

SORDO-A

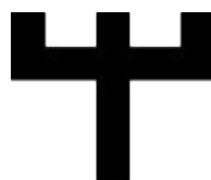
Sound attenuator for circular ducts



QUICK FACTS

- Mineral wool covered with special polyester fabric
- Air tightness class D
- Type-approved
- Built for low CO2 footprint
- M1 class
- Very good sound attenuation
- Fire-resistance class EI30 to EI120*

**See the table for requisite safety distance*



Technical description

General features

SORDO-A is a circular sound attenuator with circular connection spigots.

The product is type approved (SC0480-18) in terms of fire-resistance class E120. EI30, EI60 and EI120 are met provided that the safety distance is realised. Specified safety distance in the table refers to evacuating persons or 2.5 kW/m². Unique properties regarding fire-resistance class, fibre-migration proof design and sound attenuation.

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

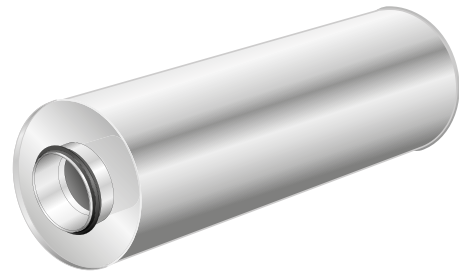


Figure 1. SORDO-A

Materials and surface treatment

- Made from recycled galvanised steel sheet for environmental class C3 (equivalent to M2 for AMA VVS2016)
- 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

SORDO-A is part of Swegon's RE:3 concept based on the key principles of circularity, and which consists of RE:duce, RE:use and RE:vitalise. SORDO-A is made with sustainable sheet metal called RRP, where RRP stands for "recycled and renewably produced". The steel has a recycled steel content of at least 75 per cent. In addition, the manufacturing process uses electric arc furnaces that run on 100 per cent renewable energy.

Installation and maintenance

See separate installation instructions.

Environment

Building Materials Declaration 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, sound data

Size	Length (mm)	Ø d (mm)	Ø D (mm)	Static integral attenuation, dB to ISO 7235								Weight (kg)	Safety distance in mm *		
				63	125	250	500	1 K	2 K	4 K	8 K		EI30	EI60	EI120
100	500	99	205	5	7	12	24	37	45	35	24	3.4	50	90	150
	800	99	205	6	10	19	32	45	50	45	27	5.1	50	130	140
	1100	99	205	7	12	26	40	50	50	50	38	6.8	50	140	140
125	500	124	226	3	6	10	21	30	37	32	17	3.8	50	90	150
	800	124	226	4	9	16	30	40	50	38	25	5.7	50	130	150
	1100	124	226	5	12	21	39	50	50	44	33	7.8	50	150	150
160	500	159	255	3	5	10	17	25	32	17	14	4.5	50	90	160
	800	159	255	4	8	15	25	35	42	28	20	6.7	50	140	150
	1100	159	255	5	11	20	33	46	50	39	25	9	50	160	160
200	500	199	288	3	3	8	13	18	22	13	12	5.2	50	100	160
	800	199	288	3	5	11	20	30	35	20	17	7.9	50	140	160
	1100	199	288	4	7	15	27	42	48	27	19	10.5	50	170	170
250	500	249	345	2	2	5	10	16	15	8	6	6.6	50	100	170
	800	249	345	2	4	8	15	23	24	12	9	9.8	50	150	170
	1100	249	345	3	6	11	20	31	34	17	11	13.1	50	180	180
315	500	314	403	1	3	4	7	10	7	6	2	7.9	50	100	170
	800	314	403	1	4	7	12	17	14	8	4	11.8	50	160	180
	1100	314	403	2	5	9	17	25	21	10	6	15.8	50	190	190
400	500	399	479	1	3	3	7	10	7	5	3	10.1	50	110	180
	800	399	479	1	3	5	11	15	10	6	3	14.8	50	160	190
	1100	399	479	2	4	7	15	20	13	7	3	19.6	50	200	200

* = 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 SORDO-A duct-to-duct installation generates is specified in Diagram 1.

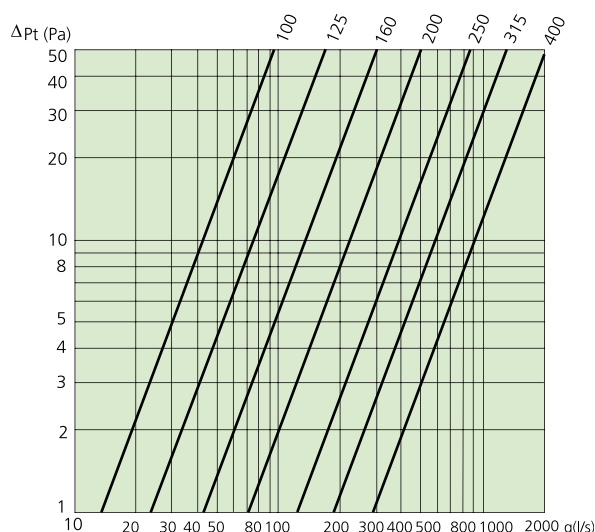
The specified data is based on a uniform air stream in and out of the product. Any dampers, duct bends or other products in the ducting near the sound attenuator will increase its pressure drop and level of flow-generated sound, which may affect its sound attenuating properties.

Software

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

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.

Diagram 1. Air flow – pressure drop



Dimensions

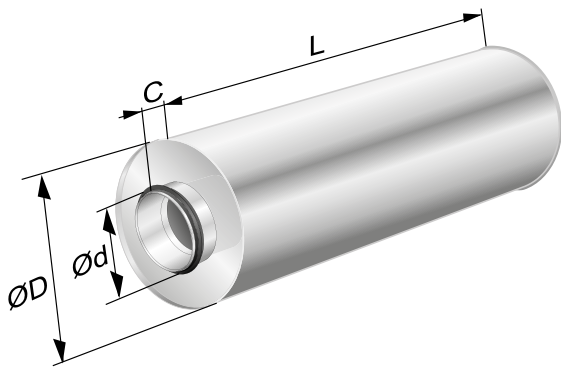


Figure 2. SORDO-A – dimensional drawing

Table for the SORDO-A dimension sketch

Size mm	Ø d mm	Ø D mm	C mm	Length mm		
100	99	205	45	500	800	1100
125	124	226	45	500	800	1100
160	159	255	45	500	800	1100
200	199	288	45	500	800	1100
250	249	345	45	500	800	1100
315	314	403	45	500	800	1100
400	399	479	60	500	800	1100

Specification

Product

Circular sound attenuators

SORDO

A- bbbb- cccc

Type:

Connection dimensions:
100, 125, 160, 200, 250, 315, 400

Length:
500, 800, 1100

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 SORDO-A round 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 EI30/EI60/EI120 with safety distances
 - Air tightness class D
 - 50 mm insulation
 - M1 class

Designation:	SORDO-A 200-800	xx items
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