Lindab **NC19**

Integra - Nozzle diffuser

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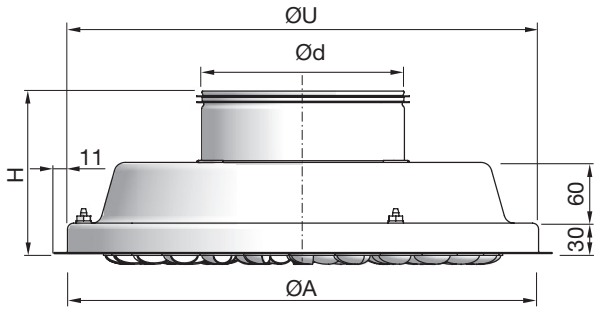
Integra - Nozzle diffuser NC19

Dimensions



NC19 Ød mm	ØA mm	H mm	ØU* mm	m 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 !

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

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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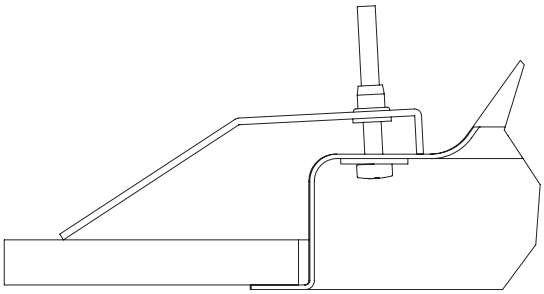
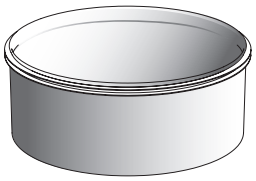
Integra - Nozzle diffuser NC19

Accessories

DCZ - Mounting brackets



MBZ - Extension piece

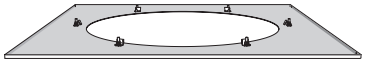


Order code - accessories

Product	aaa	bbb
Type		
Size		

Example: DRZ-200

LM - Module plate

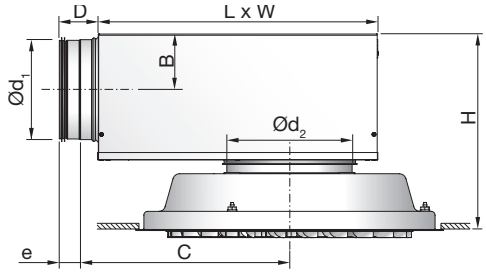


Order code - module plate

Product	LM	a	NC19	ccc
Type				
Ceiling system				
Diffuser				
Size				

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

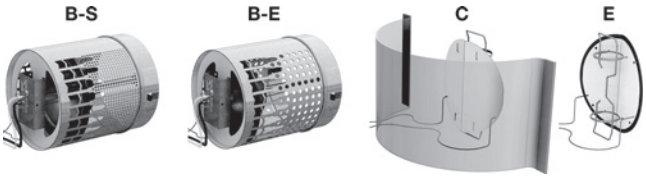
NC19 + MB plenum box



$Ød_1$	$Ød_2$	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:
$Ød_2$ = 100 - 200 mm => H +40 mm
$Ød_2$ = 250 - 315 mm => H +60 mm

Damper options



Order code

Product	MB	a	bbb	ccc	S
Type					
MB					
Damper					
B = Linear cone damper					
C = Blade damper supply					
Duct connection $Ød_1$					
Ø100-315					
Diffuser dimension $Ød_2$					
Ø125-315					
Function (Only for B damper)					
S = Supply air					

Example 1: NC19-S-200+MBB-200-250-S
Example 2: NC19-200+MBC-125-200

Integra - Nozzle diffuser NC19

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

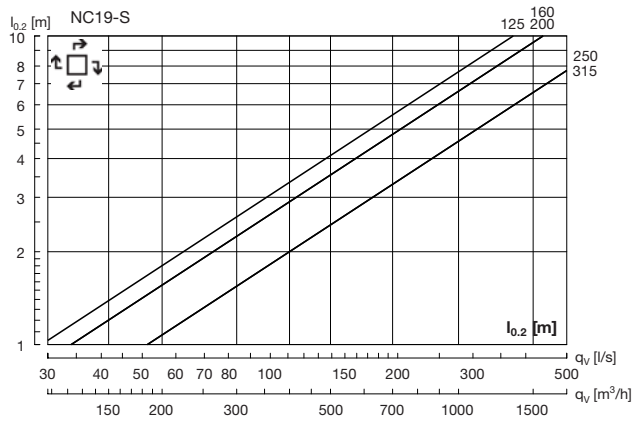
The sound power level in the frequency band is defined as $L_{WA}+K_{ok}$. K_{ok} values are specified in charts beneath the diagrams on the following pages.

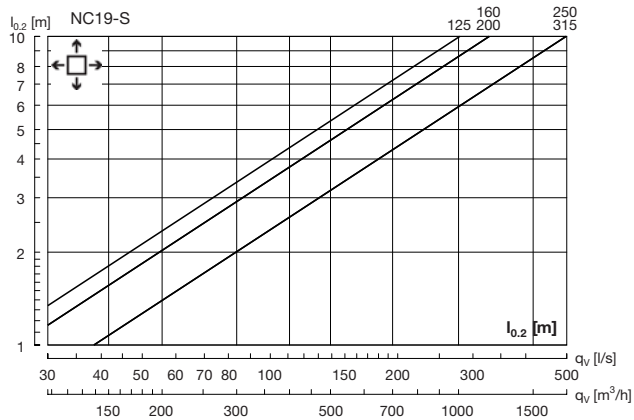
Quick selection, supply air

NC19 + MBB-S		$\Delta p_t \geq 50$ Pa		$\Delta p_t \geq 50$ Pa	
duct	NC19	30 dB(A)		35 dB(A)	
$Ød_1$	$Ød_2$	l/s	m³/h	l/s	m³/h
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									
duct	NC19	Centre frequency Hz							
$Ød_1$	$Ød_2$	63	125	250	500	1K	2K	4K	8K
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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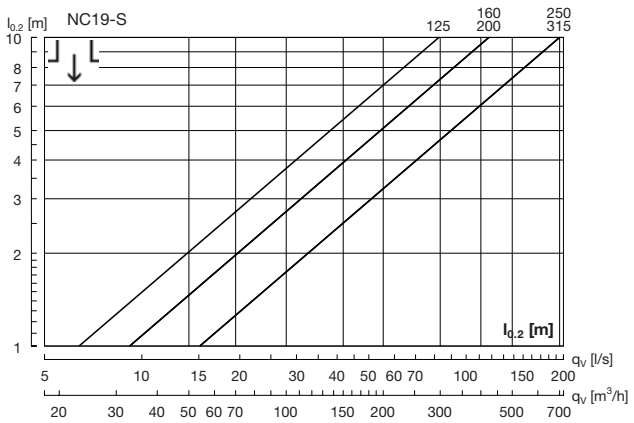
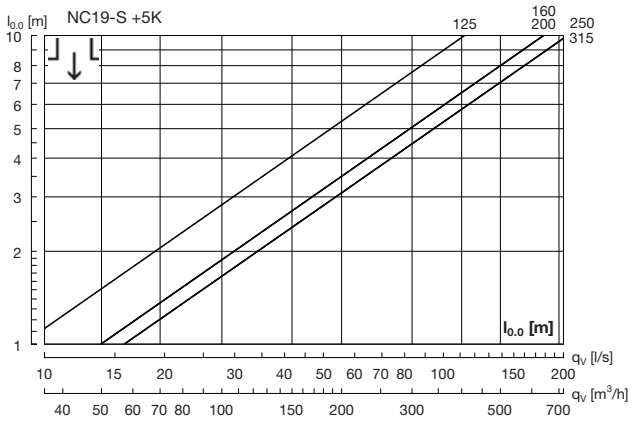
Integra - Nozzle diffuser NC19

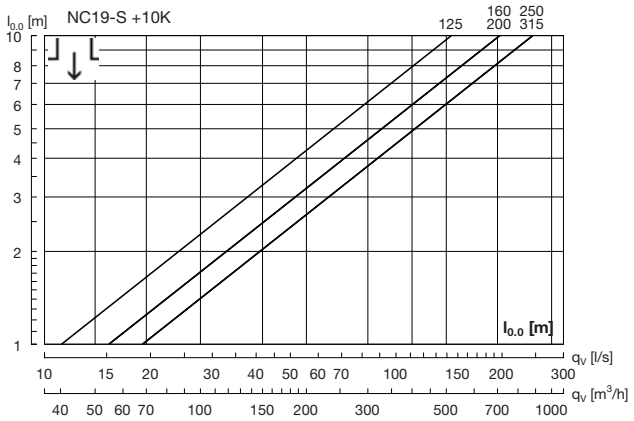
Technical data

Throws/Turning points

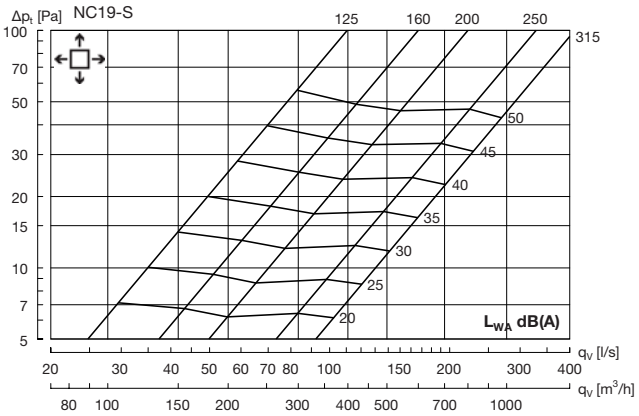
Throw $l_{0.2}$ [m] is specified at a terminal velocity of 0.2 m/s. Turning point $l_{0.0}$ [m] is specified for +5 K and +10 K respectively.







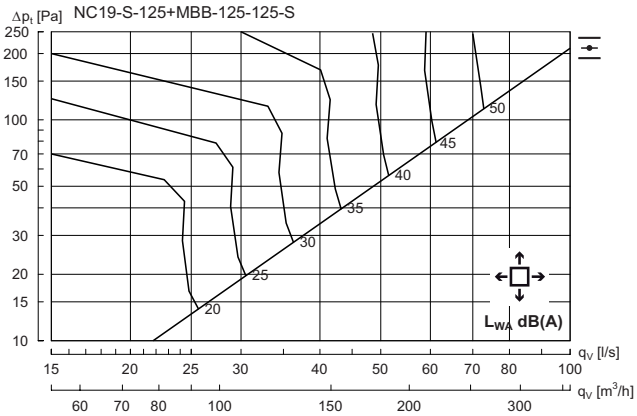
NC19 without box – Supply air



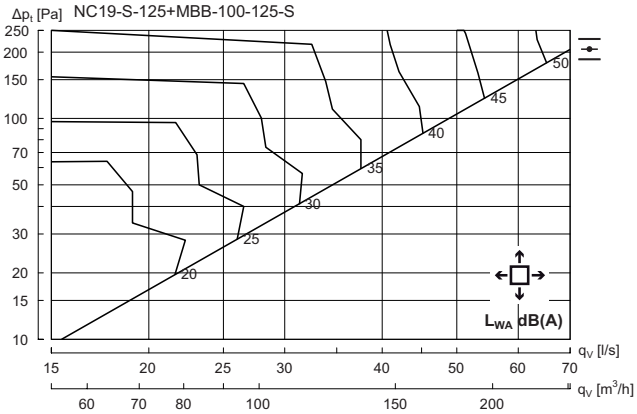
Integra - Nozzle diffuser NC19

Technical data

NC19 - 125 + MBB-S - Supply air

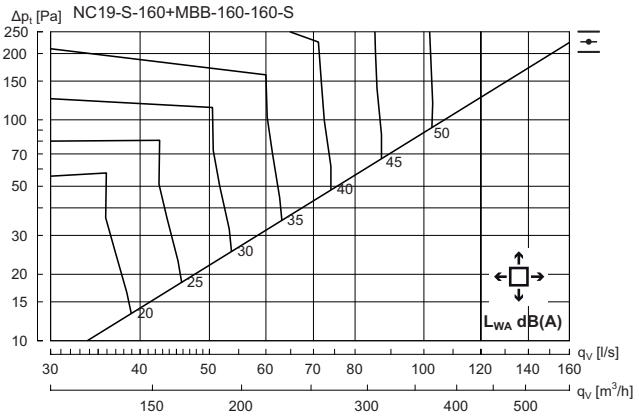


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	1	-4	0	-5	-15	-23	-35

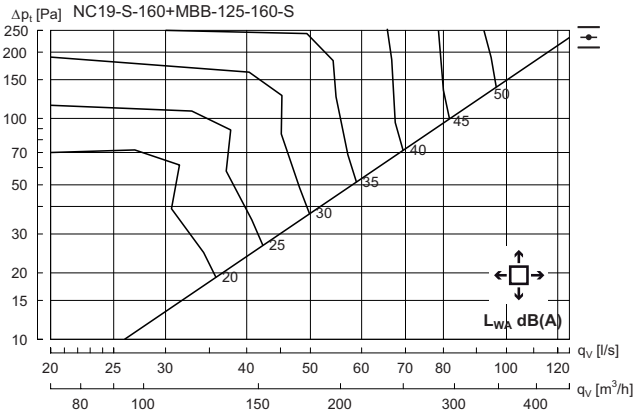


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	3	2	0	-7	-15	-22	-27

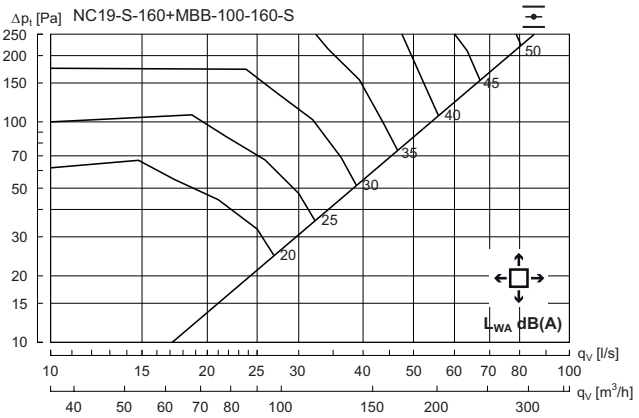
NC19 - 160 + MBB-S - Supply air



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}	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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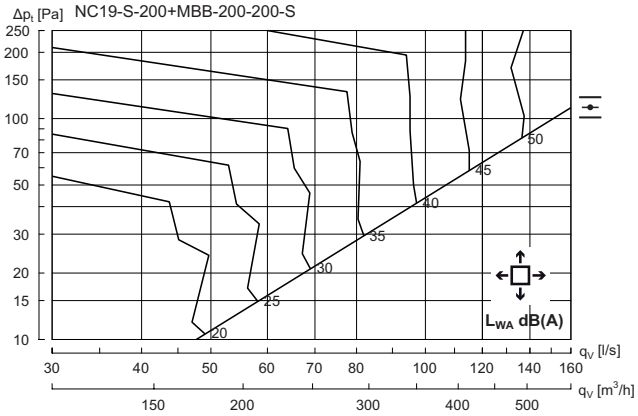
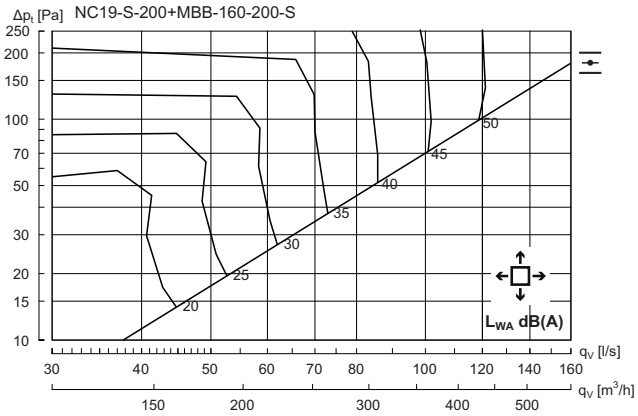
Integra - Nozzle diffuser NC19

Technical data

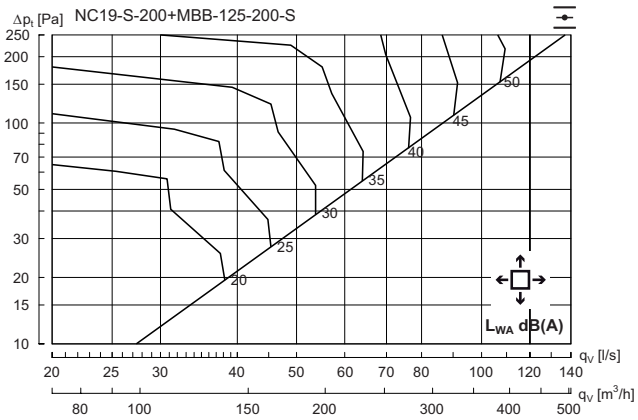
NC19 - 200 + MBB-S - Supply air



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

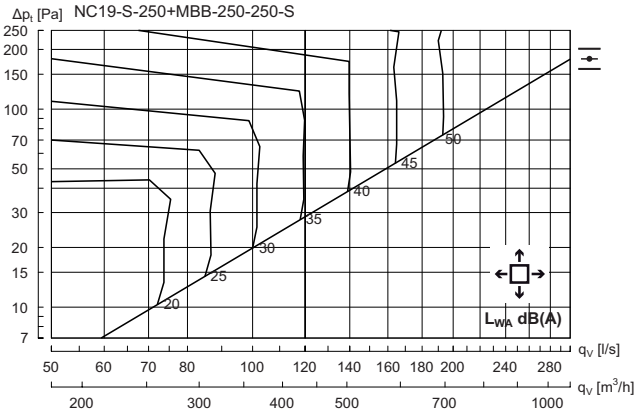


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	9	4	-2	-1	-5	-14	-20	-28

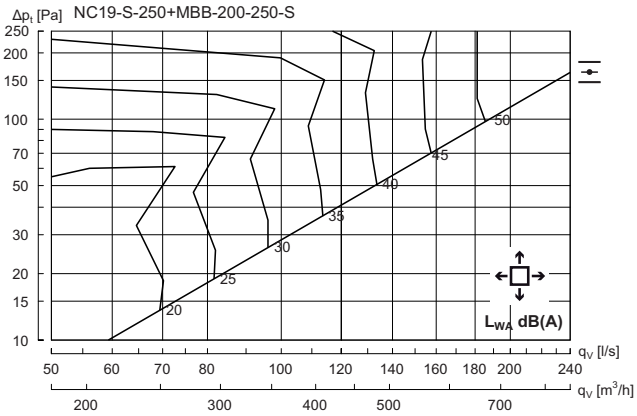


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	6	5	0	0	-6	-12	-17	-25

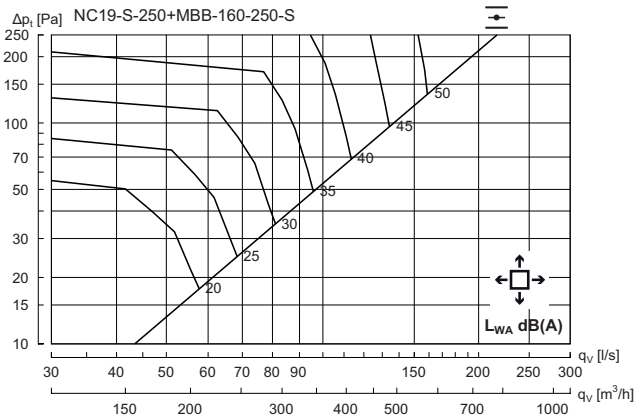
NC19 - 250 + MBB-S - Supply air



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}	6	7	-2	-1	-4	-14	-20	-29



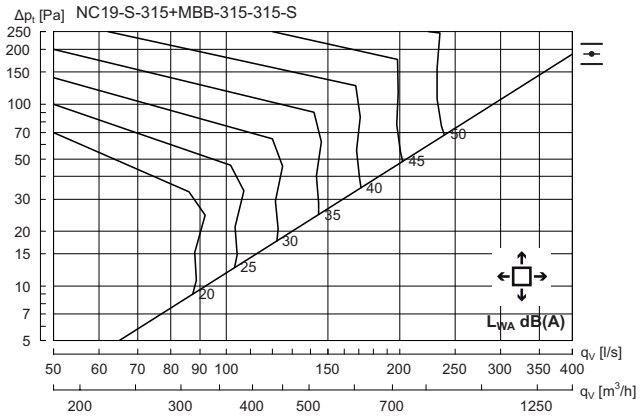
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	6	1	-2	-5	-12	-18	-26

Integra - Nozzle diffuser

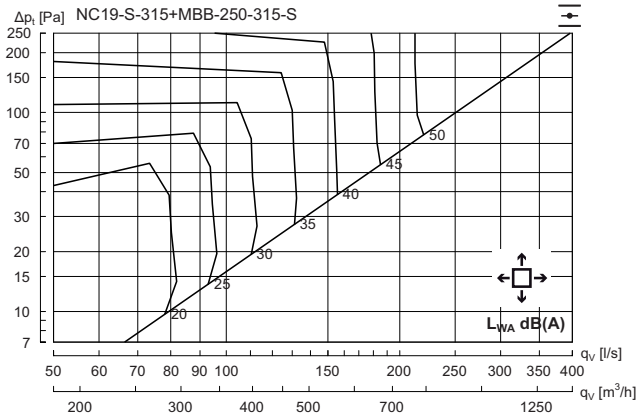
NC19

Technical data

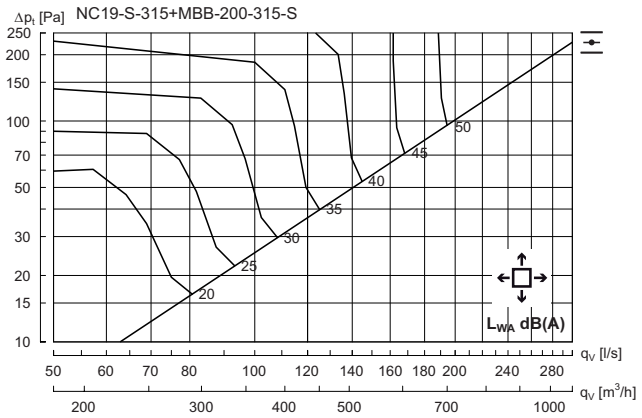
NC19 - 315 + MBB-S - Supply air



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



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



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

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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

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