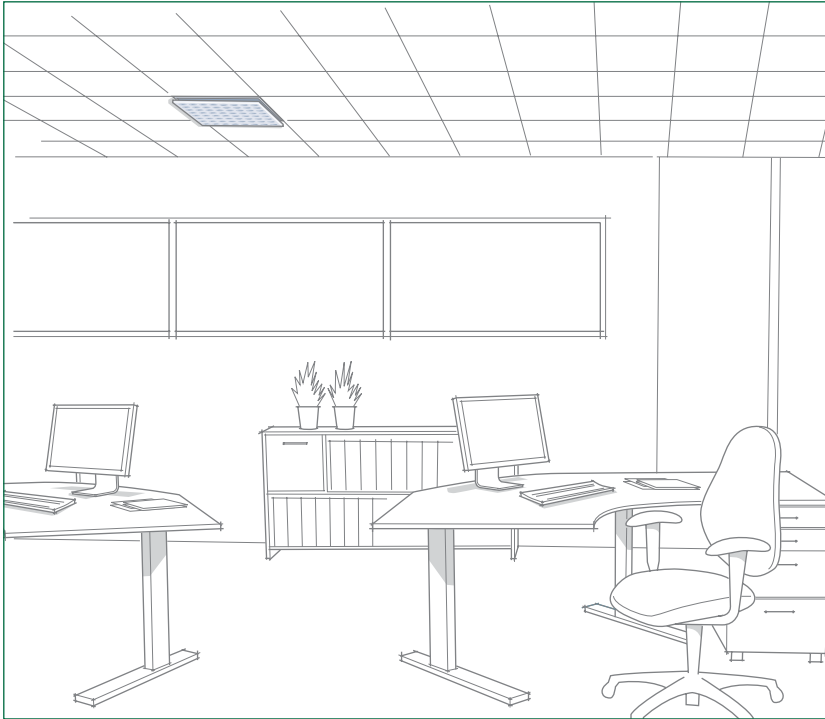


# Nozzle air diffuser DYKB/DYCB



DYKB and DYCB are air diffusers with adjustable nozzles for the setting of an optional diffusion pattern, intended for ceiling installation. Both devices are square; DYCB has a circular, and DYKB has a square nozzle pattern. The devices are shown without, with an insulated and uninsulated connection box ATTB. DYKB and DYCB have an adjustable slot of 10 mm for higher air flows.

## Quick selection

DYKB/DYCB without slot, with insulated connection box ATTB-aaa-bbb-1-0 at 50 Pa

Air diffuser Size	Connection ATTB		Air flow l/s (m <sup>3</sup> /h) at sound level		
	inlet mm	outlet mm	25 dB	30 dB	35 dB
DY(C,K)B-160	100	160	28	37 (133)	-
DY(C,K)B-200	125	200	42	53 (191)	-
DY(C,K)B-250	160	250	65	88 (317)	103
DY(C,K)B-315	200	315	81	108 (389)	130
DY(C,K)B-400	250	400	108	130 (468)	150

- = outside working area.

DYKB/DYCB without slot, with uninsulated connection box ATTB-aaa-bbb-0-0 at 50 Pa

Air diffuser Size	Connection ATTB		Air flow l/s (m <sup>3</sup> /h) at sound level		
	inlet mm	outlet mm	25 dB	30 dB	35 dB
DY(C,K)B-125	100	125	22	27 (97)	31
DY(C,K)B-160	125	160	35	45 (162)	54
DY(C,K)B-200	160	200	46	55 (198)	63
DY(C,K)B-250	200	250	77	95 (342)	110
DY(C,K)B-315	250	315	95	118 (425)	138
DY(C,K)B-400	315	400	108	130 (468)	150

- = outside working area.

## Product facts

### Nozzle air diffuser DYKB/ DYCB

Adjustable diffusion pattern.  
Choice of diffusion directions.  
False ceiling plate is available for size 160 and 200. Sizes 250-400 are adapted for false ceiling.  
Made from hot-dip galvanized steel sheet.  
Powder coated in white colour RAL 9010.  
6 sizes.

### Connection box ATTB

Measurement and adjustment damper.  
The damper is easily removable without changing the settings.  
Approved for cleaning.  
K-factors on measurement hoses.

### Product code example:

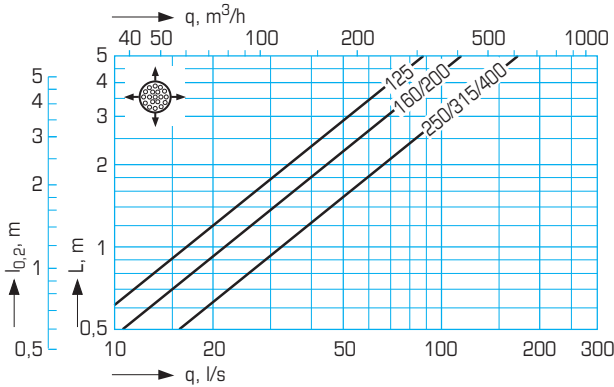
Nozzle air diffuser DYCB-160  
with connection box  
ATTB-125-160-0-0

# Air flow, zone length, throw, pressure drop, sound level

Nozzle air diffuser DYKB, DYCB with connection box, 4-way diffusion and without slot

## Zone- and throw length

Sizes in diagrams below refer to air diffuser connection in mm.

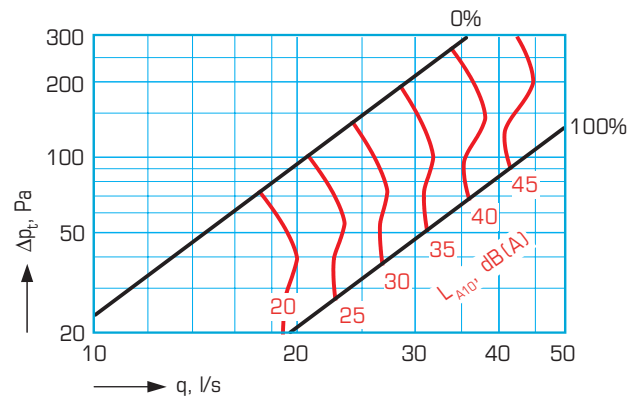


Uninsulated box = 0, Insulated box = 1

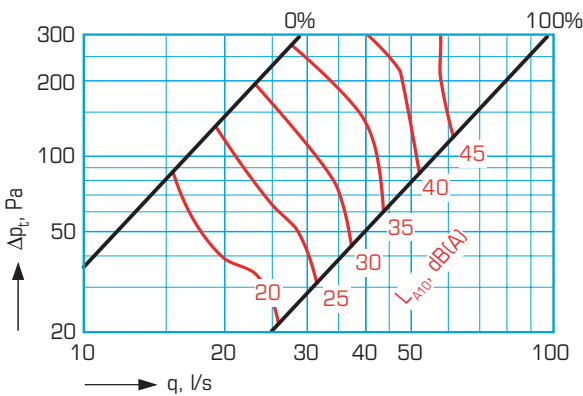
Diffuser connection in mm

Duct connection in mm

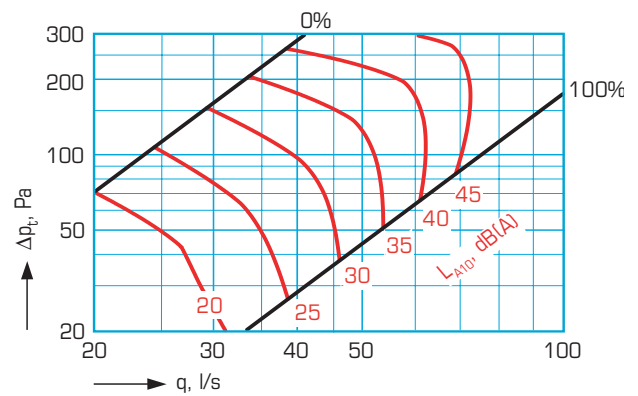
### DY(K, C)B-125 + ATTB-100-125-0-0



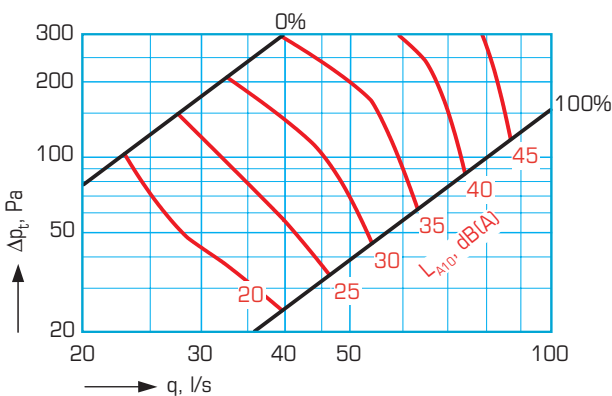
### DY(K, C)B-160 + ATTB-100-160-1-0



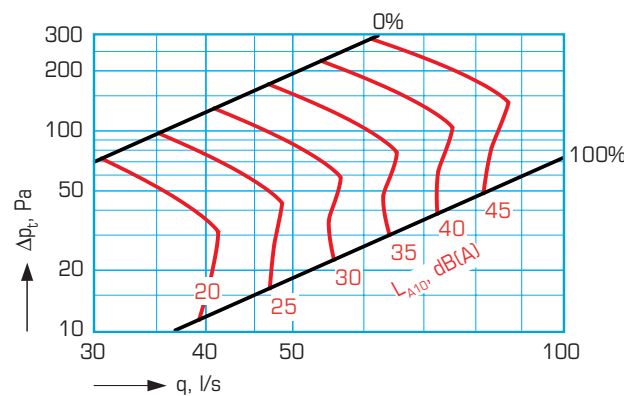
### DY(K, C)B-160 + ATTB-125-160-0-0



### DY(K, C)B-200 + ATTB-125-200-1-0



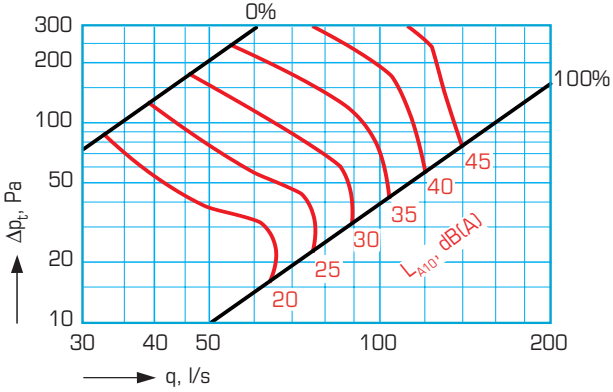
### DY(K, C)B-200 + ATTB-160-200-0-0



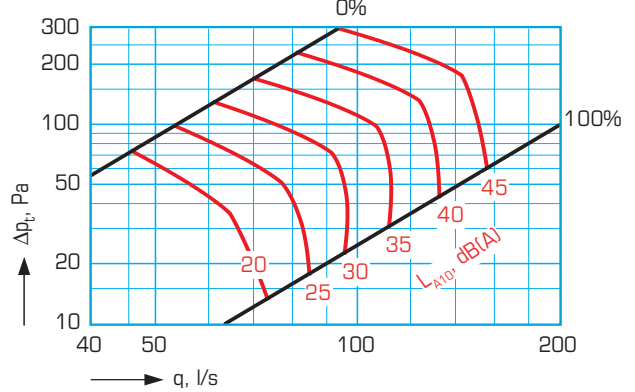
More technical data can be found in our selection tool WinDon at [www.flaktwoods.com](http://www.flaktwoods.com).

# Air flow, zone length, throw, pressure drop, sound level

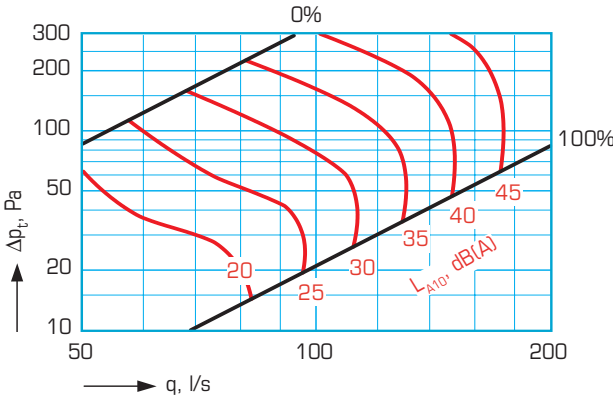
DY(K, C)B-250 + ATTB-160-250-1-0



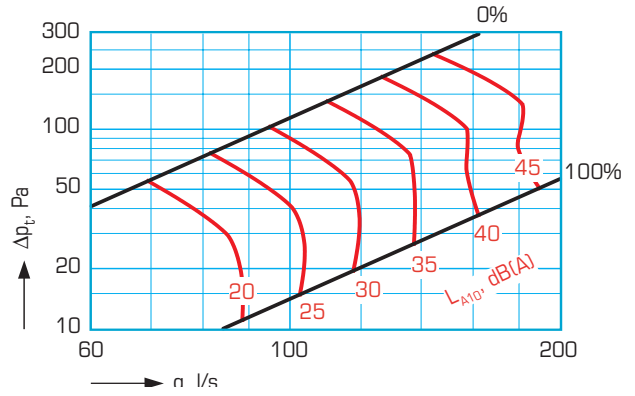
DY(K, C)B-250 + ATTB-200-250-0-0



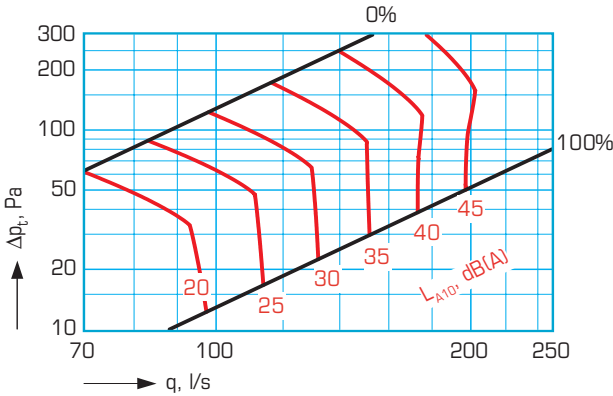
DY(K, C)B-315 + ATTB-200-315-1-0



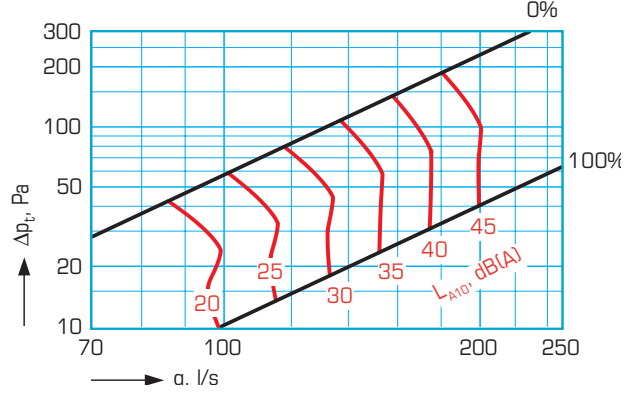
DY(K, C)B-315 + ATTB-250-315-0-0



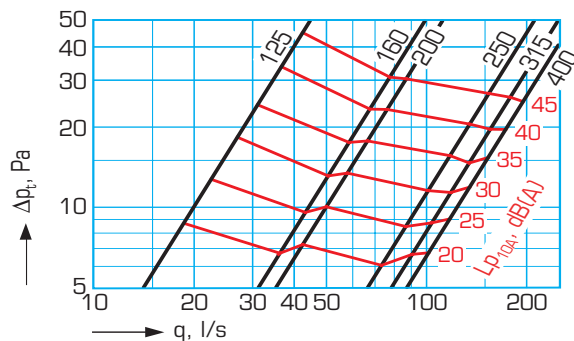
DY(K, C)B-400 + ATTB-250-400-1-0



DY(K, C)B-400 + ATTB-315-400-0-0



DY(K, C)B without connection box, 4-way diffusion, without slot



# Sound data, dimensions and weights

## Sound power level

### Air diffuser w.o. slot and with insulated conn. box

Size	Correction of sound level $K_{ok}$ in dB at							
	63	125	250	500	1k	2k	4k	8k Hz
DY(C,K)B-160+ATTB-100-160-1	6	12	6	2	-5	-7	-14	-12
DY(C,K)B-200+ATTB-125-200-1	2	11	8	3	-5	-12	-17	-12
DY(C,K)B-250+ATTB-160-250-1	3	12	6	2	-2	-15	-17	-12
DY(C,K)B-315+ATTB-200-315-1	6	13	6	2	-2	-13	-15	-12
DY(C,K)B-400+ATTB-250-400-1	6	11	5	2	-2	-13	-10	-8
Tolerance ±	6	3	2	2	2	2	2	3

### Air diffuser w.o. slot and with uninsulated conn. box

Size	Correction of sound level $K_{ok}$ in dB at							
	63	125	250	500	1k	2k	4k	8k Hz
DY(C,K)B-125+ATTB-100-125-0	6	7	2	3	0	-13	-19	-13
DY(C,K)B-160+ATTB-125-160-0	2	10	4	4	-3	-11	-18	-13
DY(C,K)B-200+ATTB-160-200-0	3	8	2	3	0	-15	-19	-12
DY(C,K)B-250+ATTB-200-250-0	5	11	4	3	-1	-13	-18	-12
DY(C,K)B-315+ATTB-250-315-0	5	10	3	3	-1	-13	-12	-9
DY(C,K)B-400+ATTB-315-400-0	5	9	4	3	-2	-13	-10	-8
Tolerance ±	6	3	2	2	2	2	2	3

### Air diffuser w.o. slot and without conn. box

Size	Correction of sound level $K_{ok}$ in dB at							
	63	125	250	500	1000	2000	4000	8000 Hz
DY(C,K)B-125	-1	-6	0	5	-1	-13	-21	-17
DY(C,K)B-160	-4	-3	0	4	1	-12	-23	-17
DY(C,K)B-200	-4	-2	1	3	1	-13	-24	-18
DY(C,K)B-250	3	0	1	4	0	-12	-17	-15
DY(C,K)B-315	1	1	1	4	0	-13	-15	-12
DY(C,K)B-400	4	2	2	3	0	-12	-15	-9
Tolerance ±	6	3	2	2	2	2	2	3

## Sound attenuation

### Air diffuser w.o. slot and with insulated conn. box

Size	Sound attenuation in dB at							
	63	125	250	500	1k	2k	4k	8k Hz
DY(C,K)B-160+ATTB-100-160-1	21	14	16	14	18	14	11	13
DY(C,K)B-200+ATTB-125-200-1	19	12	11	14	15	16	11	12
DY(C,K)B-250+ATTB-160-250-1	17	10	11	13	13	13	11	11
DY(C,K)B-315+ATTB-200-315-1	15	8	10	12	11	10	12	10
DY(C,K)B-400+ATTB-250-400-1	13	7	9	10	10	10	11	11
Tolerance ±	6	3	2	2	2	2	2	3

### Air diffuser w.o. slot and with uninsulated conn. box

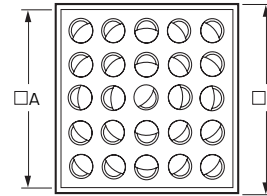
Size	Sound attenuation in dB at							
	63	125	250	500	1k	2k	4k	8k Hz
DY(C,K)B-125+ATTB-100-125-0	19	16	15	11	14	11	9	11
DY(C,K)B-160+ATTB-125-160-0	18	13	13	11	12	10	7	8
DY(C,K)B-200+ATTB-160-200-0	17	9	13	12	10	8	7	8
DY(C,K)B-250+ATTB-200-250-0	15	8	11	10	8	7	7	8
DY(C,K)B-315+ATTB-250-315-0	12	8	9	9	6	6	7	7
DY(C,K)B-400+ATTB-315-400-0	9	7	8	7	5	7	7	10
Tolerance ±	6	3	2	2	2	2	2	3

### Air diffuser w.o. slot and w.o. conn. box

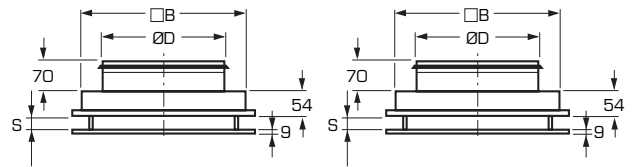
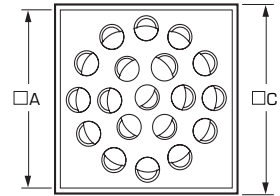
Size	Sound attenuation in dB at							
	63	125	250	500	1000	2000	4000	8000 Hz
DY(C,K)B-125	20	15	9	4	7	6	4	5
DY(C,K)B-160	19	13	6	2	5	5	4	4
DY(C,K)B-200	17	12	6	2	4	5	4	4
DY(C,K)B-250	15	10	5	2	3	4	4	5
DY(C,K)B-315	14	9	4	2	1	4	4	5
DY(C,K)B-400	11	7	3	1	2	4	5	5
Tolerance +/-	6	3	2	2	2	2	2	3

## Dimensions and weights

### DYKB



### DYCB

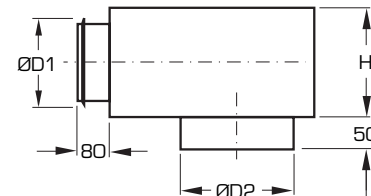
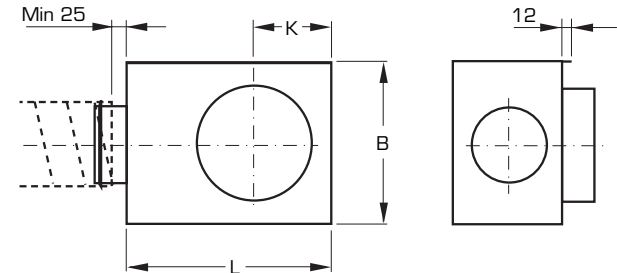


S = 0 or 10 mm

Size	□A	□B	ØD	□C	Opening. <sup>1)</sup>	W, kg
125	230	234	124.3	260	245	1,5
160	395	399	159.3	425	410	3,0
200	395	399	199.3	425	410	3,0
250	565	569	249.3	595	580	5,5
315	565	569	314.3	595	580	5,4
400	565	569	399.3	595	580	5,3

<sup>1)</sup> Tolerance +0/-5 mm

## Connection box ATTB



Size	ØD1	ØD2	H	L	B	K	W, kg
100-125	99.3	125	170	320	320	123	2.9
100-160	99.3	160	170	320	320	140	3.1
125-160	124.3	160	170	470	320	140	4.0
125-200	124.3	200	170	470	320	160	4.2
160-200	159.3	200	205	500	440	170	5.6
160-250	159.3	250	205	500	440	195	5.9
200-250	199.3	250	245	650	520	195	8.4
200-315	199.3	315	245	650	520	228	8.7
250-315	249.3	315	295	700	570	228	11.0
250-400	249.3	400	295	700	570	255	11.2
315-400	314.3	400	360	700	570	255	11.8

# Execution and function, material, product code

## Execution and function

DYKB and DYCB are air diffusers with adjustable nozzles for the setting of an optional diffusion pattern, intended for ceiling mounting. The design of the nozzles gives very good mixing of the room air (high induction). The nozzles are rotatable and offer the possibility of changing the diffusion pattern and the diffusion direction for adaptation to the actual installation and device position. The possibility of optimal air flow is assured in this way, and large undertemperatures can be handled. DYKB and DYCB adjustable slot of 10 mm for greater air flows.

Both the devices are square; DYCB has a circular, and DYKB has a square nozzle pattern. The air diffuser is supplied with a separate diffuser plate and transfer box.

The measurement hose from the measurement damper in the ATTB connection box is very easily accessible inside the diffuser. This facilitates measurement and balancing.

Connection box ATTB has a combined measurement and balancing damper with low noise generation, which is easily removable without changing the settings. The connection box is available in two executions, insulated and uninsulated. The connection box can be connected directly to a duct bend, but different k-factors are applicable for different installation alternatives.

## Material and surface finish

Both the diffuser, including the connection piece, and the connection box are made from hot-dip galvanized steel sheet.

The devices are powder-coated for a high surface finish and good impact and scratch resistance.

Standard colour RAL-9010, gloss 30, equivalent to white NCS S 0502-Y. The nozzles are white and have antistatic treatment. Other colours on request.

## Installation, adjustment and maintenance

Instructions for installation, balancing and care are described in detail in our instructions, which are supplied with every product. The instructions are also available on the Internet at [www.flaktwoods.com](http://www.flaktwoods.com).

## Technical data and dimensioning

For complete dimensioning and for cooling requirement calculations, please refer to the WinDon product selection program. This program with a module for cooling requirement calculations can be found on the Internet at [www.flaktwoods.com](http://www.flaktwoods.com).

## Product code

### Nozzle air diffuser

DY(K,C)B-aaa

Execution \_\_\_\_\_  
 K = with square nozzle pattern  
 C = with circular nozzle pattern

Size \_\_\_\_\_  
 125, 160, 200, 250, 315, 400

### Connection box

ATTB-aaa-bbb-c-0

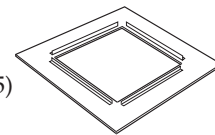
Duct connection in mm \_\_\_\_\_  
 Diffuser connection in mm \_\_\_\_\_

Type (c) \_\_\_\_\_  
 0 = Uninsulated  
 (100-125, 125-160, 160-200, 200-250, 250-315, 315-400)  
 1 = Insulated  
 (100-160, 125-200, 160-250, 200-315, 250-400)

## Accessories

### False ceiling plate

for size 160 and 200  
 (diffuser plate 395 x 395)



UTKZ-01-395

### Nozzle air diffuser plate (square nozzle pattern)

DYKZ-01-aaa

Size nozzle air diffuser plate, mm \_\_\_\_\_  
 230, 396, 565

### Nozzle air diffuser plate (circular nozzle pattern)

DY CZ-01-aaa

Size nozzle air diffuser plate, mm \_\_\_\_\_  
 230, 396, 565

Size air diffuser plate	Size air diffuser
230	125
395	160 and 200
565	250, 315 and 400

