

SDW_d

Installation – Commissioning – Maintenance

20161212

Installation and commissioning

Air diffusers are designed for installation on circular ducts of the size Ø80-125 mm.

The air flow is adjusted by using 7 different throttled modes that are determined by how many magnetic strips are placed in the front. The number of magnetic strips gives different k-factors. The flow is determined through measuring the pressure in the nipple.

Maintenance

The air diffusers can be cleaned, if necessary, using luke-warm water with dishwashing detergent added or using a vacuum cleaner.

Distribution pattern

- Generally, an air distribution pattern should be sought that cover as much of the room as possible.
- Suitable air distribution patterns depend on the placement of the supply air diffuser in relation to the room's design.

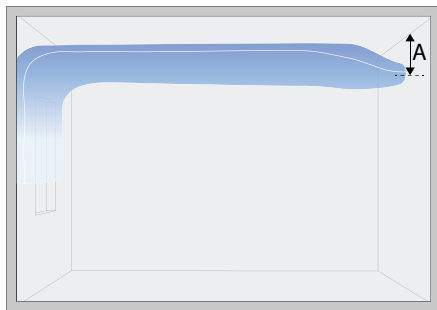


Figure 1. Distribution pattern A = Recommended measurement from the ceiling 100-300 mm measured from the centre of the diffuser.

Sound increase for different installations

X	Open rows of holes					
	Without magnetic strips		3 magnetic strips		6 magnetic strips	
5D	+0 dB	+2 dB	+0 dB	+2 dB	+0 dB	+0 dB
2D	+2 dB	+4 dB	+2 dB	+4 dB	+0 dB	+0 dB
0D	+4 dB	+6 dB	+3 dB	+5 dB	+0 dB	+0 dB

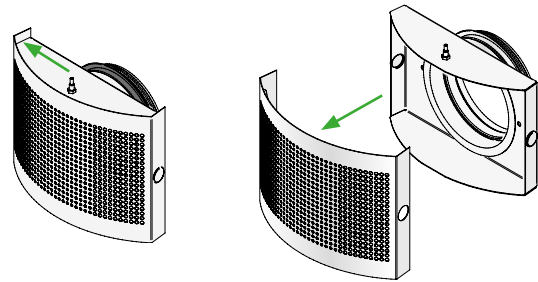
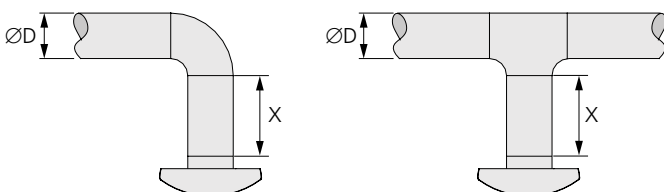


Figure 2. Removing the front, press the front outwards to the side and pull straight out.

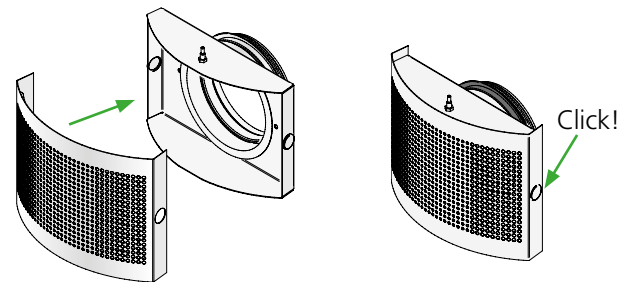


Figure 3. Assembling the front, press the front straight towards the wall plate until it snaps into position.

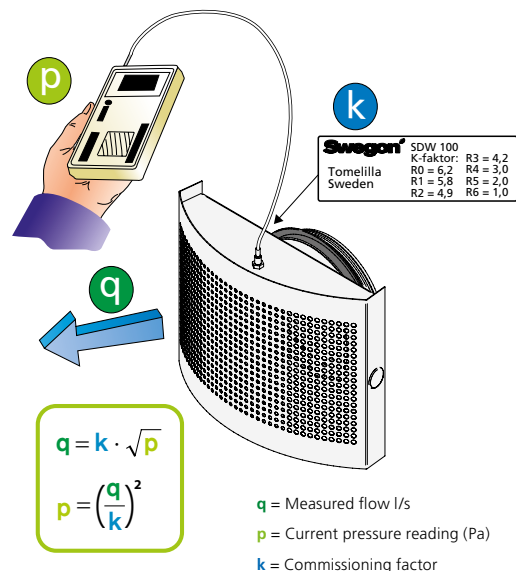


Figure 4. Commissioning.

K-Factor

Measurement pressure 5 Pa required to obtain at least ±10 % accuracy on the air flow.

Size	Number of magnetic strips (R)	K-Factor
80	R0	8.7
80	R1	6.6
80	R2	6.6
80	R3	4.1
80	R4	3.4
80	R5	2.1
80	R6	1.0
100	R0	6.2
100	R1	5.8
100	R2	4.9
100	R3	4.2
100	R4	3.0
100	R5	2.0
100	R6	1.0
125	R0	7.0
125	R1	6.1
125	R2	5.2
125	R3	4.2
125	R4	3.0
125	R5	2.0
125	R6	1.0

Application of strips

- R0 = Without magnetic strips
- R1 = Covers the 3 uppermost rows of holes
- R2 = Covers the 3 uppermost and 3 lowermost rows of holes
- R3 = Covers the 6 uppermost and 3 lowermost rows of holes
- R4 = Covers the 6 uppermost and 6 lowermost rows of holes
- R5 = 5 rows in the middle are open
- R6 = 2 rows in the middle are open

Dimensions and weights

SDW

Size (Nominal dim.)	Dimensions (mm)		Weight (g)
	ØD		
80	79		676
100	99		661
125	124		632

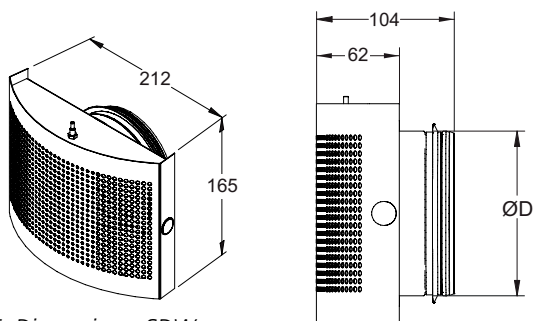


Figure 5. Dimensions, SDW

Flow regulation

The air diffuser's flow can be regulated using magnetic strips that are attached on the inside. See figure 6 to 12 below. A maximum of 6 magnetic strips can be used.

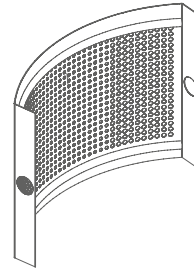


Figure 6. No magnetic strips (R0).

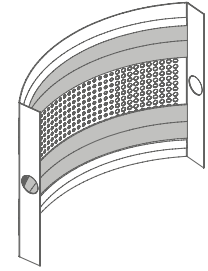


Figure 10. 4 Magnetic strips. Covers the 6 uppermost and 6 lowermost rows of holes (R4).

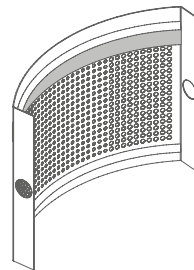


Figure 7. 1 Magnetic strip. Covers the 3 uppermost rows of holes (R1).

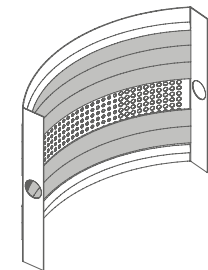


Figure 11. 5 Magnetic strips. 5 Rows in the middle are open (R5).

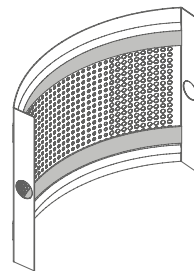


Figure 8. 2 Magnetic strips. Covers the 3 uppermost and 3 lowermost rows of holes (R2).

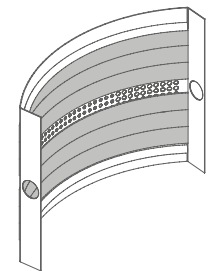


Figure 12. 6 Magnetic strips. 2 rows in the middle are open (R6).

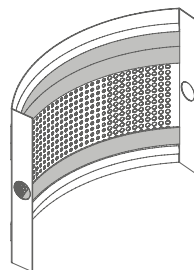


Figure 9. 3 Magnetic strips. Covers the 6 uppermost and 3 lowermost rows of holes (R3).