

# 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

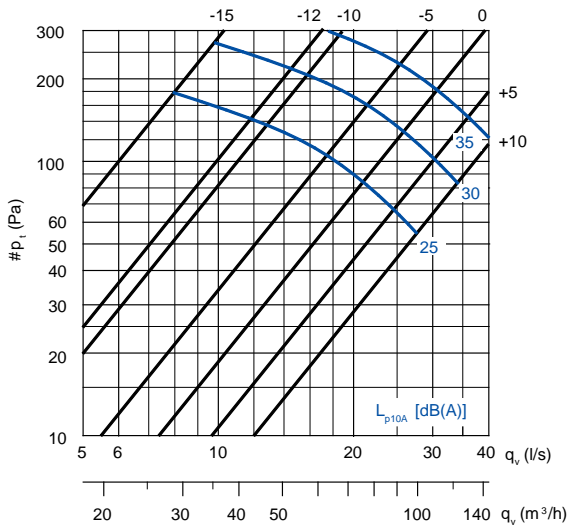
### Specifications

- 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<sub>e</sub> i ↔ o) S  
E 60 (v<sub>e</sub> i ↔ o)  
installation into rigid wall and floor:  
E 60 (v<sub>e</sub> i ↔ o) S  
E 120 (v<sub>e</sub> i ↔ o) S  
E 120 (h<sub>o</sub> i ↔ o)

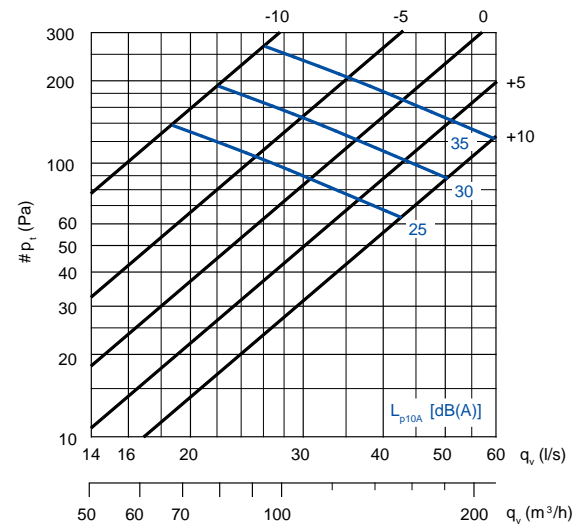
### Product code example

Fire damper KSOF-160-C

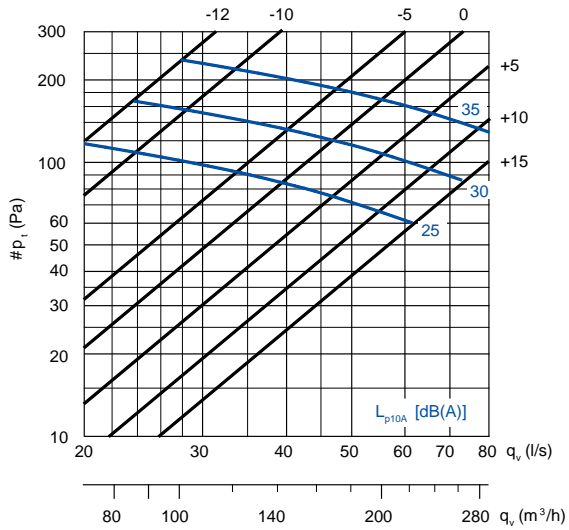
### Air flow, pressure drop, sound level KSOF-100-C



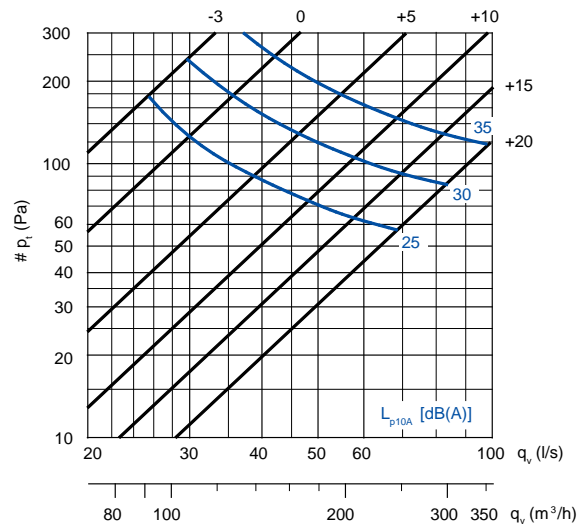
### KSOF-125-C



### KSOF-150-C, KSOF-160-C



### KSOF-200-C



### Acoustical data

#### Sound power level L<sub>w</sub>

Size	Correction of sound level K <sub>oct</sub> 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<sub>p10A</sub>, dB(A) the corrections K<sub>oct</sub> presented in the table according to the following formula:

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

Correction K<sub>oct</sub> is average value in frequency range (Hz).

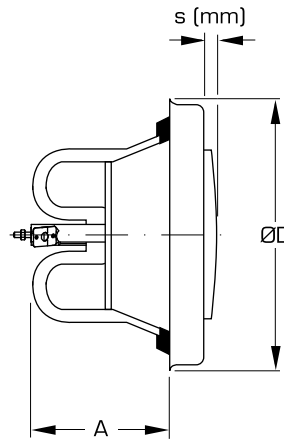
#### Sound attenuation ΔL

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.

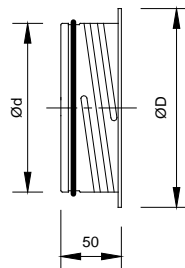
### Dimensions and weights

#### 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



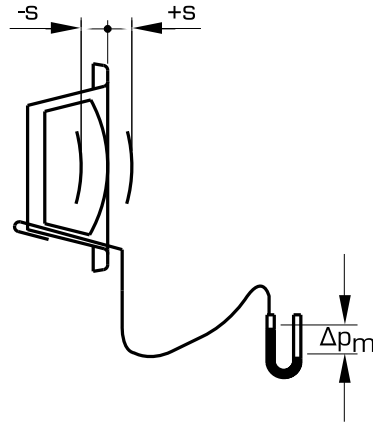
Size	Ød [mm]	ØD [mm]	Weight [g]
100	99	122	75
125	124	148	102
150	149	175	123
160	159	184	131
200	199	225	165

## 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](http://www.flaktgroup.com).

### Definitions

$q_v$	air volume	l/s, m <sup>3</sup> /h
$\Delta p_t$	total pressure drop	(Pa)
$L_{p10A}$	sound pressure level with 4 dB room attenuation (10 m <sup>2</sup> sab)	[dB(A)]
$L_{woct}$	sound power level by octave bands	(dB)
$\Delta L$	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