



Lindab **LKA**

Formo - Ceiling diffuser



Formo - Ceiling diffuser

LKA



Description

LKA is a square diffuser with unperforated face plate and can be used for both supply and extract air. LKA is suitable for horizontal supply of cooled air and can be equipped with accessories of various types in order to achieve optimal function.

Installing a LKA diffuser in a plenum box type MB or CB can help to achieve a stable airflow to the diffuser as well as realize the potential for individual adjustment.

MB box with damper type B is with a unique linear cone damper which allows to use the full operational working area and can balance with a high balancing pressure with low sound generation. Furthermore the construction of the damper provides a linear balancing characteristic, as well as an accurate and reliable measurement.

MB and CB box with damper type C or E are with rotating blade dampers for respectively supply and extract. Typically used in applications that do not require a high balancing pressure in the plenum box.

- Suitable for both supply and extract air
- Suitable for horizontal supply of cooled air
- Option of 1, 2 and 3-way supply air
- Plenum box with several damper options

Maintenance

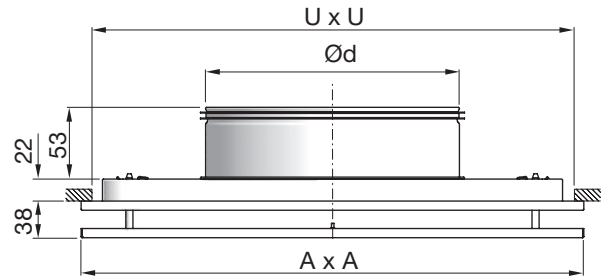
The face plate can be removed to enable cleaning of internal parts or to gain access to the duct or box. The visible parts of the diffuser can be wiped with a damp cloth.

Order code

| | | |
|---------------------------|-----|-----|
| Product | LKA | aaa |
| Type | LKA | |
| Connection dim. Ød | | |
| Ø125-400 | | |

Example: LKA-200

Dimensions



| LKA Ød mm | A mm | U* mm | Free area A m ² | m kg |
|--------------|---------|----------|-------------------------------|---------|
| 125 | 235 | 200 | 0.011 | 1.0 |
| 160 | 295 | 260 | 0.016 | 1.5 |
| 200 | 395 | 360 | 0.022 | 2.5 |
| 250 | 495 | 460 | 0.033 | 3.7 |
| 315 | 595 | 560 | 0.041 | 5.1 |
| 400 | 595 | 560 | 0.042 | 5.1 |

* U x U = Ceiling grid opening.

Materials and finish

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

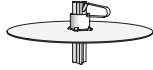
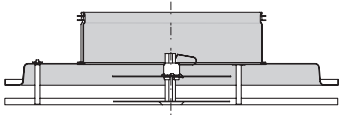
The diffuser is available in other colours. Please contact Lindab's sales department for further information.

Formo - Ceiling diffuser

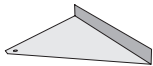
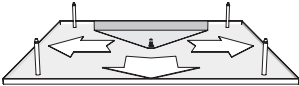
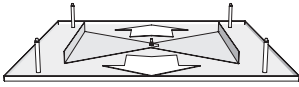
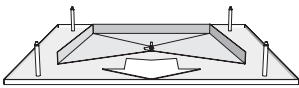
LKA

Accessories

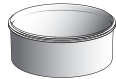
DRZ - Balancing damper



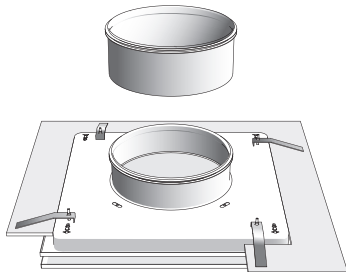
DAZ - Directional deflector (set)



MBZ - Extension piece



DKZ - Mounting brackets (set)

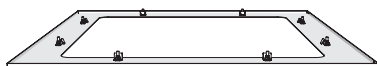


Order code - accessories

| | | |
|---------|-----|-----|
| Product | aaa | bbb |
| Type | | |
| Size | | |

Example: DRZ-200

LM - Module plate



Order code - module plate

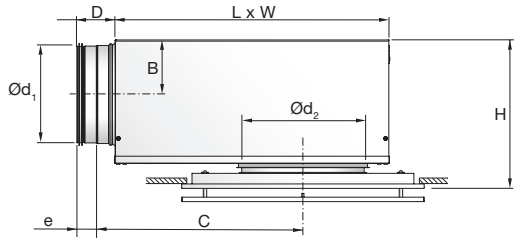
| | | | | |
|----------------|----|---|-----|-----|
| Product | LM | a | LKA | ccc |
| Type | | | | |
| Ceiling system | | | | |
| Diffuser | | | | |
| Size | | | | |

Example: LM-1-LKA-200

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LKA + MB plenum box



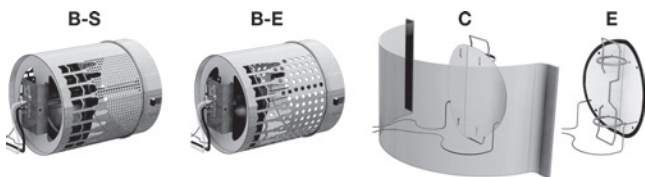
LKA + MB

| Ød ₁ mm | Ød ₂ mm | B | C | D | e | H* | L | W |
|-----------------------|-----------------------|-----|-----|-----|----|-----------|-----|-----|
| 100 | 100 | 62 | 245 | 78 | 40 | 197 - 237 | 310 | 260 |
| 100 | 125 | 62 | 245 | 78 | 40 | 197 - 237 | 310 | 260 |
| 100 | 160 | 62 | 245 | 78 | 40 | 197 - 237 | 310 | 260 |
| 125 | 125 | 75 | 291 | 78 | 40 | 222 - 262 | 376 | 310 |
| 125 | 160 | 75 | 291 | 78 | 40 | 222 - 262 | 376 | 310 |
| 125 | 200 | 75 | 291 | 78 | 40 | 222 - 262 | 376 | 310 |
| 160 | 160 | 92 | 352 | 78 | 40 | 256 - 296 | 459 | 380 |
| 160 | 200 | 92 | 352 | 78 | 40 | 256 - 296 | 459 | 380 |
| 160 | 250 | 92 | 352 | 78 | 40 | 256 - 296 | 459 | 380 |
| 200 | 200 | 112 | 425 | 78 | 40 | 297 - 337 | 565 | 460 |
| 200 | 250 | 112 | 425 | 78 | 40 | 297 - 337 | 565 | 460 |
| 200 | 315 | 112 | 425 | 78 | 40 | 297 - 337 | 565 | 460 |
| 250 | 250 | 137 | 514 | 118 | 60 | 347 - 387 | 698 | 540 |
| 250 | 315 | 137 | 514 | 118 | 60 | 347 - 387 | 698 | 540 |
| 250 | 400 | 137 | 514 | 118 | 60 | 347 - 387 | 698 | 540 |
| 315 | 315 | 170 | 675 | 118 | 60 | 412 - 452 | 858 | 540 |
| 315 | 400 | 170 | 675 | 118 | 60 | 412 - 452 | 858 | 540 |

* Using accessory MBZ the H dimension will increase:

- Ød₂ = 125 - 200 mm => H +40 mm
- Ød₂ = 250 - 315 mm => H +60 mm
- Ød₂ = 400 mm => H +80 mm

Damper options



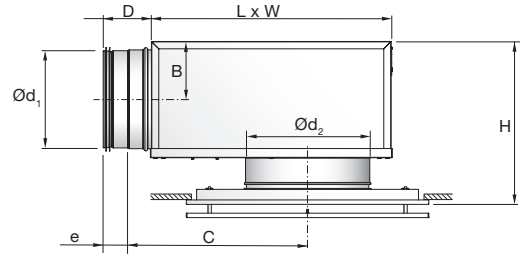
Order code

| Product | MB | a | bbb | ccc | d |
|------------------------------------|----|---|-----|-----|---|
| Type | | | | | |
| MB | | | | | |
| Damper | | | | | |
| B = Linear cone damper | | | | | |
| C = Blade damper supply | | | | | |
| E = Blade damper extract | | | | | |
| Duct connection Ød ₁ | | | | | |
| Ø100-315 | | | | | |
| Diffuser dimension Ød ₂ | | | | | |
| Ø125-400 | | | | | |
| Function (Only for B damper) | | | | | |
| S = Supply air | | | | | |
| E = Extract | | | | | |

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

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

LKA + CBC/CBE plenum box



LKA + CBC/CBE

| Ød ₁ mm | Ød ₂ mm | B | C | D | e | H* | L | W |
|-----------------------|-----------------------|-----|-----|-----|----|-----------|-----|-----|
| 100 | 125 | 65 | 213 | 78 | 40 | 208 - 248 | 273 | 209 |
| 100 | 160 | 65 | 231 | 78 | 40 | 208 - 248 | 308 | 244 |
| 125 | 160 | 78 | 250 | 78 | 40 | 233 - 273 | 327 | 244 |
| 125 | 200 | 78 | 270 | 78 | 40 | 233 - 273 | 367 | 284 |
| 160 | 200 | 95 | 295 | 78 | 40 | 268 - 308 | 392 | 284 |
| 160 | 250 | 95 | 320 | 78 | 40 | 268 - 308 | 442 | 334 |
| 200 | 250 | 115 | 345 | 78 | 40 | 308 - 348 | 467 | 334 |
| 200 | 315 | 115 | 377 | 78 | 40 | 308 - 348 | 532 | 399 |
| 250 | 315 | 140 | 423 | 118 | 60 | 358 - 398 | 558 | 399 |
| 250 | 400 | 140 | 466 | 118 | 60 | 358 - 398 | 643 | 484 |
| 315 | 400 | 173 | 536 | 118 | 60 | 423 - 463 | 714 | 484 |

* Using accessory MBZ the H dimension will increase:

- Ød₂ = 125 - 200 mm => H +40 mm
- Ød₂ = 250 - 315 mm => H +60 mm
- Ød₂ = 400 mm => H +80 mm

Damper options



Order code

| Product | CB | a | bbb | ccc |
|------------------------------------|----|---|-----|-----|
| Type | | | | |
| CB | | | | |
| Damper | | | | |
| C = Blade damper supply | | | | |
| E = Blade damper extract | | | | |
| Duct connection Ød ₁ | | | | |
| Ø100-315 | | | | |
| Diffuser dimension Ød ₂ | | | | |
| Ø125-315 | | | | |

Example 1: LKA-200 + CBC-160-200

Example 2: LKA-200 + CBE-125-200

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Technical data

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

| LKA + MBB-S | | $\Delta p_t \geq 50$ Pa | | $\Delta p_t \geq 50$ Pa | |
|-------------------|-------------------|-------------------------|-------------------|-------------------------|-------------------|
| duct | LKA | 30 dB(A) | | 35 dB(A) | |
| $\varnothing d_1$ | $\varnothing d_2$ | l/s | m ³ /h | l/s | m ³ /h |
| 100 | 125 | 31 | 112 | 38 | 137 |
| 100 | 160 | 40 | 144 | 49 | 176 |
| 125 | 125 | 42 | 151 | 50 | 180 |
| 125 | 160 | 53 | 191 | 64 | 230 |
| 125 | 200 | 63 | 227 | 75 | 270 |
| 160 | 160 | 60 | 216 | 73 | 263 |
| 160 | 200 | 70 | 252 | 88 | 317 |
| 160 | 250 | 94 | 338 | 115 | 414 |
| 200 | 200 | 98 | 353 | 118 | 425 |
| 200 | 250 | 106 | 382 | 129 | 464 |
| 200 | 315 | 133 | 479 | 159 | 572 |
| 250 | 250 | 116 | 418 | 141 | 508 |
| 250 | 315 | 136 | 490 | 167 | 601 |
| 250 | 400 | 139 | 500 | 182 | 655 |
| 315 | 315 | 153 | 551 | 183 | 659 |
| 315 | 400 | 169 | 608 | 200 | 720 |

Sound attenuation

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

| LKA + MBB-S/-E | | Centre frequency Hz | | | | | | | |
|-------------------|-------------------|---------------------|-----|-----|-----|----|----|----|----|
| duct | LKA | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
| $\varnothing d_1$ | $\varnothing d_2$ | | | | | | | | |
| 100 | 125 | 20 | 17 | 6 | 16 | 19 | 20 | 18 | 22 |
| 100 | 160 | 21 | 17 | 5 | 12 | 19 | 20 | 18 | 21 |
| 125 | 125 | 17 | 14 | 9 | 19 | 15 | 21 | 18 | 20 |
| 125 | 160 | 13 | 13 | 9 | 18 | 18 | 18 | 18 | 20 |
| 125 | 200 | 14 | 12 | 7 | 15 | 16 | 18 | 17 | 19 |
| 160 | 160 | 18 | 17 | 11 | 16 | 21 | 19 | 20 | 21 |
| 160 | 200 | 15 | 14 | 9 | 20 | 21 | 20 | 20 | 20 |
| 160 | 250 | 16 | 16 | 7 | 17 | 13 | 18 | 19 | 20 |
| 200 | 200 | 14 | 11 | 8 | 15 | 21 | 18 | 20 | 18 |
| 200 | 250 | 13 | 10 | 8 | 16 | 20 | 17 | 19 | 17 |
| 200 | 315 | 15 | 9 | 6 | 14 | 17 | 17 | 18 | 17 |
| 250 | 250 | 16 | 9 | 9 | 17 | 20 | 19 | 19 | 19 |
| 250 | 315 | 15 | 8 | 9 | 16 | 18 | 16 | 18 | 18 |
| 250 | 400 | 13 | 6 | 6 | 14 | 16 | 17 | 17 | 17 |
| 315 | 315 | 8 | 10 | 10 | 16 | 20 | 19 | 18 | 23 |
| 315 | 400 | 8 | 10 | 10 | 13 | 19 | 19 | 17 | 21 |

Balancing

Balancing guide, see the [MB installation instruction](#).

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Technical data LKA + CBC/CBE

Following LKA+plenum box data are valid for CBC.
For CBE data, follow link below. For complete configuration of your LKA diffuser, go to the [LindQST Airborne calculator](#).

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

| LKA + CBC | | $\Delta p_t \geq 50$ Pa 30dB(A) | | $\Delta p_t \geq 50$ Pa 35 dB(A) | |
|------------------------|-----------------------|------------------------------------|-------------------|-------------------------------------|-------------------|
| duct $\varnothing d_1$ | LKA $\varnothing d_2$ | l/s | m ³ /h | l/s | m ³ /h |
| 100 | 125 | 34 | 122 | 48 | 171 |
| 100 | 160 | 36 | 130 | 61 | 221 |
| 125 | 160 | 45 | 160 | 74 | 266 |
| 125 | 200 | 45 | 163 | 89 | 322 |
| 160 | 200 | 66 | 239 | 103 | 371 |
| 160 | 250 | 73 | 262 | 129 | 464 |
| 200 | 250 | 87 | 313 | 145 | 523 |
| 200 | 315 | 90 | 325 | 172 | 619 |
| 250 | 315 | 127 | 457 | 174 | 626 |
| 250 | 400 | 144 | 517 | 206 | 742 |
| 315 | 400 | 151 | 542 | 208 | 750 |

Sound attenuation

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

| LKA + CBC | | Centre frequency [Hz] | | | | | | | |
|------------------------|-----------------------|-----------------------|-----|-----|-----|----|----|----|----|
| duct $\varnothing d_1$ | LKA $\varnothing d_2$ | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
| 100 | 125 | 25 | 18 | 16 | 15 | 19 | 21 | 13 | 13 |
| 100 | 160 | 25 | 13 | 15 | 14 | 18 | 17 | 11 | 9 |
| 125 | 160 | 22 | 13 | 12 | 14 | 20 | 18 | 12 | 12 |
| 125 | 200 | 20 | 18 | 13 | 14 | 19 | 17 | 11 | 11 |
| 160 | 200 | 20 | 9 | 11 | 14 | 17 | 15 | 12 | 10 |
| 160 | 250 | 22 | 11 | 14 | 14 | 16 | 13 | 11 | 9 |
| 200 | 250 | 23 | 7 | 12 | 15 | 18 | 13 | 13 | 11 |
| 200 | 315 | 19 | 9 | 13 | 13 | 16 | 11 | 12 | 9 |
| 250 | 315 | 17 | 9 | 11 | 14 | 16 | 12 | 11 | 7 |
| 250 | 400 | 17 | 9 | 13 | 12 | 13 | 11 | 11 | 7 |
| 315 | 400 | 18 | 6 | 13 | 14 | 13 | 13 | 11 | 12 |

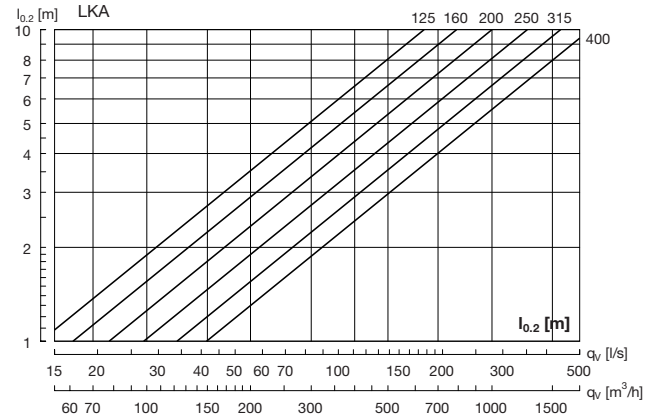
Balancing

Balancing guide, see the [CBC/CBE installation instruction](#).

Technical data

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.



Correction throw $l_{0,2}$

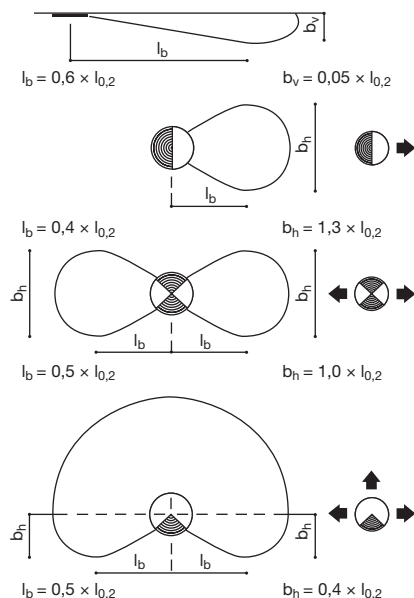
| LKA $\varnothing d$ | 1 - ways | 2 - ways | 3 - ways |
|---------------------|----------|----------|----------|
| 125 | 2.3 | 1.8 | 1.3 |
| 160 | 2.3 | 1.8 | 1.3 |
| 200 | 2.3 | 1.9 | 1.3 |
| 250 | 2.3 | 2 | 1.3 |
| 315 | 2.3 | 2 | 1.3 |
| 400 | 2.2 | 2.1 | 1.3 |

Air jet distribution

l_b = Distance from the diffuser to the point where there is maximum dispersal.

b_v = Depth of the air jet on a vertical plane.

b_h = Width of the air jet on a horizontal plane.

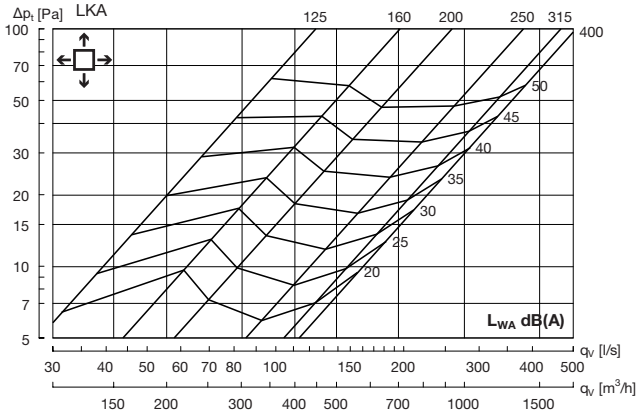


Formo - Ceiling diffuser

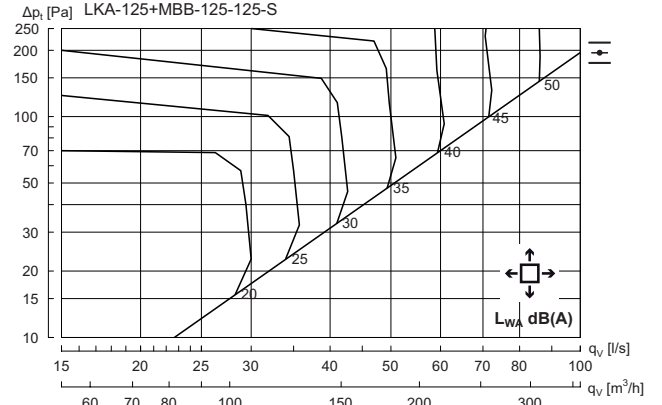
LKA

Technical data

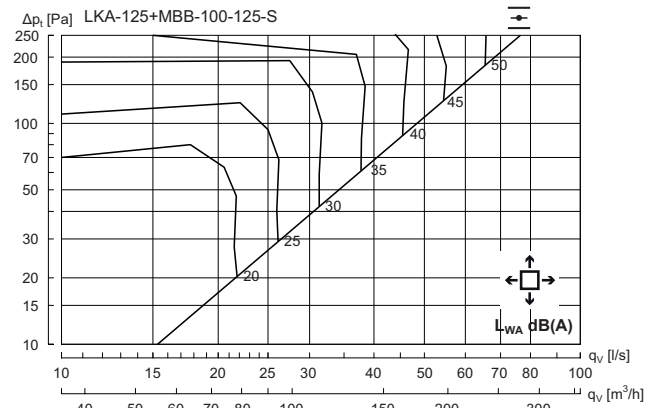
LKA without box - supply air



LKA 125 + MBB-S - Supply air



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|-------------------|----|-----|-----|-----|----|-----|-----|-----|
| K_{stat} | 12 | 6 | 1 | -4 | -4 | -13 | -20 | -28 |



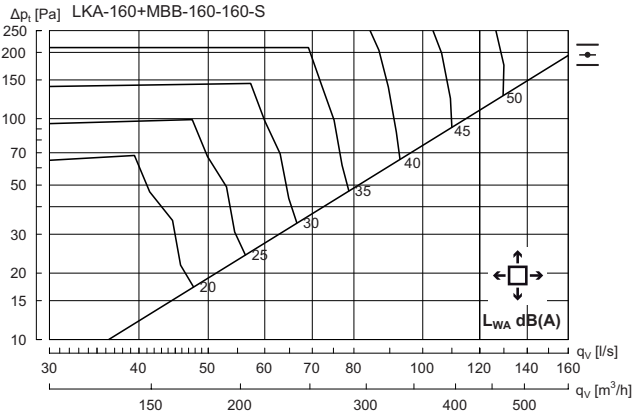
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|-------------------|----|-----|-----|-----|----|-----|-----|-----|
| K_{stat} | 11 | 7 | 3 | -4 | -5 | -14 | -18 | -24 |

Formo - Ceiling diffuser

LKA

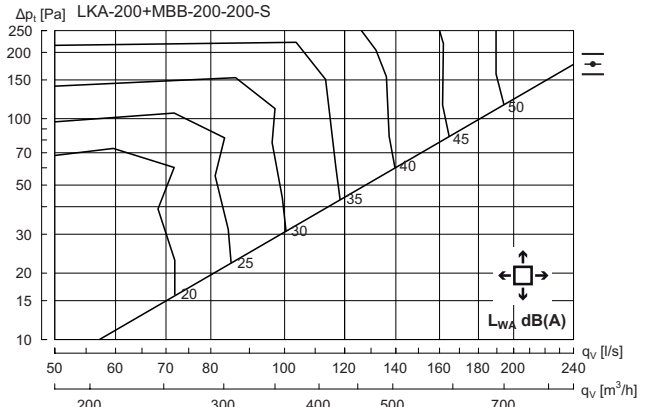
Technical data

LKA 160 + MBB-S - Supply air

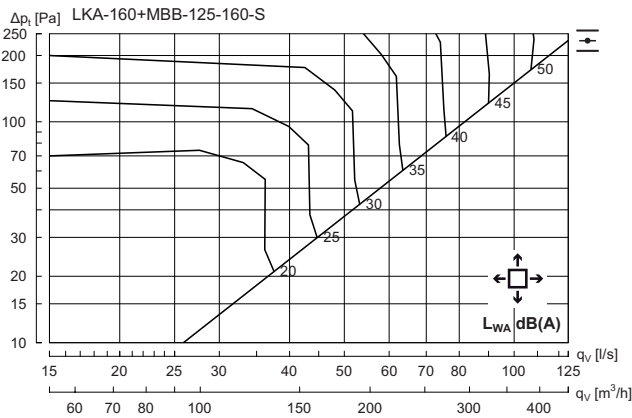


| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 11 | 11 | 0 | -2 | -7 | -15 | -22 | -28 |

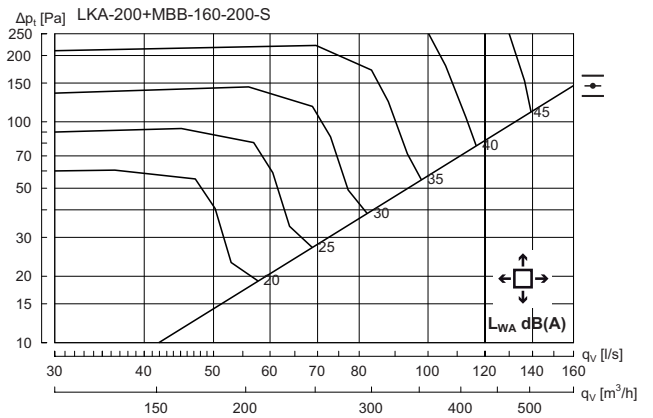
LKA 200 + MBB-S - Supply air



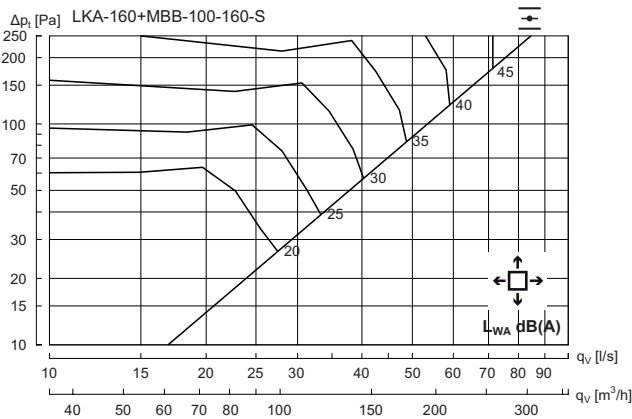
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 12 | 6 | -1 | -1 | -5 | -15 | -21 | -26 |



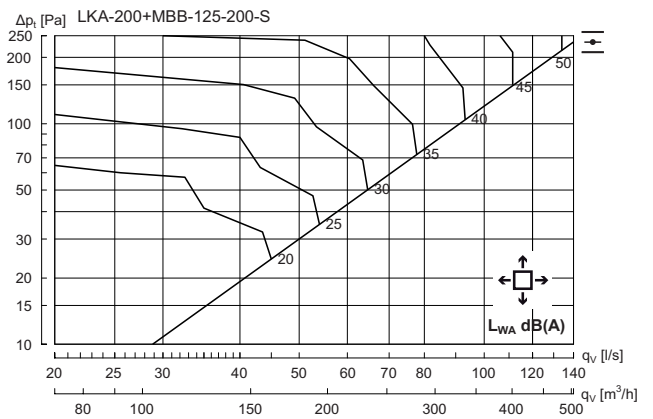
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 13 | 8 | 1 | -3 | -6 | -12 | -17 | -25 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 12 | 9 | 0 | -2 | -6 | -12 | -19 | -24 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 12 | 5 | 1 | -2 | -6 | -10 | -14 | -20 |



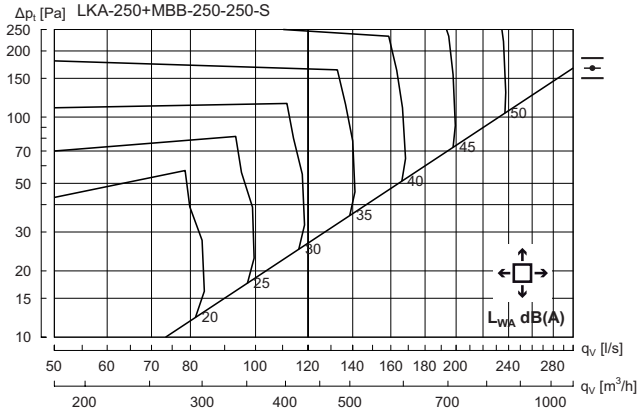
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 12 | 7 | 1 | -3 | -6 | -11 | -15 | -21 |

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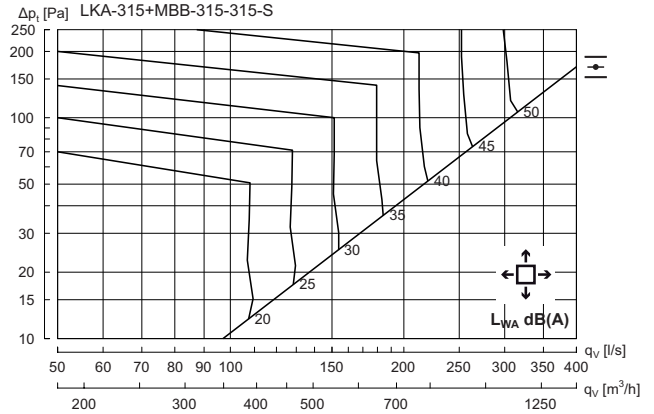
Technical data

LKA 250 + MBB-S - Supply air

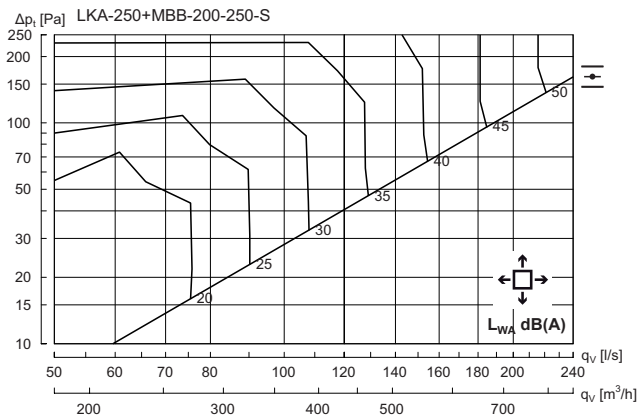


| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 12 | 3 | -4 | 0 | -4 | -17 | -24 | -31 |

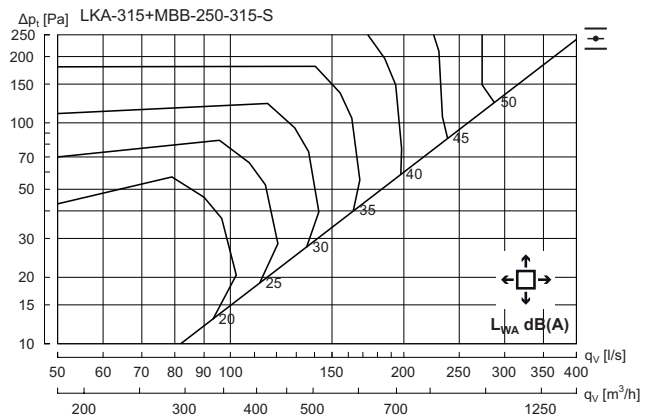
LKA 315 + MBB-S - Supply air



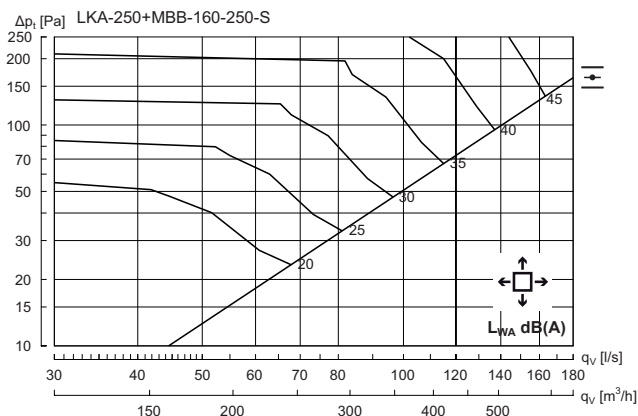
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 13 | 5 | -2 | -1 | -4 | -17 | -25 | -36 |



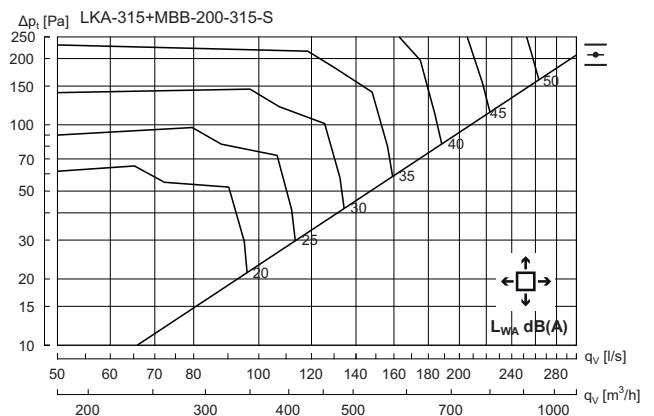
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 12 | 6 | -2 | -1 | -5 | -14 | -19 | -23 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 14 | 5 | -2 | -2 | -4 | -13 | -19 | -26 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 9 | 7 | -2 | -3 | -5 | -10 | -15 | -21 |



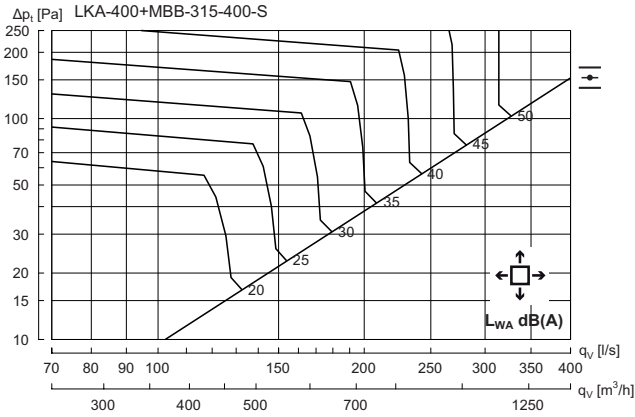
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 13 | 6 | -2 | -3 | -4 | -11 | -17 | -22 |

Formo - Ceiling diffuser

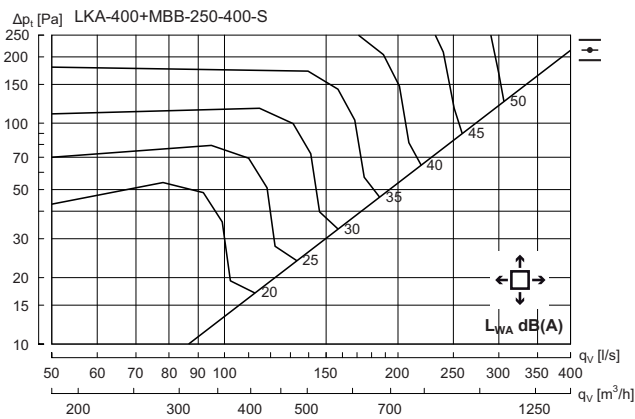
LKA

Technical data

LKA 400 + MBB-S - Supply air



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 14 | 6 | 1 | -1 | -6 | -16 | -21 | -27 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 12 | 7 | 0 | -2 | -6 | -12 | -19 | -26 |

Correction sound power level (L_{WA}) and pressure loss (Δp_t)

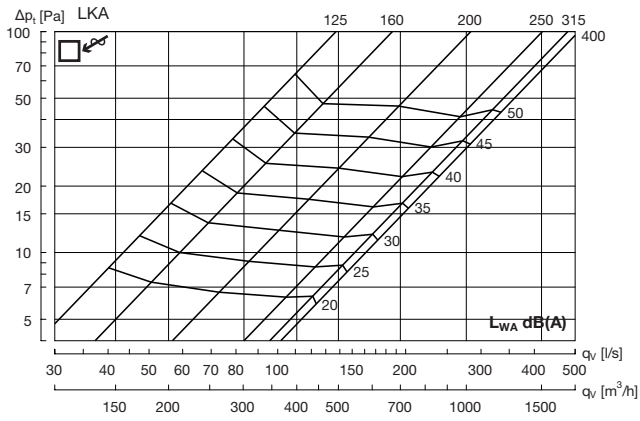
| LKA + MBB-S | | 1 - ways | | 2 - ways | | 3 - ways | |
|-------------------|-------------------|----------|--------------|----------|--------------|----------|--------------|
| duct | PKA | L_{WA} | Δp_t | L_{WA} | Δp_t | L_{WA} | Δp_t |
| $\varnothing d_1$ | $\varnothing d_2$ | | | | | | |
| 100 | 125 | + 10 | x 1.3 | + 4 | x 1.1 | + 2 | x 1.05 |
| 100 | 160 | + 5 | x 1.1 | + 2 | x 1.05 | + 1 | x 1 |
| 125 | 125 | + 10 | x 1.35 | + 6 | x 1.1 | + 4 | x 1.05 |
| 125 | 160 | + 10 | x 1.4 | + 4 | x 1.1 | + 1 | x 1 |
| 125 | 200 | + 4 | x 1.2 | + 2 | x 1.05 | + 1 | x 1 |
| 160 | 160 | + 16 | x 1.8 | + 9 | x 1.3 | + 4 | x 1.1 |
| 160 | 200 | + 16 | x 1.7 | + 10 | x 1.2 | + 4 | x 1.05 |
| 160 | 250 | + 10 | x 1.3 | + 6 | x 1.1 | + 3 | x 1 |
| 200 | 200 | + 17 | x 2.3 | + 11 | x 1.4 | + 7 | x 1.1 |
| 200 | 250 | + 13 | x 1.8 | + 6 | x 1.2 | + 4 | x 1.1 |
| 200 | 315 | + 9 | x 1.5 | + 4 | x 1.1 | + 0 | x 1.05 |
| 250 | 250 | + 21 | x 2.1 | + 11 | x 1.4 | + 7 | x 1.2 |
| 250 | 315 | + 19 | x 1.8 | + 7 | x 1.2 | + 3 | x 1.1 |
| 250 | 400 | + 10 | x 1.5 | + 6 | x 1.2 | + 0 | x 1 |
| 315 | 315 | + 21 | x 2.1 | + 10 | x 1.3 | + 4 | x 1.1 |
| 315 | 400 | + 21 | x 1.8 | + 8 | x 1.5 | + 3 | x 1.2 |

Formo - Ceiling diffuser

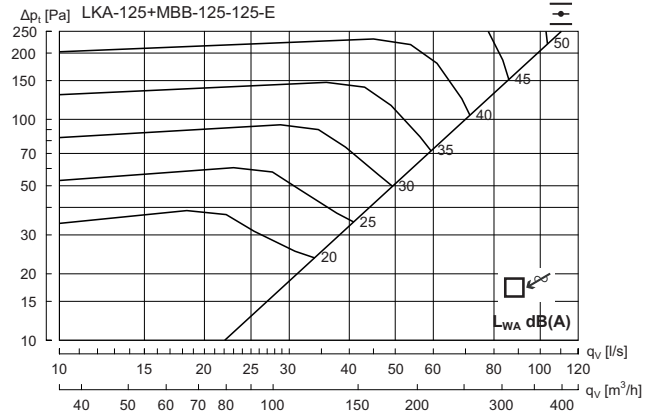
LKA

Technical data

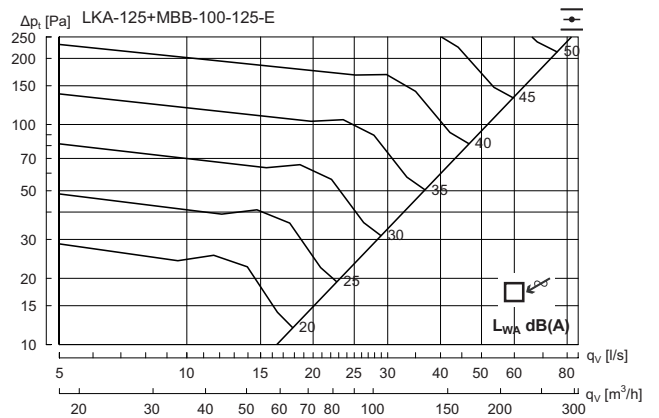
LKA without box - Extract air



LKA 125 + MBB-E - Extract air



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|-----------------|----|-----|-----|-----|----|-----|-----|-----|
| K _{ok} | 13 | 4 | 1 | -2 | -5 | -12 | -15 | -22 |



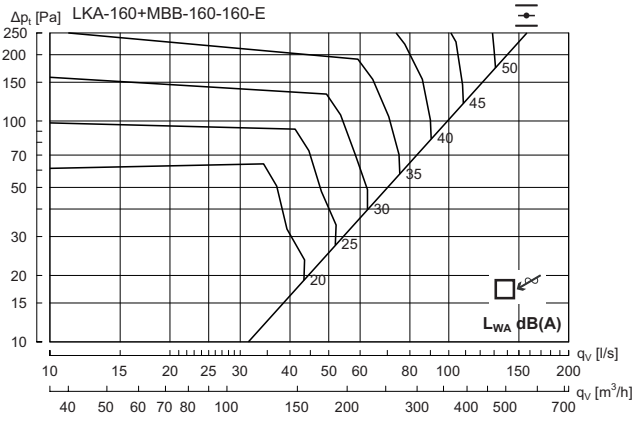
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|-----------------|----|-----|-----|-----|----|-----|-----|-----|
| K _{ok} | 13 | 0 | 4 | -2 | -8 | -11 | -16 | -22 |

Formo - Ceiling diffuser

LKA

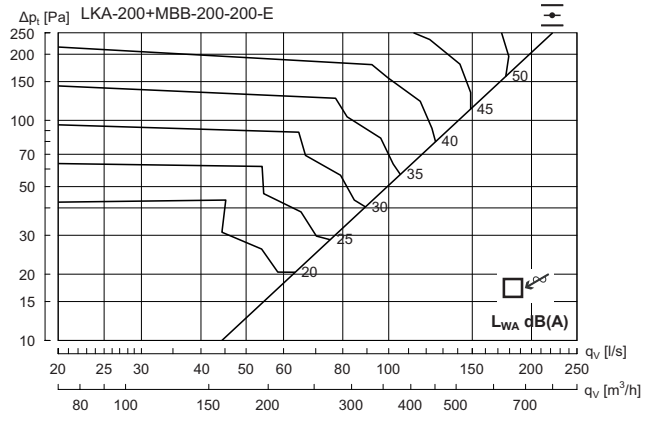
Technical data

LKA 160 + MBB-E - Extract air

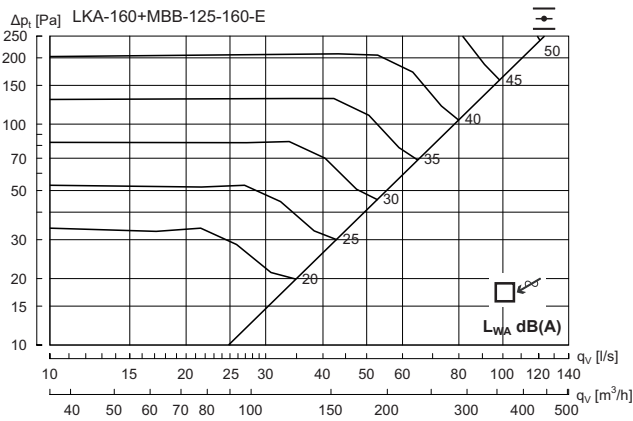


| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 16 | 6 | 1 | -4 | -5 | -11 | -17 | -24 |

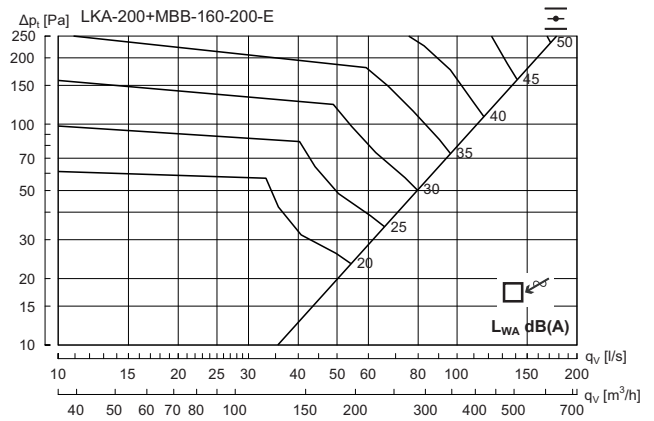
LKA 200 + MBB-E - Extract air



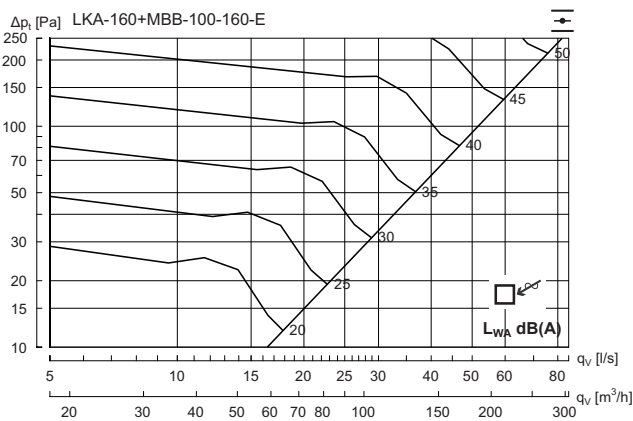
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 14 | 6 | 0 | -3 | -5 | -10 | -19 | -27 |



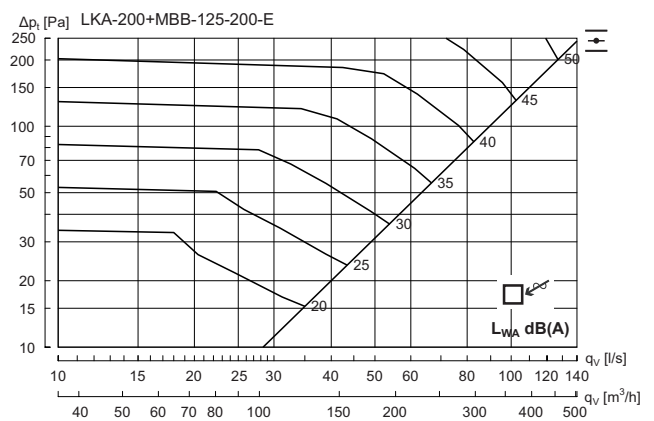
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 12 | 6 | 2 | -2 | -7 | -12 | -14 | -19 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 16 | 7 | -1 | -4 | -6 | -10 | -14 | -20 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 11 | -1 | 5 | -2 | -9 | -13 | -18 | -24 |



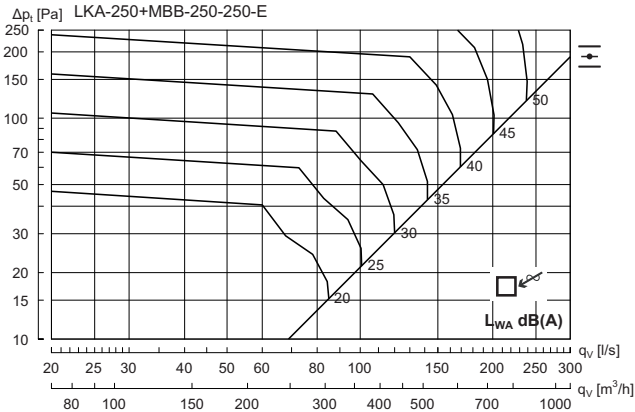
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{sk} | 11 | 3 | 0 | -2 | -5 | -11 | -14 | -21 |

Formo - Ceiling diffuser

LKA

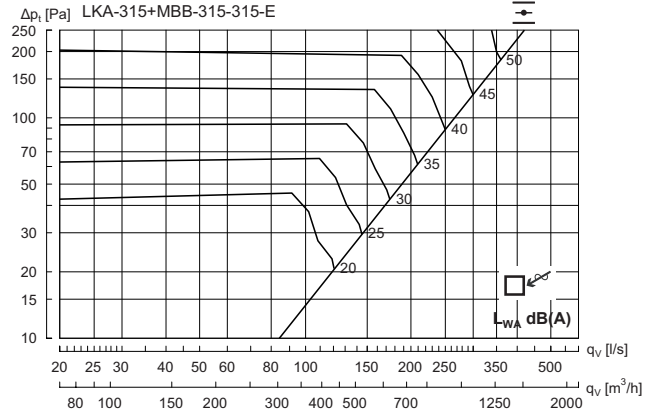
Technical data

LKA 250 + MBB-E - Extract air

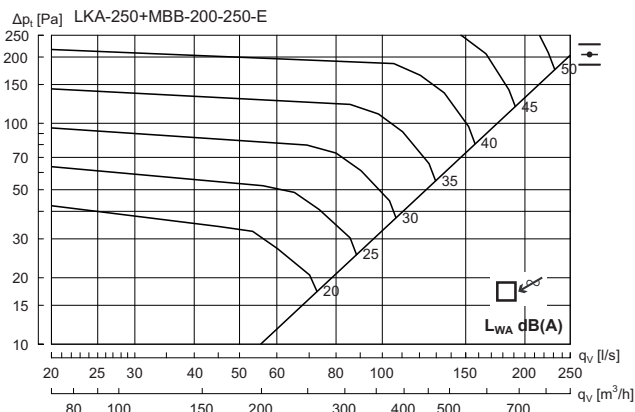


| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 12 | 4 | -1 | -3 | -3 | -12 | -19 | -30 |

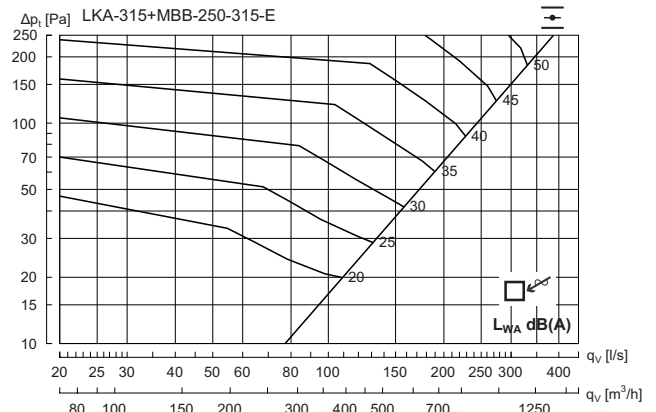
LKA 315 + MBB-E - Extract air



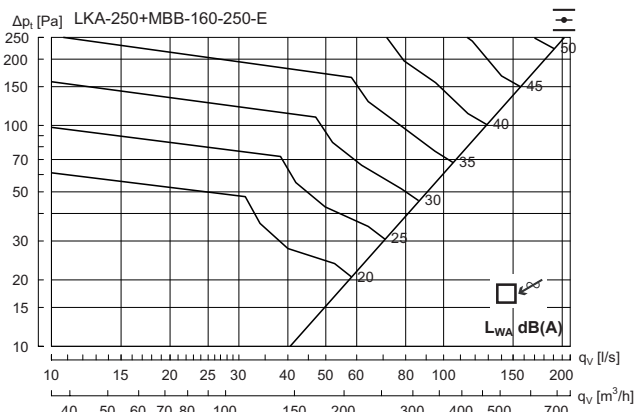
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 13 | 5 | 2 | -2 | -6 | -12 | -17 | -27 |



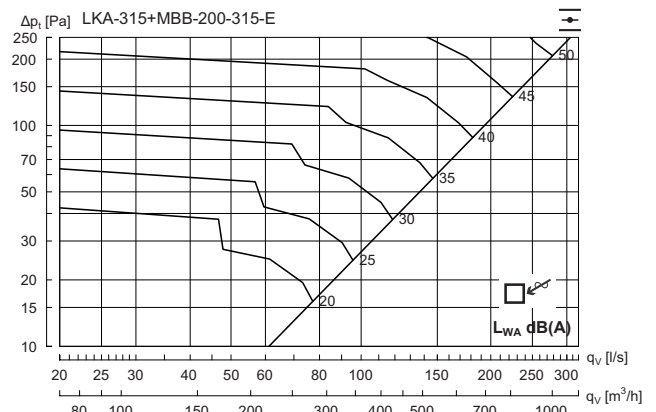
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 13 | 3 | -1 | -3 | -4 | -11 | -15 | -24 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 10 | 5 | 1 | -2 | -6 | -10 | -16 | -24 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 14 | 6 | 0 | -3 | -5 | -11 | -15 | -19 |



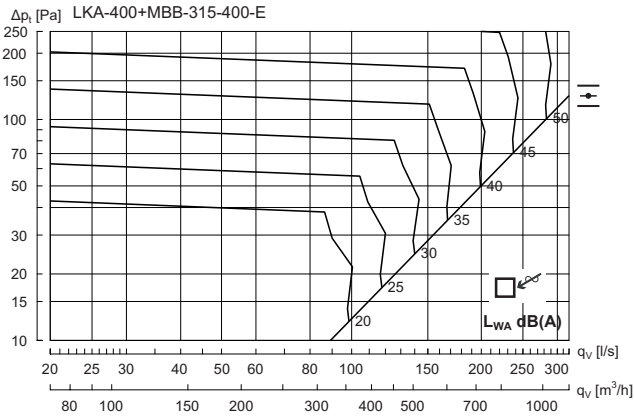
| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 14 | 5 | 0 | -2 | -6 | -12 | -14 | -22 |

Formo - Ceiling diffuser

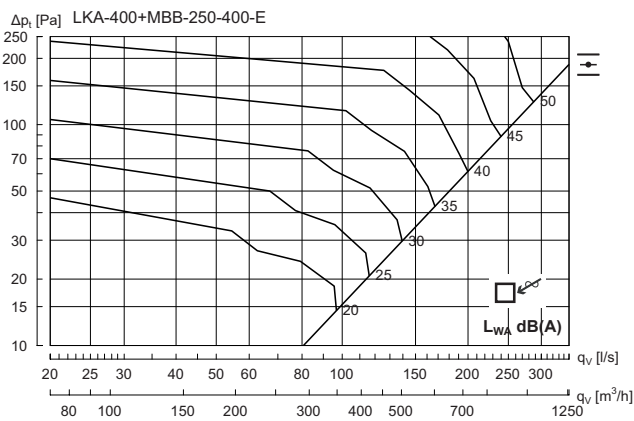
LKA

Technical data

LKA 400 + MBB-E - Extract air



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 10 | 5 | 0 | 0 | -6 | -15 | -20 | -27 |



| Hz | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|----------|----|-----|-----|-----|----|-----|-----|-----|
| K_{ok} | 12 | 5 | 1 | -1 | -7 | -12 | -16 | -24 |



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