Versio

RS16

RS16 with upper section type V

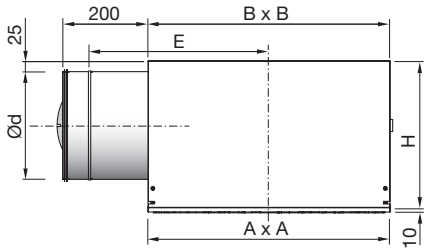
RS16 with plenum box type H

Description

RS16 is a square swirl diffuser with adjustable bars that can be used for both supply air and extract. The swirl pattern ensures high induction and a large dynamic range, and is therefore ideal for the horizontal supply of very cold air. For extract, the diffuser is supplied as standard without bars.

- High capacity
- Large dynamic range
- High induction
- Ideal for the supply of very cold air
- Can be used for both supply air and extract
- Plenum box with several damper options

Dimensions



RS16-H Ød	Pattern	A mm	B mm	H mm	E mm	m kg
250	600	**-	560	340	420	12.3
315	600	**-	560	405	420	13.1

* Face plate dimension A x A depends on ceiling system. See **"Ceiling adjustment"** for detailed dimensions. For further details on plenum box - see **"Plenum boxes"**.

Order code

Product		**RS 16 b c d eee f**
Type		
RS		
Design		
16		
Box type		
V - H - R		
Functional use		
S = Supply air		
E = Extract		
Damper		
0 = No damper	(Box	: H, V)
1 = Damper	(Box	: H, R)
2 = Damper / Meas.outlets	(Box	: H)
Connection dim.		
Ø315	(Box	: V)
Ø250-315	(Box	: H)
500x100	(Box	: R)
Ceiling system		
1 - 14	Go to chapter Ceiling tile adaption	

Example: RS-16-V-S-0-315-1

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.

Materials and finish

Grille box/plenum box:
Material: Galvanised steel

Face plate:
Material: Galvanised steel
Bars: Black ABS-plastic
Standard finish: Powder-coated
Standard colours: RAL 9003 and RAL 9010, gloss 30

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

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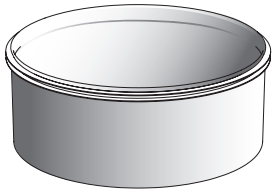
Accessories

Extension piece MBZ



Order code

Product	MBZ	aaa
Type		
Size		

Example: MBZ-315

Mounting bracket PBB

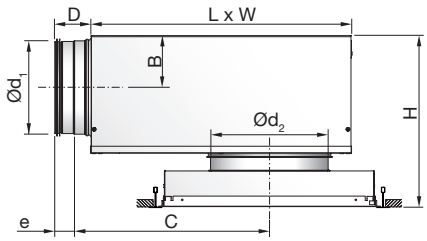
Suspension MHS

Order code

Product	aaa
Type	

Example: MHS

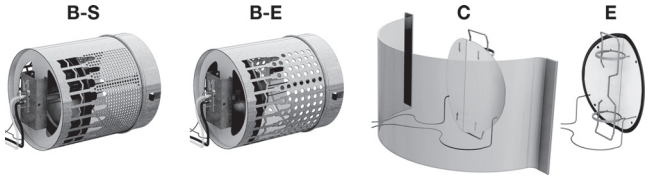
RS16-V + MB plenum box



Ød1 mm	Ød2 mm	Pattern	B	C	D	e	H*	L	W
			mm						
200	315	600	112	425	78	40	355 - 395	565	460
250	315	600	137	514	118	60	405 - 445	698	540
315	315	600	170	675	118	60	470 - 510	858	540

* Using accessory MBZ the H dimension will increase:
$Ød_2$ = 315 mm => H +60 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 $Ød_1$					
Ø200-315					
Diffuser dimension $Ød_2$					
Ø315					
Function (Only for B damper)					
S = Supply air E = Extract					

Example 1: RS-16-V-S-0-315-1+MBB-250-315-S
Example 2: RS-16-V-S-0-315-1+MBC-250-315

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RS16

Technical data

Following RS16-V+plenim 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 [m^3/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

RS16-V + MBB-S

RS16-V + MBB-S		$\Delta p_t \geq 50$ Pa		$\Delta p_t \geq 50$ Pa	
duct	RS16-V	30 dB(A)		35 dB(A)	
$Ød_1$	$Ød_2$	l/s	m^3/h	l/s	m^3/h
200	315	99	356	131	472
250	315	126	454	160	576
315	315	155	558	185	666

RS16 + H

RS16 + H			$\Delta p_t \geq 50$ Pa		$\Delta p_t \geq 50$ Pa	
Size Ød	Minimum		30 dB(A)		35 dB(A)	
mm	l/s	m^3/h	l/s	m^3/h	l/s	m^3/h
250	71	254	-	-	112	403
315	95	342	-	-	174	626

Sound attenuation

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

RS16-V + MBB-S/-E

RS16-V + MBB-S/-E									
duct	RS16-V	Centre frequency Hz							
$Ød_1$	$Ød_2$	63	125	250	500	1K	2K	4K	8K
200	315	13	9	3	16	16	15	17	16
250	315	12	7	5	17	16	17	17	18
315	315	8	10	8	17	18	17	18	23

RS16 + H

RS16-H								
Size Ød	Centre frequency Hz							
mm	63	125	250	500	1K	2K	4K	8K
250	13	8	4	8	5	5	7	9
315	12	7	5	11	5	5	6	8

RS16 + R

RS16 + R								
Size-2	Mean frequency Hz							
mm	63	125	250	500	1K	2K	4K	8K
500x100	12	7	2	4	2	5	5	5

Installation -and balancing instruction

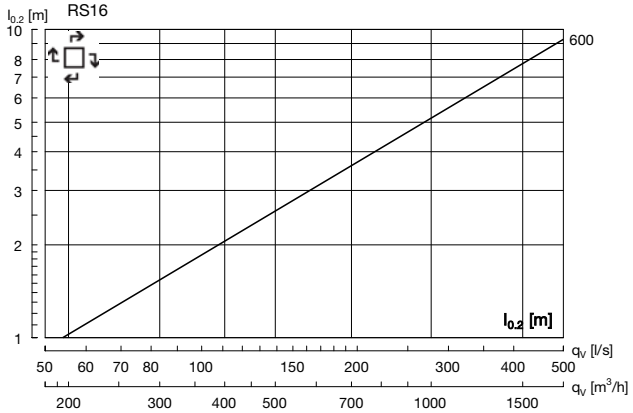
For futher information go to www.lindQST.com and installation -and balancing instruction.

Versio RS16

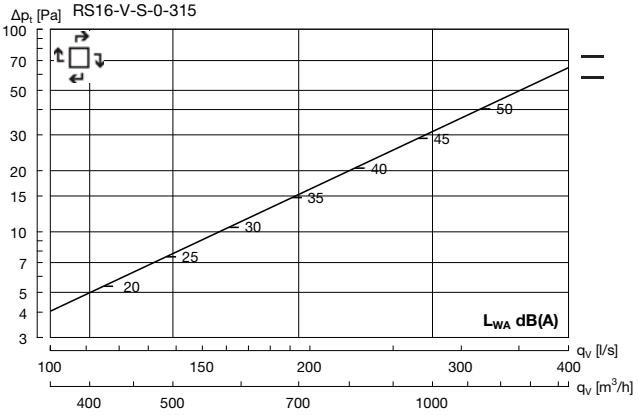
Technical data

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 pattern of dispersal.



RS16-V without plenum box – Supply air

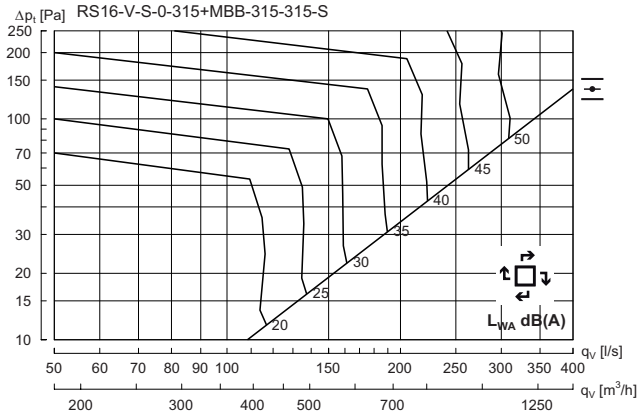


Versio

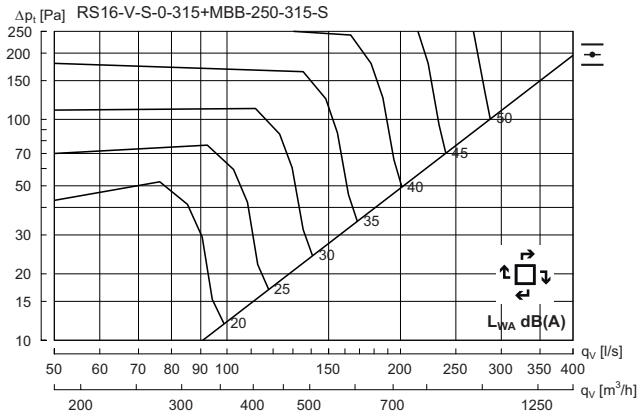
RS16

Technical data

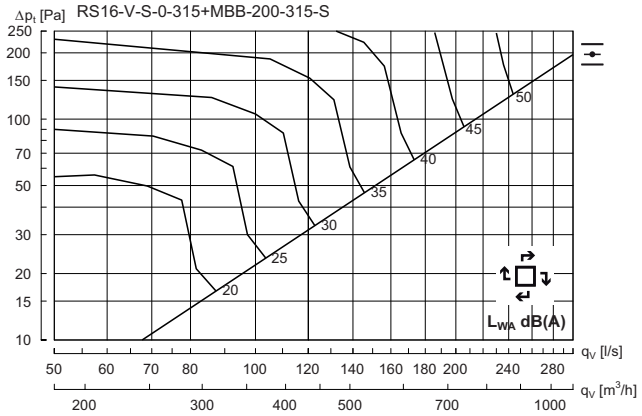
RS16-V 315 + MBB - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	1	-1	0	-6	-14	-21	-30



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	4	-1	-1	-5	-12	-19	-26



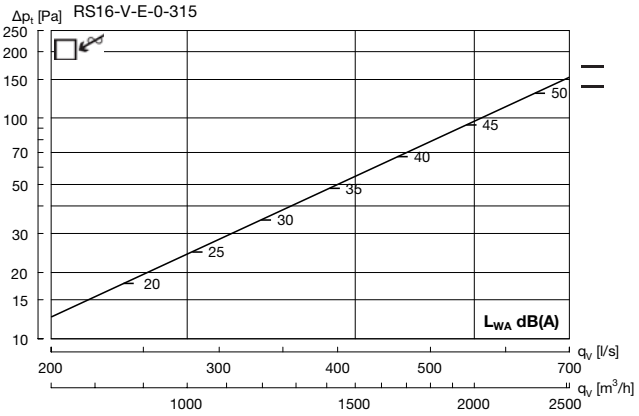
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	12	7	-1	-2	-5	-12	-18	-24

Versio

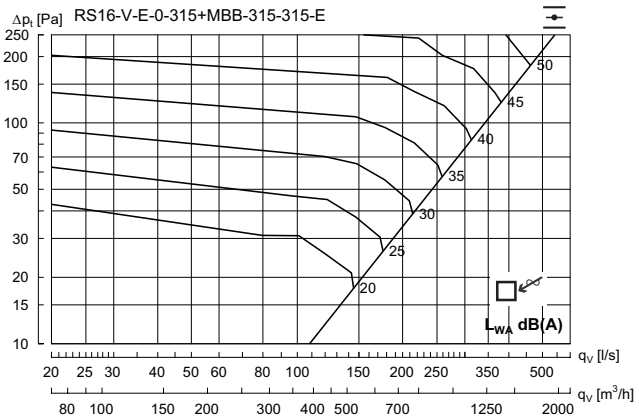
RS16

Technical data

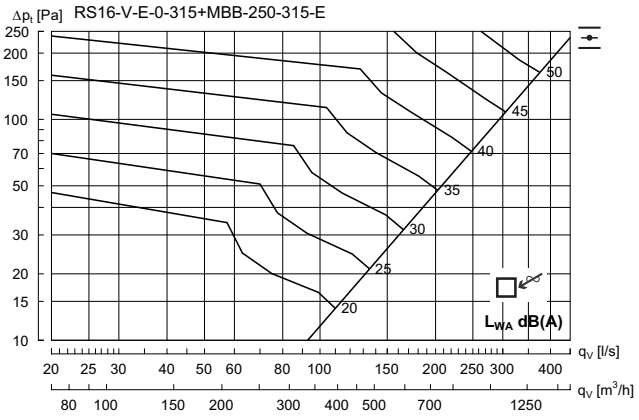
RS16-V without plenum box – Extract air



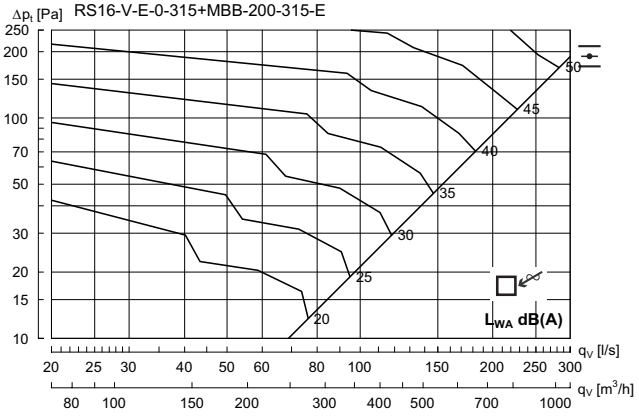
RS16-V 315 + MBB - Extract air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	5	3	-4	-6	-9	-15	-26



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	6	3	-4	-6	-11	-16	-24



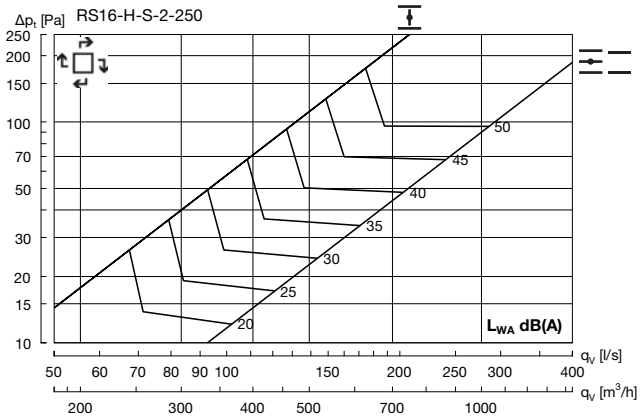
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	14	5	1	-3	-6	-9	-13	-21

Versio

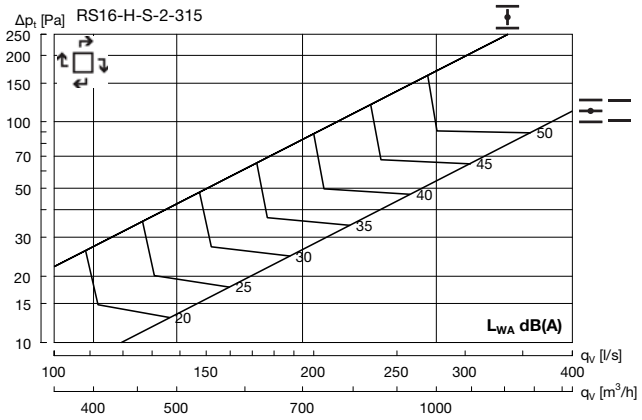
RS16

Technical data

RS16 + H - Supply air

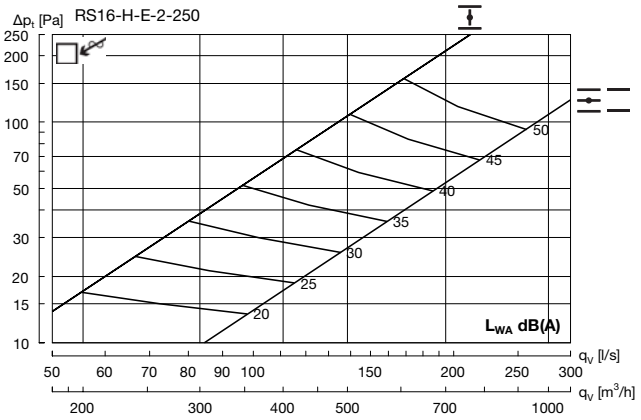


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	5	5	2	-1	-6	-13	-19	-27

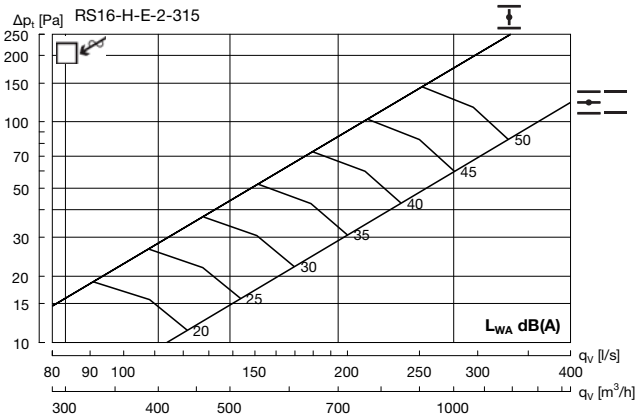


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	5	1	-1	-5	-13	-21	-31

RS16 + H - Extract air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	2	6	3	-2	-7	-12	-21	-30

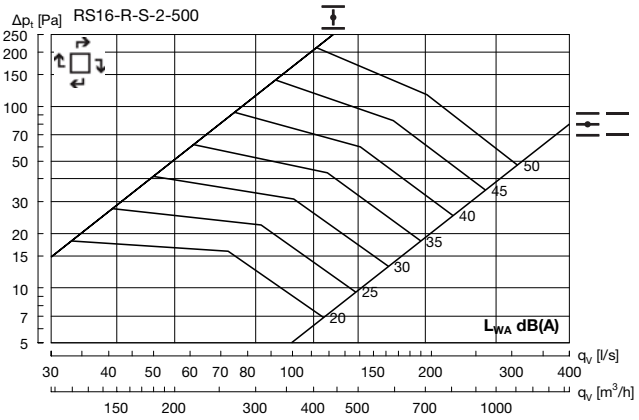


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	5	2	-2	-5	-12	-21	-32

Versio RS16

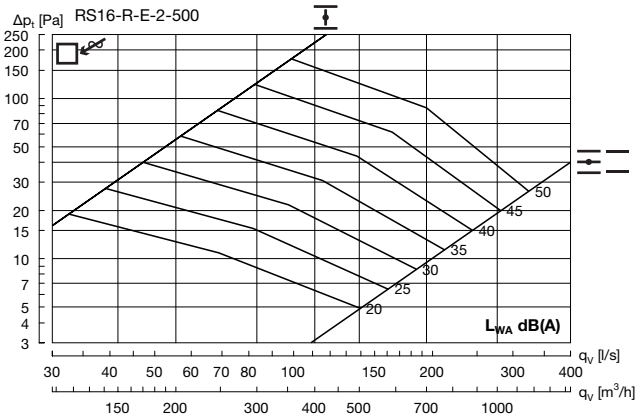
Technical data

RS16 + R - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	9	2	3	-1	-8	-12	-21	-28

RS16 + R - Extract air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	0	0	-3	-5	-8	-18	-26