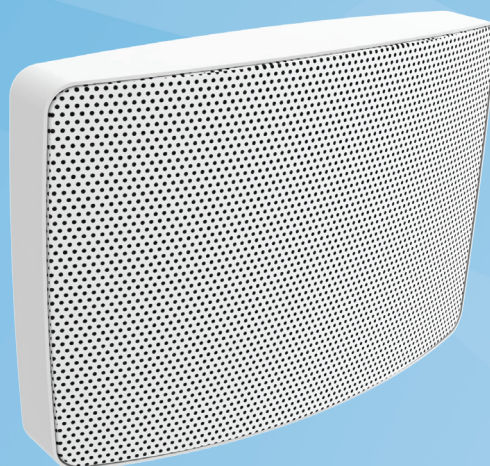


Halton BOS

Supply air valve



- Supply air valve for wall installation with adjustable operations
- Adjustable airflow rate with trimming plate
- Openable front panel enables the cleaning of diffuser and ductwork

MATERIAL AND FINISHING

PART	PART	NOTE
Casing	Steel	
Front panel	Perforated steel	
Trimming plate	HD polyethene	
Collar	Galvanized steel	
Gasket	Rubber compound	
Finishing	Painted White RAL 9010	Special colour available

QUICK SELECTION

Qv	dm ³ /s	10	15	20	25	30	40
	m ³ /h	36	54	72	90	108	144
BOS-100	L _{pA}	<20	<20	<20	25	31	42
	dP _{tot}	8	17	30	47	68	120
	dP _t	45	104	114	94	88	-
	L _{0.2}	2,7	4,0	5,3	6,6	7,9	10,5
BOS-125	L _{pA}	<20	<20	21	25	28	37
	dP _{tot}	5	14	25	39	56	100
	dP _t	44	102	132	138	120	-
	L _{0.2}	2,7	4,0	5,3	6,6	7,9	10,5

L_{pA}-arvoissa on otettu huomioon 4 dB:n huonevaimennus, mikä vastaa 10 m²-sab kokonaisabsorbtiota.

L_{pA} A-painotettu äänenpainetaso
 ΔP_{tot} Kokonaispainehäviö, Pa

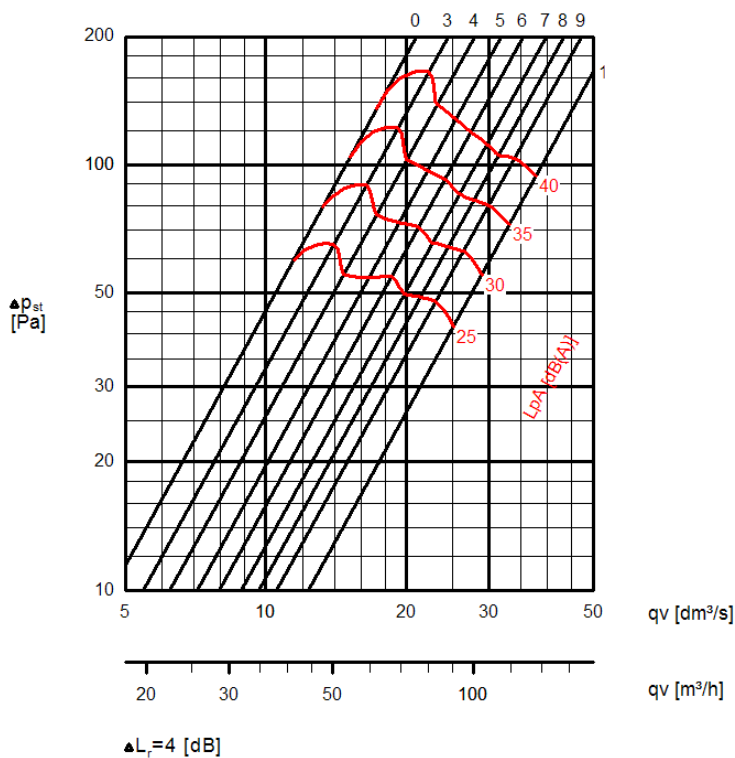
dP_t Maksimi ΔP_{tot} (Pa), kun a-painotettu
 äänenpainetaso (I_p) on 35 dB(A)
 L_{0.2} Etäisyys jossa ilmasuihkun ydin saavuttaa
 nopeuden 0,2 m/s

DIMENSIONS

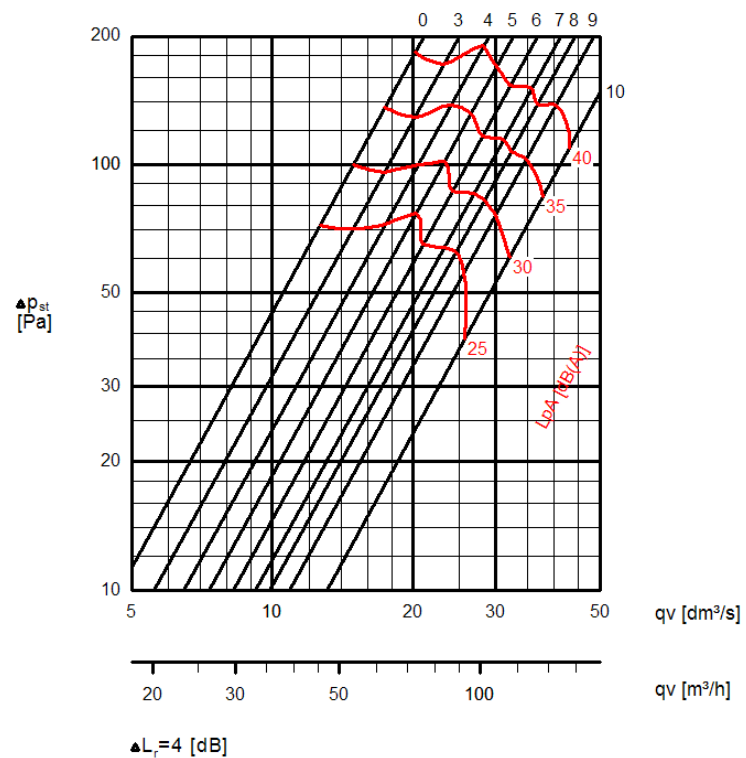
NS	ØD
100	99
125	124

Pressure drop and sound data

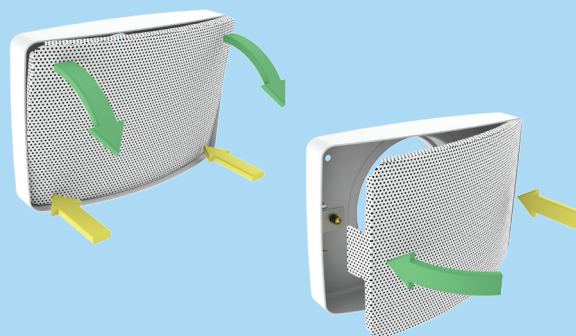
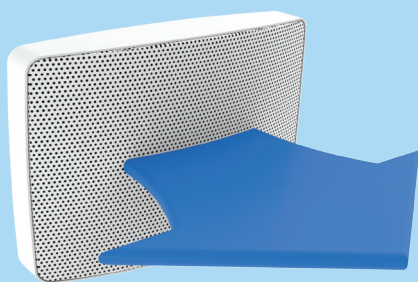
BOS-100



BOS-125



BOS - Supply air valve



Reassembly the front panel after cleaning.

Function

BOS supply air valve will be suitable in solutions where small airflow rates are required and air supply will be made from wall.

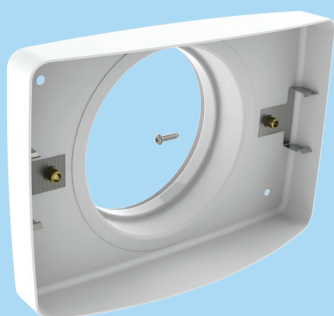
Supply air is discharged through the perforated front panel direct forwards.

Airflow rate can be adjusted by changing the size of the trimming plate.

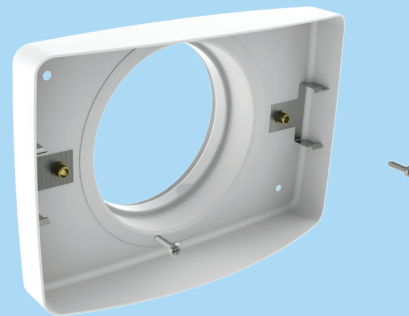
Servicing

Pressing the both corners of the front panel at the same time and release the front panel by pulling carefully from the opened side.

Note the position of the throttle plate. Wipe the parts with a damp cloth, instead of immersing in water.



Fix the casing to the duct by screwing or riveting from the spigot



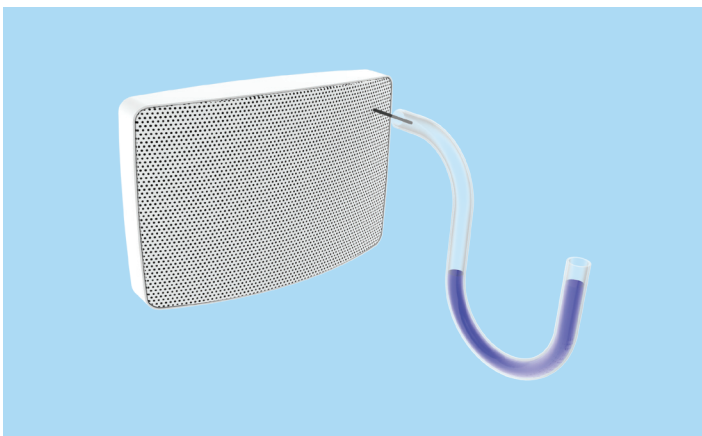
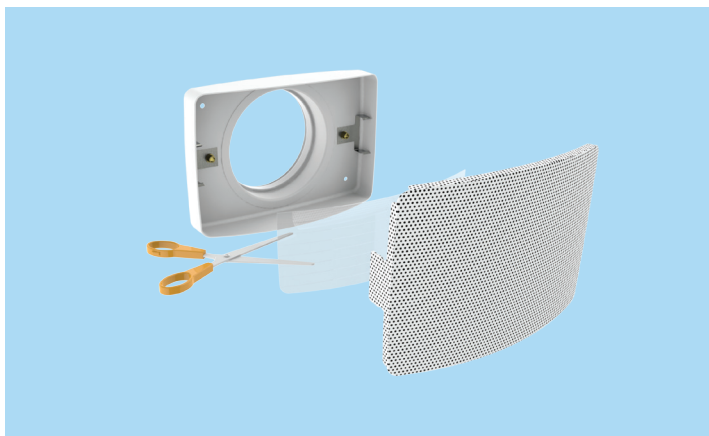
or with the screws from the bottom of the casing.

Installation

BOS supply air valve will be installed on wall surface to the needed height, it could be installed close to the ceiling surface.

It will recommend having a minimum distance of 50 mm to the ceiling surface enabling the opening for front panel.

A recommended minimum safety distance before the valve is 3xD.



Adjustment

Adjust the airflow rate by cutting the trimming plate according to the needs. Set a probe inside the valve and measure the differential pressure with a manometer. The location for the probe would be about 20 mm from top and side surfaces.

The airflow rate is calculated using the formula and coefficients from the table below.

These values will be valid for both valve sizes.

$$q_v = k * \sqrt{\Delta p_m}$$

A	k
10	1,60
9	1,80
8	2,11
7	2,39
6	2,66
5	2,91
4	3,22
3	3,45
open	4,08

Suggested specification

BOS supply air valve shall have a detachable front plate and casing made of painted steel with a white (RAL 9010) standard colour.

The casing shall incorporate a sealing gasket.

Supply airflow rate and throw length shall be adjusted by adjusting the size of trimming plate in the front panel. Pressure loss shall be selected at the same time as the flow pattern adjustment and balancing.

Product code

BOS-D

D = Connection size
100, 125

Specifics and accessories

CO = Colour
W white RAL 9010
C special colour

Code example

BOS-100, CO=W