



Lindab **NC19**

Integra - Nozzle diffuser



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NC19



Description

NC19 is a circular diffuser with individually adjustable nozzles. The diffuser is suitable for the horizontal supply of cooled air, where great flexibility in the dispersal pattern is required. The diffuser can also be set to a vertical supply air pattern, enabling supply of heated air.

Installing a NC19 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 an 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 is with a rotating blade damper for supply air. Typically used in applications that don't require a high balancing pressure in the plenum box.

- Adjustable dispersal patterns
- No pressure change for different dispersal patterns
- Suitable for horizontal or vertical supply air patterns
- Plenum box with several damper options

Maintenance

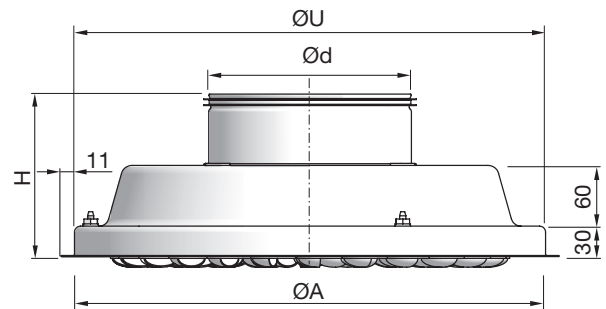
The face plate can be removed to enable cleaning of internal parts or to gain access to the duct or box. The visible parts of the diffuser can be wiped with a damp cloth.

Order code

| | | | | | |
|------------------------|----------------|---|----------|---|------------|
| Product | NC19 | - | S | - | aaa |
| Type | NC19 | | | | |
| Functional use | S = Supply air | | | | |
| Connection dim. | Ød 125-315 | | | | |

Example: NC19-S-200

Dimensions



| NC19 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 !



Materials and finish

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

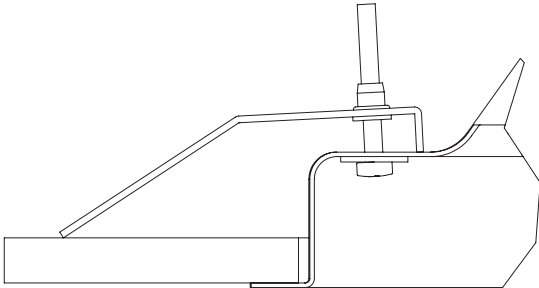
The diffuser is available in other colours. Please contact Lindab's sales department for further information.

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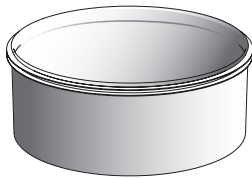
NC19

Accessories

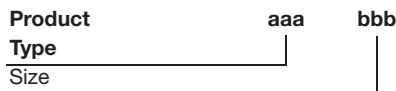
DCZ - Mounting brackets



MBZ - Extension piece

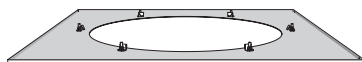


Order code - accessories

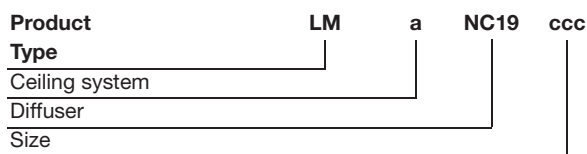


Example: DRZ-200

LM - Module plate

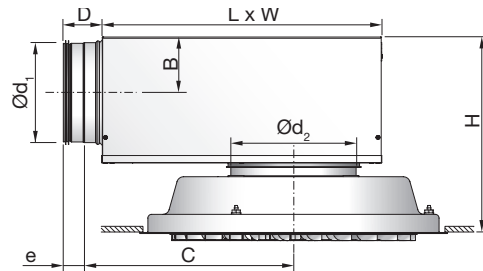


Order code - module plate



Example: LM-1-NC19-200
Ceiling system - see introductory summary

NC19 + MB plenum box



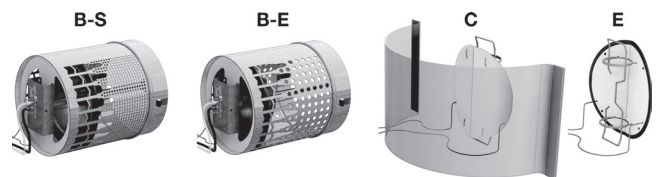
| $\text{\O}d_1$ | $\text{\O}d_2$ | B | C | D | e | H* | L | W |
|----------------|----------------|-----|-----|-----|----|-----------|-----|-----|
| mm | | mm | | | | | | |
| 100 | 125 | 62 | 245 | 78 | 40 | 250 - 290 | 310 | 260 |
| 100 | 160 | 62 | 245 | 78 | 40 | 250 - 290 | 310 | 260 |
| 125 | 125 | 75 | 291 | 78 | 40 | 275 - 315 | 376 | 310 |
| 125 | 160 | 75 | 291 | 78 | 40 | 275 - 315 | 376 | 310 |
| 125 | 200 | 75 | 291 | 78 | 40 | 275 - 315 | 376 | 310 |
| 160 | 160 | 92 | 352 | 78 | 40 | 309 - 349 | 459 | 380 |
| 160 | 200 | 92 | 352 | 78 | 40 | 309 - 349 | 459 | 380 |
| 160 | 250 | 92 | 352 | 78 | 40 | 309 - 349 | 459 | 380 |
| 200 | 200 | 112 | 425 | 78 | 40 | 350 - 390 | 565 | 460 |
| 200 | 250 | 112 | 425 | 78 | 40 | 350 - 390 | 565 | 460 |
| 200 | 315 | 112 | 425 | 78 | 40 | 350 - 390 | 565 | 460 |
| 250 | 250 | 137 | 514 | 118 | 60 | 400 - 440 | 698 | 540 |
| 250 | 315 | 137 | 514 | 118 | 60 | 400 - 440 | 698 | 540 |
| 315 | 315 | 170 | 675 | 118 | 60 | 465 - 505 | 858 | 540 |

* Using accessory MBZ the H dimension will increase:

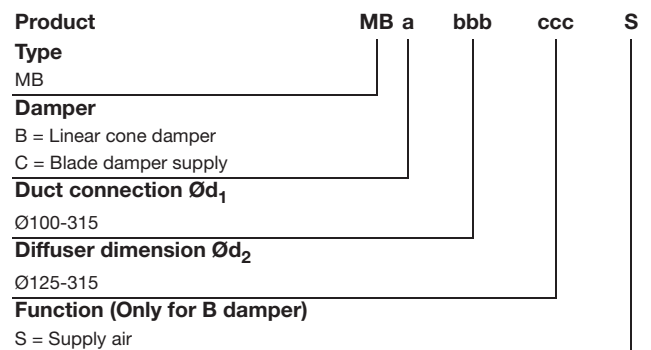
$\text{\O}d_2 = 100 - 200 \text{ mm} \Rightarrow H + 40 \text{ mm}$

$\text{\O}d_2 = 250 - 315 \text{ mm} \Rightarrow H + 60 \text{ mm}$

Damper options



Order code



Example 1: NC19-S-200+MBB-200-250-S

Example 2: NC19-200+MBC-125-200

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Technical data

Following NC19+plenum box data are valid for MBB-S. For MBC data, go to www.lindQST.com

Capacity

Air 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 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.

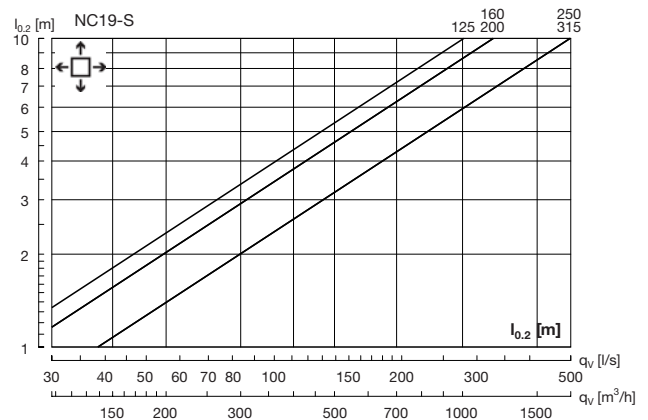
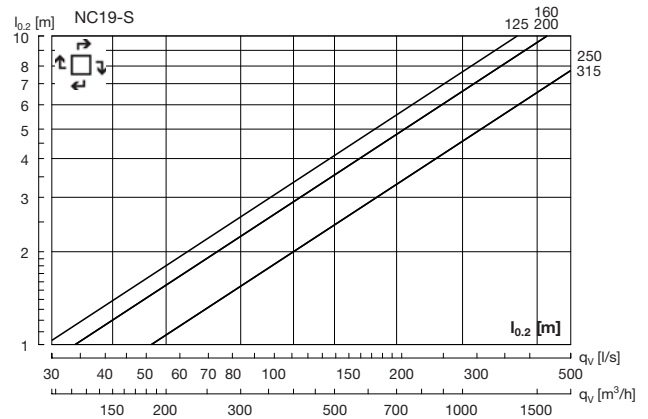
Quick selection, supply air

| NC19 + MBB-S | | $\Delta p_t \geq 50$ Pa 30 dB(A) | | $\Delta p_t \geq 50$ Pa 35 dB(A) | |
|-------------------|-------------------|-------------------------------------|-------------------|-------------------------------------|-------------------|
| duct | NC19 | l/s | m ³ /h | l/s | m ³ /h |
| $\varnothing d_1$ | $\varnothing d_2$ | | | | |
| 100 | 125 | 25 | 90 | 33 | 119 |
| 100 | 160 | 39 | 140 | 47 | 169 |
| 125 | 125 | 35 | 126 | 41 | 148 |
| 125 | 160 | 48 | 173 | 59 | 212 |
| 125 | 200 | 54 | 194 | 64 | 230 |
| 160 | 160 | 52 | 187 | 63 | 227 |
| 160 | 200 | 59 | 212 | 72 | 259 |
| 160 | 250 | 76 | 274 | 96 | 346 |
| 200 | 200 | 66 | 238 | 80 | 288 |
| 200 | 250 | 92 | 331 | 112 | 403 |
| 200 | 315 | 97 | 349 | 120 | 432 |
| 250 | 250 | 100 | 360 | 119 | 428 |
| 250 | 315 | 109 | 392 | 131 | 472 |
| 315 | 315 | 121 | 436 | 143 | 515 |



Throw $l_{0,2}$

Throw $l_{0,2}$ [m] can be seen in the diagram for isothermal air, at a terminal velocity of 0.2 m/s.



Sound attenuation

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

| NC19 + MBB-S | | Centre frequency Hz | | | | | | | |
|-------------------|-------------------|---------------------|-----|-----|-----|----|----|----|----|
| duct | NC19 | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
| $\varnothing d_1$ | $\varnothing d_2$ | | | | | | | | |
| 100 | 125 | 20 | 16 | 6 | 15 | 20 | 20 | 19 | 23 |
| 100 | 160 | 16 | 16 | 4 | 13 | 18 | 19 | 17 | 21 |
| 125 | 125 | 17 | 15 | 10 | 19 | 20 | 20 | 19 | 22 |
| 125 | 160 | 15 | 14 | 7 | 18 | 18 | 18 | 18 | 21 |
| 125 | 200 | 13 | 12 | 5 | 15 | 15 | 16 | 17 | 19 |
| 160 | 160 | 16 | 15 | 11 | 22 | 20 | 20 | 20 | 20 |
| 160 | 200 | 16 | 15 | 8 | 21 | 19 | 19 | 19 | 21 |
| 160 | 250 | 16 | 14 | 5 | 17 | 14 | 16 | 18 | 19 |
| 200 | 200 | 15 | 10 | 8 | 16 | 20 | 18 | 20 | 18 |
| 200 | 250 | 13 | 9 | 5 | 13 | 17 | 15 | 19 | 17 |
| 200 | 315 | 13 | 9 | 4 | 11 | 16 | 15 | 17 | 17 |
| 250 | 250 | 14 | 8 | 8 | 16 | 18 | 18 | 18 | 19 |
| 250 | 315 | 14 | 8 | 6 | 14 | 17 | 16 | 17 | 18 |
| 315 | 315 | 8 | 10 | 9 | 14 | 17 | 17 | 18 | 24 |

Balancing

Balancing data is contained in a separate brochure.

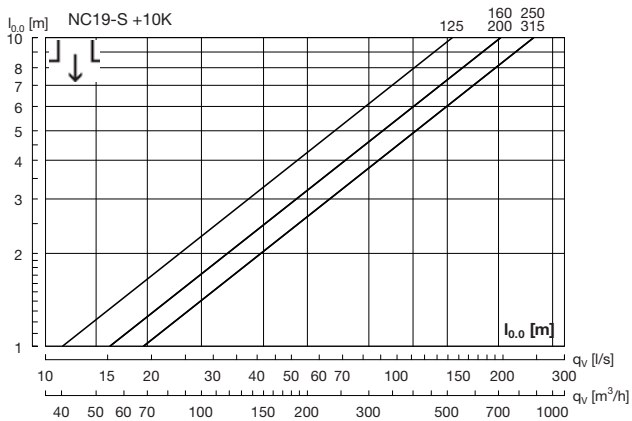
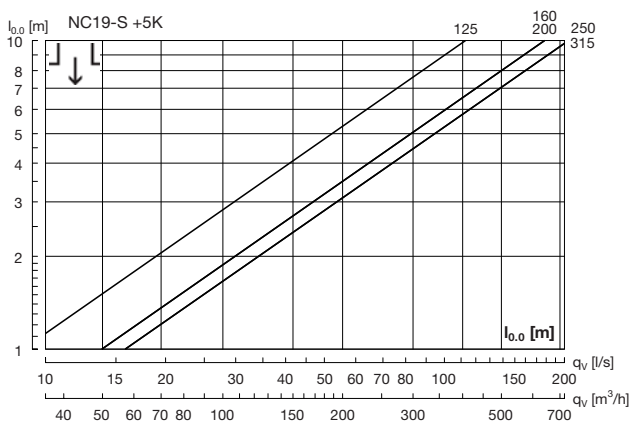
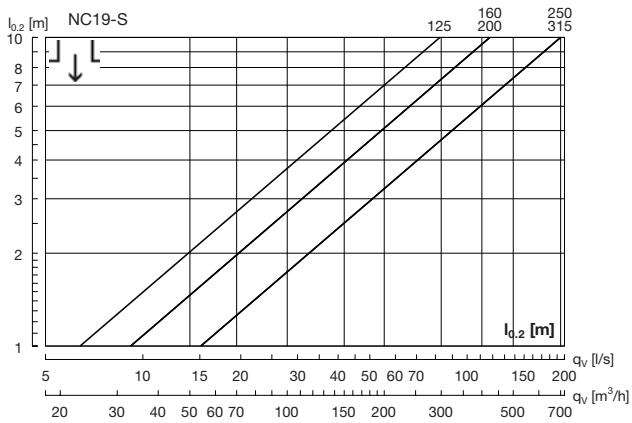
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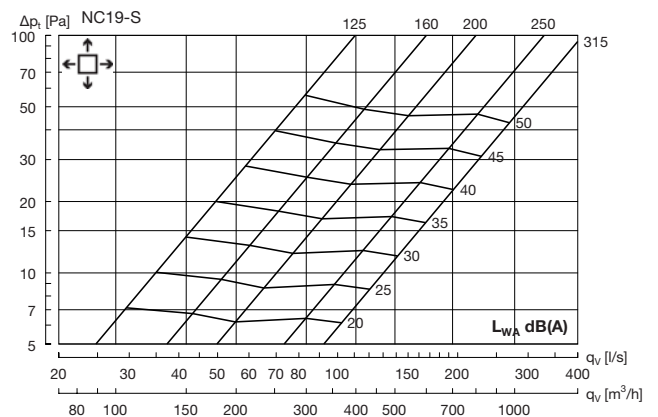
Technical data

Throws/Turning points

Throw $l_{0,2}$ [m] is specified at a terminal velocity of 0.2 m/s.
Turning point $l_{0,0}$ [m] is specified for +5 K and +10 K respectively.



NC19 without box – Supply air

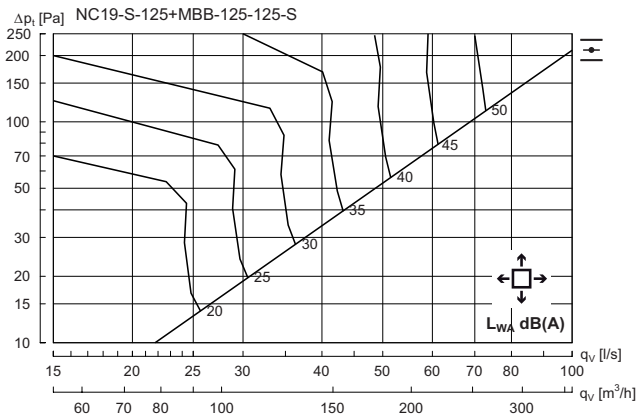


Integra - Nozzle diffuser

NC19

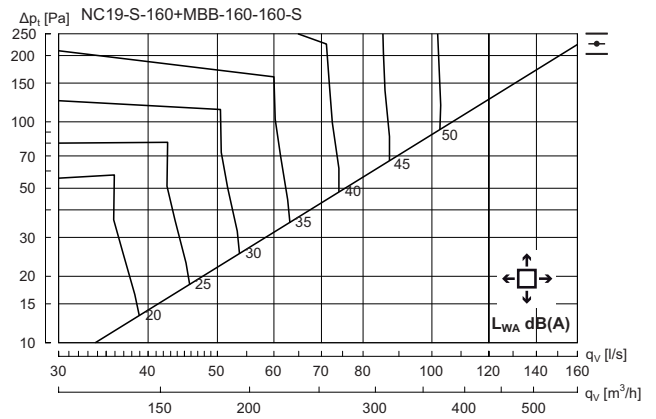
Technical data

NC19 - 125 + MBB-S - Supply air

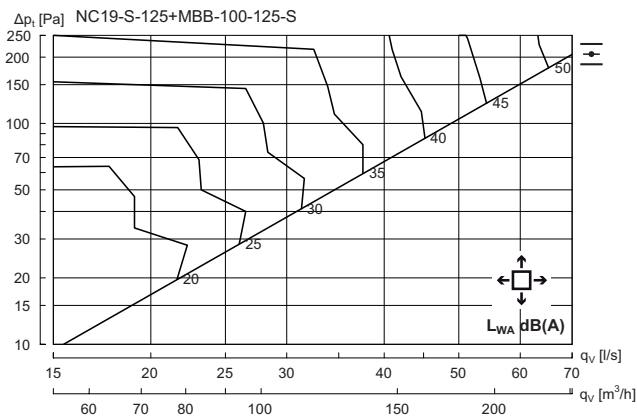


| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 11 | 1 | -4 | 0 | -5 | -15 | -23 | -35 |

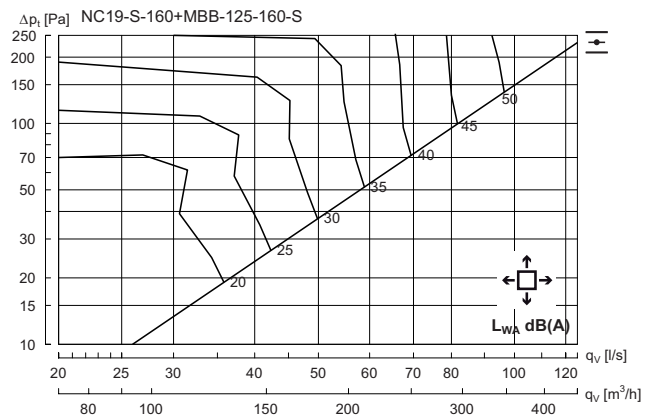
NC19 - 160 + MBB-S - Supply air



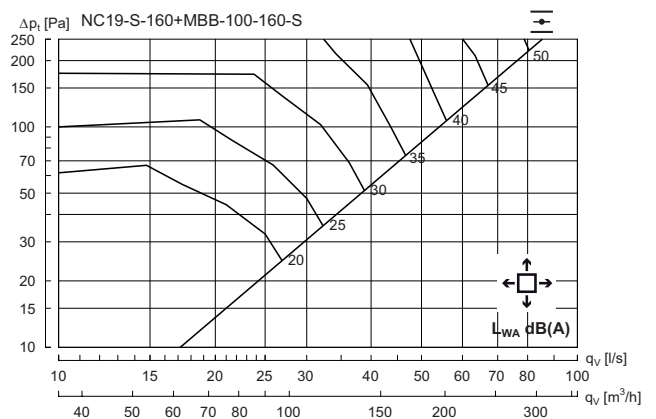
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 6 | 5 | -3 | -1 | -4 | -14 | -21 | -32 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 10 | 3 | 2 | 0 | -7 | -15 | -22 | -27 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 8 | 5 | -1 | -1 | -6 | -13 | -17 | -25 |



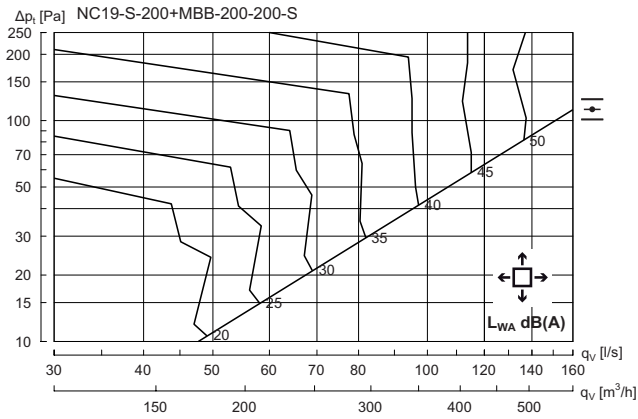
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 10 | 4 | 1 | 0 | -8 | -12 | -16 | -21 |

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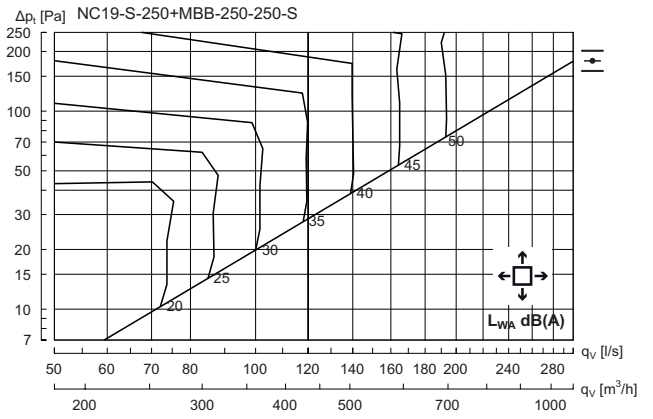
Technical data

NC19 - 200 + MBB-S - Supply air

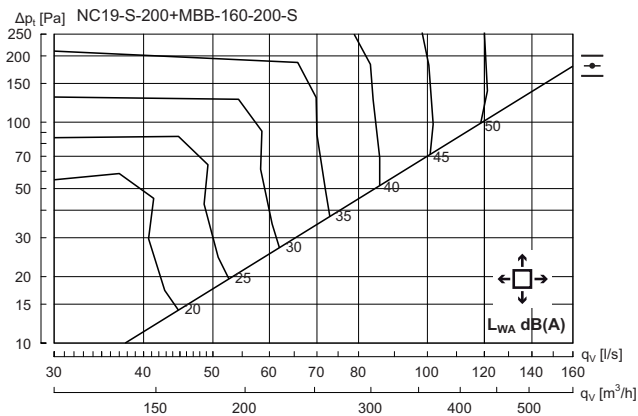


| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 11 | 2 | -5 | 0 | -4 | -16 | -23 | -33 |

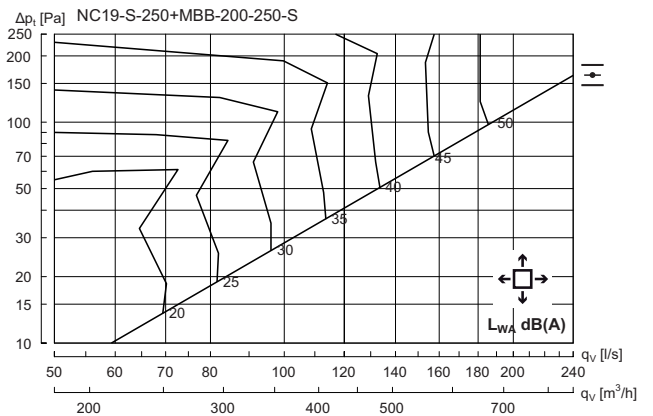
NC19 - 250 + MBB-S - Supply air



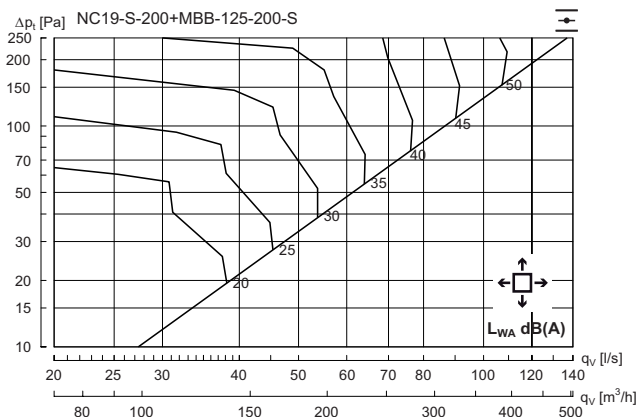
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 10 | 3 | -4 | -1 | -4 | -15 | -23 | -34 |



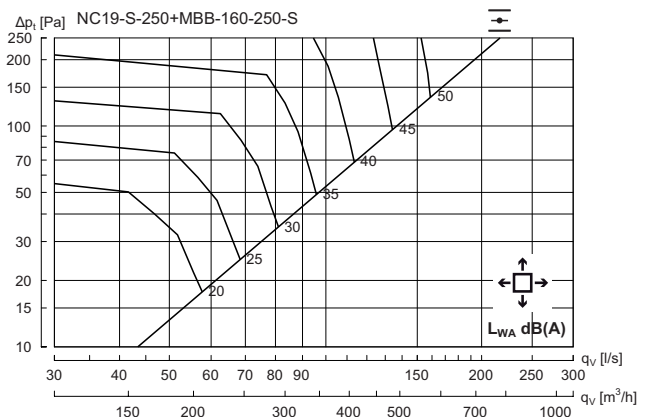
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 9 | 4 | -2 | -1 | -5 | -14 | -20 | -28 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 6 | 7 | -2 | -1 | -4 | -14 | -20 | -29 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 6 | 5 | 0 | 0 | -6 | -12 | -17 | -25 |



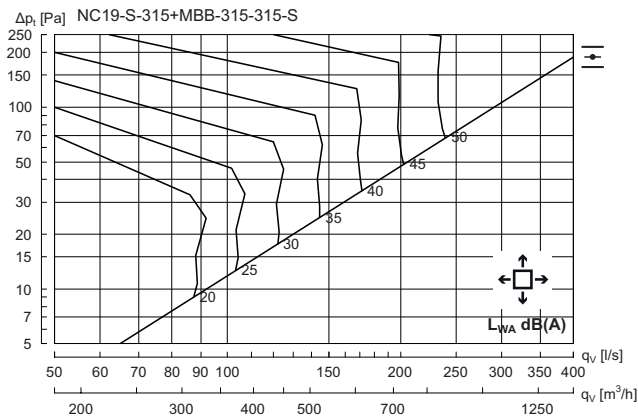
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 11 | 6 | 1 | -2 | -5 | -12 | -18 | -26 |

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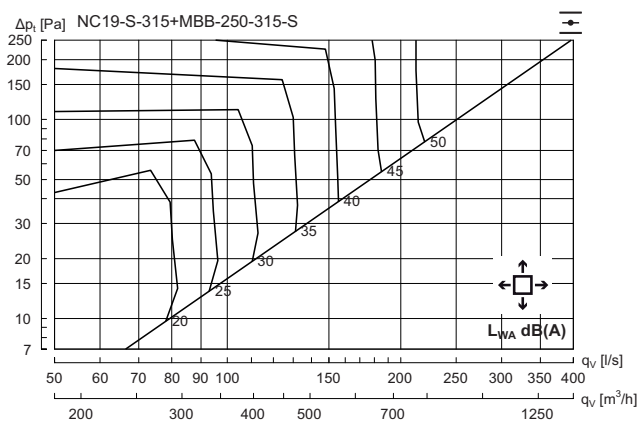
NC19

Technical data

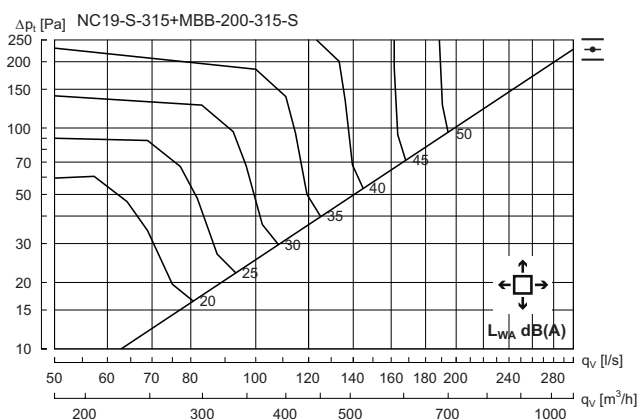
NC19 - 315 + MBB-S - Supply air



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 9 | 1 | -4 | -1 | -3 | -17 | -26 | -40 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 9 | 4 | -2 | -1 | -4 | -15 | -23 | -30 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 8 | 7 | 0 | -2 | -5 | -14 | -20 | -30 |



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