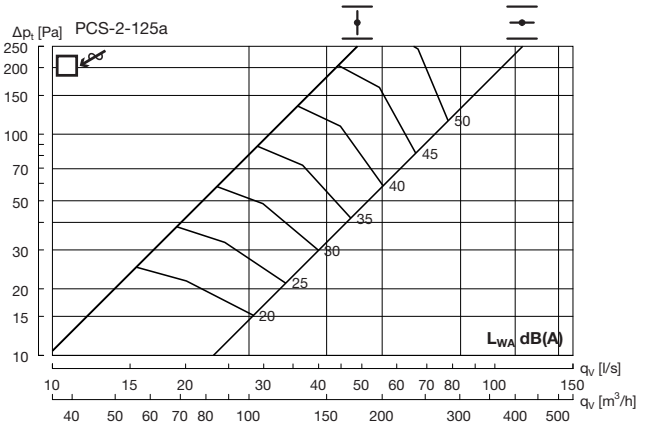


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	6	3	-1	-4	-5	-9	-16	-17

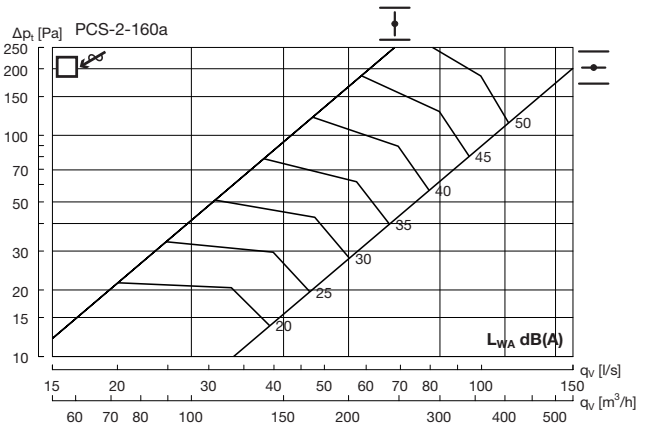


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	3	0	-2	-3	-4	-9	-17	-19

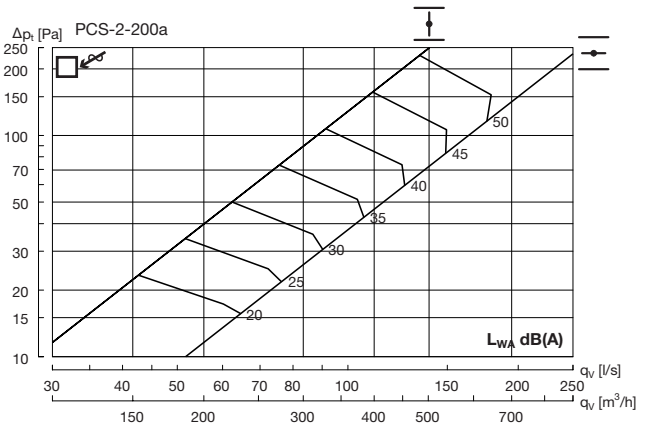
Extract air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	**6**	**3**	**2**	**-3**	**-6**	**-10**	**-13**	**-16**



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	**5**	**2**	**0**	**-6**	**-5**	**-8**	**-13**	**-18**



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	**7**	**4**	**-1**	**-3**	**-4**	**-9**	**-15**	**-19**

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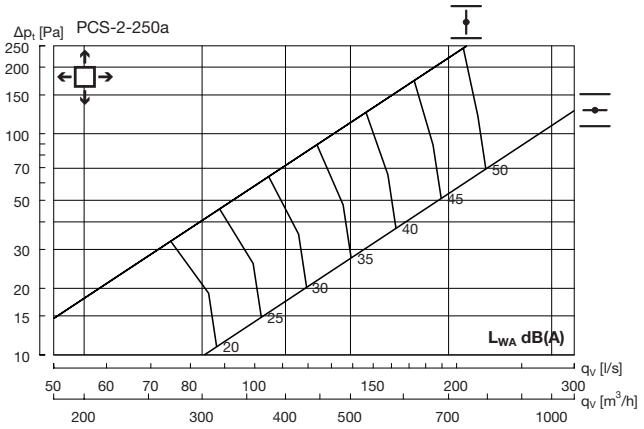
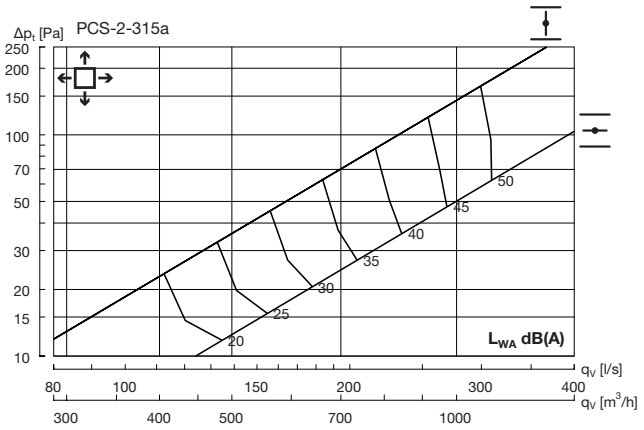
Technical data

Supply air

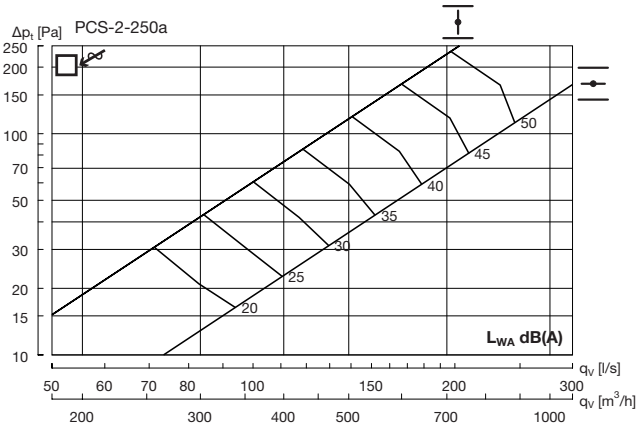


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	4	1	-3	-3	-4	-9	-17	-18

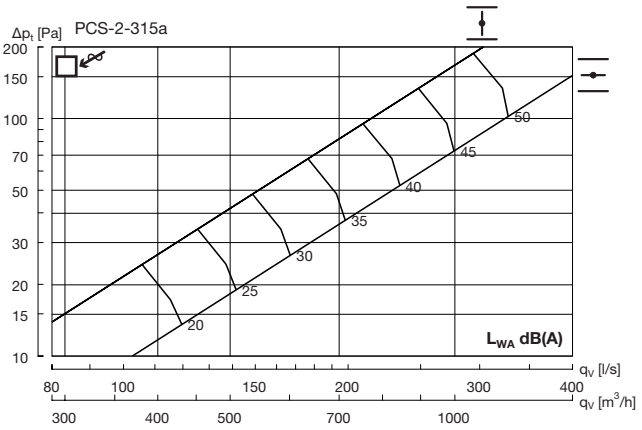


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	5	2	-2	-1	-5	-11	-17	-16

Extract air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	**8**	**5**	**-2**	**-3**	**-5**	**-9**	**-14**	**-16**



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