

KSOF Fire damper valve



KSOF is developed for use as a fire damper valve in exhaust ventilation systems.

Fire damper valve KSOF is CE marked based on product standard EN 15650:2010 and tested according to test standard EN 1366-2.

KSOF has a low sound level and good natural sound attenuation.

Quick Selection

Valve Size	Air flow range l/s at sound level		
	25 dB(A)	30 dB(A)	35 dB(A)
100	28	34	40
125	43	50	59
150	61	73	80
160	61	73	80
200	69	82	99

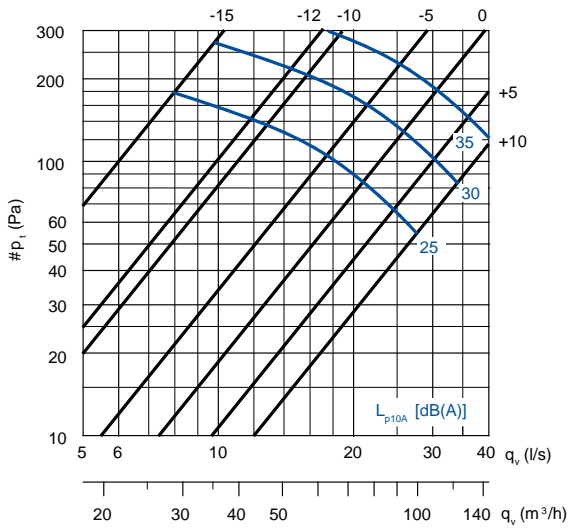
Specifications

- CleanVent coating as standard
- Manufactured of sheet steel
- Horizontal and vertical ducting
- CE marking KSOF
SP 0402-CPR-SC0768-13
- Fire class according to EN 13501-3
installation into gypsum board wall:
E 45 (v_e i ↔ o) S
E 60 (v_e i ↔ o)
installation into rigid wall and floor:
E 60 (v_e i ↔ o) S
E 120 (v_e i ↔ o) S
E 120 (h_o i ↔ o)

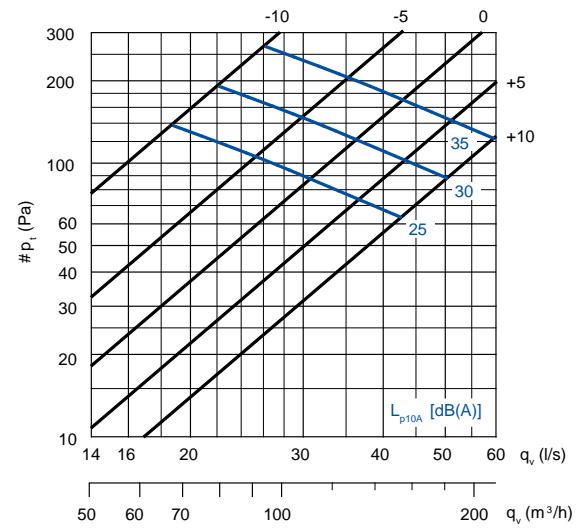
Product code example

Fire damper KSOF-160-C

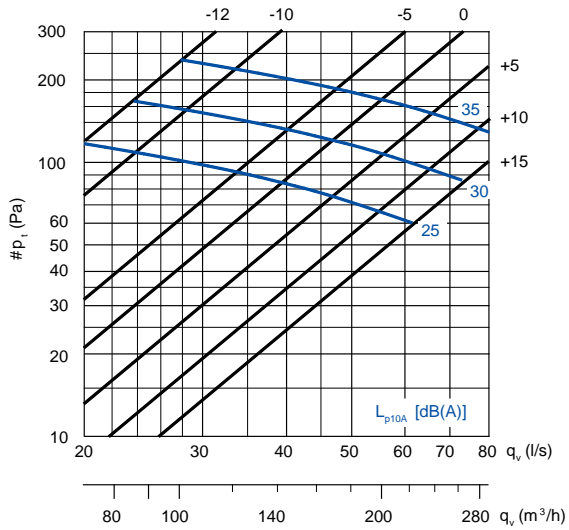
Air flow, pressure drop, sound level
KSOF-100-C



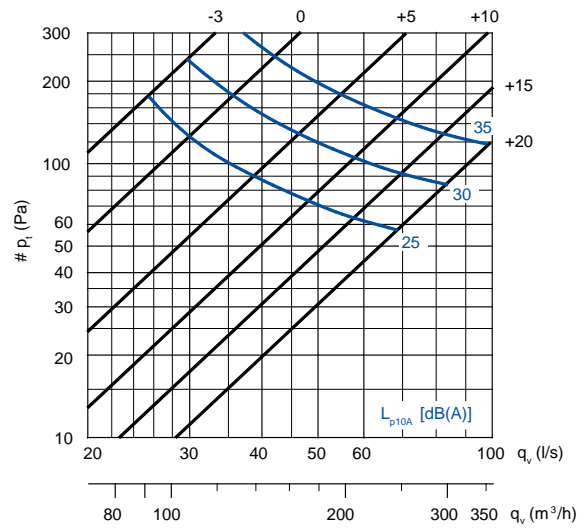
KSOF-125-C



KSOF-150-C, KSOF-160-C



KSOF-200-C



Acoustical data

Sound power level L_w

Size	Correction of sound level K _{oct} in dB at						
	125	250	500	1000	2000	4000	8000 Hz
100	2	-1	-1	1	-4	-8	-22
125	-3	-3	-3	-2	0	-7	-24
150/ 160	0	-3	-1	-2	-7	-11	-25
200	1	-3	-4	3	-8	-12	-29
Toler.	±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).

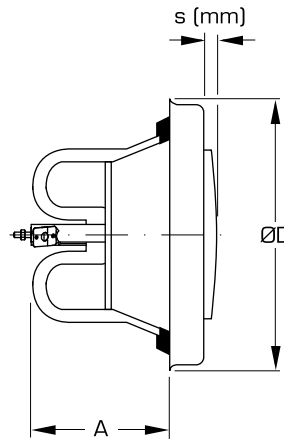
Sound attenuation ΔL

Size	Adjustment (mm)	Sound attenuation in dB at							
		63	125	250	500	1000	2000	4000	8000 Hz
100	-10	22	19	16	16	16	18	9	9
	0	22	18	13	12	12	13	6	7
	+10	22	17	12	9	8	11	4	6
125	-10	21	18	15	14	15	14	10	7
	0	19	17	12	11	11	10	6	5
	+10	20	16	10	9	9	8	5	5
150/ 160	-10	19	16	14	14	14	16	8	8
	0	18	14	11	11	11	13	5	7
	+10	18	14	10	9	9	11	4	6
200	-10	15	15	14	14	16	15	10	9
	0	14	12	11	10	12	12	7	7
	+10	13	11	8	8	9	10	6	6
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 wall installation, is obtained in the table above.

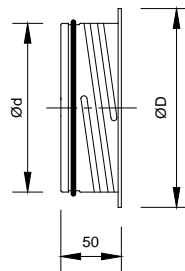
Dimensions and weights

KSOF



Size	ØD [mm]	A [mm]	Weight [kg]
100	134	74	0.30
125	160	85	0.38
150	191	89	0.50
160	191	89	0.50
200	241	107	0.72

KKT



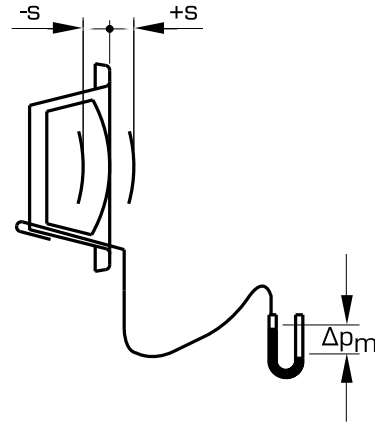
Size	Ød [mm]	ØD [mm]	Weight [g]
100	99	122	75
125	124	148	102
150	149	175	123
160	159	184	131
200	199	225	165

Installation

Valve is supplied complete with spring loaded fuse and fixed by a “screwing action” to locate the valve lugs into indents in the mounting ring.

Regulation and measurement of air flow

Measurement of air flow is achieved by measuring the pressure difference with a separate test probe. Regulation of air flow is achieved by turning the control disc to change adjustment dimension s (mm). See installation instructions.



General

Application

CE marked fire damper valve KSOF is an exhaust valve, used to prevent spreading of fire and smoke to duct systems.

KSOF has a low sound level and good natural sound attenuation.

A springloaded fuse will close the valve when temperature reaches the fusible link rating, 70 °C.

Material and surface finish

The valve is manufactured from hot galvanized steel sheet.

KSOF is powder coated for a high surface finish and good impact and scratch resistance. Standard colour is white (RAL 9003) with CleanVent coating as standard. Other colours on demand.

The valve body is supplied with a cellular plastic gasket to form an airtight seal against the mounting frame.

The separate mounting ring is manufactured from galvanized steel sheet. Each valve is delivered with mounting ring KKT.

Instructions

Instructions for installation, adjustment and care are set out in detail in our technical instruction which accompanies each product. The instruction is also accessible on www.flaktgroup.com.

Definitions

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

Descriptive text

CE marked fire damper valve KSOF manufactured by FläktGroup.

Product code

Fire damper valve KSOF-aaa-C
(including mounting ring KKT)

Size (aaa)
100, 125, 150, 160, 200

Fire damper valve with special colour KSOF-aaa-E
(including mounting ring KKT, not CleanVent)

Size (aaa)
100, 125, 150, 160, 200