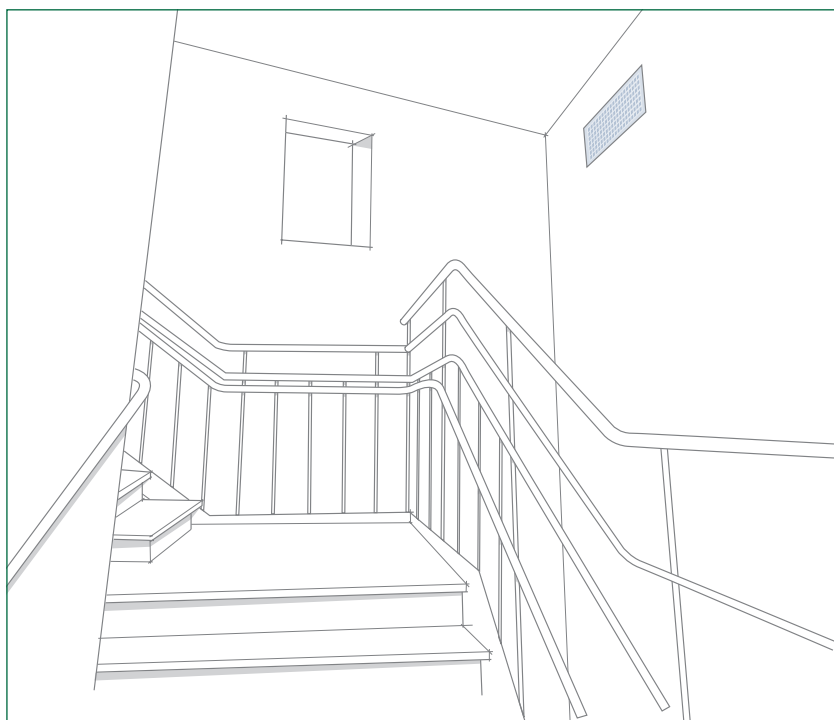


AVS, AVSL, SI Grilles



AVS, SI



AVSL

AVS, AVSL and SI grilles are designed for use as supply air devices for e.g. in offices and commercial premises. They are also suitable for exhaust and transfer air and have adjustable spread patterns and throws. The grilles which are intended for mounting on a wall, on the floor, on a window sill or in the ceiling, can be completed with mounting frame K or connection box TG/TGE, which has a new and silent measurement damper. As accessory there is also adjusting device S which makes it possible to adjust the air flow.

Product facts

Grilles

Low sound level.
Can be mounted without mounting frame .
Easy to adjust.

Product code example

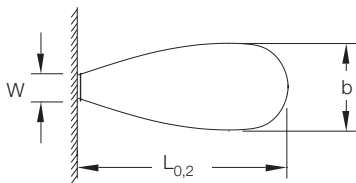
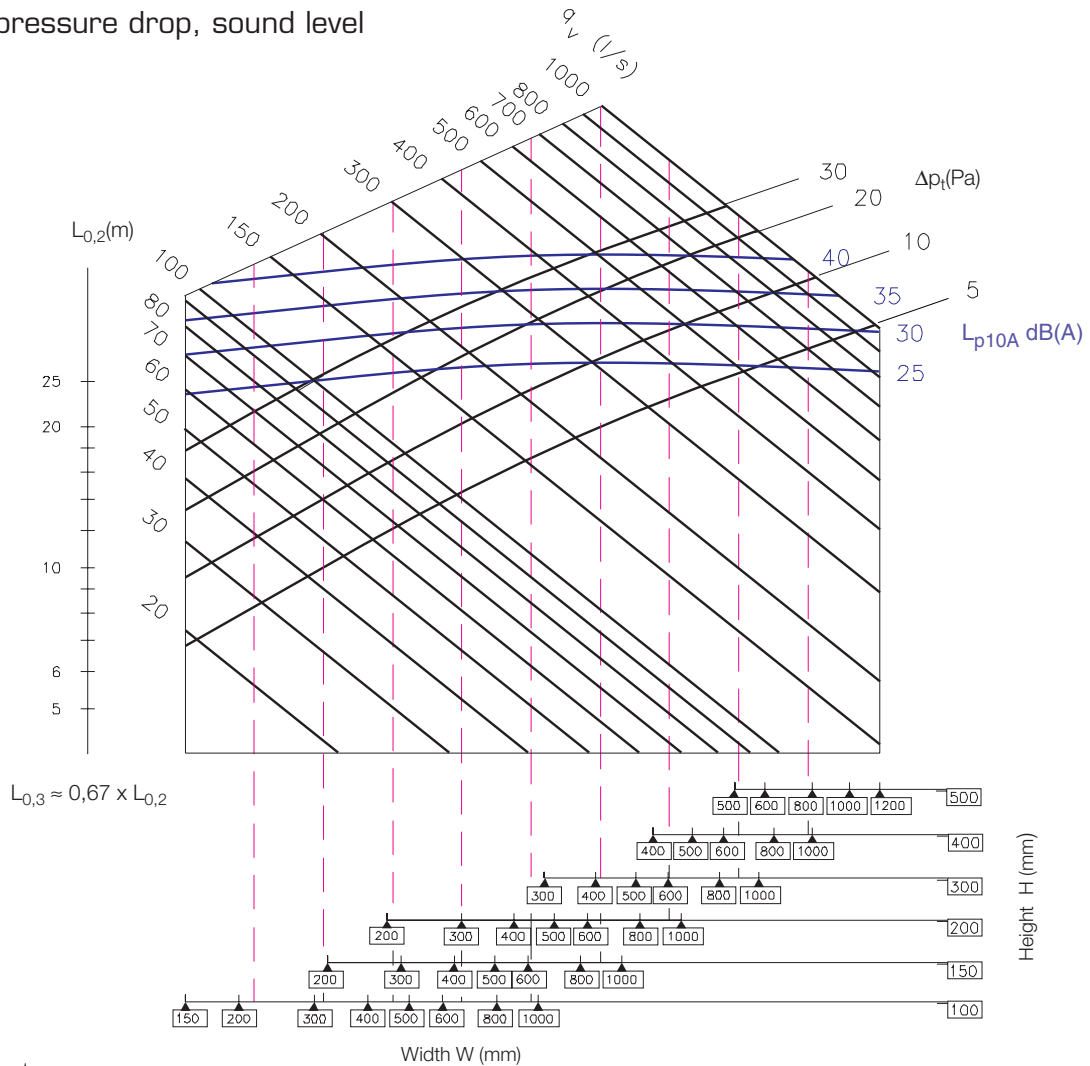
Grille AVS-800-400
Connection box supply air
TG-1000-100-A
Connection box exhaust air
TGE-1000-100-B
Mounting frame K-1000-100
Adjusting device S-1000-100

Quick selection supply air without connection box

Grille model	Air flow range l/s (m ³ /h) at sound level		
	25 dB(A)	30 dB(A)	35 dB(A)
AVS-aaaa-100	60 - 240	70 - 295 (252 - 1062)	82 - 330
AVS-aaaa-150	110 - 330	135 - 400 (486 - 1440)	150 - 460
AVS-aaaa-200	135 - 410	160 - 500 (576 - 1800)	190 - 580
AVS-aaaa-300	260 - 520	300 - 640 (1080 - 2304)	360 - 760
AVS-aaaa-400	380 - 650	450 - 790 (1620 - 2844)	520 - 900
AVS-aaaa-500	500 - 810	600 - 990 (2160 - 3564)	700 - 1150
SI-aaaa-100	45 - 210	50 - 250 (180 - 900)	60 - 290
SI-aaaa-150	85 - 300	100 - 350 (360 - 1260)	120 - 400
SI-aaaa-200	110 - 380	130 - 440 (468 - 1584)	150 - 510
SI-aaaa-300	210 - 500	250 - 600 (900 - 2160)	300 - 700
SI-aaaa-400	330 - 650	400 - 750 (1440 - 2700)	460 - 890
SI-aaaa-500	480 - 810	550 - 950 (1980 - 3420)	640 - 1150

AVS, AVSL, SI Dimensioning

Air flow, pressure drop, sound level

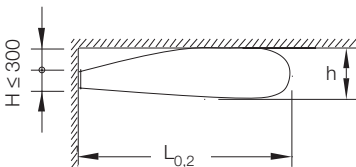


$$h \sim 0,25 \times L_{0,2}$$

$$\Delta t = 0^{\circ}\text{C}$$

Exhaust air

The diagrams are valid for supply air. When used for exhaust air the sound level grows approx. 12 dB and the pressure drop falls with 10%.

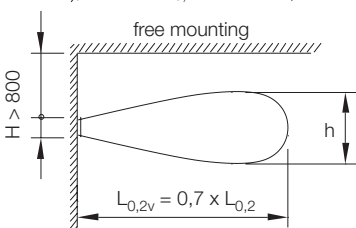


$$h \sim 0,06 \times L_{0,2}$$

$$\Delta t = 0^{\circ}\text{C}$$

Supply air

When using chilled air, recommended height H is ≤ 200 mm and max. chilled air $\Delta t =$ approx. -5°C .



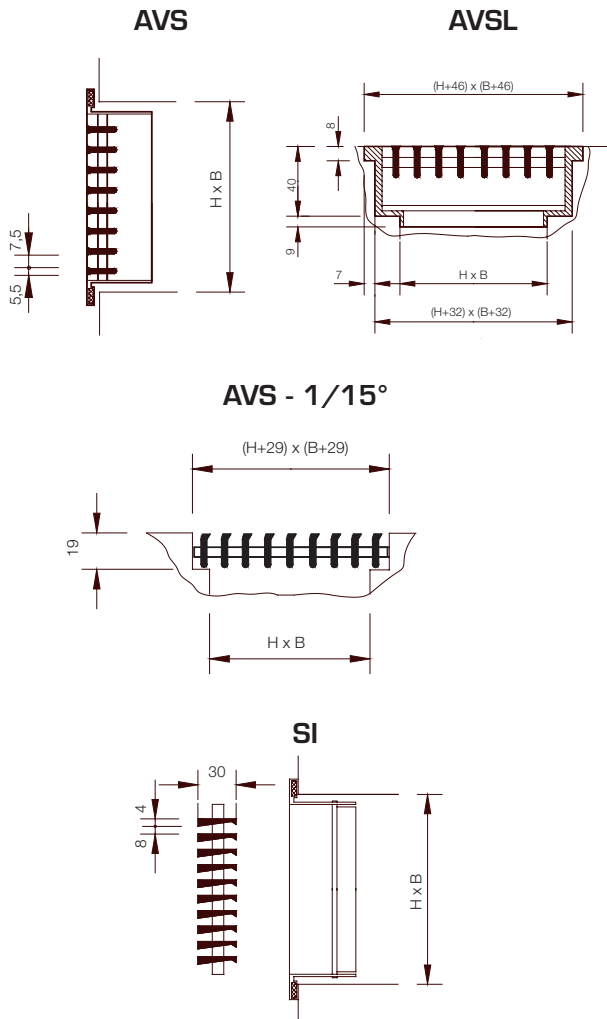
$$h \sim 0,1 \times L_{0,2}$$

$$\Delta t = 0^{\circ}\text{C}$$

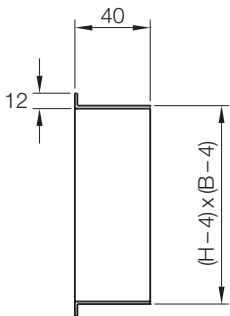
When connection box TG or TGE is used, see acoustical and pressure data for each product.

Dimensions, adjusting device S

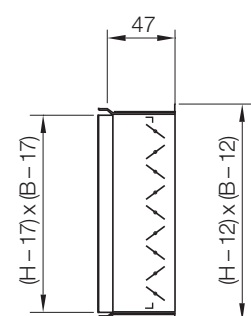
Dimensions



Mounting frame K

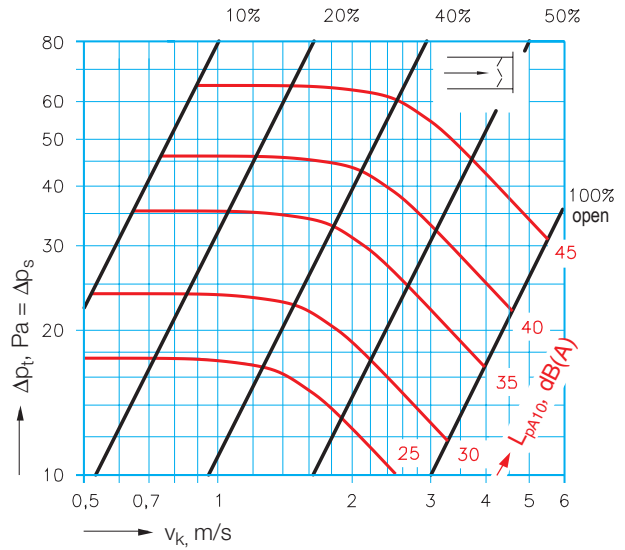


Adjusting device S



For dimensions H and W see below heading "Dimensioning" on previous pages.

Adjusting device S, supply air



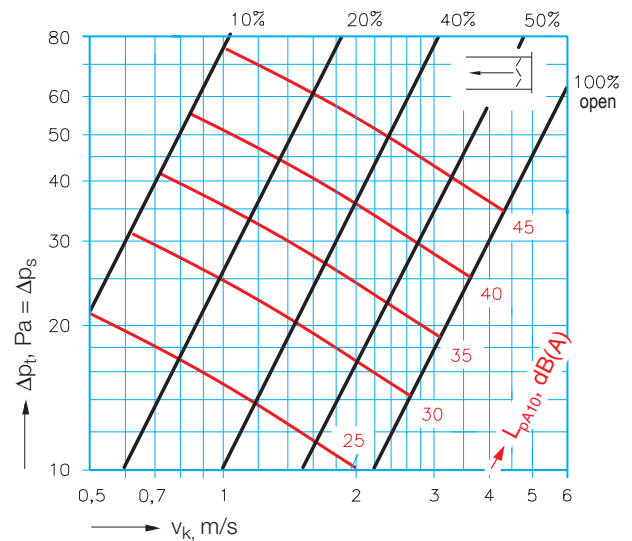
Sound level of adjusting device: $L_{A10s} = L_{A10} + K_A$

Velocity of the face area: $v_k = \frac{q_v}{B \times H}$ $\left[\frac{m^3/s}{m^2} \right]$

Influence of the face area (A_k) to the sound pressure level:

$A_k = B \times H$	0,03	0,06	0,12	0,2	0,4	m^2
K_A	± 0	+3	+8	+11	+15	dB

Adjusting device S, exhaust air



Total sound level of grille and adjusting device:

Difference of sound levels between grille and adjusting device	0 - 1	2 - 3	4 - 9	≥ 10	dB
Addition to the higher sound pressure level	3	2	1	0	dB

Construction, material, installation, product code

Construction

- AVS: horizontal fixed front blades.
 - AVS-1: front blades only without frame
 - AVSL: firm floor grille equipped with mounting frame, blades as in AVS (window sill use)
- AVS ... AVSL/15°: as above, but blades at 15° angle

Grilles, larger than width W > 1200 and/or height H > 500 are available with modular construction. In case of modular construction the dimensions of the installation whole W x H (mm) should be stated.

Material and surface finish

The grilles are manufactured from aluminium profiles. Mounting frame K and adjusting device S are manufactured from hot galvanized sheet steel SS 1151. The regulation blades are manufactured from aluminium.

The devices are powder coated for a high surface finish and good impact and scratch resistance.

Standard colour White RAL 9010, gloss 70, equivalent to NCS S 0502-Y.

Installation

The grill are fitted into mounting frame K or connection box TGE with springs or screwed directly on the wall or ceiling. The springs are ready in all sizes, screw holes in sizes W >600 mm or H >300 mm.

Placement	AVS	AVSL	AVS-1	SI
Wall, supply and exhaust	●		●	●
Ceiling, supply and exhaust	●		●	
Window sill, supply				●
Floor, supply and exhaust		●		

Installation, adjustment and maintenance

Instructions for installation, adjustment and maintenance are described in detail in our technical instructions also available on the Internet at www.flaktwoods.com.

Technical data and dimensioning

For complete dimensioning, please refer to the WinDon product selection program. This is applicable especially when connection box TG/TGE is in use because device and box is not accounted for in the catalogue material.

This program can be found on the Internet at www.flaktwoods.com.

Descriptive text

Grille e.g. AVS in size 500 x 100 mm manufactured by Fläkt Woods.

Product code

- Grille (supply, exhaust , transfer air)**
- SI-aaaa-bbb
 - SI-1-aaaa-bbb
 - AVS-aaaa-bbb
 - AVS/15-aaaa-bbb
 - AVS-1-aaaa-bbb
 - AVS-1/15-aaaa-bbb
 - AVSL-aaaa-bbb
 - AVSL/15-aaaa-bbb

Width, mm _____

Height, mm _____

Connection box supply air

TG-aaaa-bbb-c

Length of grille connection, mm _____

Height of grille connection, mm _____

Connection alternative _____

A = from the side
B = from the rear
C = from above /from below

Connection box exhaust air

TGE-aaaa-bbb-c

Length of grille connection, mm _____

Height of grille connection, mm _____

Connection alternative _____

A = from the side
B = from the rear
C = from above /from below

Mounting frame

K-aaaa-bbb

Size grille _____

Width in mm _____

Height in mm _____

Adjusting device

S-aaaa-bbb

Size, grille _____

Width in mm _____

Height in mm _____