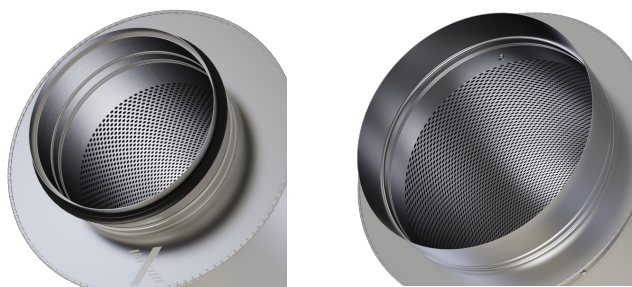
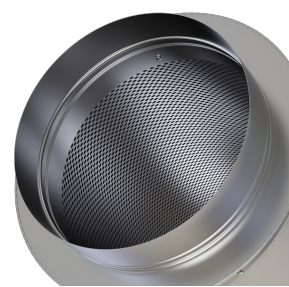




Spigot with groove



Spigot with lip seal



Socket-type spigot

## CAH

### CIRCULAR SILENCERS FOR THE REDUCTION OF NOISE IN CIRCULAR DUCTS OF VENTILATION AND AIR CONDITIONING SYSTEMS

Circular silencer made of galvanised sheet steel or stainless steel

- 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

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### Application

- Circular silencer for the reduction of noise
- For the reduction of air-regenerated noise of air terminal units LVC, TVR, TVE and of mechanical self-powered controllers RN and VFC
- 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
- The sound absorbing material is non-combustible
- Insulation thickness 25, 50 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: 80, 100, 125, 160, 200, 250, 315, 400, 450, 500, 560, 630, 710, 800 mm
- L: 500, 1000, 1500 mm

For VAV terminal units and CAV controllers

- ØD: 100, 125, 160, 200, 250, 315, 400 mm

### Variants

- 025: Circular silencer with 25 mm insulation
- 050: Circular silencer with 50 mm insulation

- 100: Circular silencer with 100 mm insulation

## Construction

### Circular silencer

- 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
- Absorption material

## Construction features

- Circular casing
  - Outer duct: spiral duct, galvanised steel 1.0917
  - Outer duct: plain duct, 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

- Outer duct and perforated inner duct are spiral ducts made of galvanised steel 1.0917
- Plain outer duct made of stainless steel 1.4301
- Perforated inner duct made of galvanised steel or stainless steel 1.4301
- Spigot made of galvanised steel 1.0917 or stainless steel 1.4301
- Absorption material is mineral wool
  - To EN 13501-1, 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
  - Inner duct with non-woven fibre (fleece) 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
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- Leakage class and pressure class according to EN 15727

## Maintenance

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

## TECHNICAL INFORMATION

|                              |              |
|------------------------------|--------------|
| <b>Nominal sizes</b>         | 80 - 800 mm  |
| <b>Operating pressure</b>    | 2000 Pa max. |
| <b>Operating temperature</b> | 90 °C max.   |

Circular silencers for ventilation and air conditioning systems, rigid construction, available in 14 nominal sizes and with 3 insulation thicknesses

Insertion loss measured according to ISO 7235.

Casing with acoustic and thermal insulation.

Galvanised steel or stainless steel.

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
  - The sound absorbing material is non-combustible
  - Insulation thickness 25, 50 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

- Outer duct and perforated inner duct are spiral ducts made of galvanised steel 1.0917
- Plain outer duct made of stainless steel 1.4301
- Perforated inner duct made of galvanised steel or stainless steel 1.4301

- Spigot made of galvanised steel 1.0917 or stainless steel 1.4301
- Absorption material is mineral wool
  - To EN 13501-1, 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
  - Inner duct with non-woven fibre (fleece) 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

##### Circular silencer

- 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: 80, 100, 125, 160, 200, 250, 315, 400, 450, 500, 560, 630, 710, 800 mm
- Insulation thickness: 25, 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

- $\varnothing D$  [mm]
- L [mm]
- $L_1$  [mm]
- $q_v$  [m<sup>3</sup>/h]
- $D_e$  [dB]
- $\Delta p_{st}$  [Pa]

**CAH** - **A2** / **D2** / **160** × **1000** / **50**  
| | | | | | | | | |  
**1** **2** **3** **4** **5** **6**

1 Type  
CAH Circular silencer

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]  
80, 100, 125, 160, 200, 250, 315, 400, 450, 500, 560, 630, 710, 800

5 Nominal length [mm]  
500, 1000, 1500

6 Insulation thickness [mm]  
25, 50, 100

Order example: CAH-A2/D2/160×1000/50

|                           |                                   |
|---------------------------|-----------------------------------|
| Type                      | CAH                               |
| Material                  | Stainless steel (1.4301)          |
| Type of connection        | Spigot with lip seal on both ends |
| Nominal size [mm]         | 160                               |
| Length [mm]               | 1000                              |
| Insulation thickness [mm] | 50                                |