

- Circular
- Galvanized steel
- Spigot



Circular sound attenuators type SAR-G

Circular sound attenuator in galvanized steel with insulation shell thickness of 50 or 100 mm wrapped in a glass film for air speeds up to 20 m / s
Attenuation values according to DIN EN ISO 7235 (63, 125, 250, 500, 1k, 2k, 4k, 8k [Hz])

Application

- For noise reduction in circular air duct systems.
- Reducing noise produced by mechanical components.
- Can be used as a silencer / sound attenuator to prevent sound transfer via ducting between rooms.

Composition

- Circular silencers are designed with an external galvanised duct system
- Insulation with thickness 50 mm (SAR-G50) or 100 mm (SAR-G100)
- Inner casing is made of perforated sheet steel
- Complete with optional 'safe' seal but also suitable for direct connection to spiral duct / fittings
- The void between the two is filled with sound-absorbing non-combustible mineral wool according to DIN4102 A2, specific mass > 20 kg / m³, building material class A2
- Mineral wool certified according to RAL GZ 388
- Connection to circular air ducts according to DIN EN 1506 or DIN EN 13180
- Class D airtight connection with EPDM rubber according to DIN EN 12237
- Airtight connection class D with EPDM rubber according to DIN EN 12237

Mounting

- The attenuators should be mounted using duct suspension clamps, type **OBDC**, around the duct connection DN

Order example

SAR-G 50 100 L=600mm

Explanation:

SAR-G = Type of sound attenuator

50 = Thickness of insulation in mm

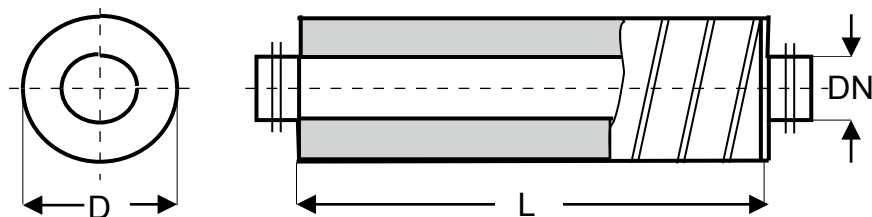
100 = Connection diameter in mm

600 = Length in mm

Explanatory Notes

- DN = Nominal connection diameter of silencer in mm
- D = Outside diameter in mm
- L = Length in mm
- $\Delta P_{tot} = \Delta P_L \times [(\rho \times v^2) / 2] \times L$
 - ΔP_{tot} = Total pressure loss in Pascal
 - ΔP_L = Average total pressure loss coefficient ζ/m
 - P = Specific weight = 1.2041 kg/m³
 - v = Air velocity in m/s
 - L = Length in meters

Sound attenuation values												
50 mm Insulation												
			[dB]									Δ P _L [ζ / m]
DN	D [mm]	L [mm]	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	[kg]	
100	200	600	4	9	11	19	33	45	40	19	3.3	0.286
100	200	900	4	10	15	28	40	50	44	27	4.6	
125	224	600	4	6	10	19	28	33	25	18	3.8	0.22
125	224	900	4	9	14	27	42	50	35	24	5.3	
150	250	600	3	6	9	17	30	29	24	13	4.5	0.176
150	250	900	4	7	12	25	38	44	32	17	6.2	
160	250	600	2	5	8	16	26	26	23	10	4.5	0.163
160	250	900	3	5	11	23	35	39	30	12	6.2	
200	300	600	0	3	7	16	22	20	13	10	5.5	0.123
200	300	900	2	5	10	19	30	31	16	11	7.6	
250	355	600	1	2	6	13	19	15	8	6	7.7	0.095
250	355	900	2	3	9	17	26	21	13	8	10.6	
300	400	600	0	2	5	11	15	11	6	5	8.7	0.074
300	400	900	2	3	8	16	23	18	10	7	12	
315	400	600	0	1	4	10	12	7	4	4	9.2	0.069
315	400	900	1	2	6	15	21	15	8	7	12.6	
100 mm Insulation												
			[dB]									Δ P _L [ζ / m]
DN	D [mm]	L [mm]	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	[kg]	
355	555	600	1	3	9	11	12	7	5	4	15	0.061
355	555	900	2	5	11	16	19	14	8	7	20.4	
400	600	600	1	4	10	12	14	7	6	5	16.2	0.052
400	600	900	2	5	12	19	20	14	8	8	22	
500	700	600	1	4	6	12	13	6	4	4	22.8	0.039
500	700	900	3	6	12	20	18	8	6	5	31.1	



Pressure loss

