

# Perforated ceiling diffuser

# LCR3



## Description

LCR3 is a ceiling-mounted air exhaust diffuser, which can be used to advantage in clean rooms where you don't want to equip exhaust diffusers with HEPA filters. In addition, the diffuser can be used to supply air in connection with a central duct-mounted HEPA filter. LCR3 ensures a sealed ceiling and diffuser solution for the pressure regulation of rooms.

LCR3 is available in two sizes and with different duct connections. The diffuser can also be adapted for the most popular ceiling systems with reference to the order code. Visually, the diffuser looks like type LCR1. The diffuser is equipped with a fully perforated front plate, which is attached by wire springs, ensuring easy installation and removal of the base plate for cleaning purposes.

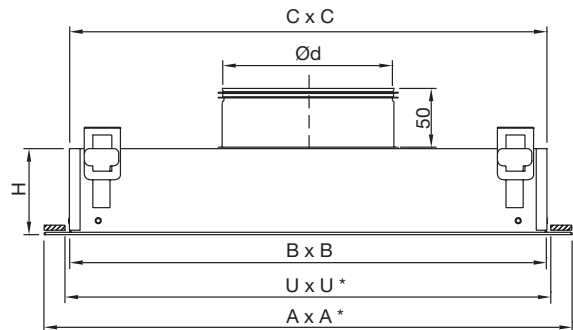
- Can be supplied adapted for ceilings with reference to the order code
- Visually identical to LCR1
- Airtight box with sealed design
- Mounting brackets supplied as standard
- Can be attached using a wire mounting (pendants) for standard ceiling systems
- The front plate can be opened downwards without having to demount it.

## Materials and finish

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

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

## Dimensions



\*) Dimensioning applies for fixed ceiling diffusers. Dimensions for other ceiling types (size 600) are given in the ceiling adjustment section. (see chapter "Ceiling tile adaption").

U x U = Min. cutting dimension

Size	Ød	H	A	B	C	U	m
mm	mm	mm	mm	mm	mm	mm	kg
400	125-200	100	415	360	325	365	2.4
600	160-400	100	615	560	525	565	4.8

## Order (size 400)

Product **LCR3 400 F aaa**

Type \_\_\_\_\_

Size \_\_\_\_\_

Fixed ceiling \_\_\_\_\_

Connection Ød (125, 160, 200) \_\_\_\_\_

## Order (size 600)

Product **LCR3 600 a bbb**

Type \_\_\_\_\_

Size \_\_\_\_\_

**ceiling**

F = Fixed ceiling \_\_\_\_\_

T = Visible T-rail \_\_\_\_\_

C = Clip-In (bevelled) \_\_\_\_\_

A = Other ceiling type\* \_\_\_\_\_

Connection Ød (160, 200, 250, 315, 400) \_\_\_\_\_

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## Technical data

### Capacity

Volume flow  $q_v$  [l/s] and [m<sup>3</sup>/h], total pressure drop  $\Delta p_t$  [Pa] and sound effect level  $L_{WA}$  [dB(A)] can be seen in the diagram below.

### Frequency-related sound effect level

The sound effect level in the frequency band is defined as  $L_{wok} = L_{WA} + K_{ok}$ . The values for  $K_{ok}$  are specified in charts beneath the diagram below.

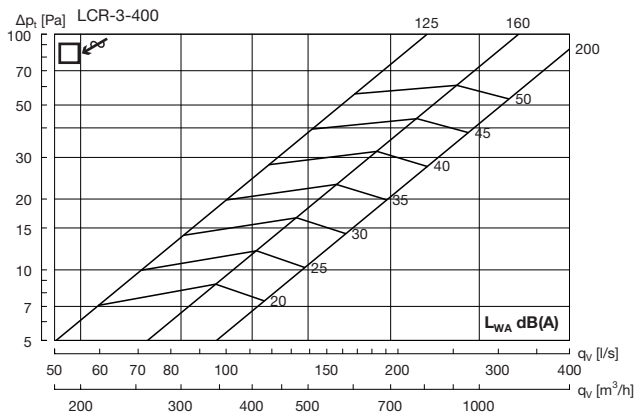
## Sound attenuation

The diffuser's sound attenuation function from duct to room, including end reflection.

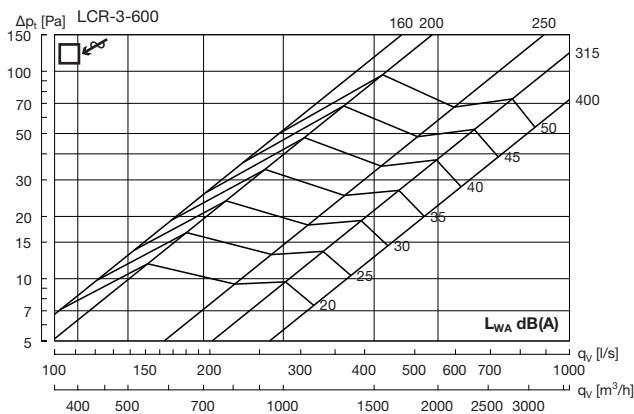
Size	Mean frequency Hz							
	63	125	250	500	1K	2K	4K	8K
400-125	20	14	9	10	5	1	1	3
400-160	160	13	7	0	5	1	1	3
400-200	16	10	4	1	4	0	0	2
600-160	18	12	7	2	1	0	0	1
600-200	15	10	4	2	0	0	1	2
600-250	15	9	3	3	0	0	1	1
600-315	12	7	2	1	0	1	1	2
600-400	9	6	1	3	0	0	0	1

## Ceiling adjustment

LCR3 in size 600 is suitable for installation in several different types of ceiling system. Read more about this in the ceiling adjustment section.



Size	63	125	250	500	1K	2K	4K	8K
125	8	6	3	-2	-9	-10	-19	-25
160	8	9	2	-3	-7	-11	-20	-28
200	7	5	-2	-3	-3	-14	-25	-40



Size	63	125	250	500	1K	2K	4K	8K
160	2	9	3	-3	-7	-12	-20	-27
200	2	10	1	-2	-7	-12	-17	-22
250	1	11	1	-2	-7	-14	-21	-28
315	9	4	-2	-1	-4	-17	-24	-33
400	1	3	-5	-1	-3	-14	-23	-34