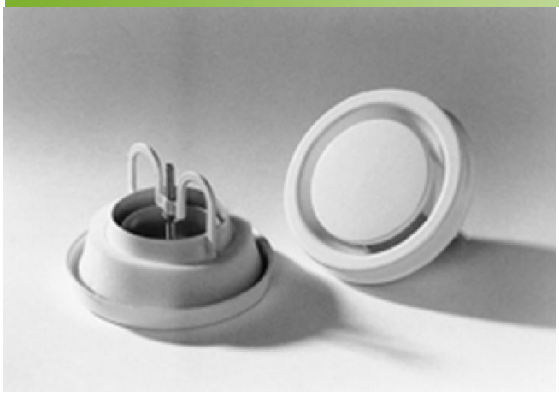


DSO(S)
EXHAUST AIR VALVE

AIR MANAGEMENT SYSTEMS

PRODUCT PROPERTIES

DSO is an exhaust valve suitable for houses, offices etc.

- Good adjusting features
- Low noise level
- Good sound attenuation features
- Quick and easy to install
- Airflow easy to measure

CONSTRUCTION

The **DSO** is manufactured from steel sheet, powder coated. Standard color white (RAL 9010). Other color finishes are available to special order quantities. The body is equipped with cellular plastic gasket to form an airtight seal. Adjustment of the airflow is simple, the inner cone being rotated to the required setting and locked in the position with a single nut. For mounting a mounting-ring **DKT** can be ordered.

Sauna valve **DSO-S** can be opened and closed simply by pushing or pulling the wooden knob. Max. opening is adjusted by moving the retaining ring. Min. opening, which is pre-adjusted into pos. 0 mm, can be adjusted by shortening the plastic tube. Max. working temperature +120°C.

SOUND POWER LEVEL L_W

DSO	CORRECTION K_{oct} (dB)						
	Middle frequency by octave band (Hz)						
	125	250	500	1k	2k	4k	8k
100	-2	1	1	0	-5	-9	-23
125	-3	-2	-1	-4	0	-8	-24
150/160	1	-3	-1	2	-8	-12	-25
200	-1	-3	-4	2	-5	-9	-26
Tol. ±	3	2	2	2	2	2	3

Sound power levels by octave bands are obtained by adding to total sound pressure level L_{p10A}, dB(A) the corrections K_{oct} presented in the table according to the following formula:

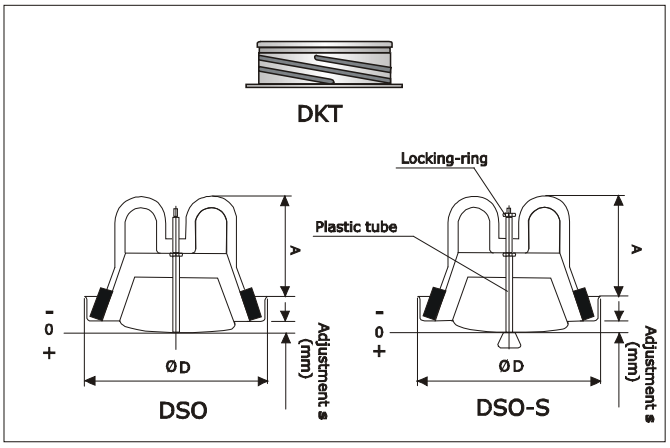
$$L_{Woct} = L_{p10A} + K_{oct}$$

Correction K_{oct} is average value in range of use of DSO unit.

DSO	SOUND ATTENUATION ΔL							
	Middle frequency by octave band (Hz)							
	63	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**
100	23	18	14	12	12	14	5	6
125	21	17	12	11	12	11	7	6
150/160	19	14	12	11	11	14	5	7
200	15	13	11	11	13	12	7	7
Tol. ±	6	3	2	2	2	2	2	3

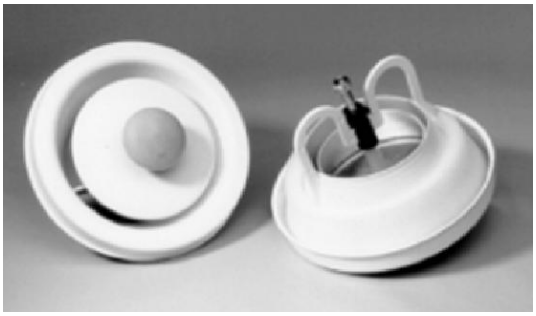
DIMENSIONS in mm

DSO	Ø D	A	W (gr)
100	134	74	300
125	160	85	390
150/160	191	89	570
200	241	107	760
DSO-S	**Ø D**	**A**	**W (gr)**
100	134	73	310

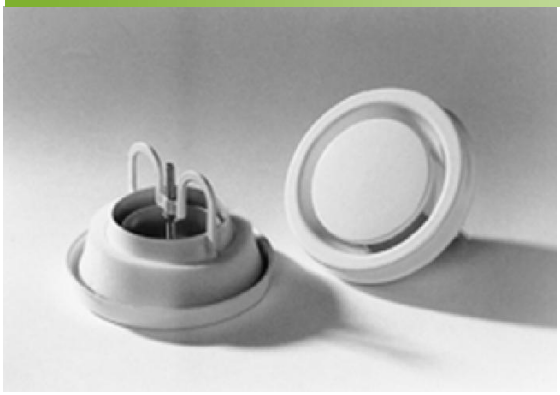


REGULATION AND MEASUREMENTS

Regulation of airflow is achieved by turning the control disc to change adjustment dimension s (mm). The measurement of airflow is made by a pressure difference measurement with a separate measuring tube. Refer to airflow measurement diagrams for information.



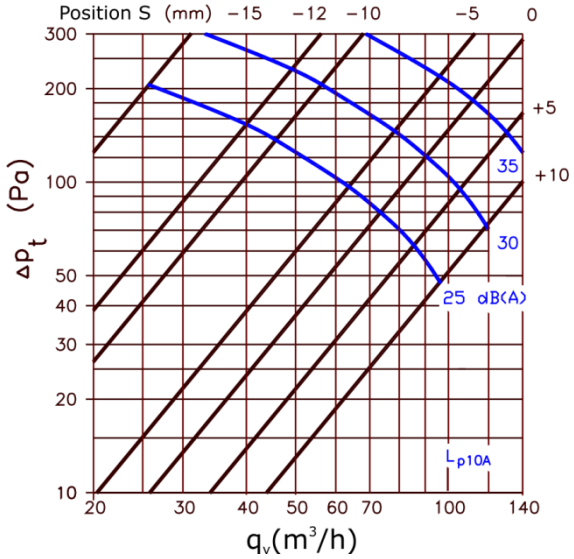
The average sound attenuation ΔL from duct to room including the end reflection of the connecting duct in ceiling installation is obtained in the table above.



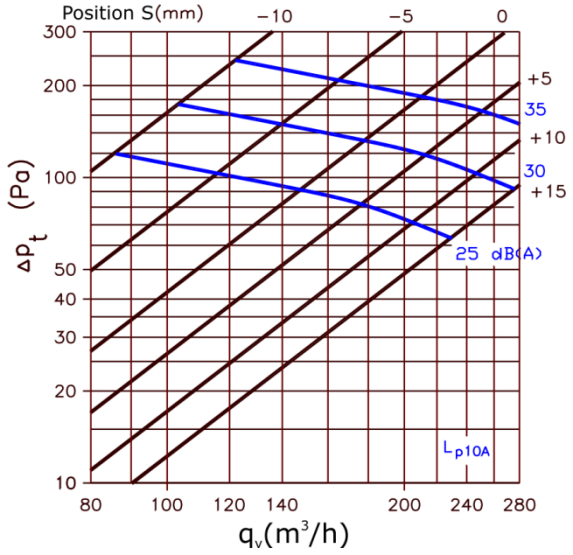
DSO(S)
EXHAUST AIR VALVE

AIR MANAGEMENT SYSTEMS

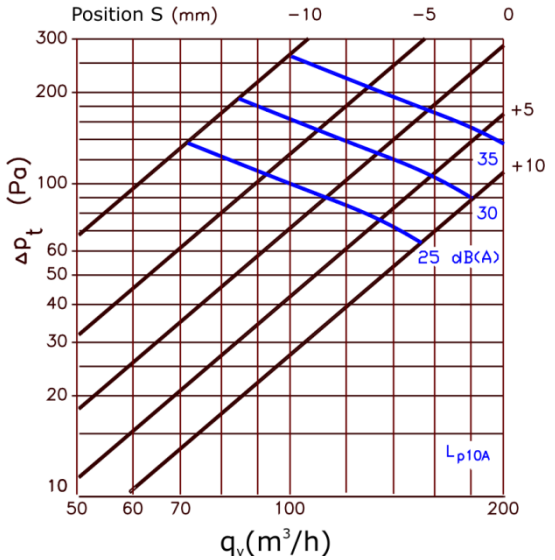
DSO 100 mm



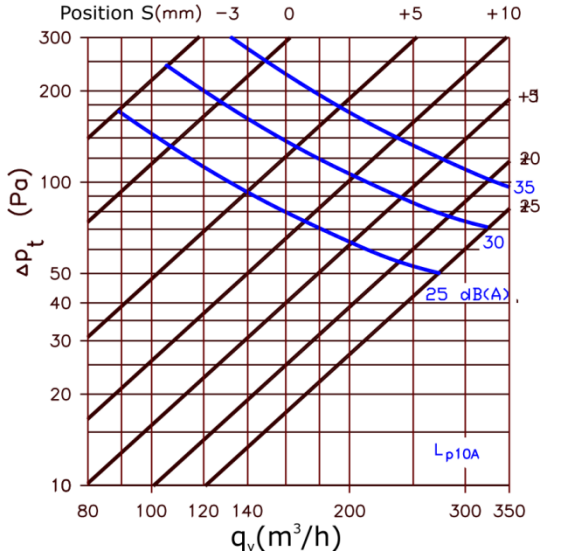
DSO 150/160 mm



DSO 125 mm



DSO 200 mm



DEFINITIONS		
q_v	air volume	(m^3/h)
Δp_t	total pressure drop	(Pa)
L_{p10A}	sound pressure level with 4 dB room attenuation (10 m^2sab)	[dB(A)]
L_{Woct}	sound power level by octave bands	(dB)
ΔL	sound attenuation	(dB)
K_{oct}	correction	(dB)