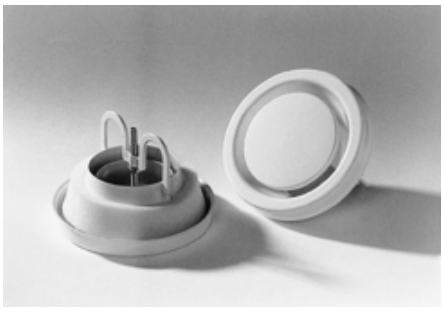
DSO and DSO-S

TECHNICAL DATA
DSO is an exhaust valve suitable for houses, offices etc.
DSO-S is designed for sauna rooms.

- Good adjusting features
- Low noise level
- Good sound attenuation features
- Quick and easy to install
- Easy to measure the air flow



CONSTRUCTION
The **DSO** exhaust valve is made of steel sheet. Standard color is white (RAL9010). Other colors are available to special order. 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 **DKK** can be ordered.

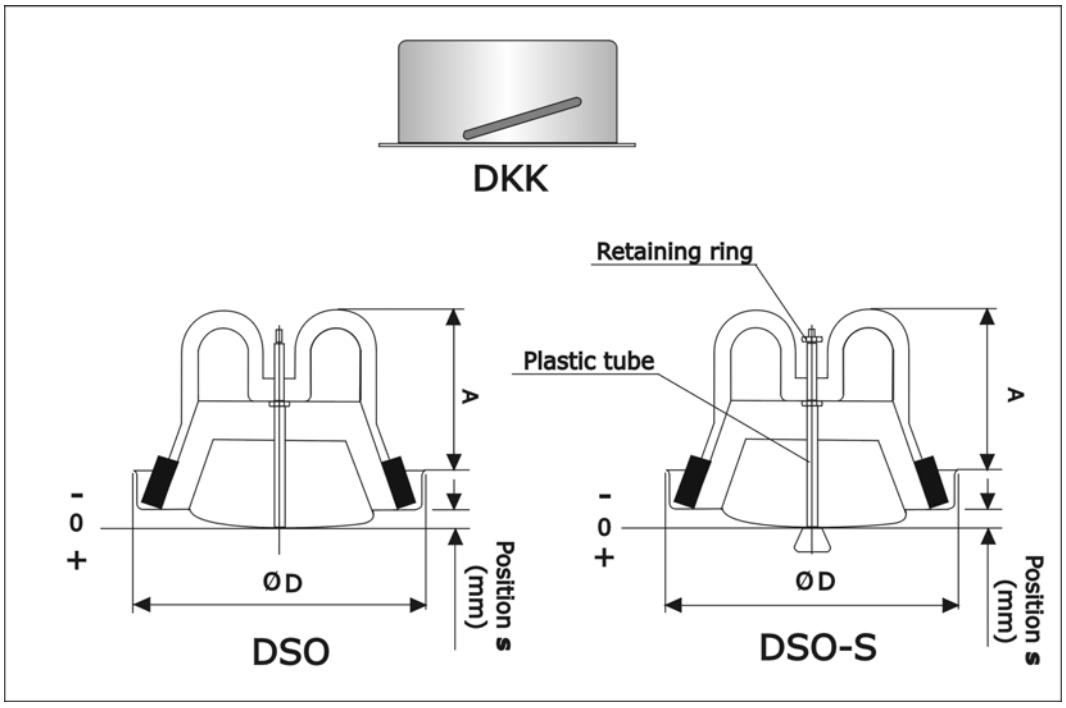
Sauna valve **DSO-S** can be opened and closed simply by pushing or pulling the wooden knob. Max. opening is adjusted by moving the retaining ring. Min. opening, which is pre-adjusted into pos. 0 mm, can be adjusted by shortening the plastic tube. Max. working temperature +120°C.
For mounting a mounting-ring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

REGULATION AND MEASUREMENTS
The measurement of airflow is made as a pressure difference measurement with a separate measuring tube.
Regulation of air volume is made by changing the position **s**.
For diagrams for measuring and regulation see the separate diagram.
Refer to airflow measurement diagrams for information.

ORDER EXAMPLE:

Product:	DSO-S
Size:	125
CODE:	**DSO-S 125**

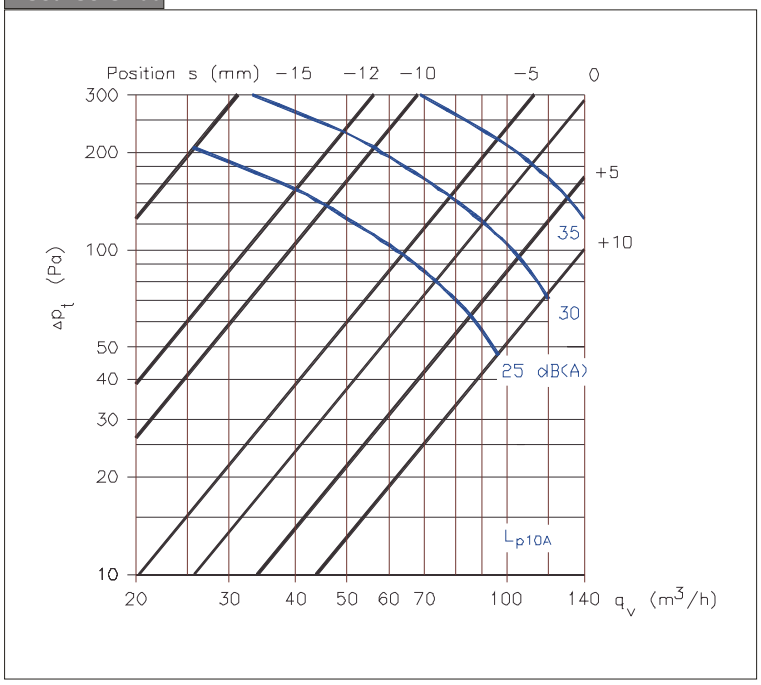
DSO and DSO-S



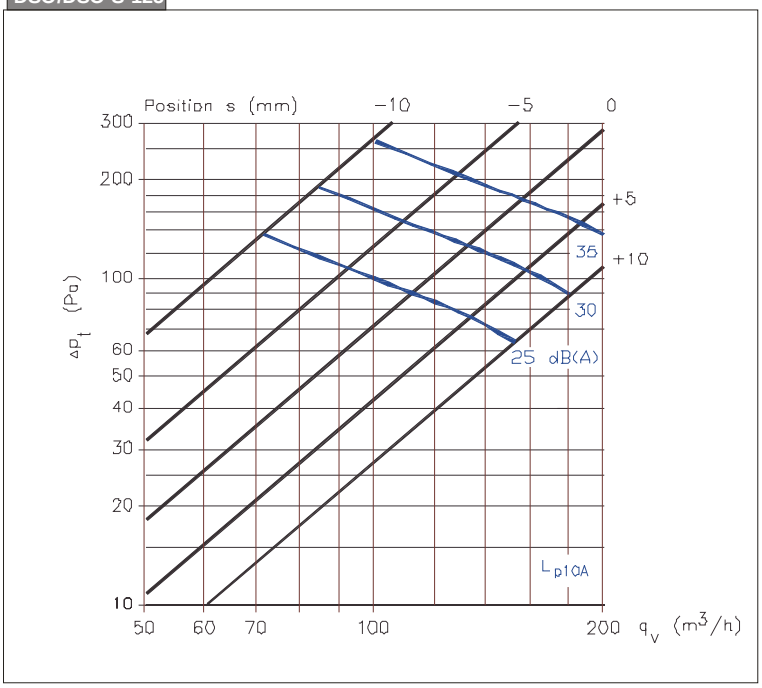
DIMENSIONS IN MILLIMETRES

DSO	Ø D	A	Weight g
100	134	74	280
125	160	85	360
150/160	191	89	470
200	241	107	720
DSO-S	**Ø D**	**A**	**Weight g**
100	134	73	310

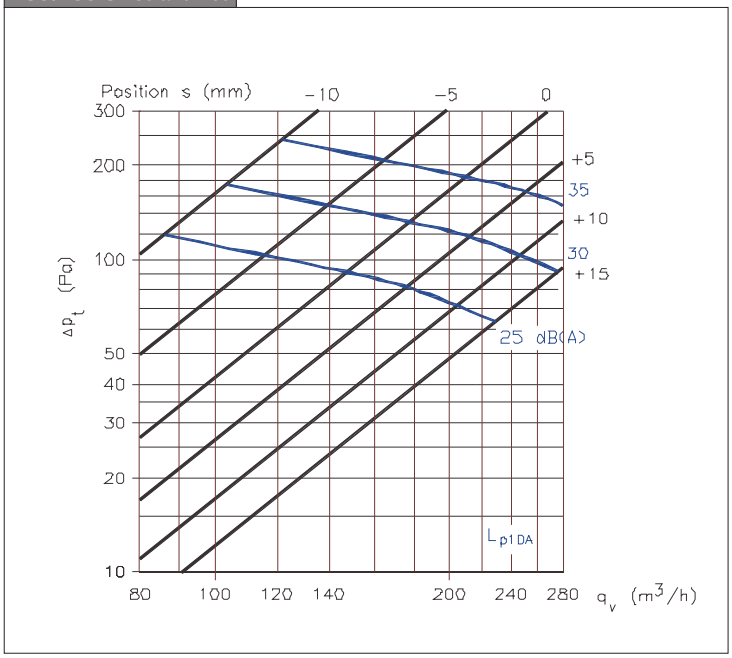
DSO/DSO-S 100



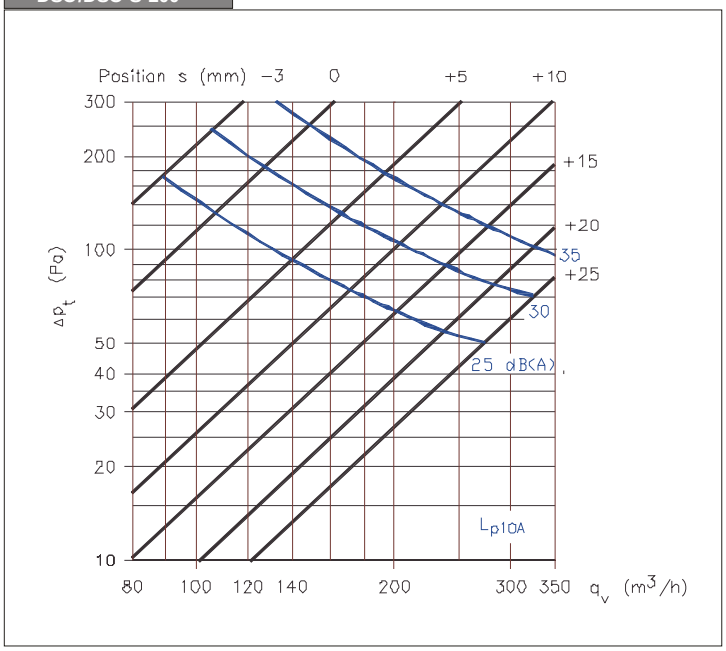
DSO/DSO-S 125



DSO/DSO-S 150 and 160



DSO/DSO-S 200



SOUND POWER LEVEL L_W

DSO / DSO-S	CORRECTION K_{oct} (dB)						
	Middle frequency by octave band (Hz)						
	125	**250**	**500**	**1000**	**2000**	**4000**	**8000**
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 frequency range (Hz).

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)

SOUND ATTENUATION ΔL

DSO/DSO-S	SOUND ATTENUATION ΔL							
	Middle frequency octave band(Hz)							
	63	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**
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
Toler.+/-	6	3	2	2	2	2	2	3

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.

