

NOISE PROTECTION

SKE-A absorber sound attenuators

SKE-B broadband sound attenuators

SKE-V sound attenuators for volume flow and pressure controllers

SE-A absorber splitters

SE-B broadband splitters



Contents

1	Product overview	3
2	Product features	4
3	Product description	6
3.1	.1 SKE sound attenuator	6
	3.1.1 Dimensions	6
	3.1.2 Frame profile	
	3.1.3 Side-by-side assembly	
	3.1.4 Assembly on top of each other	
	3.1.5 Assembly one behind another	
	.2 SKE-V Sound attenuator for volume flow and pressure controllers	
	3.2.1 Dimensions	c
3.3	.3 SE splitters	1C
	3.3.1 Dimensions	
	3.3.2 Assembly on top of each other	1C
	3.3.3 Assembly one behind another	1
4	Information about the arrangement	12
5	Installation	14
5.1	.1 Installation in sheet metal ducts	14
5.2	.2 Installation in concrete and masonry ducts	14
5.3	.3 Installation positions	15
5.4	.4 Arranging the splitters	15
5.5	.5 Inlet distance	16
6	Technical Data	17
6.1	.1 Weights	17
7	Specification text	18
8	Wildeboer makes it easy	2
8.1	.1 Wildeboer Connect	2
8.2		
8.7	3 Documents online	

1

Product overview

SKE sound attenuators are robust air duct casings made of galvanized sheet steel, which are reinforced with beading and longitudinal profiles. They include splitters that are designed as SE-A absorber splitters or SE-B broadband splitters, depending on what is required. The absorption material is made up of bio-soluble mineral wool, which is clad with tearresistant glass fibre or covered with galvanized sheet steel to provide protection against moisture and abrasion. SKE sound attenuators ensure that fan and airflow noise is effectively reduced in ventilation and air conditioning systems.

SKE-V sound attenuators for volume flow and pressure controllers are specially designed to be used along with volume flow controllers and are available in standard dimensions.



 Sound attenuator dimensions: SKE sound attenuator:

> Width: 150 ... 4800 mm Clearance height: 150 ... 3600 mm 500 ... 3000 mm Length: See SE-A and SE-B for thickness of splitters

Sound attenuator dimensions:

SKE-V sound attenuator for volume flow and pressure controllers: 200, 300, 400, 500, Width:

600, 700, 800, 1000 mm Clearance height: 100, 200, 300, 400,

500, 600, 1000 mm

Length: 1500 mm Thickness of splitters: 100 mm

Splitter dimensions: SE-A absorber splitter:

Nominal height: 100 ... 5400 mm 500 ... 3000 mm Length: Thickness of splitters: 100, 150, 170, 185,

200, 215, 230, 300 mm SE-B broadband splitter:

Nominal height: 100 ... 5400 mm Length: 500 ... 3000 mm Thickness of splitters: 100, 150, 170, 185,

200, 215, 230 mm

-20 ... +100 °C Min. ... Max. operating temperature:

Max. air velocity in the splitter gap:

20 m/s

Airtightness: Optional: Class C as per DIN EN 15727 Pressure class: Optional: Class 3 according to DIN EN 15727

Insertion loss, flow noise, and pressure drop according to DIN EN ISO 7235

· Hygiene certificate: Issued by the Ruhr District Institute of Hygiene

 Non-flammable: Building material class A2 according to DIN 4102-1 P-MPA-BS-240048

· Toxicological certification: Thanks to its high degree of bio-solubility, it contains no carcinogenic, mutagenic or reprotoxic substances. Safety data sheet according to notice on hazardous substances 220 of the mineral wool manufacturer

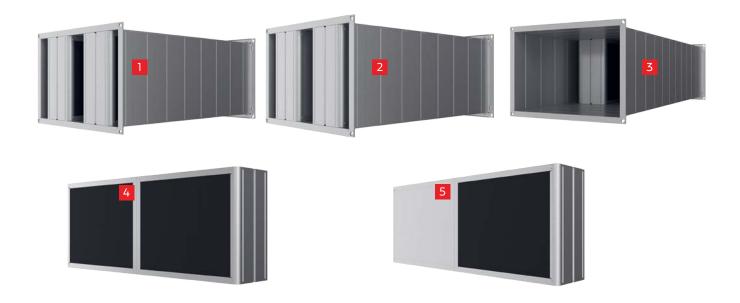




2 Product features

SKE sound attenuators can be produced as

- · SKE-A absorber sound attenuators with SE-A absorber splitters,
- · SKE-B broadband sound attenuators with SE-B broadband splitters or
- · SKE-V sound attenuators for volume flow and pressure controllers with SE-B broadband splitters



1 SKE-A absorber sound attenuators

Absorber sound attenuators consist of an air duct casing and integrated SE-A absorber splitters. They are designed to achieve optimum attenuation in the upper frequency range from 500 Hz to 2000 Hz.

2 SKE-B broadband sound attenuators

Broadband sound attenuators consist of an air duct casing and integrated SE-B broadband splitters. They are designed to attenuate a wide range of frequencies, and are made especially for the low frequency range at 125 and 250 Hz. They combine various attenuation mechanisms, such as absorption and resonance, to effectively reduce as much noise as possible.

3 SKE-V sound attenuator for volume flow and pressure controllers

Sound attenuators for volume flow and pressure controllers consist of an extended air duct casing and integrated SE-B broadband splitters. The extended air duct casing is mainly used to ensure the required outflow ranges of volume flow controllers.

For further information, see ▶ page 6.

4 SE-A absorber splitters



SE-A absorber splitters consist of separate absorption surfaces made of mineral wool inserts clad with glass fibre and encased in galvanized sheet steel.

The mineral wool in the inserts helps to absorb sound and improve room acoustics thanks to its sound absorption properties. The sound waves penetrate the porous mineral wool, where the energy of the sound waves is converted into heat by the friction and viscosity within the material, thus attenuating the sound. The glass fibre with which the mineral wool is clad protects the inserts from mechanical damage and moisture.

5 SE-B broadband splitters



SE-B broadband splitters consist of separate absorption surfaces made of mineral wool inserts clad with glass fibre and encased in galvanized sheet steel as well as resonance surfaces, each of which is equipped with cover plates. These surfaces are arranged diagonally to each other.

The mineral wool in the inserts helps to absorb sound and improve room acoustics thanks to its sound absorption properties. The sound waves penetrate the porous mineral wool, where the energy of the sound waves is converted into heat by the friction and viscosity within the material, thus attenuating the sound. The glass fibre with which the mineral wool is clad protects the inserts from mechanical damage and moisture. The cover plates also increase the attenuation at low frequencies (\leq 250 Hz).

For further information, see ▶ page 10.

6 Accessories



Perforated metal covering Perforated metal covering for absorption surfaces with glass fibre Optional accessories



Height connector set for assembling SE-A and SE-B splitters on top of each other

Consisting of:

- 2 x side connectors including rivets
- 4 x joint-side connectors including rivets

Included in delivery for height-split SE splitters





Length connectors for assembling SE-A and SE-B splitters one behind another Consisting of:

2 x length connectors including rivets Included in delivery for length-split SE splitters

Push-in brackets for assembling SKE sound attenuators on top of each other Consisting of:

4 x push-in brackets including screws Included in delivery for height-split SKE sound attenuators

3 Product description

Hygiene

SKE sound attenuators and SE splitters

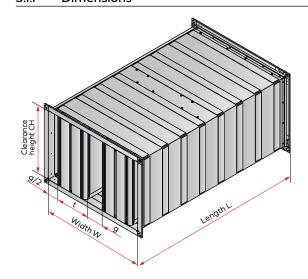
- meet the hygiene requirements according to VDI 6022-1, VDI 3803-1, DIN 1946-4, DIN EN 16798-3, SWKI VA104-01, SWKI VA105-01, ÖNORM H6020, ÖNORM H6021,
- are resistant to microbes, so they do not promote the growth of micro-organisms (fungi, bacteria),
- · are resistant to cleaning agents and disinfectants,
- are suitable for cleaning and satisfy the requirements for surface and geometric design



For further information and instructions ⇒ see hygiene certificate and operating instructions

3.1 SKE sound attenuator

3.1.1 Dimensions



SKE sound attenuators are available in the following dimensions:

Туре	Thickness of splitters t [mm]	Gap width Width* g [mm] W [mm]		Clearance height* CH [mm]	Length* L [mm]
	100	50 200	150 1600		
	150	50 300	200 2000		
SKE-A	170	50 340	220 2160		500
&	185	50 370	235 2280	150 1800	750 1000
SKE-B	200	50 400	250 2400	150 1600	1250
	215	54 400	269 2400		1500
	230	57 400	288 2400		
SKE-A	300	75 600	375 2400		

^{*} Larger widths W up to 4800 mm, clearance heights CH up to 3600 mm and lengths L up to 3000 mm can be produced by assembling two sound attenuators.

Width W: Widths are available in 1 mm increments from 150 mm to 2400 mm and with n = 1 to 8 splitters in the specified gap widths g.

Widths W > 2400 mm are divided into two sound attenuators and supplied for assembly on site.

Clearance height CH: Clearance heights are available in 1 mm increments from 150 mm to 1800 mm.

Clearance heights CH > 1800 mm are divided into two sound attenuators and supplied for assembly on site.

Length L: Lengths are available in the specified dimensions.

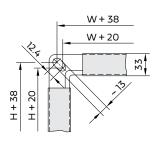
Lengths > 1500 mm are divided into two sound attenuators and supplied for assembly on site.

We can supply any combination of the specified clearance heights, widths and lengths.

3.1.2 Frame profile

The flanges of the SKE sound attenuators can be fitted with different frame profiles.

Illustration	Description	Illustration	Description
33	V10 frame profile (standard)	30	P30 frame profile
N N	S20 frame profile	707	S40 frame profile



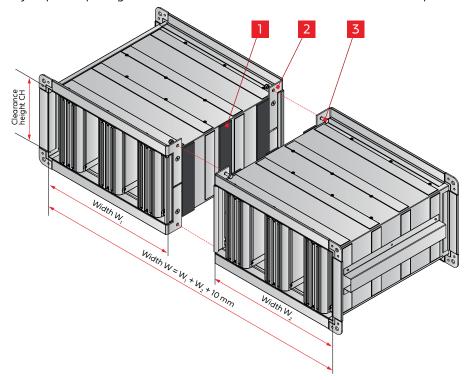
Order o	ptions	Pressure r SKE sound attenu		Meets DIN EN 15727		
Frame profile Casing		Negative pressure			Leak tightness class	
V10	Standard	-1000	+1000	2	А	
V10	Option: 2	-1000	+2500	3	А	
P30	Option: C	-1000	+1000	2	С	
Option: S20	Standard	-630	+1000	2	-	
Option: S40	Standard	-1000	+2500	3	-	



The pressure class and leak tightness class may change depending on the frame profile used.

3.1.3 Side-by-side assembly

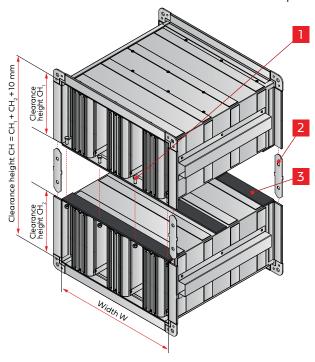
Assembling the sound attenuators next to each other allows the maximum width W to be extended to 4800 mm. For this purpose, sound attenuators with a W > 2400 mm are split in width and supplied from the factory with corners 2 and screws 3 to be assembled on site. The gap between the sound attenuators is fitted with sealing strips 1 at the factory. Any required spacing of the sound attenuators for W < 2400 mm must be specified when ordering.



- The same clearance heights CH and lengths L are required for both casings
- The same splitter thickness t should be used in both casings, and the gap widths g should also always be the same
- The width W is always 10 mm greater than the sum of the two individual widths W₁ + W₂
- The screws and nuts
 (M8 x 20) 3 needed for assembly are included with the delivery

3.1.4 Assembly on top of each other

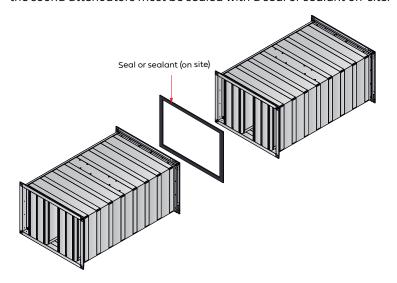
Assembling the sound attenuators on top of each other allows the maximum clearance height CH to be extended to 3600 mm. For this purpose, sound attenuators with a CH > 1800 mm are supplied with push-in brackets 2 and screws 1 to be assembled on site. The gap between the sound attenuators is fitted with sealing strips 3 at the factory. Any required spacing of the sound attenuators for CH < 1800 mm must be specified when ordering.



- The same widths W and lengths L are required for both casings
- The same splitter thickness t should be used in both casings, and the gap widths g should also always be the same
- The clearance height CH is always 10 mm greater than the sum of the two individual clearance heights CH, + CH,
- The screws (M8 x 20) 11 needed for assembly are included with the delivery

3.1.5 Assembly one behind another

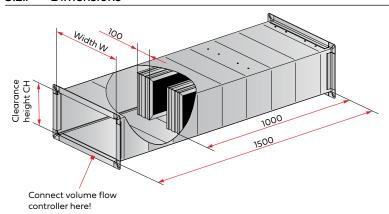
Assembling the sound attenuators one behind another allows the maximum length L to be extended to 3000 mm. For this purpose, sound attenuators with a L > 1500 mm are supplied to be assembled on site. The gap between the sound attenuators must be sealed with a seal or sealant on site.



- The screws and nuts (M8 x 20) needed for assembly must be provided by the customer
- The seal or sealing kit must be provided by the customer

3.2 SKE-V Sound attenuator for volume flow and pressure controllers

3.2.1 Dimensions

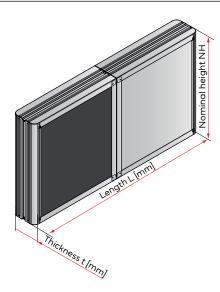


Maximum possible reduction in flow noise from SKE-V sound attenuators in [dB]:

Size W x H	Quantity	Width	Height				Attenua	tion [dB]			
[mm]	[n]	[mm]	[mm]	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
200 x 150	1	200	150	1	4	10	19	21	15	10	8
300 x 150	1	300	150	1	2	6	13	10	7	5	5
200 x 200	1	200	200	1	4	10	19	21	15	10	8
300 x 200	1	300	200	1	2	6	13	10	7	5	5
400 x 200	2	400	200	1	4	10	19	21	15	10	8
500 x 200	2	500	200	1	3	8	15	14	10	7	6
600 x 200	3	600	200	1	4	10	19	21	15	10	8
700 x 200	3	700	200	1	3	8	16	16	11	8	7
800 x 200	4	800	200	1	4	10	19	21	15	10	8
300 x 250	1	300	250	1	2	6	13	10	7	5	5
400 x 250	2	400	250	1	4	10	19	21	15	10	8
500 x 250	2	500	250	1	3	8	15	14	10	7	6
600 x 250	3	600	250	1	4	10	19	21	15	10	8
300 x 300	1	300	300	1	2	6	13	10	7	5	5
400 x 300	2	400	300	1	4	10	19	21	15	10	8
500 x 300	2	500	300	1	3	8	15	14	10	7	6
600 x 300	3	600	300	1	4	10	19	21	15	10	8
700 x 300	3	700	300	1	3	8	16	16	11	8	7
800 x 300	4	800	300	1	4	10	19	21	15	10	8
400 x 400	2	400	400	1	4	10	19	21	15	10	8
500 x 400	2	500	400	1	3	8	15	14	10	7	6
600 x 400	3	600	400	1	4	10	19	21	15	10	8
700 x 400	3	700	400	1	3	8	16	16	11	8	7
800 x 400	4	800	400	1	4	10	19	21	15	10	8
500 x 500	2	500	500	1	3	8	15	14	10	7	6
600 x 500	3	600	500	1	4	10	19	21	15	10	8
1000 x 500	5	1000	500	1	4	10	19	21	15	10	8
1000 x 600	5	1000	600	1	4	10	19	21	15	10	8
1000 x 1000	5	1000	1000	1	4	10	19	21	15	10	8

3.3 SE splitters

3.3.1 Dimensions



SE splitters are available in the following dimensions:

Type	Thickness of splitters t [mm]	Nominal height NH* [mm]	Length L* [mm]
	100		
	150		
	170		
SE-A & SE-B	185	100 2500	500 1500
	200	100 2500	500 1500
	215		
	230		
SE-A	300		

^{*} Larger nominal heights NH up to 5400 mm and lengths L up to 3000 mm can be produced using splitters.

For nominal heights \geq 105 mm, the actual height of the splitters is 5 mm less than the nominal height NH.

Nominal height NH: Nominal heights are available in 1 mm increments from 100 mm to 2500 mm. Nominal heights NH > 2500 mm are divided into two/three splitters and supplied for assembly on site.

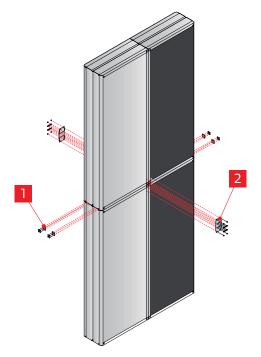
Length L: Lengths are available in 1 mm increments from 500 mm to 1500 mm. Lengths L > 1500 mm are divided into two splitters at the factory and supplied for assembly on site.

We can supply any combination of the specified heights and lengths.

3.3.2 Assembly on top of each other

Assembling the splitters on top of each other allows the maximum nominal height NH to be extended to 5400 mm. The splitters are supplied with height connectors and rivets to be assembled on site.

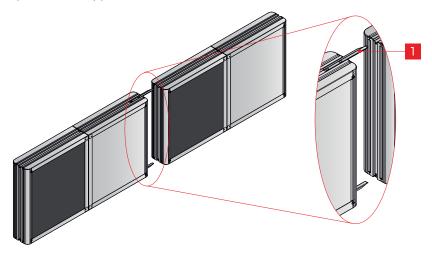
Any required spacing of the splitters for NH < 2500 mm must be specified when ordering.



- The same thicknesses t and lengths L are required for both splitters
- The height connector set with front connector 1 and side connector 2 for assembly on site are included in the delivery

3.3.3 Assembly one behind another

The length division of the SE splitters allows the maximum length L to be extended to 3000 mm. For this purpose, two splitters are supplied to be assembled on site.



- The same splitter thicknesses t and nominal heights NH are required for both splitters
- The length connectors and rivets for assembly are supplied from the factory

4 Information about the arrangement

The following example illustrates how the parameters change depending on the way in which the SKE sound attenuators are arranged.

- The yellow marking indicates the parameter changed in the initial example
- · The green marking shows that the values have increased, the blue shows a decrease

			1	2	3	4	5	6	7	8
	Example of ar	rangement	Туре	Number of splitters: n	Thickness of splitters t 230 mm	Thickness of splitters t 170 mm	Width B 700 mm	Height H 500 mm	Length L 1500 mm	Length L 500 mm
Туре		SKE-B	SKE-A	SKE-B	SKE-B	SKE-B	SKE-B	SKE-B	SKE-B	SKE-B
Numb	er of splitters	2	2	1	2	2	2	2	2	2
Thickn	ess of splitters	200 mm	200 mm	200 mm	230 mm	170 mm	200 mm	200 mm	200 mm	200 mm
Width		600 mm	600 mm	600 mm	600 mm	600 mm	700 mm	600 mm	600 mm	600 mm
Heigh	t	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	500 mm	400 mm	400 mm
Lengt	h	1000 mm	1000 mm	1000 mm	1000 mm	1000 mm	1000 mm	1000 mm	1500 mm	500 mm
Gap w	idth	100 mm	100 mm	400 mm	70 mm	130 mm	150 mm	100 mm	100 mm	100 mm
Free s	oace	0.08 m ²	0.08 m²	0.16 m²	0.06 m²	0.10 m ²	0.12 m²	0.10 m ²	0.08 m ²	0.08 m²
Pressu	re drop	46.4 Pa	46.4 Pa	5.4 Pa	110.1 Pa	23.4 Pa	17.4 Pa	30.6 Pa	51.3 Pa	41.5 Pa
Splitti	ng speed	11.25 m/s	11.25 m/s	5.63 m/s	16.07 m/s	8.65 m/s	7.50 m/s	9.00 m/s	11.25 m/s	11.25 m/s
Inflow	velocity	3.75 m/s	3.75 m/s	3.75 m/s	3.75 m/s	3.75 m/s	3.21 m/s	3.00 m/s	3.75 m/s	3.75 m/s
Flow r	ate	3240 m³/h	3240 m³/h	3240 m³/h	3240 m³/h	3240 m³/h	3240 m³/h	3240 m³/h	3240 m³/h	3240 m³/h
Sound	power level	40 dB(A)	40 dB(A)	22 dB(A)	49 dB(A)	33 dB(A)	30 dB(A)	34 dB(A)	40 dB(A)	40 dB(A)
Weigh	t	30 kg	28 kg	23 kg	32 kg	29 kg	32 kg	34 kg	42 kg	19 kg
41	63 Hz	4 dB	2 dB	1 dB	6 dB	2 dB	2 dB	4 dB	5 dB	2 dB
the	125 Hz	9 dB	7 dB	3 dB	10 dB	7 dB	7 dB	9 dB	14 dB	6 dB
of ies	250 Hz	21 dB	14 dB	8 dB	24 dB	17 dB	17 dB	21 dB	29 dB	14 dB
Attenuation of frequencies	500 Hz	24 dB	30 dB	5 dB	27 dB	21 dB	18 dB	24 dB	35 dB	15 dB
uat	1000 Hz	23 dB	44 dB	4 dB	27 dB	19 dB	16 dB	23 dB	33 dB	15 dB
ent	2000 Hz	18 dB	31 dB	4 dB	25 dB	14 dB	12 dB	18 dB	25 dB	13 dB
Att	4000 Hz	13 dB	20 dB	4 dB	18 dB	10 dB	9 dB	13 dB	17 dB	10 dB
	8000 Hz	12 dB	15 dB	4 dB	15 dB	9 dB	9 dB	12 dB	15 dB	9 dB

1 Type of sound attenuator:

- SE-A absorber splitters
- ▶ high degree of attenuation in the medium and high frequency range
- SE-B broadband splitters
- ▶ high degree of attenuation over the entire frequency range, especially low and medium frequencies

2 Number of splitters:

Reduce the number of splitters > Increasing: Gap width, free space

▶ Decreasing: Pressure drop, splitting speed, sound power level, weight, attenuation

3+4 Thickness of splitters:

• Increase thickness
• Increasing: Pressure drop, splitting speed, sound power level, weight, attenuation

▶ Decreasing: Gap width, free space

Reduce thickness

Increasing: Gap width, free space

Decreasing: Pressure drop, splitting speed, sound power level, attenuation

5 Width:

Increase width
 Increasing:
 Gap width, free space, weight

Decreasing: Pressure drop, splitting speed, inflow velocity, sound power level,

attenuation 6 Height:

· Increase height

► Increasing: Free space, weight

Decreasing: Pressure drop, splitting speed, inflow velocity, sound power level

7+8 Length:

Increase length
 Increasing: Pressure drop, weight, attenuation

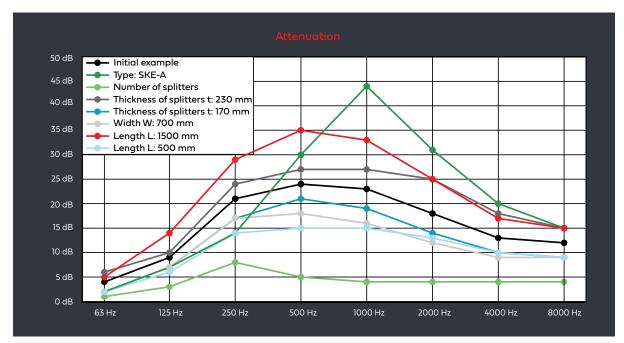
▶ Decreasing: -

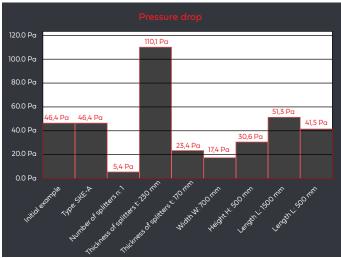
Reduce length

Increasing:

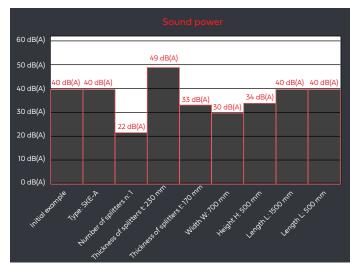
Decreasing: Pressure drop, weight, attenuation

The arrangement parameters interact with each other. For precise dimensioning of the sound attenuators, we recommend using our software WiDim.





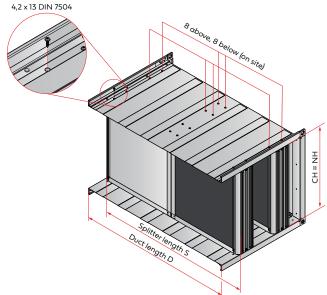




5 Installation

In order to achieve the specified insertion loss, the SE splitters must be fitted with the specified gap widths in suitable ducts made of sheet metal or other materials, such as mineral building materials.

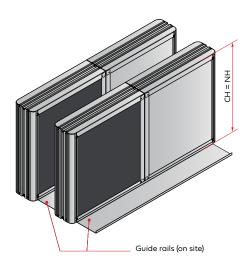
5.1 Installation in sheet metal ducts



SE splitters can be inserted into sheet metal ducts using self-drilling screws. The following should be noted here:

- At least 16 self-drilling screws must be used according to the specified screw arrangement
- The splitters can be inserted into a duct with a clearance height CH that is equal to the nominal height NH
- Only ventilation ducts with walls that are as smooth and flat as possible should be used
- The firm, vibration-free fit of the splitters must be guaranteed
- Seal the screws as required
- Do not install in areas where the splitter is exposed to the weather
- Surfaces must not be coated with paints or similar substances
- The splitter must not be used as bracing or with a loadbearing or bracing function
- · Recognised technical rules must be observed

5.2 Installation in concrete and masonry ducts

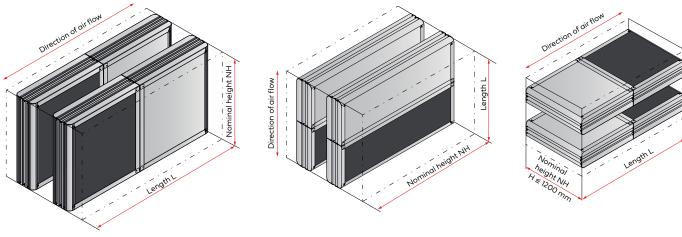


SE splitters can be used in concrete and masonry ducts with guide rails. The following should be noted here:

- · Only non-combustible building materials may be used
- The splitters can be inserted into a duct with a clearance height CH that is equal to the nominal height NH
- Only ventilation ducts with walls that are as smooth and flat as possible should be used
- The firm, vibration-free fit of the splitters must be guaranteed
- Do not install in areas where the splitter is exposed to the weather
- Surfaces must not be coated with paints or similar substances
- The splitter must not be used as bracing or with a loadbearing or bracing function
- · Recognised technical rules must be observed

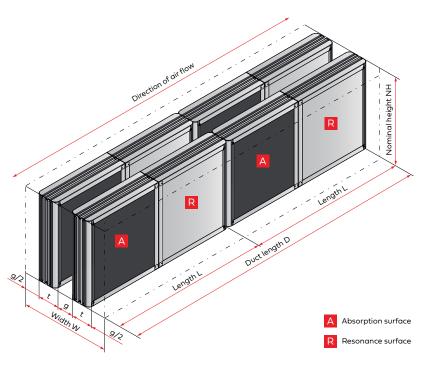
5.3 Installation positions

The SE splitters are installed in an upright position. Horizontal splitters up to a maximum height of 1200 mm are only permitted if moisture penetration is essentially ruled out.



Nominal height NH \geq 600 mm should also be supported in the centre.

5.4 Arranging the splitters



SE splitters:

- The duct length D must be at least equal to the sum of the splitter lengths L.
- Only splitters of the same length L may be arranged next to and on top of each other.
- The nominal height NH and length L of the splitters must not be interchanged.
- The air flow must pass through the gap g in the direction of the splitter length L.
- The gap width g between the two outer splitters and the duct must be halved, i.e. set to g/2.
- The gap widths must be kept the same over the length L and over the nominal height NH.
- If the gap width is increased, the attenuation is reduced.
- If the gap width is reduced, the pressure drops and flow noise increases.
- The nominal height NH of the splitters is always the order dimension.

SE-B broadband splitters:

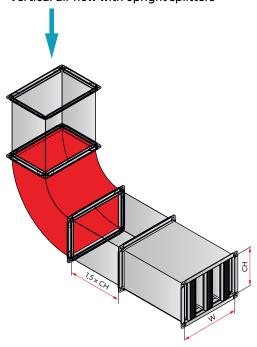
 SE-B broadband splitters must be arranged parallel to each other in such a way that the absorption surfaces [A] always face and follow resonance surfaces [R].

5.5 Inlet distance

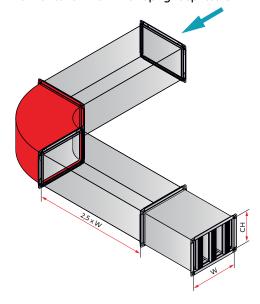
For optimum operation of the sound attenuator and splitter, the following minimum inlet distances must be observed.

Non-compliance leads to increased drop in pressure and increased flow noise. To prevent damage to the splitter filling, we recommend using the perforated metal covering.

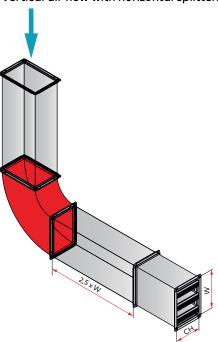
Vertical air flow with upright splitters



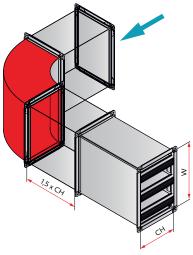
Horizontal air flow with upright splitters



Vertical air flow with horizontal splitters



Horizontal air flow with horizontal splitters



6 Technical Data

6.1 Weights

The following weights [kg] refer to the standard version of the SE splitters without attachments and accessories.

SE-A SE-B Thickness = 100 mm		Length L [mm]						
		500	750	1000	1250	1500		
بر	100	1 1	1 1	2 2	2 2	2 3		
اقاط آ	500	3 3	3 4	4 5	5 6	5 8		
al heig [mm]	1000	5 6	6 8	7 10	8 12	9 13		
mina NH [1500	7 9	8 11	10 14	11 17	13 19		
Nominal height NH [mm]	2000	9 11	11 15	13 18	15 22	17 25		
Z	2500	11 14	13 18	16 23	18 27	21 31		

SE-A SE-B Thickness = 150 mm		Length L [mm]						
		500	750	1000	1250	1500		
ıt	100	1 1	2 2	2 2	3 3	3 4		
eigł J	500	3 4	4 5	5 7	6 8	7 10		
l he	1000	6 7	8 10	9 12	11 15	13 17		
ina H [1500	9 11	11 14	14 18	16 21	18 24		
Nominal height NH [mm]	2000	12 14	15 19	18 23	21 28	23 32		
Z	2500	14 18	18 23	22 29	25 34	29 39		

SE-A SE-B Thickness = 170 mm		Length L [mm]						
		500	750	1000	1250	1500		
Ħ	100	1 1	2 2	2 3	3 3	4 4		
Nominal height NH [mm]	500	4 4	5 6	6 7	7 9	8 10		
h E	1000	7 8	9 11	11 13	12 16	14 18		
ing H	1500	11 12	12 15	15 19	18 23	20 27		
E Z	2000	14 15	16 20	20 25	23 30	26 35		
Z	2500	17 19	20 25	24 31	28 37	32 43		

SE-A SE-B Thickness = 185 mm		Length L [mm]						
		500	750	1000	1250	1500		
۲	100	1 2	2 2	3 3	3 3	4 4		
Nominal height NH [mm]	500	4 5	5 6	6 8	8 9	9 11		
al heig [mm]	1000	7 9	9 11	11 14	13 17	15 19		
mina NH [1500	11 12	13 16	16 20	19 24	22 28		
E Z	2000	14 16	17 21	21 26	25 32	28 37		
Ż	2500	17 20	21 26	26 33	30 39	35 45		

SE-A SE-B Thickness = 200 mm		Length L [mm]						
		500	750	1000	1250	1500		
Ħ	100	2 2	2 2	3 3	3 4	4 4		
Nominal height NH [mm]	500	4 5	6 7	7 8	8 10	9 12		
<u> </u>	1000	8 9	10 12	12 15	14 18	16 21		
= <u>i</u> =	1500	11 13	14 17	17 21	20 25	23 30		
E Z	2000	15 17	19 23	22 28	26 33	30 39		
Z	2500	18 21	23 28	28 34	32 41	37 48		

SE-A SE-B Thickness = 215 mm		Length L [mm]								
		500	750	1000	1250	1500				
Nominal height NH [mm]	100	2 2	2 2	3 3	4 4	4 5				
	500	5 5	6 7	7 9	9 10	10 12				
	1000	8 9	11 13	13 16	15 19	17 22				
	1500	12 14	15 18	18 22	22 27	25 31				
	2000	16 18	20 24	24 29	28 35	32 41				
	2500	19 22	24 29	29 36	34 43	39 50				

SE-A SE-B Thickness = 230 mm		Length L [mm]								
		500	750	1000	1250	1500				
ıal height [mm]	100	2 2	2 3	3 3	4 4	4 5				
	500	5 5	6 7	8 9	9 11	11 13				
	1000	9 10	11 13	14 16	16 19	18 23				
mina NH [1500	13 15	16 19	19 24	23 28	26 33				
No min	2000	17 19	21 25	25 31	30 37	34 43				
	2500	20 24	26 31	31 38	37 45	42 52				

SE-A Thickness = 300 mm		Length L [mm]								
		500	750	1000	1250	1500				
Nominal height NH [mm]	100	2	3	4	5	5				
	500	6	8	10	12	13				
	1000	11	14	17	20	23				
E II.	1500	16	20	25	29	33				
No N	2000	21	26	32	38	43				
	2500	26	33	39	46	53				

Perforated metal covering

The weight for a perforated metal covering is roughly calculated using the following formula and must be added on to the weight of the splitter. If several perforated metal coverings are used, the result must be multiplied by the number.

 $0.0015 \cdot L/2 \cdot NH = m [g]$

Example:

 $0.0015 \cdot 1000/2 * 500 = 375 g$

7 Specification text

SKE sound attenuators with built-in SE splitters for the effective reduction of fan and flow noise in ventilation and air conditioning systems. Integrated splitters in the version as

- * SE broadband splitter with resonance and absorption elements for optimum sound attenuation of a wide frequency spectrum, especially in the low and medium frequency range, splitter thicknesses 100, 150, 170, 185, 200, 215, 230 mm
- * SE-A absorber splitter for attenuation in the medium and higher frequency range, splitter thicknesses 100, 150, 170, 185, 200, 215, 230 or 300 mm

Different splitter thicknesses for optimum gap widths to achieve a balanced ratio between low pressure drop and high insertion loss. Flow-optimised inlet and outlet profiles for an optimised air flow, low pressure drops and high energy efficiency. Splitters consisting of a galvanized steel frame and effective absorption material made of bio-soluble mineral wool with a cladding of high-strength, moisture-repellent glass fibre to protect against abrasion at air speeds of up to 20 m/s. Non-combustible according to DIN 4102. Air duct casing with profile frame made of galvanized sheet steel. Insertion loss and sound power level measured in accordance with DIN EN 7235. Certificate as proof of compliance with the hygiene requirements as per VDI 6022-1, VDI 3803-1, DIN 1946-4, DIN EN 16798-3, SWKI VA104-01, SWKI VA105-01, ÖNORM H6020 and ÖNORM H6021.

..... Pcs.

PCS.		
Thickness of splitters:	:	mm
Number of splitters:		Pcs.
Air duct width:		mm
Air duct height:		+ mm
Air duct length:		+ mm
Gap width:		mm
Insertion loss:		dB at 63 Hz
Insertion loss:		dB at 125 Hz
Insertion loss:		dB at 250 Hz
Insertion loss:		dB at 500 Hz
Insertion loss:		dB at 1000 Hz
Insertion loss:		dB at 2000 Hz
Insertion loss:		dB at 4000 Hz
Insertion loss:		dB at 8000 Hz
Volume flow:		m³/h
Pressure drop:		Pa
Sound power level:		dB(A)
Leaktightness class:		
Operating pressure:		
Manufacturer:	WILDEBOER	
Type:	SKE-A / SI	KE-B
	and addita	ional perforated metal covering

Proof of usability in accordance with state building regulations by means of a general building authority test certificate.

Complete with fixings and other accessories

supply:	•	•	•	•	•	•	•	•	•	•	
install:											

SE splitters in the version as

- * SE broadband splitter with resonance and absorption elements for optimum sound attenuation of a wide frequency spectrum, especially in the low and medium frequency range, splitter thicknesses 100, 150, 170, 185, 200, 215, 230 mm
- * SE-A absorber splitter for attenuation in the medium and higher frequency range, splitter thicknesses 100, 150, 170, 185, 200, 215, 230 or 300 mm

Different splitter thicknesses for optimum gap widths to achieve a balanced ratio between low pressure drop and high insertion loss.

Flow-optimised inlet and outlet profiles for an optimised air flow, low pressure drops and high energy efficiency. Splitters consisting of a galvanized steel frame and effective absorption material made of bio-soluble mineral wool with a cladding of high-strength, moisture-repellent glass fibre to protect against abrasion at air speeds of up to 20 m/s. Non-combustible according to DIN 4102. Insertion loss and sound power level measured in accordance with DIN EN 7235. Certificate as proof of compliance with the hygiene requirements as per VDI 6022-1, VDI 3803-1, DIN 1946-4, DIN EN 16798-3, SWKI VA104-01, SWKI VA105-01, ÖNORM H6020 and ÖNORM H6021.

splitter set(s) each with splitter(s) Thickness of splitters: Air duct width: Splitter height: + Splitter length: Gap width: Insertion loss: dB at 63 Hz Insertion loss: dB at 125 Hz dB at 250 Hz Insertion loss: dB at 500 Hz Insertion loss: dB at 1000 Hz Insertion loss: dB at 2000 Hz Insertion loss: dB at 4000 Hz Insertion loss: Insertion loss: dB at 8000 Hz Volume flow: m³/h Pressure drop: Sound power level: dB(A) WILDEBOER Manufacturer: SE-A / SE-B Type: and additional perforated metal covering

Proof of usability in accordance with state building regulations by means of a general building authority test certificate.

Deliver complete with fixings and other accessories and install in an on-site casing made of

supply:
install:

SKE-V sound attenuator for volume flow and pressure controllers with built-in SE splitters in the design as a broadband splitter with resonance and absorption elements for optimum sound attenuation at 250 Hz. Flow-optimised inlet and outlet profiles for an optimised air flow, low pressure drops and high energy efficiency. Splitters consisting of a galvanized steel frame and effective absorption material made of bio-soluble mineral wool with a cladding of high-strength, moisture-repellent glass fibre to protect against abrasion at air speeds of up to 20 m/s. Non-combustible according to DIN 4102. Air duct casing with connection frame made of galvanized sheet steel. Insertion loss and sound power level measured in accordance with DIN EN 7235. Certificate as proof of compliance with the hygiene requirements as per VDI 6022-1, VDI 3803-1, DIN 1946-4, DIN EN 16798-3, SWKI VA104-01, SWKI VA105-01, ÖNORM H6020 and ÖNORM H6021.

Proof of usability in accordance with state building regulations by means of a general building authority test certificate.

..... Pcs.

Air duct width: mr
Air duct height: mr
Air duct length: 1500 mm

Manufacturer: WILDEBOER
Type: SKE-V

and additional perforated metal covering

8 Wildeboer makes it easy

8.1 Wildeboer Connect



- High-performance configurator with customer-specific net prices
- · Quick, intuitive product configuration of Wildeboer products
- Access to prices and unique version keys for ordering products
- Easy calculation of operating point data for configured products
- Interface to Autodesk Revit and AutoCAD for transferring CAD geometries
- Download of CAD data, data sheets, specification texts and further product documents in common data formats
- · Transparent real-time order tracking
 - · View of detailed order information
 - Access to order documents
 - · Access to shipment tracking





- Functional, modern and intuitive dimensioning of Wildeboer products
- Conveniently collect operating point data, 3D product views, suitable accessories and current revision documents in a single project
- · Project can be output in various formats
- A GAEB interface and an interface based on VDI 3805 facilitate a continuous planning process



8.3 Documents online



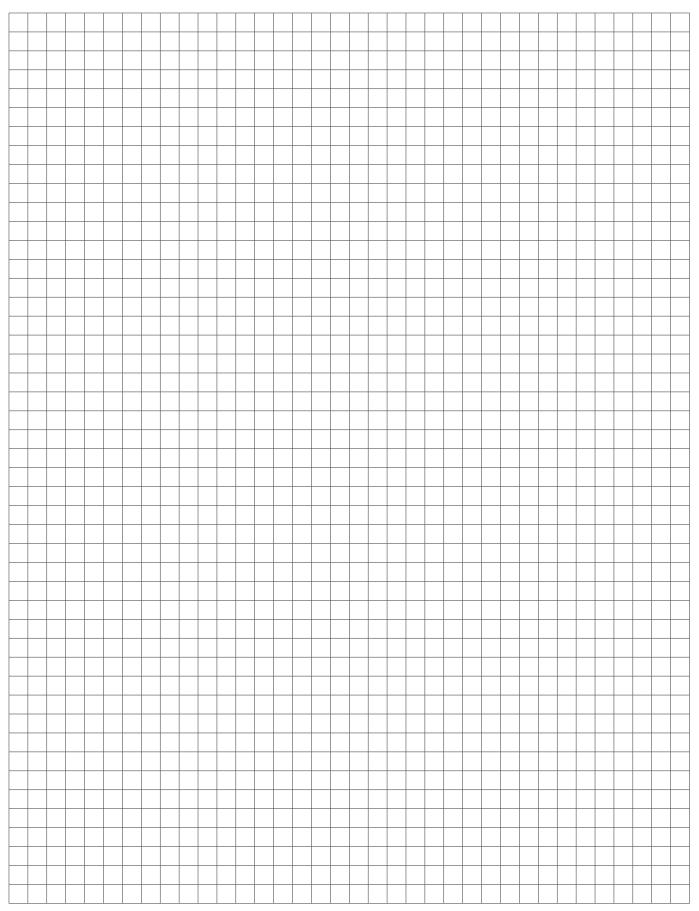
- Paperless and environmentally friendly online access to Wildeboer documents
- · All documents in one central location and always up to date
- Supporting interactive formats and content



Wildeboer makes it easy

SKE sound attenuators | SE splitters

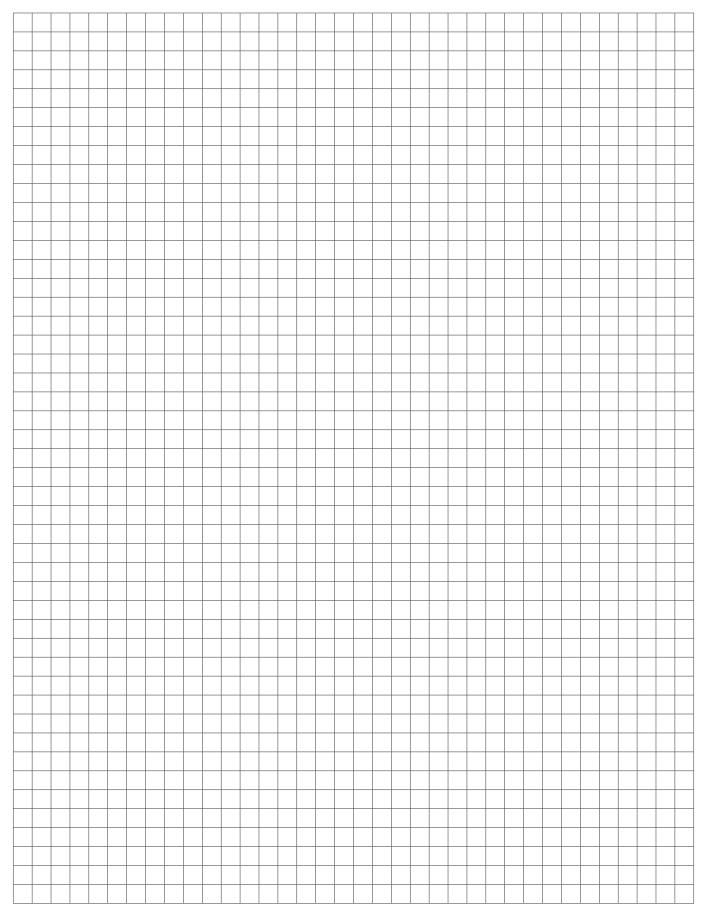
Notes



Wildeboer makes it easy

SKE sound attenuators | SE splitters

Notes



c6584.006.001-09 ske ahb 6.3 en 01-00

Always there for you

Locations & contact

