

- Circular
- Galvanized steel
- with baffle



Circular sound attenuators with baffle type SAR-GB

Circular sound attenuator with baffle, duct in galvanized steel with insulation thickness of 100 mm sheathed in a dust cover 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 round air ducts
- Reducing noise produced by fans
- Reducing flow noises from flow regulators or other channel components
- Can be used as a damper to prevent sound transfer trough the ducting between rooms

Advantage

The silencer with baffle type **SAR-GB** has a higher attenuation than the classic round silencer.

Composition

- Circular silencers are designed with an external galvanised duct system
- Insulation with thickness 100 mm (SAR-GB100)
- Inner casing is made of perforated sheet steel
- 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 **OBMC**, around the duct connection DN

Order example

SAR-GB100 315 L=600mm

Explanation:

SAR-GB = Type of sound attenuator with internal baffle

100 = Thickness of insulation in mm

315 = Connection diameter in mm

600 = Length in mm

| Sound attenuation values | | | | | | | | | | | |
|--------------------------|--------|--------|-------|--------|--------|--------|---------|---------|---------|---------|------|
| l = 100 mm | | | | | | | | | | | |
| SAR-GB 100 | | | [dB] | | | | | | | | |
| DN | D [mm] | L [mm] | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | [kg] |
| 315 | 500 | 600 | 3 | 6 | 13 | 20 | 25 | 22 | 17 | 15 | 16 |
| 315 | 500 | 900 | 5 | 9 | 17 | 26 | 42 | 37 | 25 | 20 | 23 |
| 315 | 500 | 1200 | 5 | 10 | 22 | 34 | 52 | 51 | 32 | 24 | 30 |
| 355 | 560 | 600 | 3 | 5 | 10 | 16 | 27 | 24 | 16 | 12 | 17 |
| 355 | 560 | 900 | 5 | 8 | 16 | 25 | 41 | 36 | 24 | 19 | 26 |
| 355 | 560 | 1200 | 5 | 9 | 21 | 33 | 51 | 50 | 31 | 23 | 34 |
| 400 | 600 | 600 | 3 | 4 | 9 | 16 | 20 | 14 | 10 | 10 | 20 |
| 400 | 600 | 900 | 5 | 6 | 14 | 24 | 31 | 22 | 15 | 15 | 31 |
| 400 | 600 | 1200 | 5 | 8 | 16 | 30 | 42 | 32 | 21 | 18 | 42 |
| 450 | 630 | 900 | 4 | 5 | 13 | 23 | 30 | 21 | 14 | 14 | 35 |
| 450 | 630 | 1200 | 4 | 7 | 15 | 29 | 41 | 31 | 20 | 17 | 47 |
| 500 | 710 | 900 | 4 | 5 | 12 | 20 | 23 | 15 | 11 | 12 | 40 |
| 500 | 710 | 1200 | 4 | 6 | 14 | 27 | 34 | 21 | 14 | 15 | 53 |
| 560 | 800 | 1200 | 3 | 5 | 13 | 26 | 33 | 20 | 13 | 14 | 59 |
| 630 | 800 | 1200 | 3 | 4 | 11 | 23 | 24 | 14 | 11 | 12 | 63 |
| 710 | 900 | 1200 | 2 | 4 | 11 | 21 | 17 | 11 | 10 | 10 | 71 |
| 800 | 1000 | 1200 | 2 | 3 | 10 | 20 | 16 | 10 | 9 | 9 | 82 |

- l = Insulation jacket thickness in mm
- DN = Nominal connection diameter of silencer in mm
- D = Outside diameter in mm
- L = Length in mm

| Pressure loss | | | | | | | | | | | | | | |
|--------------------|-----------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| ΔPt (Pa/m) | | | | | | | | | | | | | | |
| DN | Q (m ³ /h) | | | | | | | | | | | | | |
| | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 | 8000 | 9000 | 10000 | 11000 | 12000 | 13000 | 14000 |
| 315 | 13 | 50 | 100 | | | | | | | | | | | |
| 355 | 8 | 23 | 48 | 70 | 101 | | | | | | | | | |
| 400 | 3 | 9 | 22 | 48 | 58 | 80 | 100 | | | | | | | |
| 450 | | 6 | 12 | 20 | 30 | 43 | 58 | 72 | 87 | 101 | | | | |
| 500 | | 3 | 7 | 11 | 18 | 25 | 33 | 43 | 52 | 65 | 78 | 95 | | |
| 560 | | | 4 | 7 | 11 | 15 | 21 | 26 | 33 | 40 | 49 | 60 | 66 | 77 |
| 630 | | | | 6 | 8 | 11 | 14 | 18 | 22 | 27 | 32 | 37 | 41 | 50 |
| 710 | | | | | | 4 | 6 | 8 | 10 | 12 | 14 | 17 | 20 | 24 |
| 800 | | | | | | | | | 5 | 6 | 7 | 8 | 9 | 12 |

- ΔPt = Total pressure loss in Pa / m
- DN = Nominal connection diameter of the silencer in mm
- Q = Air flow in m³ / h

