SORDO-PF

Sound attenuator with centre body for circular ducts



QUICK FACTS

- Flange connection
- \circ Excellent noise attenuation
- $\,\circ\,$ The round centre body means that the product is very well suited to axial fans
- Mineral wool covered with special polyester fabric and perforated sheet steel
- \odot Air tightness class C
- $\,\circ\,$ Available in the sizes 500-2000 mm



Technical description

General features

SORDO PF is a circular sound attenuator with an aerodynamically designed centre body (pod) for circular connection spigots with 100 mm insulation, covered with EUROLON and perforated sheet steel.

Version

The product is fitted with a flange connection.

SORDO-P is fitted with an acoustic centre body for extremely good sound attenuation.

The product satisfies air tightness class C.

SORDO-PF conforms to fire-resistance class E60.

Material and surface layer

- Made of galvanised sheet steel to environmental class C3 (equivalent to M2 as per VVS-AMA 98)
- Sound attenuating materials: 100 mm thick mineral wool. The insulation is covered with EUROLON. The sound attenuating material is also covered with perforated sheet steel outside the EUROLON layer.

Installation and maintenance

See separate installation instructions

Environment

The relevant building product declaration is available from our website.

Accessories

2

The SORDO T1 counterflange is a robust flange made of flat steel that has then been galvanised. The dimensions are adapted to the German standard DIN 24 154 Parts 2 and 5. The counterflange can be fitted on both spiralfold and longitudinal-fold ducts. Oval bult holes facilitate installation.



Figure 1. SORDO-PF



Sizing Sound attenuation

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

Table 1.												
Size	Length	Ød	ØD	Static integral attenuation, dB to ISO 7235						Weight		
	(mm)	(mm)	(mm)	63	125	250	500	1 K	2 K	4 K	8 K	
500	900	499	700	2	5	12	22	33	27	17	15	50.5
	1200	499	700	3	6	15	28	41	30	19	17	60.5
630	900	629	830	2	4	11	19	25	19	12	8	58
	1200	629	830	3	5	14	25	33	22	14	10	77
800	900	799	1000	1	3	9	17	21	15	9	6	69
	1600	799	1000	2	4	12	22	29	18	11	8	84
1000	1000	999	1200	1	3	9	17	20	15	9	6	96
	2000	999	1200	3	7	17	27	36	29	17	13	173
1250	1200	1249	1450	1	3	9	17	20	12	7	4	150
	2400	1249	1450	3	8	18	27	33	25	14	11	260
1600	1600	1599	1800	2	4	10	17	20	22	6	3	230
	3200	1599	1800	3	8	17	26	32	22	11	9	425
2000	2000	1999	2200	2	4	9	16	19	22	5	3	320
	4000	1999	2200	3	8	15	23	30	20	9	7	600

Pressure drop

The pressure drop that SORDO-PF 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.

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. Pressure drop – Air flow (Pa/m)



Dimensions



Figure 2. Dimension sketch

Size	Ød	ØD	Length		
mm	mm	mm	mm		
500	499	700	900	1200	
630	629	830	900	1200	
800	799	1000	900	1600	
1000	999	1200	1000	2000	
1250	1249	1450	1200	2400	
1600	1599	1800	1600	3200	
2000	1999	2200	2000	4000	

Dimensions for flange connection

Size mm	Centre dimension A (mm)	Number of tapped holes	Hole dimension
500	541	12	M8
630	674	16	M10
800	837	24	M10
1000	1043	24	M10
1250	1311	24	M10
1600	1637	32	M10
2000	2073	40	M8

Specification Product

Circular sound attenuator with centre body (pod) and flange connection

SORDO-PF	bbbb-	сссс
Connection dimensions:		
500, 630, 800, 1000, 1250, 1600, 2000		
Length:		
(dim. 500+630) 900, 1200		
(dim. 800) 900, 1600		
(dim. 1000) 1000, 2000		
(dim. 1250) 1200, 2400		
(dim. 1600) 1600, 3200		
(dim. 2000) 2000, 4000		

Accessories

Counterflange (supplied in pairs) SORDO T1

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-PF round sound attenuators for connection to circular ducts, with the following functions:

- Fitted with aerodynamic centre body (pod)
- With flange connection
- 100 mm thick mineral wool covered with EUROLON and perforated sheet steel
- Air tightness class C
- Conforms to fire-resistance class E60

Designation: SORDO-PF 630-1200 xx pcs

4

