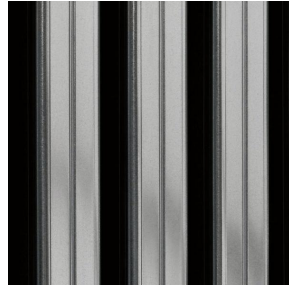


**SOUND ATTENUATOR
SPLITTERS TYPE MK**



**AERODYNAMICALLY
OPTIMISED SPLITTER
FRAME**

Aerodynamically optimised
splitter frame



TESTED TO VDI 6022

Tested to VDI 6022

MK

SPLITTER WITH HIGH INSERTION LOSS AND BROADBAND ATTENUATION EVEN IN THE LOW FREQUENCY RANGE

**Sound attenuator splitters with resonating panels, ready to be used in
ventilation and air conditioning systems**

- Attenuation effect due to absorption and resonance
- Energy efficient due to aerodynamically formed frame (bullnose radius 20 mm)
- Acoustic data measured to EN ISO 7235
- Sound absorbing material is biosoluble and hence hygienically safe
- Sound absorbing material faced with glass fibre fabric as a protection against erosion due to airflow velocities up to 20 m/s
- The sound absorbing material is non-combustible, to EN 13501, fire rating class A1
- For use in areas with potentially explosive atmospheres (according to EC Directive 2014/34/EU (ATEX)), zones 1, 2, and zones 21 and 22 (outside according to EC Directive 1999/92/EC)
- Operating temperature up to 100 °C, with expanded metal (variant L) up to 300 °C for a limited period of time

Optional equipment and accessories

- Expanded metal as an additional mechanical protection for the sound absorbing material
- Stainless steel variant A2 (1.4301), with optional perforated metal facing as an additional protection for the sound absorbing material

- Other stainless steel and aluminium variants as well as PUR coating are upon request
- Fitting accessories to join subdivided attenuator splitters

General information

Application

- Sound attenuator splitters with resonating panels are used for the reduction of fan and air-regenerated noise in ventilation and air conditioning systems
- Attenuation effect due to absorption and resonance
- Broadband attenuation even in the low frequency range of critical fan noise
- Hygiene tested and compliant with VDI 6022
- For use in areas with potentially explosive atmospheres (EC Directive 2014/34/EU (ATEX)), zones 1, 2, 21 and 22 (outside) according to Directive 1999/92/EC

Special features

Resonating panels ensure increased insertion loss in the frequency range of critical fan noise

- Energy savings due to aerodynamically formed splitter frame
 - Up to 30 % lower differential pressure
- Hygiene tested and compliant with VDI 6022
- Multi-section construction available for large dimensions

Nominal sizes

- H: 150 – 2500 mm
- L: 500, 750, 1000, 1250, 1500, 1750, 2000, 2250, 2500 mm
- Intermediate sizes of H and L are possible: 150 – 2500 mm in increments of 1 mm
- Undivided construction: H + L 600 mm min., 4000 mm max., 100 kg max.
 - Size limit for H or L: If one dimension is greater than 1500 mm, the other one must not exceed 1500 mm
- Height and length subdivided in case of deviation, or a dimension 2501 – 5000 mm
 - Height subdivided from $H \geq 2501$ mm, otherwise length subdivided

Variants

- MK100: splitter thickness 100 mm
- MK200: splitter thickness 200 mm
- MK230: splitter thickness 230 mm

Construction

Half of the splitter is covered by a resonating panel

- F: Glass fibre fabric
- L: glass fibre fabric faced with expanded metal as an additional mechanical protection for the sound absorbing material

Materials and surfaces

- No entry: Galvanised steel 1.0917
- A2: Stainless steel 1.4301
 - Construction L: Glass fibre fabric with perforated metal facing as an additional mechanical protection for the sound absorbing material
- P1: Powder-coated RAL 7001, silver grey

Parts and characteristics

- Aerodynamically profiled frame
 - Reduced weight and increased rigidity due to special profile
 - Helps to optimise the airflow, hence reducing the air-regenerated noise
 - Reduces the pressure loss
 - Covers the edges of the sound absorbing material
- Absorption material and resonating panels fitted to reduce air-regenerated noise by absorption and resonance

Accessories

- U-sheets/clamp sheets to join subdivided attenuator splitters (included with subdivided splitter constructions)

Construction features

- Aerodynamically formed splitter frame (bullnose radius 20 mm) that helps to reduce turbulence on both the upstream and downstream sides; frame with grooves for increased rigidity
- Frame edges with bullnose to protect the infill
- Operating temperature up to 100 °C; variant L up to 300 °C for 8h max.

Materials and surfaces

- Splitter frames, centre mullion and resonating panels made of galvanised sheet steel 1.0917 or stainless steel 1.4301
- Expanded metal facing made of galvanised steel 1.0917
- Perforated metal facing made of stainless steel 1.4301
- Absorption material is mineral wool
 - To EN 13501, fire rating Class A1, non-combustible
 - RAL quality mark RAL-GZ 388
 - Biosoluble and hence non-hazardous to health according to the German TRGS 905 (Technical Rules for Hazardous Substances) and EU Directive 97/69/EC
 - Faced with glass fibre fabric as a protection against erosion from airflow velocities of up to 20 m/s
 - Inert to fungal and bacterial growth according to EN 846

Standards and guidelines

- Insertion loss and sound power level of air-regenerated noise tested to ISO 7235
- Meets the hygiene requirements of VDI 6022, VDI 3803 Part 1 and DIN 1946 Part 4
- EC Directive 2014/34/EC (ATEX): Equipment and protective systems intended for use in areas with potentially explosive atmospheres
- EC Directive 1999/92/EC (ATEX): Improvement of the safety and health protection of workers potentially at risk from explosive atmospheres.

Maintenance

- Low-maintenance as construction and materials are not subject to wear

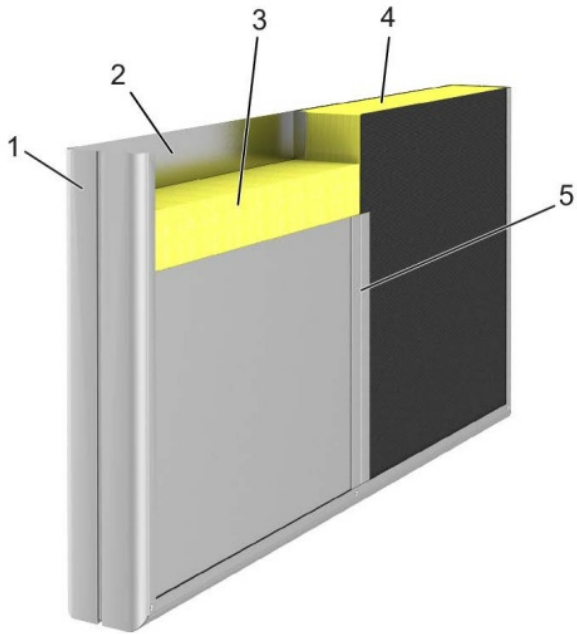
TECHNICAL INFORMATION

Function, Technical data, Quick sizing, Specification text, Order code



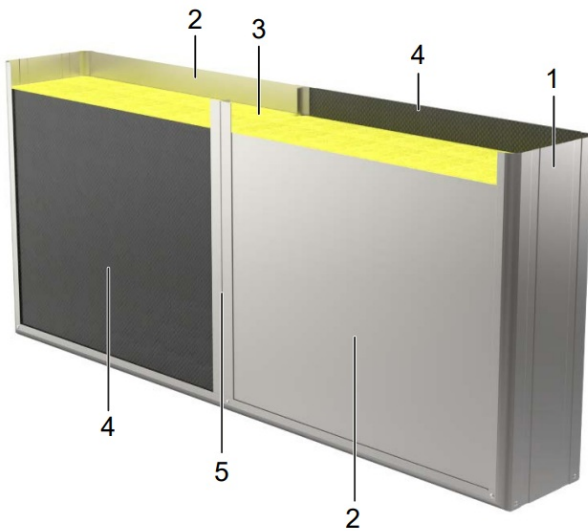
The attenuation effect of the MK splitters is due to absorption and resonance. The splitters have a mineral wool infill as sound absorbing material. Part of the splitter surface that runs parallel to the airflow is covered with resonating panels. These panels start oscillating due to the sound (resonance) and hence absorb sound energy. Resonance works best in the frequency range of critical fan noise. There is a higher attenuation across a wider frequency range when compared to mere absorption splitters.

Schematic illustration of MK100



- 1 Splitter frame
- 2 Opposing resonating panels
- 3 Sound absorbing material
- 4 Sound absorbing material faced on both sides with glass fibre fabric
- 5 Centre mullion

Schematic illustration of types MK 200, 230



- 1 Splitter frame
- 2 Offset resonating panels
- 3 Sound absorbing material
- 4 Glass fibre fabric (facing)
- 5 Centre mullion

| | |
|-----------------------|--|
| Splitter thickness | 100, 200, 230 mm |
| Nominal sizes (H x L) | 150 x 450 – 1500 x 2500 mm, 450 x 150 – 2500 x 1500 mm |
| Height subdivide | 2501 – 5000 mm or if H and L > 1500 mm |
| Length subdivided | 2501 – 5000 mm or if H and L > 1500 mm |
| Intermediate sizes | In increments of 1 mm |
| Operating temperature | Up to 100 °C, variant L up to 300 °C for 8 h max. |

The length (L) of sound attenuator splitters refers to the airflow direction.

Quick sizing tables provide a good overview of the insertion loss and of differential pressures for different airway widths and airflow velocities. Intermediate values can be calculated with our Easy Product Finder design program.

The differential pressures apply to sound attenuators with a height of 1 m.

MK100, MS100, insertion loss D_e [dB] and differential pressure Δp_t [Pa]

| L | Airway width | Centre frequency f_m [Hz] | | | | | | | | v_s [m/s] | | |
|------|--------------|-----------------------------|-----|-----|------|------|------|------|------|-------------|----|-----|
| | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | 6 | 10 | 14 |
| 500 | 50 | 4 | 9 | 10 | 11 | 19 | 25 | 21 | 16 | 10 | 29 | 56 |
| 500 | 100 | 3 | 4 | 5 | 8 | 13 | 15 | 11 | 8 | 8 | 23 | 45 |
| 1000 | 50 | 5 | 11 | 18 | 20 | 28 | 34 | 28 | 23 | 13 | 37 | 72 |
| 1000 | 80 | 4 | 8 | 12 | 16 | 23 | 25 | 19 | 15 | 10 | 28 | 55 |
| 1000 | 100 | 4 | 7 | 9 | 13 | 21 | 21 | 15 | 11 | 9 | 26 | 51 |
| 1500 | 50 | 6 | 14 | 26 | 29 | 37 | 42 | 36 | 29 | 16 | 44 | 87 |
| 1500 | 80 | 5 | 11 | 18 | 22 | 32 | 32 | 24 | 19 | 12 | 32 | 63 |
| 1500 | 100 | 4 | 9 | 14 | 19 | 29 | 28 | 19 | 13 | 10 | 29 | 56 |
| 2000 | 50 | 7 | 17 | 34 | 38 | 46 | > 50 | 44 | 36 | 19 | 52 | 102 |
| 2000 | 80 | 6 | 14 | 24 | 29 | 40 | 40 | 29 | 23 | 13 | 36 | 70 |
| 2000 | 100 | 5 | 12 | 19 | 24 | 37 | 34 | 22 | 16 | 11 | 32 | 62 |
| 2500 | 50 | 8 | 20 | 42 | 47 | > 50 | > 50 | > 50 | 43 | 22 | 60 | 118 |
| 2500 | 80 | 7 | 16 | 30 | 35 | 48 | 47 | 34 | 27 | 14 | 40 | 78 |
| 2500 | 100 | 6 | 15 | 24 | 30 | 44 | 41 | 26 | 19 | 12 | 34 | 67 |
| 3000 | 50 | 9 | 22 | 50 | > 50 | > 50 | > 50 | > 50 | 50 | 24 | 68 | 133 |
| 3000 | 80 | 8 | 19 | 35 | 42 | > 50 | > 50 | 39 | 31 | 16 | 44 | 85 |
| 3000 | 100 | 7 | 17 | 28 | 35 | > 50 | 47 | 30 | 22 | 13 | 37 | 73 |

MK200, MS200, insertion loss D_e [dB] and differential pressure Δp_t [Pa]

| L | Airway width | Centre frequency f_m [Hz] | | | | | | | | v_s [m/s] | | |
|------|--------------|-----------------------------|-----|------|------|------|------|------|------|-------------|-----|-----|
| | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | 6 | 10 | 14 |
| 500 | 50 | 4 | 6 | 18 | 21 | 24 | 18 | 15 | 13 | 21 | 58 | 114 |
| 500 | 100 | 2 | 4 | 12 | 13 | 15 | 12 | 10 | 8 | 11 | 31 | 61 |
| 1000 | 50 | 6 | 13 | 29 | 34 | 39 | 29 | 20 | 17 | 24 | 67 | 131 |
| 1000 | 80 | 5 | 11 | 24 | 26 | 29 | 22 | 16 | 13 | 15 | 43 | 84 |
| 1000 | 100 | 4 | 9 | 21 | 22 | 24 | 19 | 13 | 11 | 13 | 35 | 69 |
| 1500 | 50 | 8 | 20 | 41 | 46 | > 50 | 41 | 26 | 21 | 27 | 75 | 147 |
| 1500 | 80 | 6 | 16 | 33 | 36 | 40 | 30 | 20 | 16 | 17 | 48 | 94 |
| 1500 | 100 | 5 | 14 | 30 | 32 | 34 | 25 | 17 | 14 | 14 | 40 | 78 |
| 2000 | 50 | 10 | 28 | > 50 | > 50 | > 50 | > 50 | 31 | 26 | 30 | 83 | 164 |
| 2000 | 80 | 8 | 22 | 43 | 47 | > 50 | 39 | 24 | 19 | 19 | 53 | 105 |
| 2000 | 100 | 7 | 20 | 38 | 41 | 43 | 32 | 21 | 17 | 16 | 44 | 86 |
| 2000 | 200 | 3 | 12 | 23 | 22 | 18 | 12 | 10 | 7 | 9 | 25 | 50 |
| 2500 | 50 | 13 | 35 | > 50 | > 50 | > 50 | > 50 | 37 | 30 | 33 | 92 | 180 |
| 2500 | 80 | 10 | 28 | > 50 | > 50 | > 50 | 47 | 28 | 23 | 21 | 59 | 115 |
| 2500 | 100 | 8 | 25 | 47 | 50 | > 50 | 39 | 24 | 19 | 17 | 48 | 94 |
| 2500 | 200 | 4 | 14 | 29 | 28 | 22 | 14 | 11 | 8 | 10 | 28 | 54 |
| 3000 | 50 | 15 | 42 | > 50 | > 50 | > 50 | > 50 | 42 | 34 | 36 | 100 | 197 |
| 3000 | 80 | 11 | 34 | > 50 | > 50 | > 50 | > 50 | 33 | 26 | 23 | 64 | 126 |
| 3000 | 100 | 10 | 30 | > 50 | > 50 | > 50 | 46 | 28 | 22 | 19 | 53 | 103 |
| 3000 | 200 | 5 | 17 | 35 | 34 | 26 | 16 | 13 | 10 | 11 | 30 | 59 |

MK230, MS230, insertion loss D_e [dB] and differential pressure Δp_t [Pa]

| L | Airway width | Centre frequency f_m [Hz] | | | | | | | | v_s [m/s] | | |
|------|--------------|-----------------------------|-----|------|------|------|------|------|------|-------------|----|-----|
| | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | 6 | 10 | 14 |
| 500 | 80 | 2 | 6 | 14 | 16 | 18 | 14 | 12 | 12 | 15 | 43 | 84 |
| 500 | 100 | 2 | 5 | 12 | 13 | 15 | 11 | 10 | 11 | 13 | 35 | 69 |
| 1000 | 80 | 6 | 11 | 24 | 25 | 29 | 21 | 15 | 15 | 18 | 49 | 97 |
| 1000 | 100 | 5 | 10 | 21 | 22 | 25 | 17 | 13 | 14 | 14 | 40 | 78 |
| 1000 | 200 | 2 | 7 | 14 | 12 | 10 | 6 | 7 | 9 | 8 | 23 | 44 |
| 1500 | 80 | 9 | 17 | 34 | 35 | 41 | 28 | 19 | 18 | 20 | 56 | 109 |
| 1500 | 100 | 8 | 15 | 31 | 31 | 34 | 23 | 16 | 16 | 16 | 45 | 88 |
| 1500 | 200 | 3 | 11 | 20 | 17 | 14 | 9 | 10 | 10 | 9 | 25 | 49 |
| 2000 | 80 | 13 | 22 | 44 | 45 | > 50 | 34 | 22 | 22 | 22 | 62 | 121 |
| 2000 | 100 | 11 | 20 | 40 | 39 | 44 | 29 | 20 | 19 | 18 | 50 | 98 |
| 2000 | 200 | 4 | 14 | 26 | 23 | 18 | 12 | 12 | 12 | 10 | 28 | 54 |
| 2500 | 80 | 16 | 27 | > 50 | > 50 | > 50 | 41 | 25 | 25 | 25 | 68 | 134 |
| 2500 | 100 | 13 | 25 | 49 | 48 | > 50 | 35 | 23 | 22 | 20 | 55 | 108 |
| 2500 | 200 | 5 | 18 | 33 | 28 | 22 | 15 | 15 | 13 | 11 | 30 | 59 |
| 3000 | 80 | 19 | 33 | > 50 | > 50 | > 50 | 48 | 29 | 28 | 27 | 74 | 146 |
| 3000 | 100 | 16 | 30 | > 50 | > 50 | > 50 | 41 | 26 | 25 | 22 | 60 | 117 |
| 3000 | 200 | 6 | 21 | 39 | 34 | 26 | 17 | 17 | 15 | 12 | 33 | 64 |

Sound attenuator splitters used for the reduction of fan noise and air-regenerated noise in air conditioning systems. Attenuation effect due to absorption and resonance. Energy-saving as well as hygiene tested.

Installation kit consists of an aerodynamically profiled frame (bullnose radius of 20 mm), sound absorbing material and resonating panels.

The splitter frame reduces pressure losses and air-regenerated noise. The special profile helps to reduce the weight and increase the rigidity of the splitters. Frame edges with bullnose to protect the sound absorbing infill.

Insertion loss and sound power level of the air-regenerated noise tested to ISO 7235.

Meets the hygiene requirements of VDI 6022, VDI 3803 Part 1 and DIN 1946 Part 4.

For use in areas with potentially explosive atmospheres (ATEX), zones 1, 2, 21 and 22 (outside) according to Directive 1999/92/EC.

Special features

Resonating panels ensure increased insertion loss in the frequency range of critical fan noise

- Energy savings due to aerodynamically formed splitter frame
 - Up to 30 % lower differential pressure
- Hygiene tested and compliant with VDI 6022
- Multi-section construction available for large dimensions

Materials and surfaces

- Splitter frames, centre mullion and resonating panels made of galvanised sheet steel 1.0917 or stainless steel 1.4301
- Expanded metal facing made of galvanised steel 1.0917
- Perforated metal facing made of stainless steel 1.4301
- Absorption material is mineral wool
 - To EN 13501, fire rating Class A1, non-combustible

- RAL quality mark RAL-GZ 388
- Biosoluble and hence non-hazardous to health according to the German TRGS 905 (Technical Rules for Hazardous Substances) and EU Directive 97/69/EC
- Faced with glass fibre fabric as a protection against erosion from airflow velocities of up to 20 m/s
- Inert to fungal and bacterial growth according to EN 846

Construction

Half of the splitter is covered by a resonating panel

- F: Glass fibre fabric
- L: glass fibre fabric faced with expanded metal as an additional mechanical protection for the sound absorbing material

Materials and surfaces

- No entry: Galvanised steel 1.0917
- A2: Stainless steel 1.4301
 - Construction L: Glass fibre fabric with perforated metal facing as an additional mechanical protection for the sound absorbing material
- P1: Powder-coated RAL 7001, silver grey

Technical data

- Splitter thickness: 100, 200, 230 mm
- Dimensions: 150 × 450 – 1500 × 2500 mm, 450 × 150 – 2500 × 1500 mm
- Height subdivided: up to 5000 mm
- Length subdivided: up to 5000 mm
- Intermediate sizes: in increments of 1 mm
- Operating temperature: up to 100 °C, variant L up to 300 °C for 8 h max.

The length (L) of splitter sound attenuators refers to the airflow direction.

- B [mm]
- H [mm]
- L (in airflow direction) [mm]
- q_v (m³/h)
- D_e At 250 Hz [dB]
- Δp_{st} [Pa]

| | | | | | | | | | | | | |
|----|---|-----|---|---|---|----|---|-----|---|-----|---|------|
| MK | - | ... | - | F | - | A2 | / | 200 | x | 600 | x | 1500 |
| | | | | | | | | | | | | |
| 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 |

1 TypeMK

Sound attenuator splitter with resonating panels

2 Variant

No entry required: TROX standard variants
ACC Connecting material: U-sheets, clamp sheets

3 Splitter surface

F Glass fibre fabric
L Glass fibre fabric and expanded metal

4 Material

No entry required: Galvanised steel 1.0917
A2 Stainless steel 1.4301
P1 Powder-coated in RAL 7001, silver grey

5 Splitter thickness T [mm]

100, 200, 230

6 Height H [mm]

150 – 5000

7 Length L in airflow direction [mm]

150 – 5000

Order example: MK-F-A2/100×1500×1000

Splitter surface Glass fibre fabric
Material Stainless steel 1.4301
Splitter thickness 100 mm
Height 1500 mm
Length 1000 mm

Assembly material SDK

To be ordered separately if splitters are to be subdivided by others.

| | | | | | | |
|-----|---|----|---|-----|---|---|
| SDK | – | A2 | / | 200 | / | 2 |
| | | | | | | |
| 1 | | 2 | | 3 | | 4 |

1 Type SDK

Accessories for sound attenuator splitters

2 Material No entry: galvanised steel (1.0917)

A2 Stainless steel (1.4301)
P1 Powder-coated RAL 7001 (galvanised steel (1.0917))

3 Splitter thickness T [mm]

No entry: without U-sheets
100 With 2 U-sheets
200 With 2 U-sheets
230 With 2 U-sheets
300 With 2 U-sheets

4 No. of clamp sheets for the joints

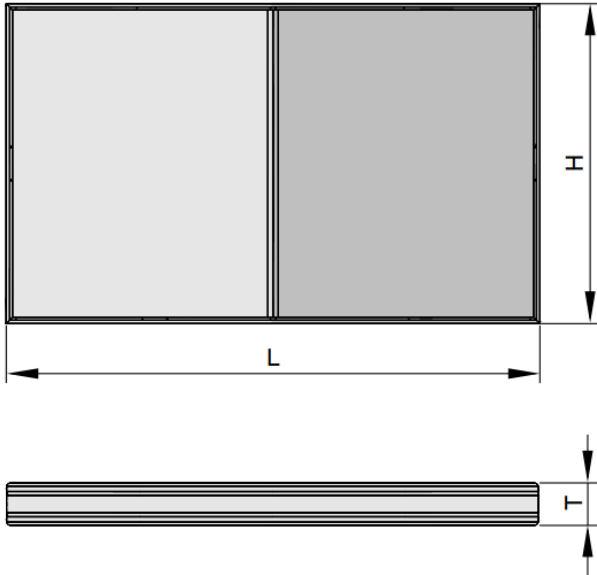
No entry: H or L ≤ 750 mm without clamp sheets
2 H or L 751 – 1000 mm: 2 clamp sheets
4 H or L ≥ 1001 mm: 4 clamp sheets

Order example: SDK-A2/200/2

Material Stainless steel (1.4301)
Splitter thickness 200 mm, with 2 U-sheets
No. of clamp sheets 2



*See dimensions on the right



- H: 150 – 2500 mm
- L: 500, 750, 1000, 1250, 1500, 1750, 2000, 2250, 2500 mm
- Intermediate sizes of H and L are possible: 150 – 2500 mm in increments of 1 mm
- Undivided construction: H + L 600 mm min., 4000 mm max., 100 kg max.
- Size limit for H or L: If one dimension is greater than 1500 mm, the other one must not exceed 1500 mm
- Height or length subdivided is possible for sizes 2501 – 5000 mm

The total weight for intermediate sizes can be generated with our Easy Product Finder design program.

MK 100 – Glass fibre fabric (-F)

| H | L | | | | | | | | |
|------|-----|-----|------|------|------|------|------|------|------|
| | 500 | 750 | 1000 | 1250 | 1500 | 1750 | 2000 | 2250 | 2500 |
| 500 | 3 | 5 | 6 | 7 | 8 | 10 | 11 | 12 | 13 |
| 750 | 5 | 6 | 8 | 9 | 11 | 13 | 15 | 16 | 18 |
| 1000 | 6 | 8 | 10 | 12 | 15 | 17 | 19 | 21 | 23 |
| 1250 | 7 | 9 | 12 | 15 | 18 | 20 | 23 | 27 | 30 |
| 1500 | 8 | 11 | 15 | 18 | 21 | 24 | 29 | 32 | 35 |
| 1750 | 10 | 13 | 17 | 20 | 24 | X | X | X | X |
| 2000 | 11 | 15 | 19 | 23 | 27 | X | X | X | X |
| 2250 | 12 | 17 | 21 | 25 | 30 | X | X | X | X |
| 2500 | 13 | 18 | 23 | 28 | 32 | X | X | X | X |

X = subdivided construction

MK 100 – Glass fibre fabric and expanded metal (-L)

| H | L | | | | | | | | |
|------|-----|-----|------|------|------|------|------|------|------|
| | 500 | 750 | 1000 | 1250 | 1500 | 1750 | 2000 | 2250 | 2500 |
| 500 | 4 | 5 | 7 | 8 | 10 | 12 | 13 | 15 | 16 |
| 750 | 5 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 |
| 1000 | 7 | 10 | 12 | 15 | 19 | 21 | 24 | 26 | 29 |
| 1250 | 8 | 12 | 15 | 19 | 22 | 26 | 29 | 34 | 37 |
| 1500 | 10 | 14 | 18 | 22 | 26 | 30 | 36 | 40 | 44 |
| 1750 | 12 | 16 | 21 | 26 | 30 | X | X | X | X |
| 2000 | 13 | 19 | 24 | 29 | 34 | X | X | X | X |
| 2250 | 15 | 21 | 26 | 32 | 38 | X | X | X | X |
| 2500 | 16 | 23 | 29 | 35 | 41 | X | X | X | X |

X = subdivided construction

MK 100 – Glass fibre fabric and perforated sheet metal (-L-A2)

| H | L | | | | | | | | |
|------|-----|-----|------|------|------|------|------|------|------|
| | 500 | 750 | 1000 | 1250 | 1500 | 1750 | 2000 | 2250 | 2500 |
| 500 | 5 | 7 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 750 | 7 | 9 | 12 | 14 | 17 | 20 | 23 | 25 | 28 |
| 1000 | 8 | 12 | 15 | 18 | 23 | 26 | 30 | 33 | 36 |
| 1250 | 10 | 14 | 18 | 24 | 28 | 32 | 36 | 42 | 46 |
| 1500 | 12 | 17 | 23 | 28 | 33 | 38 | 45 | 50 | 55 |
| 1750 | 14 | 20 | 26 | 32 | 38 | X | X | X | X |
| 2000 | 16 | 23 | 30 | 36 | 43 | X | X | X | X |
| 2250 | 18 | 25 | 33 | 40 | 48 | X | X | X | X |
| 2500 | 20 | 28 | 36 | 44 | 52 | X | X | X | X |

X = subdivided construction

MK 200 – Glass fibre fabric (-F)

| H | L | | | | | | | | |
|------|-----|-----|------|------|------|------|------|------|------|
| | 500 | 750 | 1000 | 1250 | 1500 | 1750 | 2000 | 2250 | 2500 |
| 500 | 5 | 7 | 9 | 11 | 13 | 15 | 17 | 18 | 20 |
| 750 | 7 | 10 | 12 | 14 | 17 | 20 | 23 | 25 | 28 |
| 1000 | 9 | 12 | 15 | 18 | 23 | 26 | 29 | 32 | 35 |
| 1250 | 11 | 14 | 18 | 23 | 27 | 31 | 35 | 41 | 45 |
| 1500 | 13 | 17 | 22 | 27 | 32 | 36 | 43 | 48 | 52 |
| 1750 | 15 | 20 | 26 | 31 | 36 | X | X | X | X |
| 2000 | 17 | 23 | 29 | 35 | 41 | X | X | X | X |
| 2250 | 19 | 25 | 32 | 39 | 45 | X | X | X | X |
| 2500 | 21 | 28 | 35 | 42 | 50 | X | X | X | X |

X = subdivided construction

MK 200 – Glass fibre fabric and expanded metal (-L)

| H | L | | | | | | | | |
|------|-----|-----|------|------|------|------|------|------|------|
| | 500 | 750 | 1000 | 1250 | 1500 | 1750 | 2000 | 2250 | 2500 |
| 500 | 6 | 8 | 10 | 12 | 14 | 17 | 19 | 21 | 23 |
| 750 | 8 | 11 | 14 | 17 | 20 | 23 | 26 | 29 | 32 |
| 1000 | 10 | 14 | 17 | 21 | 26 | 30 | 34 | 37 | 41 |
| 1250 | 12 | 17 | 21 | 27 | 32 | 36 | 41 | 48 | 52 |
| 1500 | 14 | 20 | 26 | 31 | 37 | 43 | 51 | 56 | 61 |
| 1750 | 17 | 24 | 30 | 36 | 43 | X | X | X | X |
| 2000 | 19 | 26 | 34 | 41 | 48 | X | X | X | X |
| 2250 | 21 | 29 | 37 | 45 | 53 | X | X | X | X |
| 2500 | 24 | 32 | 41 | 50 | 59 | X | X | X | X |

X = subdivided construction

MK 200 – Glass fibre fabric and perforated sheet metal (-L-A2)

| H | L | | | | | | | | |
|------|-----|-----|------|------|------|------|------|------|------|
| | 500 | 750 | 1000 | 1250 | 1500 | 1750 | 2000 | 2250 | 2500 |
| 500 | 7 | 9 | 12 | 14 | 16 | 19 | 22 | 24 | 27 |
| 750 | 9 | 13 | 16 | 19 | 23 | 27 | 31 | 34 | 38 |
| 1000 | 12 | 16 | 21 | 25 | 31 | 35 | 40 | 44 | 48 |
| 1250 | 14 | 19 | 25 | 31 | 37 | 43 | 48 | 56 | 61 |
| 1500 | 16 | 23 | 30 | 37 | 43 | 50 | 59 | 66 | 72 |
| 1750 | 20 | 27 | 35 | 43 | 50 | X | X | X | X |
| 2000 | 22 | 31 | 40 | 48 | 57 | X | X | X | X |
| 2250 | 25 | 34 | 44 | 54 | 63 | X | X | X | X |
| 2500 | 27 | 38 | 48 | 59 | 70 | X | X | X | X |

X = subdivided construction

MK 230 – Glass fibre fabric (-F)

| H | L | | | | | | | | |
|------|-----|-----|------|------|------|------|------|------|------|
| | 500 | 750 | 1000 | 1250 | 1500 | 1750 | 2000 | 2250 | 2500 |
| 500 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 |
| 750 | 8 | 11 | 13 | 16 | 19 | 22 | 25 | 28 | 30 |
| 1000 | 10 | 13 | 17 | 20 | 25 | 28 | 32 | 35 | 39 |
| 1250 | 12 | 16 | 20 | 25 | 30 | 34 | 39 | 45 | 49 |
| 1500 | 14 | 19 | 25 | 30 | 35 | 40 | 48 | 53 | 57 |
| 1750 | 17 | 23 | 28 | 34 | 40 | X | X | X | X |
| 2000 | 19 | 25 | 32 | 39 | 45 | X | X | X | X |
| 2250 | 21 | 28 | 35 | 43 | 50 | X | X | X | X |
| 2500 | 23 | 31 | 39 | 47 | 55 | X | X | X | X |

X = subdivided construction

MK 230 – Glass fibre fabric and expanded metal (-L)

| H | L | | | | | | | | |
|------|-----|-----|------|------|------|------|------|------|------|
| | 500 | 750 | 1000 | 1250 | 1500 | 1750 | 2000 | 2250 | 2500 |
| 500 | 6 | 9 | 11 | 13 | 16 | 18 | 21 | 23 | 25 |
| 750 | 9 | 12 | 15 | 18 | 21 | 25 | 28 | 32 | 35 |
| 1000 | 11 | 15 | 19 | 23 | 29 | 33 | 37 | 41 | 45 |
| 1250 | 13 | 18 | 23 | 29 | 34 | 40 | 44 | 52 | 56 |
| 1500 | 16 | 21 | 28 | 34 | 40 | 46 | 55 | 61 | 66 |
| 1750 | 19 | 26 | 33 | 40 | 46 | X | X | X | X |
| 2000 | 21 | 29 | 37 | 44 | 52 | X | X | X | X |
| 2250 | 23 | 32 | 41 | 49 | 58 | X | X | X | X |
| 2500 | 26 | 35 | 45 | 54 | 64 | X | X | X | X |

X = subdivided construction

MK 230 – Glass fibre fabric and perforated sheet metal (-L-A2)

| H | L | | | | | | | | |
|------|-----|-----|------|------|------|------|------|------|------|
| | 500 | 750 | 1000 | 1250 | 1500 | 1750 | 2000 | 2250 | 2500 |
| 500 | 7 | 10 | 13 | 15 | 18 | 21 | 24 | 26 | 29 |
| 750 | 10 | 14 | 17 | 21 | 25 | 29 | 33 | 37 | 40 |
| 1000 | 13 | 17 | 22 | 27 | 33 | 38 | 43 | 47 | 52 |
| 1250 | 15 | 21 | 27 | 34 | 40 | 46 | 52 | 60 | 66 |
| 1500 | 18 | 25 | 33 | 40 | 47 | 54 | 64 | 70 | 77 |
| 1750 | 21 | 30 | 38 | 46 | 54 | X | X | X | X |
| 2000 | 24 | 33 | 43 | 52 | 61 | X | X | X | X |
| 2250 | 27 | 37 | 47 | 58 | 68 | X | X | X | X |
| 2500 | 29 | 41 | 52 | 63 | 75 | X | X | X | X |

X = subdivided construction



Variant ACC

- U-sheets/clamp sheets to join subdivided attenuator splitters (included with subdivided splitter constructions)
- U-sheets and clamping sheets (ACC) for previously provided single splitters that are to be connected
 - Made of galvanised sheet steel 1.0917 or stainless steel 1.4301
 - Number according to division rule for height or length subdivided splitters
 - Specification of the total dimensions is necessary for the delivery of the recommended number of pieces
- Fixing material for connecting the U-sheets and clamp sheets to the sound attenuator to be provided by others

Number of clamp sheets per splitter joint:

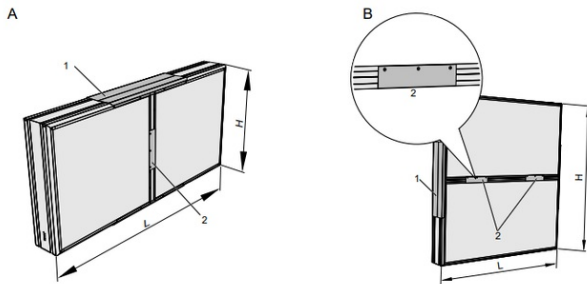
H or L ≤ 750 mm: without clamp sheet

H or L 751 – 1000 mm: 1 clamp sheet on each side

H or L > 1000 mm: 2 clamp sheets on each side recommended

Number of U-sheets per splitter joint: 2

Follow the instructions in the installation manual.



A Construction with length subdivided

- H 1000 × L 4000 with 2 U-sheets, 2 clamp sheets

B Height subdivided

- H 2000 × L 2500 with 2 U-sheets, 4 clamp sheets



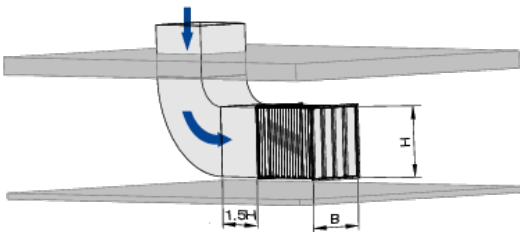
1 U-sheet

2 Clamp sheet

Installation and commissioning

- Follow the installation manual and comply with the general codes of good practice in order to achieve the given performance data
- Up to height $H = 1200$ mm, length $L = 1500$ mm and 40 kg: any installation orientation, but we recommend upright installation of splitters
- From height $H = 1201$ mm: upright installation only
- The length (L) of sound attenuator splitters and splitter sound attenuators refers to the airflow direction; be sure to note how width, height and length are defined, particularly in case of a vertical airflow
- A turbulent airflow may cause damage to the splitters
 - A straight upstream section is required upstream of the sound attenuator
 - The recommended minimum upstream section depends on the change of direction, change of cross-section and splitter arrangement
- Installation in ducts outside closed rooms requires sufficient protection against the effects of weather

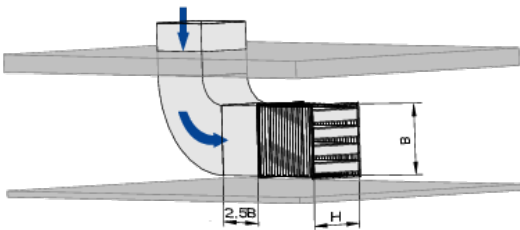
Upstream conditions after bends, junctions or a narrowing or widening of the duct, vertical upstream section, splitters upright



B Width of the sound attenuator

H Height of the sound attenuator and the splitters

Upstream conditions after bends, junctions or a narrowing or widening of the duct, vertical upstream section, splitters lying flat

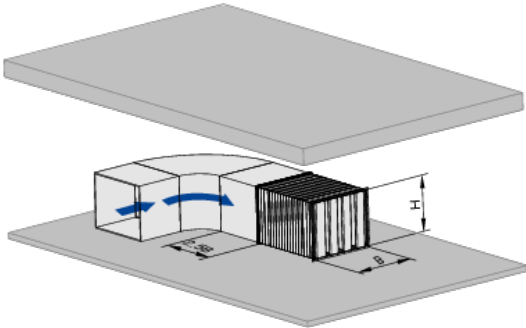


B Width of the sound attenuator

H Height of the sound attenuator and the splitters

Installation with the splitters lying flat only for splitters up to height 1200 mm

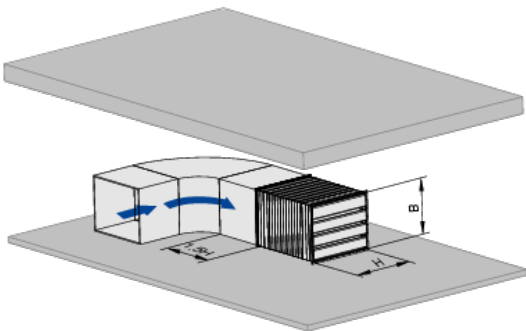
Upstream conditions after bends, junctions or a narrowing or widening of the duct, horizontal upstream section, splitters upright



B Width of the sound attenuator

H Height of the sound attenuator and the splitters

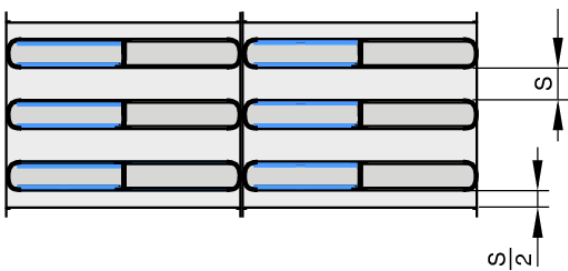
Upstream conditions after bends, junctions or a narrowing or widening of the duct, horizontal upstream section, splitters lying flat



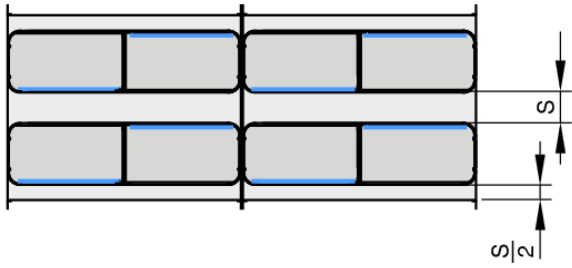
B Width of the sound attenuator

H Height of the sound attenuator and the splitters

Installation with the splitters lying flat only for splitters up to height 1200 mm



MK100: Opposite resonating panels



MK200, MK230: Offset resonating panels