

Lindab **NQ19**

Ceiling diffuser



Ceiling diffuser

NQ19



Description

NQ19 is a square ceiling diffuser with individually adjustable nozzles.

The diffuser is suitable for horizontal supply of cooled air, where great flexibility is required in the spread pattern.

Nozzles can also be oriented to a vertical supply air pattern, which allows the supply of heated air.

The diffuser is supplied as standard with nozzles set to a swirl pattern.

The diffuser front can be opened with a smart credit card system, and the front is securely hinged to ease up the work during the installation and balancing phase.

NQ19 is typically used in combination with the plenum box CBC for individual balancing, sound reduction and even distribution of air into the diffuser.

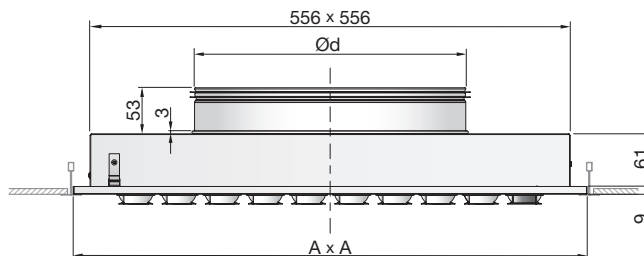
- Flexible diffuser with adjustable spread pattern.
- Suitable for horizontal or vertical supply air.
- No change in sound and pressure for different spread patterns.
- Easy access to the plenum box with credit card opening system.
- Used in combination with plenum box CBC.

Order Code

Product	NQ19	aaa	1
Type			
NQ19			
Size			
160, 200, 250, 315, 400			
Ceiling system			
1			

Example: NQ19-250-1

Dimensions



NQ19 Ød mm	Number of nozzles	A mm	m kg
160	36	595	5.7
200	64	595	5.5
250	81	595	5.5
315	100	595	5.2
400	121	595	5.0



NQ19-250 with plenum box CBC-160-250.

Maintenance

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

Materials and finish

Material:	Galvanised steel
Standard finish:	Powder-coated
Standard colour:	RAL 9003, Gloss 30
Nozzles:	White, ABS plastic

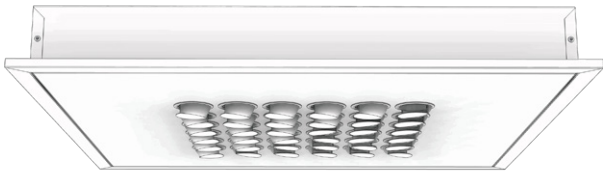
The NQ19 is available in other colours. Please contact Lindab's sales department for further information.

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NQ19 variants

NQ19-160 (36 nozzles)



NQ19-200 (64 nozzles)



NQ19-250 (81 nozzles)



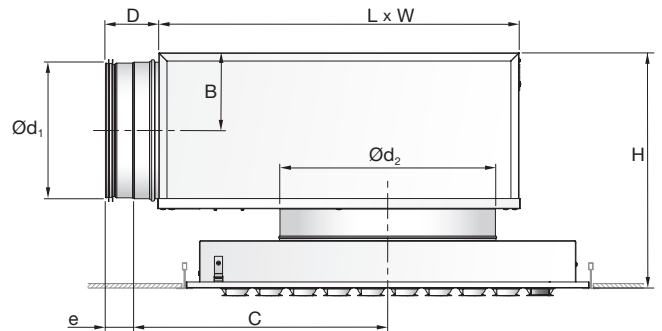
NQ19-315 (100 nozzles)



NQ19-400 (121 nozzles)

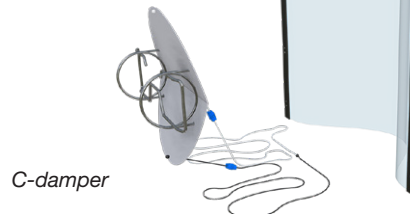
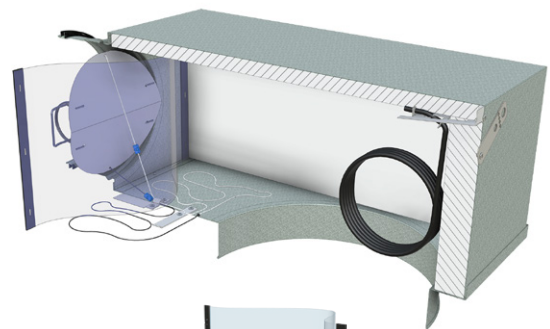


NQ19 + CBC Plenum box

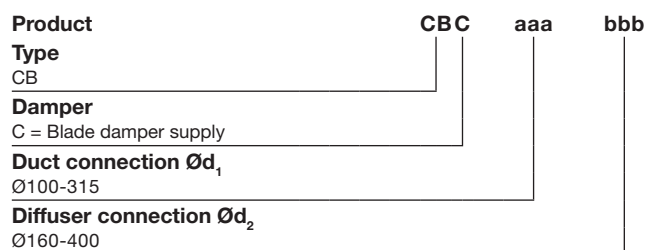


Ød ₁ mm	Ød ₂ mm	No. of nozzles	B	C	D	e	H	L	W
mm									
100	160	36	65	231	78	40	248 - 286	308	244
125	160	36	78	250	78	40	273 - 311	327	244
125	200	64	78	270	78	40	273 - 311	367	284
160	200	64	95	295	78	40	307 - 345	392	284
160	250	81	95	320	78	40	307 - 345	442	334
200	250	81	115	345	78	40	347 - 385	467	334
200	315	100	115	377	78	40	347 - 385	532	399
250	315	100	140	423	118	60	398 - 436	558	399
250	400	121	140	466	118	60	398 - 436	643	484
315	400	121	173	536	118	60	463 - 501	714	484

CB Plenum box with C-damper



Order Code



Example: NQ19-315 + CBC-250-315

Ceiling diffuser

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Technical data

NQ19 + CBC plenum box

The following NQ19 + plenum box data are valid for CB with supply blade damper C.

For complete configuration of your NQ19 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)].

Frequency-related sound power level

The sound power level in the frequency band is defined as $L_{WA} + K_{ok}$.

Quick selection, supply air

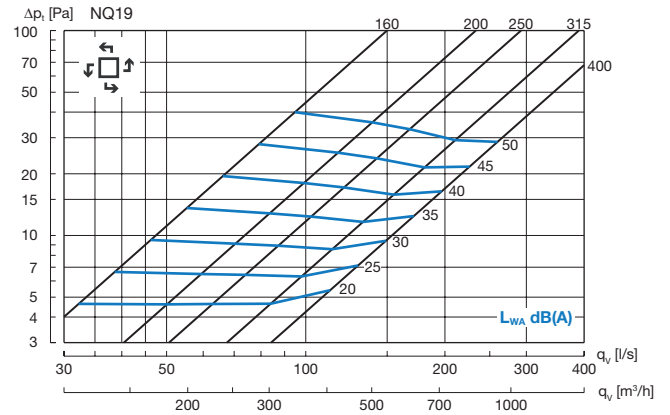
NQ19 + CBC		$\Delta p_t \geq 50$ Pa 30dB(A)		$\Delta p_t \geq 50$ Pa 35dB(A)	
Duct $\varnothing d_1$	NQ19 $\varnothing d_2$	l/s	m ³ /h	l/s	m ³ /h
100	160	26	94	46	165
125	160	34	124	48	173
125	200	36	130	70	254
160	200	48	173	75	270
160	250	50	182	88	316
200	250	51	185	94	339
200	315	52	187	114	409
250	315	81	293	121	435
250	400	87	315	156	561
315	400	114	411	166	597

Sound attenuation

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

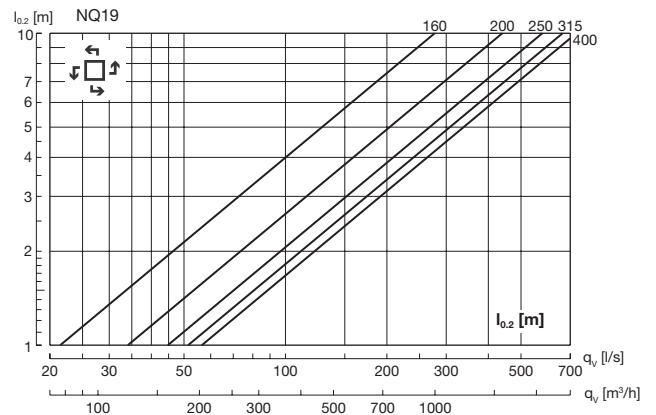
NQ19 + CBC		Sound attenuation ΔL [dB]							
Duct $\varnothing d_1$	NQ19 $\varnothing d_2$	Centre frequency Hz							
		63	125	250	500	1K	2K	4K	8K
100	160	25	18	11	16	17	14	8	7
125	160	22	17	10	18	19	17	14	13
125	200	22	16	9	12	15	13	10	12
160	200	25	14	8	13	16	13	11	9
160	250	26	13	7	13	13	13	12	9
200	250	19	12	8	12	16	12	12	10
200	315	20	9	7	12	14	11	11	9
250	315	17	9	5	14	16	10	11	7
250	400	16	9	5	13	13	9	11	7
315	400	12	7	12	11	14	12	10	14

NQ19 without plenum box



Throw $l_{0.2}$

Throw $l_{0.2}$ [m] is specified at a terminal velocity of 0.2 m/s. The designation by the lines specifies the five NQ19 sizes available, defined by the NQ19 connection diameter.



Correction throw

4-way	3-way	2-way	1-way
1.3	2	2.5	4.6

Installation and balancing

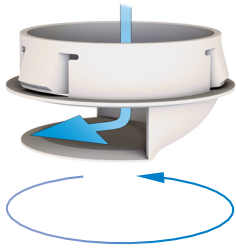
For further information, go to www.lindQST.com and see [NQ19](#) and [CBC plenum box](#) installation and balancing instructions.

Ceiling diffuser

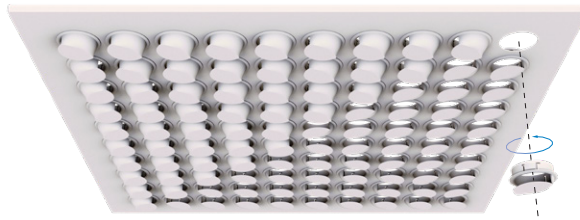
NQ19

Air patterns - Individually adjustable nozzles

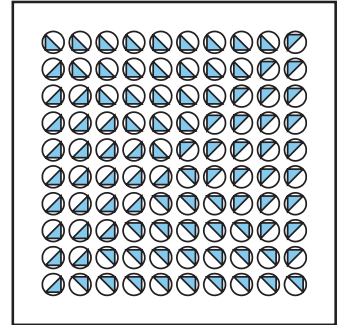
As an example the NQ19-315 faceplate with 100 nozzles are shown below with different air patterns. The diffuser is supplied as standard with nozzles set to a swirl (rotation) pattern.



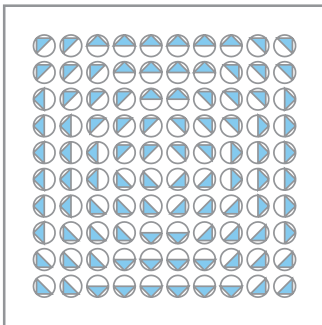
Standard



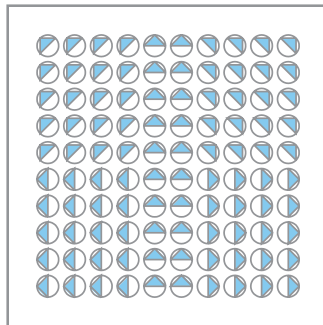
S  Swirl (rotation)



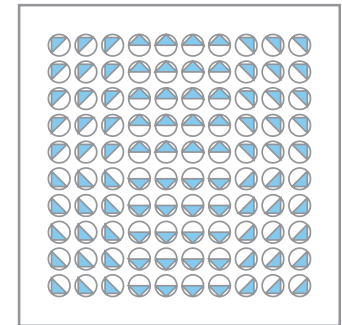
S  4-ways




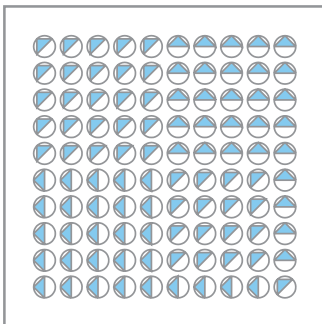
S  3-ways



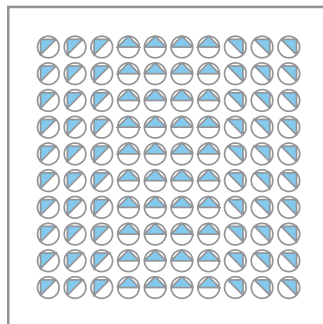
S  2-ways



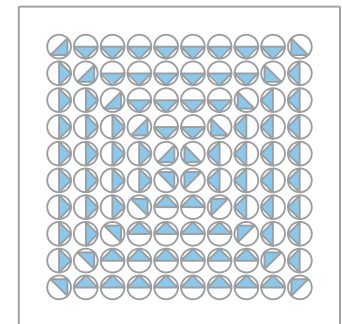
S  2-ways (corner)



S  1-way



S  Vertical

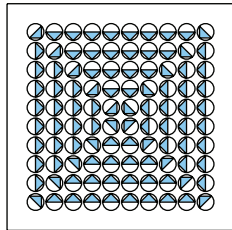


Ceiling diffuser

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Technical data

Nozzle settings vertical

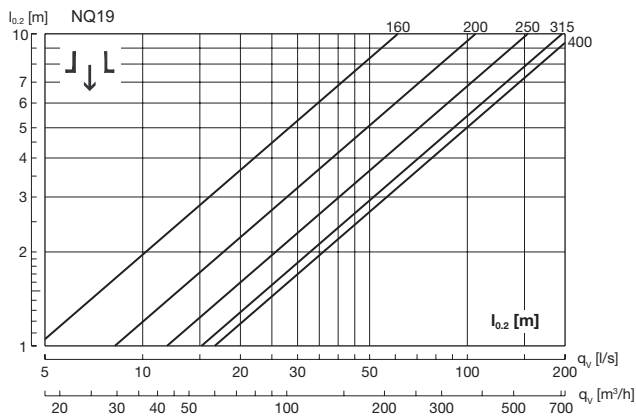


Throws

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

The designation by the lines specifies the five NQ19 sizes available, defined by the NQ19 connection diameter.

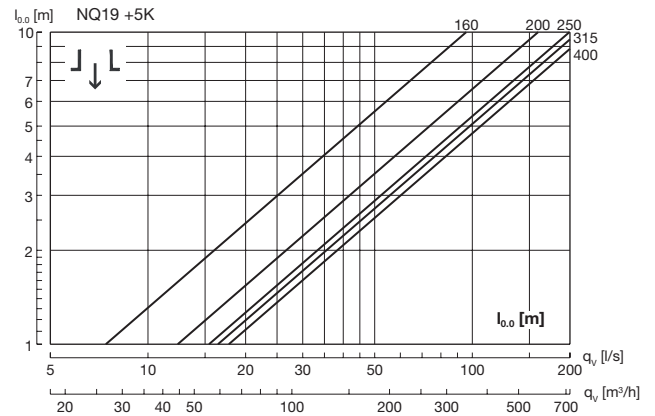
Throw $l_{0,2}$ Isothermal



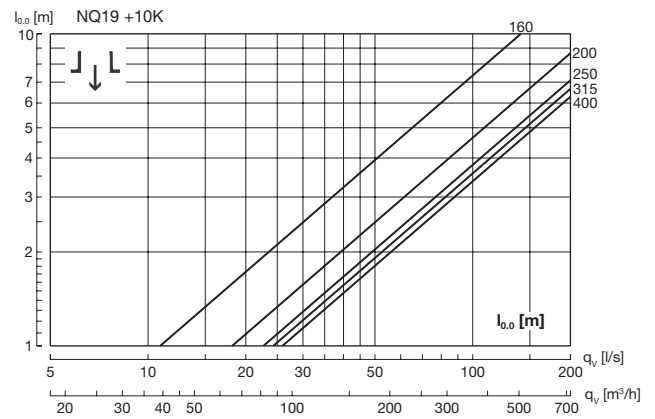
Turning points

Turning point $l_{0,0}$ [m] can be seen in the diagrams for heated air, +5 K and +10 K respectively.

Turning point $l_{0,0}$ heated air +5 K



Turning point $l_{0,0}$ heated air +10 K





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