

# Vissible diffuser

# LCF



## Description

LCF is a diffuser with circular unperforated face plate for free hanging installations.

LCF is suitable for horizontal supply of cooled air and handles high airflows as well as low airflows with high under-temperature without the risk of drafts.

LCF includes a unique linear cone damper which makes it possible to regulate in the full airflow range (0-100%) and allows to balance with a high pressure drop over the unit with low sound level (up to 200 Pa).

Furthermore the construction of the damper gives an accurate and reliable measurement.

LCF has a readable K-value scale and has the possibility to be preadjusted before the final balancing.

- Suitable in full airflow range with high under-temperature.
- Unique linear cone damper
- Up to 200 Pa with low sound level
- Accurate and reliable measurement of flow

## Maintenance

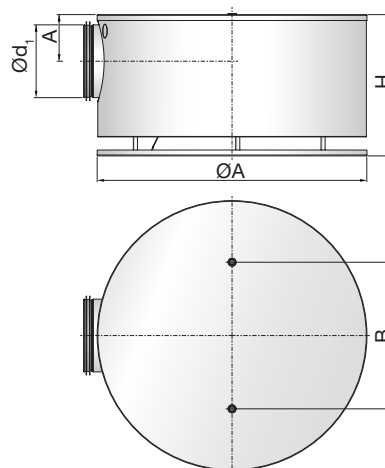
The face plate can be detached and the damper removed to enable cleaning of the internal parts or the duct. The visible parts of the diffuser can be wiped with a damp cloth.

## Order code

<b>Product</b>	<b>LCF</b>	<b>aaa</b>	<b>S</b>
<b>Type</b>			
LCF			
<b>Connection dim.</b>			
Ød 125-200			
<b>Functional use</b>			
S = Supply air			

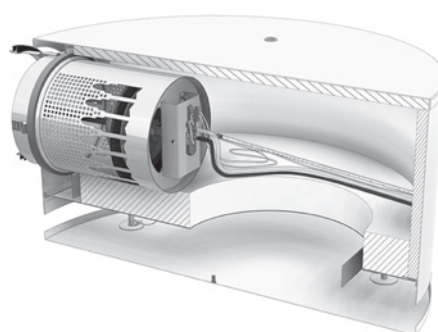
Example: LCF-200-S

## Dimensions



Ød <sub>1</sub> mm	ØA mm	A mm	H mm	B mm	Weight kg
125	460	80	241	250	7.00
160	540	97	275	300	10.0
200	660	117	315	400	13.7

## Construction



## Materials and finish

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

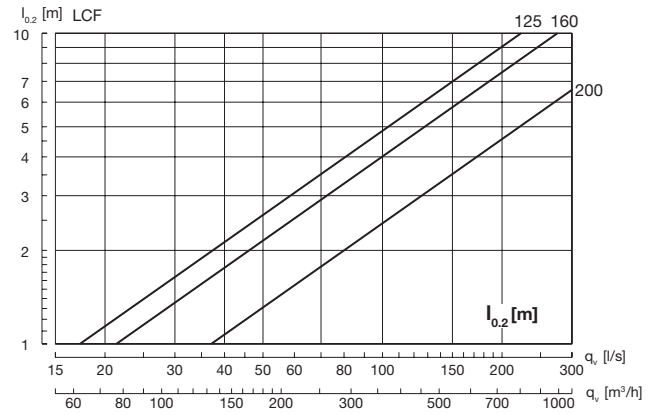
### Quick selection

#### Supply air

duct $\varnothing d_1$	$\Delta p_t \geq 50$ Pa 30 dB(A)		$\Delta p_t \geq 50$ Pa 35 dB(A)	
	l/s	m <sup>3</sup> /h	l/s	m <sup>3</sup> /h
125	55	198	71	256
160	76	274	99	356
200	129	463	154	553

## Throw $l_{0.2}$

The throw 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 end reflection, see table below.

Size	Centre frequency Hz							
	63	125	250	500	1K	2K	4K	8K
125	16	9	12	8	10	11	16	21
160	13	9	11	6	9	8	15	20
200	13	13	14	15	17	17	22	25

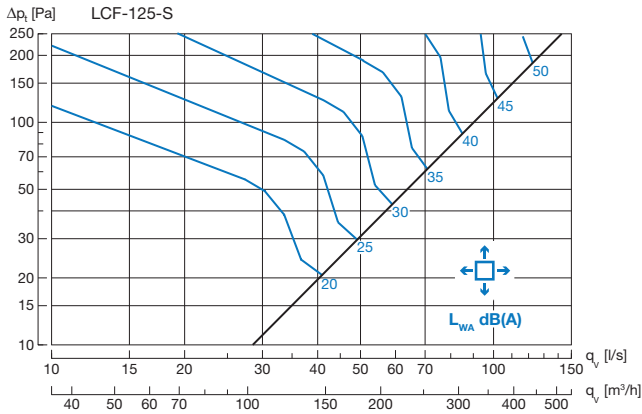
## Balancing

Balancing data is contained in a separate brochure.

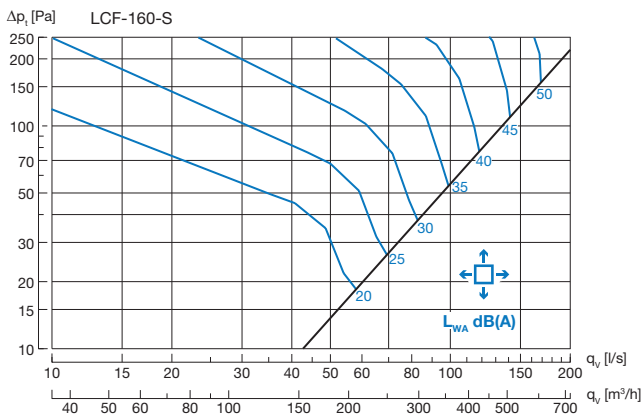
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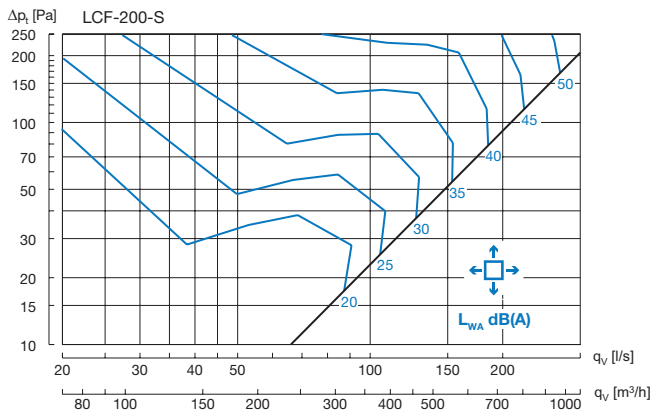
## Technical data



Hz	63	125	250	500	1K	2K	4K	8K
$K_{\text{ok}}$	7	7	-3	-6	-4	-8	-15	-17



Hz	63	125	250	500	1K	2K	4K	8K
$K_{\text{ok}}$	10	9	-3	-6	-4	-10	-16	-14



Hz	63	125	250	500	1K	2K	4K	8K
$K_{\text{ok}}$	7	6	-3	-6	-6	-6	-14	-16