Spigot with groove

Spigot with lip seal

Socket-type spigot

# Attenuators

## CK

### Circular silencers with splitter for the reduction of noise in circular ducts of ventilation and air conditioning systems

Circular silencer with sound absorbing splitter providing increased insertion loss

- Aerodynamic splitter provides increased insertion loss
- Choice of various splitter thicknesses ensures best possible application
- Attenuation effect due to absorption
- The sound absorbing material is non-combustible mineral wool and non-hazardous to health according to the German TRGS 905 (Technical Rules for Hazardous Substances) and EU directive 97/69/EC
- Acoustic data measured to ISO 7235
- Leakage class C or D (depending on size) to EN 15727.
- 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

Optional equipment and accessories

- Spigot with lip seal, for circular connecting ducts to EN 1506 or EN 13180
- Socket-type spigot suitable for circular ducts to EN 1506 or EN 13180

# General information

### Application
- Circular silencer for the reduction of noise in circular ducts of ventilation and air conditioning systems
- For the reduction of fan noise
- Can be used as cross talk silencer to reduce the transfer of noise through ducts between neighbouring rooms

### Special characteristics
- Insertion loss measured according to ISO 7235
- Choice of 2 splitter widths for each nominal diameter
  - Increased insertion loss with a wider splitter
  - Reduced differential pressure with a smaller splitter
- The sound absorbing material is non-combustible
- Insulation thickness 50 mm or 100 mm
- Leakage class D for nominal sizes up to and including 400 mm
- Leakage class C from nominal size 450 mm

### Nominal sizes
- ØD: 250, 315, 400, 450, 500, 560, 630, 710, 800, 900, 1000 mm
- L: 500, 1000, 1500 mm

### Variants
Insulation thickness
- 050: Circular silencer with 50 mm insulation
- 100: Circular silencer with 100 mm insulation

Splitter width
- T: 50, 100, 150, 200, 250, 300 mm

### Construction
Circular silencers
- No entry: galvanised steel 1.0917
- A2: Stainless steel 1.4301

Type of connection
- No entry: Spigot with groove on both ends
- D2: Spigot with lip seal on both ends
- AS: Spigot with lip seal and socket-type spigot on one end

### Parts and characteristics
- Circular casing
- Perforated inner duct
- Splitter
- Sound absorbing material

### Construction features
- Circular casing
  - Outer duct: spiral duct, galvanised steel 1.0917
  - Outer duct: plain duct, stainless steel 1.4301
- Splitter
  - Aerodynamic shape, galvanised steel 1.0917 or stainless steel 1.4301
- Spigot suitable for circular ducts to EN 1506 or EN 13180
- Lip seals up to nominal size 800
- Max. operating pressure 2000 Pa
- Max. airflow velocity 20 m/s
- Max. operating temperature 90 °C

### Material and surfaces
- Splitter made of galvanised sheet steel 1.0917 or stainless steel 1.4301
- Casing pipe as spiral duct made of galvanised steel 1.0917
- Smooth casing pipe made of stainless steel 1.4301
- Perforated inner duct made of galvanised steel 1.0917 or stainless steel 1.4301
- Spigot made of galvanised steel 1.0917 or stainless steel 1.4301
- Absorption material is mineral wool
  - To EN 13501, fire rating class A1, non-combustible
  - Non-hazardous to health according to the German TRGS 905 (Technical Rules for Hazardous Substances) and EU directive 97/69/EC
  - Protection against erosion from airflow velocities up to 20 m/s
    - Inner duct with non-woven fibre (fleece)
    - Splitters faced with glass fibre scrim
  - Inert to fungal and bacterial growth according to EN 846

### Standards and guidelines
- Insertion loss and sound power of air-regenerated noise tested according 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
- Leakage class according to DIN EN 15727

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

## Technical data

| | |
|---|---|
| Nominal sizes | 250 – 1000 mm |
| Operating pressure | 2000 Pa max. |
| Operating temperature | 90 °C max. |

## Quick sizing

The stated differential pressures for circular silencers vary, they depend on the splitter and the duct diameter.

### Insulation thickness 50 mm, insertion loss $D_e$ [dB]

| Nominal size | Nominal length | Splitter width | Centre frequency $f_m$ [Hz] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 250 | 500 | 50 | 1 | 2 | 5 | 10 | 20 | 23 | 15 | 8 |
| 250 | 500 | 100 | 2 | 3 | 7 | 12 | 23 | 28 | 21 | 13 |
| 250 | 1000 | 50 | 3 | 5 | 10 | 19 | 38 | 44 | 30 | 15 |
| 250 | 1000 | 100 | 4 | 6 | 14 | 23 | 44 | 50 | 40 | 26 |
| 250 | 1500 | 50 | 4 | 7 | 15 | 28 | 50 | 50 | 43 | 22 |
| 250 | 1500 | 100 | 6 | 9 | 20 | 33 | 50 | 50 | 50 | 37 |
| 315 | 500 | 50 | 1 | 2 | 4 | 9 | 17 | 19 | 9 | 4 |
| 315 | 500 | 100 | 2 | 3 | 6 | 10 | 23 | 22 | 13 | 6 |
| 315 | 1000 | 50 | 2 | 4 | 9 | 17 | 33 | 37 | 18 | 8 |
| 315 | 1000 | 100 | 4 | 5 | 11 | 20 | 44 | 42 | 25 | 12 |
| 315 | 1500 | 50 | 3 | 5 | 12 | 24 | 48 | 50 | 25 | 11 |
| 315 | 1500 | 100 | 6 | 8 | 16 | 29 | 50 | 50 | 37 | 18 |
| 400 | 500 | 100 | 1 | 2 | 4 | 8 | 19 | 15 | 8 | 5 |
| 400 | 500 | 150 | 2 | 3 | 6 | 11 | 23 | 18 | 12 | 7 |
| 400 | 1000 | 100 | 3 | 3 | 8 | 15 | 36 | 29 | 15 | 9 |
| 400 | 1000 | 150 | 4 | 6 | 12 | 21 | 45 | 34 | 23 | 14 |
| 400 | 1500 | 100 | 4 | 5 | 12 | 21 | 50 | 41 | 22 | 14 |
| 400 | 1500 | 150 | 6 | 8 | 18 | 30 | 50 | 50 | 34 | 20 |

### Insulation thickness 100 mm, insertion loss $D_e$ [dB]

| Nominal size | Nominal length | Splitter width | Centre frequency $f_m$ [Hz] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 250 | 500 | 50 | 1 | 5 | 9 | 16 | 22 | 24 | 17 | 10 |
| 250 | 500 | 100 | 2 | 6 | 11 | 18 | 26 | 29 | 25 | 17 |
| 250 | 1000 | 50 | 3 | 9 | 17 | 30 | 43 | 46 | 33 | 19 |
| 250 | 1000 | 100 | 4 | 11 | 20 | 35 | 50 | 50 | 49 | 33 |
| 250 | 1500 | 50 | 4 | 13 | 25 | 44 | 50 | 50 | 48 | 28 |
| 250 | 1500 | 100 | 6 | 16 | 29 | 50 | 50 | 50 | 50 | 48 |
| 315 | 500 | 50 | 1 | 4 | 8 | 15 | 18 | 20 | 9 | 5 |
| 315 | 500 | 100 | 2 | 5 | 9 | 16 | 23 | 22 | 13 | 7 |
| 315 | 1000 | 50 | 2 | 8 | 15 | 28 | 34 | 38 | 18 | 9 |
| 315 | 1000 | 100 | 4 | 10 | 17 | 31 | 44 | 43 | 26 | 14 |
| 315 | 1500 | 50 | 3 | 11 | 21 | 41 | 50 | 50 | 26 | 14 |
| 315 | 1500 | 100 | 6 | 14 | 25 | 45 | 50 | 50 | 37 | 20 |
| 400 | 500 | 100 | 1 | 3 | 6 | 12 | 21 | 15 | 8 | 5 |
| 400 | 500 | 150 | 2 | 4 | 8 | 16 | 24 | 18 | 12 | 8 |
| 400 | 1000 | 100 | 2 | 5 | 12 | 23 | 40 | 29 | 16 | 10 |

| Nominal size | Nominal length | Splitter width | Centre frequency $f_m$ [Hz] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 400 | 1000 | 150 | 4 | 7 | 16 | 32 | 46 | 35 | 23 | 15 |
| 400 | 1500 | 100 | 3 | 7 | 18 | 33 | 50 | 42 | 23 | 15 |
| 400 | 1500 | 150 | 6 | 11 | 24 | 46 | 50 | 50 | 33 | 21 |
| 450 | 500 | 100 | 1 | 2 | 5 | 11 | 18 | 12 | 6 | 4 |
| 450 | 500 | 150 | 2 | 2 | 6 | 13 | 21 | 15 | 8 | 5 |
| 450 | 1000 | 100 | 2 | 3 | 10 | 22 | 35 | 22 | 12 | 8 |
| 450 | 1000 | 150 | 4 | 4 | 12 | 25 | 41 | 28 | 16 | 10 |
| 450 | 1500 | 100 | 3 | 4 | 15 | 31 | 50 | 32 | 17 | 12 |
| 450 | 1500 | 150 | 5 | 6 | 17 | 36 | 50 | 41 | 23 | 15 |
| 500 | 500 | 150 | 1 | 2 | 6 | 12 | 18 | 13 | 7 | 5 |
| 500 | 500 | 200 | 2 | 3 | 7 | 14 | 20 | 15 | 9 | 7 |
| 500 | 1000 | 150 | 2 | 4 | 11 | 23 | 35 | 24 | 14 | 10 |
| 500 | 1000 | 200 | 4 | 5 | 13 | 26 | 38 | 29 | 18 | 13 |
| 500 | 1500 | 150 | 3 | 6 | 16 | 33 | 50 | 35 | 21 | 15 |
| 500 | 1500 | 200 | 5 | 7 | 18 | 38 | 50 | 42 | 26 | 19 |
| 560 | 500 | 150 | 1 | 3 | 6 | 12 | 14 | 10 | 6 | 5 |
| 560 | 500 | 200 | 2 | 4 | 7 | 13 | 16 | 13 | 7 | 6 |
| 560 | 1000 | 150 | 2 | 6 | 12 | 23 | 28 | 20 | 11 | 9 |
| 560 | 1000 | 200 | 4 | 7 | 13 | 25 | 31 | 24 | 14 | 11 |
| 560 | 1500 | 150 | 3 | 9 | 18 | 33 | 40 | 29 | 16 | 13 |
| 560 | 1500 | 200 | 5 | 10 | 19 | 36 | 45 | 35 | 20 | 16 |
| 630 | 500 | 200 | 1 | 2 | 6 | 12 | 14 | 9 | 6 | 5 |
| 630 | 500 | 250 | 2 | 3 | 7 | 14 | 16 | 11 | 8 | 6 |
| 630 | 1000 | 200 | 2 | 4 | 11 | 24 | 27 | 17 | 12 | 10 |
| 630 | 1000 | 250 | 3 | 5 | 13 | 26 | 31 | 21 | 15 | 12 |
| 630 | 1500 | 200 | 3 | 6 | 16 | 34 | 39 | 25 | 18 | 15 |
| 630 | 1500 | 250 | 5 | 8 | 19 | 38 | 45 | 30 | 21 | 18 |
| 710 | 500 | 200 | 1 | 2 | 5 | 12 | 12 | 7 | 5 | 5 |
| 710 | 500 | 250 | 2 | 2 | 6 | 13 | 13 | 8 | 6 | 5 |
| 710 | 1000 | 200 | 2 | 3 | 10 | 23 | 23 | 14 | 10 | 9 |
| 710 | 1000 | 250 | 3 | 4 | 11 | 25 | 25 | 16 | 11 | 10 |
| 710 | 1500 | 200 | 3 | 5 | 14 | 33 | 34 | 20 | 15 | 13 |
| 710 | 1500 | 250 | 5 | 6 | 17 | 36 | 37 | 23 | 16 | 15 |
| 800 | 500 | 250 | 1 | 2 | 6 | 12 | 11 | 7 | 5 | 5 |
| 800 | 500 | 300 | 2 | 3 | 7 | 12 | 13 | 7 | 6 | 5 |
| 800 | 1000 | 250 | 2 | 4 | 12 | 23 | 22 | 13 | 10 | 9 |
| 800 | 1000 | 300 | 3 | 5 | 13 | 24 | 25 | 14 | 11 | 10 |
| 800 | 1500 | 250 | 2 | 6 | 17 | 33 | 32 | 18 | 15 | 13 |
| 800 | 1500 | 300 | 5 | 8 | 19 | 35 | 36 | 20 | 16 | 15 |
| 900 | 500 | 250 | 1 | 2 | 6 | 11 | 9 | 6 | 4 | 4 |
| 900 | 500 | 300 | 2 | 2 | 6 | 12 | 10 | 6 | 5 | 4 |
| 900 | 1000 | 250 | 2 | 4 | 11 | 21 | 18 | 11 | 8 | 8 |
| 900 | 1000 | 300 | 3 | 4 | 12 | 23 | 20 | 11 | 9 | 8 |
| 900 | 1500 | 250 | 2 | 5 | 16 | 31 | 26 | 16 | 12 | 11 |
| 900 | 1500 | 300 | 4 | 6 | 18 | 33 | 28 | 17 | 13 | 12 |
| 1000 | 500 | 300 | 1 | 2 | 6 | 11 | 8 | 5 | 5 | 4 |
| 1000 | 1000 | 300 | 3 | 4 | 12 | 20 | 16 | 10 | 9 | 7 |
| 1000 | 1500 | 300 | 4 | 6 | 18 | 29 | 24 | 14 | 13 | 11 |

**Differential pressure $\Delta p_t$[Pa]**

| Nominal size | Splitter width | $q_v$ | | Nominal length | | |
|---|---|---|---|---|---|---|
| | | l/s | m³/h | 500 | 1000 | 1500 |
| 250 | 50 | 194 | 700 | 9 | 10 | 10 |
| 250 | 100 | 194 | 700 | 37 | 42 | 44 |
| 250 | 50 | 333 | 1200 | 25 | 28 | 29 |
| 250 | 100 | 333 | 1200 | 109 | 121 | 127 |
| 315 | 50 | 333 | 1200 | 3 | 4 | 4 |
| 315 | 100 | 333 | 1200 | 4 | 4 | 5 |
| 315 | 50 | 1000 | 3600 | 26 | 29 | 31 |
| 315 | 100 | 1000 | 3600 | 32 | 35 | 37 |
| 400 | 100 | 389 | 1400 | 12 | 13 | 14 |
| 400 | 150 | 389 | 1400 | 19 | 21 | 22 |
| 400 | 100 | 833 | 3000 | 54 | 60 | 63 |
| 400 | 150 | 833 | 3000 | 85 | 94 | 99 |
| 450 | 100 | 611 | 2200 | 18 | 20 | 21 |
| 450 | 150 | 611 | 2200 | 26 | 29 | 30 |
| 450 | 100 | 1111 | 4000 | 60 | 66 | 70 |
| 450 | 150 | 1111 | 4000 | 84 | 93 | 98 |
| 500 | 150 | 778 | 2800 | 10 | 11 | 11 |
| 500 | 200 | 778 | 2800 | 21 | 23 | 25 |
| 500 | 150 | 1556 | 5600 | 38 | 42 | 44 |
| 500 | 200 | 1556 | 5600 | 84 | 93 | 98 |
| 560 | 150 | 1000 | 3600 | 10 | 11 | 11 |
| 560 | 200 | 1000 | 3600 | 18 | 20 | 21 |
| 560 | 150 | 2222 | 8000 | 45 | 50 | 52 |
| 560 | 200 | 2222 | 8000 | 86 | 95 | 100 |
| 630 | 200 | 1250 | 4500 | 14 | 16 | 17 |
| 630 | 250 | 1250 | 4500 | 30 | 34 | 35 |
| 630 | 200 | 2083 | 7500 | 39 | 43 | 45 |
| 630 | 250 | 2083 | 7500 | 84 | 93 | 98 |
| 710 | 200 | 1556 | 5600 | 11 | 12 | 13 |
| 710 | 250 | 1556 | 5600 | 17 | 19 | 20 |
| 710 | 200 | 3472 | 12500 | 54 | 60 | 63 |
| 710 | 250 | 3472 | 12500 | 83 | 92 | 96 |
| 800 | 250 | 2000 | 7200 | 9 | 10 | 10 |
| 800 | 300 | 2000 | 7200 | 17 | 19 | 20 |
| 800 | 250 | 4500 | 16200 | 43 | 48 | 50 |
| 800 | 300 | 4500 | 16200 | 84 | 93 | 98 |
| 900 | 250 | 2500 | 9000 | 11 | 12 | 13 |
| 900 | 300 | 2500 | 9000 | 16 | 18 | 19 |
| 900 | 250 | 5833 | 21000 | 57 | 63 | 67 |
| 900 | 300 | 5833 | 21000 | 86 | 95 | 100 |
| 1000 | 300 | 3125 | 11250 | 19 | 22 | 23 |
| 1000 | 300 | 6667 | 24000 | 87 | 96 | 101 |

# Specification text

This specification text describes the general properties of the product. Texts for variants can be generated with our Easy Product Finder design program.

Circular silencers with integral splitter for better acoustic performance, rigid construction, for ventilation and air conditioning systems, available in 11 nominal sizes and with 2 insulation thicknesses.
Insertion loss measured according to ISO 7235.
Casing with acoustic and thermal insulation.
Galvanised steel or stainless steel.
Optimised differential pressure upstream and downstream of the integral splitter due to the aerodynamic shape.
Choice of splitter widths for optimised differential pressure or increased insertion loss.
Various types of connection, suitable for circular ducts to EN 1506 or EN 13180.
Leakage class C or D (depending on size) to EN 15727.

## Special characteristics

- Insertion loss measured according to ISO 7235
- Choice of 2 splitter widths for each nominal diameter
  - Increased insertion loss with a wider splitter
  - Reduced differential pressure with a smaller splitter
- The sound absorbing material is non-combustible
- Insulation thickness 50 mm or 100 mm
- Leakage class D for nominal sizes up to and including 400 mm
- Leakage class C from nominal size 450 mm

## Material and surfaces

- Splitter made of galvanised sheet steel 1.0917 or stainless steel 1.4301
- Casing pipe as spiral duct made of galvanised steel 1.0917
- Smooth casing pipe made of stainless steel 1.4301
- Perforated inner duct made of galvanised steel 1.0917 or stainless steel 1.4301
- Spigot made of galvanised steel 1.0917 or stainless steel 1.4301
- Absorption material is mineral wool
  - To EN 13501, fire rating class A1, non-combustible
  - Non-hazardous to health according to the German TRGS 905 (Technical Rules for Hazardous Substances) and EU directive 97/69/EC
  - Protection against erosion from airflow velocities up to 20 m/s
    - Inner duct with non-woven fibre (fleece)
    - Splitters faced with glass fibre scrim
  - Inert to fungal and bacterial growth according to EN 846

## Construction

Circular silencers
- No entry: galvanised steel 1.0917
- A2: Stainless steel 1.4301

Type of connection
- No entry: Spigot with groove on both ends
- D2: Spigot with lip seal on both ends
- AS: Spigot with lip seal and socket-type spigot on one end

## Technical data

- Nominal size: 250, 315, 400, 450, 500, 560, 630, 710, 800, 900, 1000 mm
- Insulation thickness: 50, 100 mm
- Nominal length: 500, 1000, 1500 mm
- Operating pressure: 2000 Pa max.
- Airflow velocity: 20 m/s max.
- Operating temperature: 90 °C max.

## Sizing data

- ØD [mm]
- L [mm]
- $L_1$ [mm]
- qv [m³/h]
- De [dB]
- Δpst [Pa]

# Order code

**CK – A2 / D2 / 315 × 1500 / 100 – 50**
**1 2 3 4 5 6 7**

**1 Type**
**CK** Circular silencer with splitter
**2 Material**
No entry: galvanised steel (1.0917)
**A2** Stainless steel (1.4301)
**3 Type of connection**
No entry: spigot with groove on both ends
**D2** Spigot with lip seal on both ends
**AS** Spigot with lip seal and socket-type spigot on one end
**4 Nominal size [mm]**
**250, 315, 400, 450, 500, 560, 630, 710, 800, 900, 1000**
**5 Nominal length [mm]**
**500, 1000, 1500**
**6 Insulation thickness [mm]**
**50, 100**
**7 Splitter thickness [mm]**
**50, 100, 150, 200, 250, 300**

**Order example: CK–A2/D2/315×1500/100–50**

| | |
|---|---|
| **Material** | Galvanised steel (1.0917) |
| **Material** | Stainless steel (1.4301) |
| **Type of connection** | Spigot with lip seal on both ends |
| **Nominal size [mm]** | 315 |
| **Length [mm]** | 1500 |
| **Insulation thickness [mm]** | 100 |
| **Splitter width [mm]** | 50 |

**Order example: CK/250×1500/100–100**

| | |
|---|---|
| **Type** | CK |
| **Material** | Galvanised steel (1.0917) |
| **Type of connection** | Spigot with groove on both ends |
| **Nominal size [mm]** | 250 |
| **Length [mm]** | 1500 |
| **Insulation thickness [mm]** | 100 |
| **Splitter width [mm]** | 100 |

# Dimensions and weight

**CK: Dimensions:**

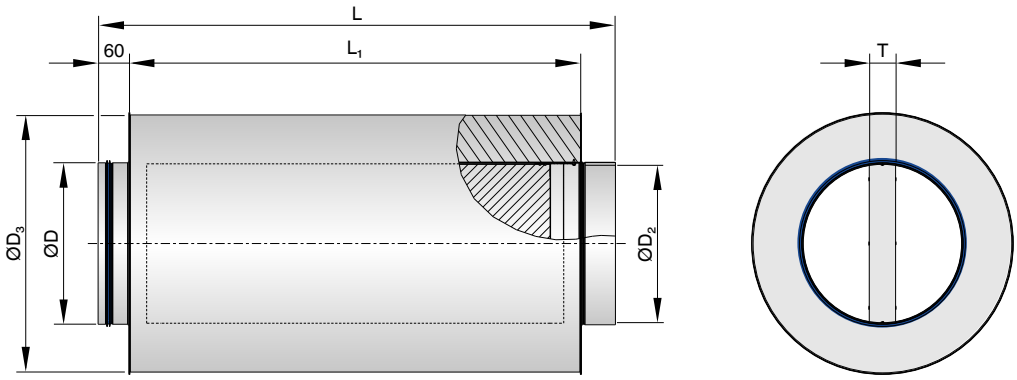


Illustration showing connection type AS

**CK: Dimensions**

| NS | ØD | Insulation thickness 50 | | Insulation thickness 100 | |
|---|---|---|---|---|---|
| | | $ØD_2$ | $ØD_3$ | $ØD_2$ | $ØD_3$ |
| 250 | 249 | 250 | 354 | 250 | 455 |
| 315 | 314 | 315 | 405 | 315 | 505 |
| 400 | 399 | 400 | 505 | 400 | 605 |
| 450 | 448 | | | 450 | 636 |
| 500 | 498 | | | 500 | 716 |
| 560 | 558 | | | 560 | 806 |
| 630 | 628 | | | 630 | 806 |
| 710 | 708 | | | 710 | 908 |
| 800 | 798 | | | 800 | 1008 |
| 900 | 898 | | | 900 | 1128 |
| 1000 | 998 | | | 1000 | 1258 |

No entry: spigot with groove to EN1506 ØD
**D2:** Spigot with groove to EN1506 ØD
**AS:** Spigot with lip seal ØD and socket-type spigot on one end $ØD_2$

**CK: Lengths**

| LN | L | $L_1$ |
|---|---|---|
| 500 | 500 | 380 |
| 1000 | 1000 | 880 |
| 1500 | 1500 | 1380 |

### CK-0: Weight without splitter [kg]

| NS | Insulation thickness 50 | | | Insulation thickness 100 | | |
|---|---|---|---|---|---|---|
| | LN | | | LN | | |
| | 500 | 1000 | 1500 | 500 | 1000 | 1500 |
| 250 | 7 | 12 | 16 | 9 | 16 | 22 |
| 315 | 8 | 14 | 20 | 10 | 18 | 25 |
| 400 | 10 | 17 | 25 | 14 | 23 | 32 |
| 450 | | | | 16 | 28 | 39 |
| 500 | | | | 18 | 32 | 45 |
| 560 | | | | 21 | 36 | 51 |
| 630 | | | | 22 | 37 | 52 |
| 710 | | | | 26 | 46 | 66 |
| 800 | | | | 30 | 52 | 74 |
| 900 | | | | 36 | 62 | 91 |
| 1000 | | | | 41 | 69 | 97 |

### CK-A2: Weight without splitter [kg]

| NS | Insulation thickness 50 | | | Insulation thickness 100 | | |
|---|---|---|---|---|---|---|
| | LN | | | LN | | |
| | 500 | 1000 | 1500 | 500 | 1000 | 1500 |
| 250 | 7 | 12 | 17 | 9 | 15 | 22 |
| 315 | 8 | 14 | 21 | 10 | 18 | 25 |
| 400 | 10 | 18 | 26 | 13 | 23 | 32 |
| 450 | | | | 14 | 24 | 33 |
| 500 | | | | 16 | 28 | 40 |
| 560 | | | | 18 | 32 | 45 |
| 630 | | | | 20 | 34 | 47 |
| 710 | | | | 23 | 38 | 54 |
| 800 | | | | 26 | 44 | 62 |
| 900 | | | | 30 | 53 | 75 |
| 1000 | | | | 34 | 59 | 84 |

### CK-...×500: Weight of splitter [kg]

| LN 500 | T | | | | | |
|---|---|---|---|---|---|---|
| NS | 50 | 100 | 150 | 200 | 250 | 300 |
| 250 | 1 | 2 | | | | |
| 315 | 1 | 2 | | | | |
| 400 | | 2 | 3 | | | |
| 450 | | 2 | 3 | | | |
| 500 | | | 3 | 4 | | |
| 560 | | | 3 | 4 | | |
| 630 | | | | 5 | 6 | |
| 710 | | | | 5 | 6 | |
| 800 | | | | | 7 | 8 |
| 900 | | | | | 8 | 9 |
| 1000 | | | | | | 10 |

### CK-...×1000: Weight of splitter [kg]

| LN 1000 | T | | | | | |
|---|---|---|---|---|---|---|
| NS | 50 | 100 | 150 | 200 | 250 | 300 |
| 250 | 2 | 3 | | | | |
| 315 | 2 | 3 | | | | |
| 400 | | 4 | 5 | | | |
| 450 | | 4 | 5 | | | |
| 500 | | | 5 | 7 | | |
| 560 | | | 6 | 7 | | |
| 630 | | | | 9 | 11 | |
| 710 | | | | 10 | 12 | |
| 800 | | | | | 13 | 14 |
| 900 | | | | | 14 | 16 |
| 1000 | | | | | | 18 |

**CK-...×1500: Weight of splitter [kg]**

| LN 1500 | T | | | | | |
|---|---|---|---|---|---|---|
| NS | 50 | 100 | 150 | 200 | 250 | 300 |
| 250 | 3 | 4 | | | | |
| 315 | 3 | 5 | | | | |
| 400 | | 5 | 7 | | | |
| 450 | | 5 | 7 | | | |
| 500 | | | 8 | 10 | | |
| 560 | | | 8 | 11 | | |
| 630 | | | | 12 | 15 | |
| 710 | | | | 13 | 16 | |
| 800 | | | | | 17 | 21 |
| 900 | | | | | 18 | 23 |
| 1000 | | | | | | 24 |

# Installation details

**Installation and commissioning**

- Follow the installation manual and comply with the general codes of good practice in order to achieve the given performance data
- Installation in ducts outside closed rooms requires sufficient protection against the effects of weather
- Due to its weight the silencer must be supported, e.g. by a suitable fixing system.

## Explanation

**ØD** [mm]
Outer diameter of the spigot

**$ØD_3$** [mm]
Inside diameter of the socket-type spigot

**$ØD_3$** [mm]
Outer diameter of circular silencers

**$L_N$** [mm]
Nominal length

**L** [mm]
Length of sound attenuator including spigot (always in airflow direction)

**$L_1$**
Length of acoustic cladding and acoustically effective length

**T** [mm]
Splitter thickness

**n** [ ]
Number of flange screw holes

**m** [kg]
Weight

**$f_m$** [Hz]
Octave band centre frequency

**$L_{WA}$** [dB(A)]
A-weighted sound power level of air-regenerated noise

**$D_e$** [dB]
Insertion loss

**$q_v$** [m³/h]; [l/s]
Volume flow rate

**$\Delta p_t$** [Pa]
Total differential pressure

**Lengths**
All lengths are given in millimetres [mm] unless stated otherwise.

All sound power levels are based on 1 pW.

All values were measured in a TROX lab and to EN ISO 7235. Intermediate values may be achieved by interpolation.

Lab measurements exceeding 50 dB are given as 50 dB, based on practical conditions.