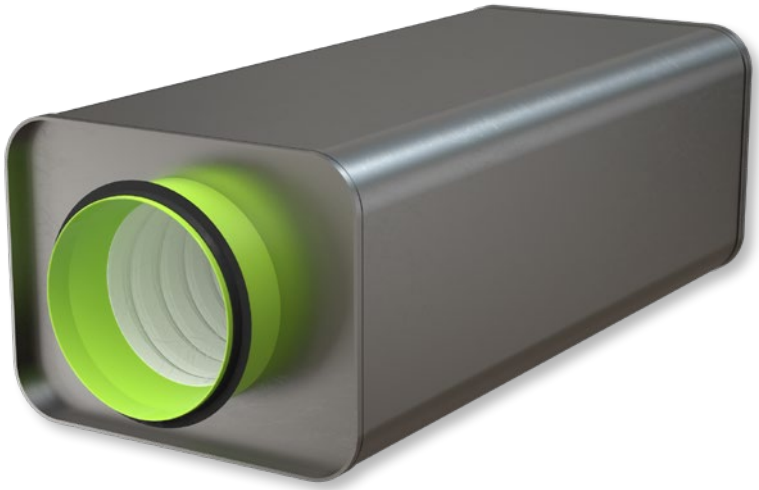
CLA-A

Compact sound attenuator for circular ducts



QUICK FACTS

- Extremely low installation height.
- Very good sound attenuation
- Air tightness class D
- M1 class
- Low pressure drop
- Type-approved
- Available in material with low CO2 footprint
- Fire-resistance class EI20
  Fire-resistance class EI30 to EI120*

** See the table for the requisite safety distance*

REDUCE REUSE RE:3 REVITALISE

RTS • CLEANLINESS CLASS FOR AIR-HANDLING COMPONENT M1

EPD

Swegon

Technical description

General

A rectangular sound attenuator with circular connection spigots.

Unique properties regarding installation height, fire-resistance class, fibre-migration proof design and sound attenuation.

CLA-A is type approved (TG SC0478-18) in terms of fire-resistance class E120. EI30, EI60 and EI120 are met provided that the safety distance is realised. Specified safety distance in table 1 refers to evacuating persons or 2.5 kW/m^2.

Patented in terms of the self-supporting fibre-migration proof surface.

CLA is included in Swegon's RE:3 concept based on the three principles of circularity, made up of RE:duce, RE:use and RE:vitalise.

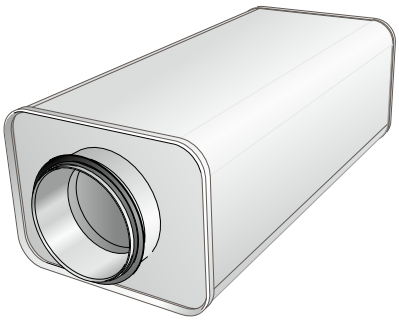


Figure 1. CLA-A

Materials and surface treatment

- Made of galvanised sheet steel to environmental class C3 (equivalent to M2 as per VVS-AMA 98).
- Available with RRP galvanised sheet steel corresponding to environmental class C3 (equivalent to M2 as per AMA VVS2016). This produces a significantly reduced CO2 footprint.
- Sound attenuating materials: 50 mm thick mineral wool, covered with special polyester fabric.
- Fibre migration-secured thanks to our solution with self-supporting surface layer, approved with regard to cleaning, fibre migration, ageing resistance, emissions, etc.
- The connection spigots are fitted with rubber seals

Environmentally friendly alternative RE:3

CLA is available with an environmentally friendly alternative called RRP, which stands for "recycled and renewably produced". The proportion of recycled steel in the steel amounts to at least 75 per cent. In addition, the manufacturing process uses electric arc furnaces that run on 100 per cent renewable energy. Choosing this more environmentally friendly option reduces the CO2 footprint by approximately 34% compared to the CLA-A standard option.

Installation and maintenance

See separate installation instructions.

Environment

Building Materials Declaration, EPD and other environment-related documentation are available on our website.

Sizing

Sound attenuation

Sound attenuation is specified to ISO 7235, i.e. static integral attenuation for duct products.

Table 1.

Size	Length	Ød	H	Static integral attenuation, dB to ISO 7235								Weight	Safety distance (mm) *		
	(mm)	(mm)	(mm)	63	125	250	500	1 K	2 K	4 K	8 K	(kg)	EI30	EI60	EI120
100	500	99	152	7	9	14	26	34	42	35	26	3.0	50	50	60
	1000	99	152	7	17	26	44	50	50	50	39	5.7	50	50	80
125	500	124	177	5	9	13	21	29	35	31	20	3.7	50	50	60
	1000	124	177	7	16	23	39	50	50	47	35	6.9	50	50	80
160	500	159	212	5	8	13	17	23	31	21	17	4.7	50	50	60
	1000	159	212	7	13	22	32	45	50	38	25	8.7	50	50	90
200	500	199	252	5	8	11	15	20	22	14	14	6.0	50	50	60
	1000	199	252	7	13	20	28	40	45	27	20	11.2	50	50	100
250	500	249	302	5	6	8	11	15	16	10	7	7.8	50	50	70
	1000	249	302	6	11	15	20	28	31	18	14	14.6	50	50	110
315	500	314	367	4	6	7	9	12	8	8	5	10.1	50	50	70
	1000	314	367	6	10	12	17	24	21	12	7	18.9	50	50	120
400	500	399	458	4	6	7	9	12	8	6	4	13.7	50	50	70
	1000	399	458	5	9	12	16	23	14	8	6	25.4	50	50	120

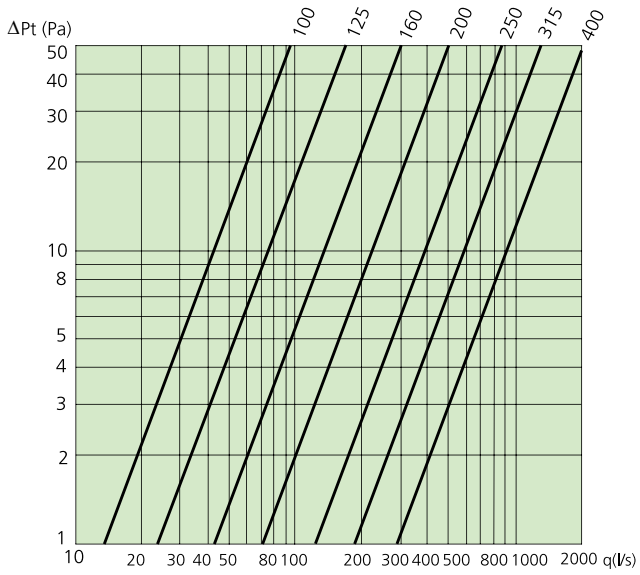
** = Specified safety distance for evacuating persons is based on a critical radiation level of 2.5 kW/m²*
Safety distance to combustible material based on a critical radiation level of 10 kW/m² is 50 mm for all fire-resistance classes

Pressure drop

The pressure drop that CLA duct-to-duct installation generates is specified in Diagram 1.

The specified data is based on a uniform air stream in and out of the product. Any dampers, duct bends or other products in the ducting near the sound attenuator will increase its pressure drop and level of flow-generated sound, and will affect its sound attenuating properties.

Diagram 1. Pressure drop – Air flow, CLA-A



Software

You can find the sizing software easily on www.swegon.se

Swegon plugin for MagiCAD for AutoCAD and Revit means that you can choose a duct section from the drawings and automatically search for suitable sound attenuator options for the duct based on the duct form, dimensions, air flow and MagiCAD sound data.

Dimensions

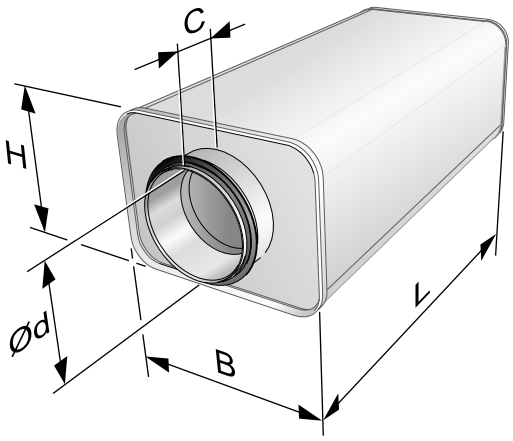


Figure 2. CLA-A – dimensional drawing

Dimensions CLA-A

Size	B	C	Ød	H	L	
	mm	mm	mm	mm	mm	mm
100	208	45	99	152	500	1000
125	236	45	124	177	500	1000
160	274	45	159	212	500	1000
200	321	45	199	252	500	1000
250	394	45	249	302	500	1000
315	462	45	314	367	500	1000
400	553	70	399	458	500	1000

Specification

Product

Rectangular sound attenuator with circular connection spigots

CLA-A	aaa-	bbbb
Connection dimensions: 100, 125, 160, 200, 250, 315, 400		
Length: 500, 1000		

Rectangular sound attenuator with circular connection spigots in RRP galvanised sheet steel with low CO2 footprint.

CLA-A	aaa-	bbbb	RE:3
Connection dimensions: 125			
Length: 500, 1000			

Accessories

No accessories are available for this product.

Specification text

Example of a specification text as per VVS AMA 12.

QKB.1 Straight sound attenuator with circular connection spigots

Example 1

Swegon type CLA-A compact sound attenuators for connection to circular ducts, with the following functions:

- Type-approved
- Fire-resistance class E120
- Fire-resistance class EI30/EI60/EI120 with safety distances
- Air tightness class D
- M1 class

Designation:	CLA-A 160-1000	xx items

Example 2

Swegon type CLA-A compact sound attenuators for connection to circular ducts, with the following functions:

- Type-approved
- Manufactured with RRP galvanised sheet steel corresponding to environmental class C3 (equivalent to M2 as per AMA VVS2016) with a low CO2 footprint.
- Fire-resistance class E120
- Fire-resistance class EI30/EI60/EI120 with safety distances
- Air tightness class D
- M1 class

Designation:	CLA-A-125-1000-RE:3	xx pcs