

Circular silencers

Type CAK



For the reduction of noise in plastic circular ducts for contaminated air

Plastic circular silencers for the reduction of noise in the circular ducts of extract air systems for aggressive media

- Absorption material is non-combustible mineral wool with RAL quality mark, biosoluble and hence hygienically safe according to the German TRGS 905 (Technical Rules for Hazardous Substances) and EU directive 97/69/EC
- Mineral wool faced with non-woven glass fibre as protection against erosion due to airflow velocities up to 20 m/s
- Casing and perforated inner duct are flame-resistant polypropylene (PPs) to DIN 4102, building class B1
- Variant with spigot suitable for circular ducts according to DIN 8077 or DIN 8078
- Insertion loss measured according to ISO 7235
- Casing air leakage to EN 15727, class D

Optional equipment and accessories

- With flanges on both ends

Type		Page
CAK	General information	CAK – 2
	Technical data	CAK – 3
	Quick sizing	CAK – 4
	Specification text	CAK – 5
	Order code	CAK – 6
	Variants	CAK – 7
	Dimensions and weight	CAK – 8
	Installation details	CAK – 10
	Basic information and nomenclature	CAK – 11

Application

Application

- Plastic circular silencers Type CAK for the reduction of noise in the circular ducts of air conditioning systems
- Suitable for contaminated air
- For the reduction of air-regenerated noise of air terminal units TVRK and TVLK
- For the reduction of fan noise

Special features

- Insertion loss measured according to ISO 7235
- Absorption material is non-combustible

Nominal sizes

- 125, 160, 200, 250, 315, 400 mm

Description

Variants

- CAK: Circular silencer
- VF2: Circular silencer with flanges on both ends

Parts and characteristics

- Casing
- Perforated inner tube
- Absorption material

Accessories

- Matching flanges for both ends, including seals

Construction features

- Circular casing
- Spigot suitable for circular ducts according to DIN 8077 or DIN 8078
- Maximum operating pressure 1000 Pa
- Max. operating temperature 100 °C

Materials and surfaces

- Casing and perforated inner duct are flame-resistant polypropylene (PPs) to DIN 4102, building class B1

- Lining is mineral wool

Mineral wool

- To EN 13501, fire rating class A2, non-combustible
- RAL quality mark RAL-GZ 388
- Biosoluble and hence hygienically safe according to the German TRGS 905 (Technical Rules for Hazardous Substances) and EU directive 97/69/EC
- Faced with glass fibre as protection against erosion through airflow velocities up to 20 m/s
- Inert to fungal and bacterial growth

Standards and guidelines

- Insertion loss measured according to ISO 7235
- Casing air leakage to EN 15727, class D

Maintenance

- Maintenance-free as construction and materials are not subject to wear

Nominal sizes	125 – 400 mm
Operating pressure	1000 Pa
Operating temperature	100 °C max.

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

Plastic circular silencers for use in extract air systems subject to aggressive media; they reduce the air-regenerated noise in plastic ducts (absorption principle).
Insertion loss measured according to ISO 7235. Absorption material is mineral wool with RAL quality mark RAL-GZ 388.
Spigot, suitable for ducts according to DIN 8077. Casing air leakage to EN 15727, class D.

Special features

- Insertion loss measured according to ISO 7235
- Absorption material is non-combustible

Materials and surfaces

- Casing and perforated inner duct are flame-resistant polypropylene (PPs) to DIN 4102, building class B1
- Lining is mineral wool

Mineral wool

- To EN 13501, fire rating class A2, non-combustible
- RAL quality mark RAL-GZ 388
- Biosoluble and hence hygienically safe

according to the German TRGS 905 (Technical Rules for Hazardous Substances) and EU directive 97/69/EC

- Faced with glass fibre as protection against erosion through airflow velocities up to 20 m/s
- Inert to fungal and bacterial growth

Technical data

- Nominal sizes: 125 to 400 mm
- Operating pressure: 1000 Pa max.
- Operating temperature: 100 °C max.

Sizing data

- D _____
[mm]
- H _____
[mm]
- Insulation thickness _____
[mm]
- $\dot{V}$ _____
[m³/h]
- D_e at 250 Hz _____
[dB]
- Δp_{st} _____
[Pa]

CAK

Variant

- Circular silencer for the reduction of noise
- Spigot

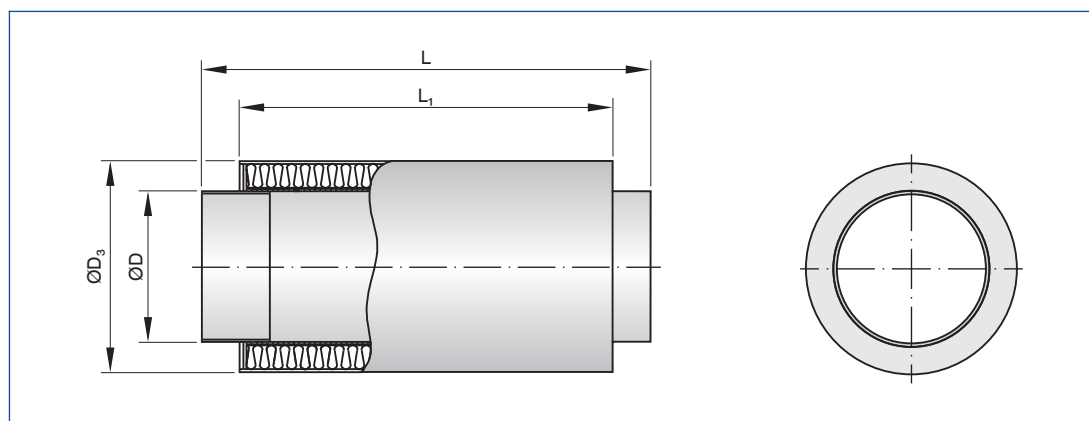
CAK/.../VF2

Variant

- Circular silencer for the reduction of noise

- With flanges to make detachable connections to the ductwork

CAK



CAK, dimensions

Nominal size	ØD	ØD ₃
	mm	mm
125	125	225
160	160	250
200	200	280
250	250	355
315	315	415
400	400	500

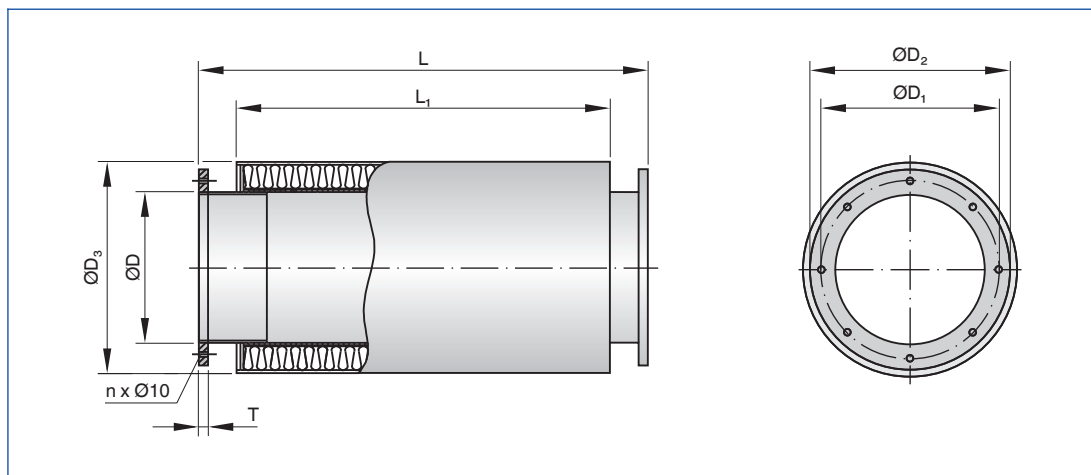
CAK, lengths

Nominal length	L	L ₁
	mm	mm
500	595	495
1000	1095	995
1500	1595	1495

CAK, weights

Nominal size	500	1000	1500
	m		
	kg	kg	kg
125	2.2	4.1	5.9
160	2.6	4.7	6.8
200	3.2	5.8	8.5
250	4.3	7.6	10.9
315	4.6	8.6	12.5
400	5.2	9.3	13.4

CAK/.../VF2



CAK/.../VF2, dimensions

Nominal size	ØD mm	ØD ₃ mm	ØD ₁ mm	ØD ₂ mm	n	T mm
125	125	225	165	185	8	8
160	160	250	200	230	8	8
200	200	280	240	270	8	8
250	250	355	290	320	12	8
315	315	415	350	395	12	10
400	400	500	445	475	16	10

CAK/.../VF2, lengths

Nominal length	L mm	L ₁ mm
	mm	mm
500	595	495
1000	1095	995
1500	1595	1495

CAK/.../VF2, weights

Nominal size	500	1000	1500
	m		
	kg	kg	kg
125	2.5	4.4	6.2
160	3.0	5.1	7.2
200	3.6	6.2	8.9
250	4.9	8.2	11.5
315	5.3	9.3	13.7
400	6.8	10.9	15.0

Installation and commissioning

- Any installation orientation
- Installation in ducts outside of closed rooms requires sufficient protection against the effects of weather