



Fire Damper Disc Valve

SVA-FF



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Fire Damper Disc Valve SVA-FF

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Fire Damper Disc Valve SVA-FF

Description

The fire protection valve SVA-FF has been designed as thermal, automatically closing fire protection valve and is suitable **for installation in return air systems**. When installed correctly in fire protection walls or ceilings, it will prevent a fire from spreading through the duct system of the ventilation installation.

For the fire protection valves of dimensions \varnothing 100 mm, \varnothing 125 mm, \varnothing 150 mm, \varnothing 160 mm and \varnothing 200 mm, the specified **fire resistance class is K90**, and, accordingly, they have been rated as suitable for use.

The valve disc which is permanently fixed to the threaded spindle allows simple regulation and fastening of the valve. The thermal fuse pre-tensioned by means of a spring closes the valve in the event of fire if the trigger temperature is exceeded in the fuse.

The mounting frame is made of galvanised sheet steel. The mounting frame is included in the delivery and is easy to clean and maintain.

To set the flow rate, the shut-off plate can be rotated by hand.

Shut-off damper preventing the transmission of fire in central ventilation lines according to DIN 18017-3.

Its use in supply air systems is not permitted!

- Fire prevention
- A relatively high air inlet ring prevents soiled edges
- Lowest possible air noise
- High pressure drop
- Presetting possible
- Sheet steel design
- Epoxy resin powder coating in RAL 9010 (white)

According to approval certificate Z-41.3-674, the fire protection valve SVA-FF has the fire resistance class K90-18017 when mounted:

- in fire-resistant shaft walls of fire resistance class F90 or
- in vertical fire-resistant ventilation lines of fire resistance class L90 or
- outside of fire-resistant shaft walls F90 or vertical fire-resistant ventilation lines L90 in externally classified suspended ceilings or walls if a stainless steel connection line without opening is arranged between the shut-off damper and the shaft wall or vertical ventilation line to be protected. The connection lines between the main line and the shut-off damper must not be longer than 6 m when shut-off dampers are mounted outside of shafts or vertical ventilation lines.

The approved article may also be installed in fire-resistant shaft walls or in vertical fire-resistant ventilation lines of a lower fire protection class than F90 or L90. In this case, the approved article has the same fire protection class as the fire-resistant shaft wall or the vertical fire-resistant ventilation line to be protected.

Construction

Bracket

- Sheet steel painted to RAL 9010 (white)

Seal

- Polyethylene (PE)

Valve body

- Sheet steel painted to RAL 9010 (white)

Valve disc

- Sheet steel painted to RAL 9010 (white)

Accessories

Mounting frame (-ER)

- Galvanised sheet steel

Fastening

Valve fixing

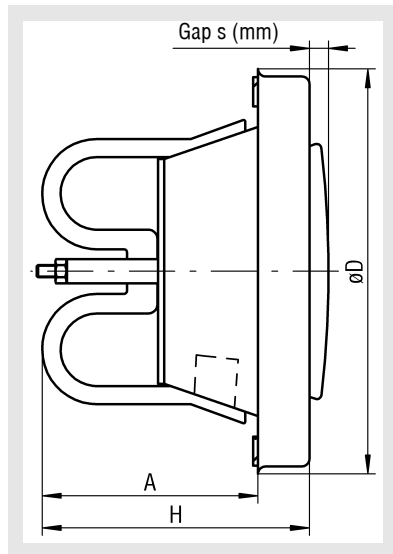
- to the mounting frame with bayonet socket (as standard)

Fire Damper Disc Valve SVA-FF

Models and dimensions

Dimensions

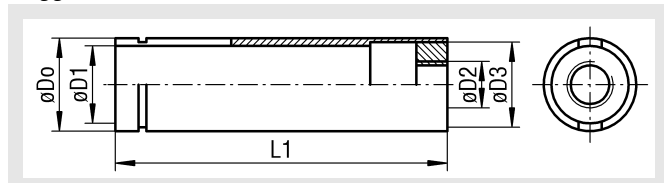
SVA-FF



Available sizes

NW	øD	H	A	Weight (g)
100	134	89	74	305
125	160	105	85	390
150/160	191	104	89	575
200	241	124	107	765

Trigger device

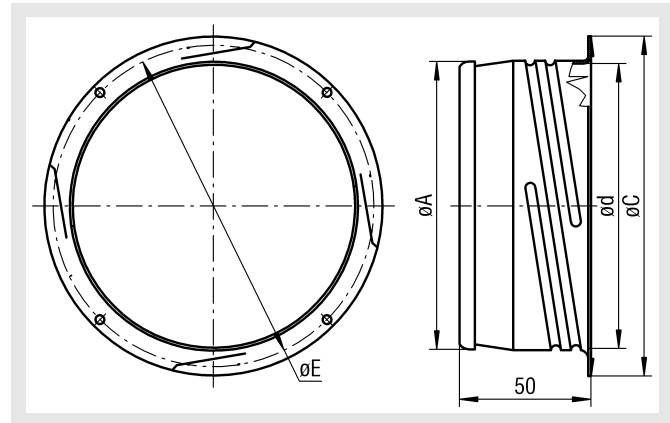


Available sizes / Release device

NW	øD0	øD1	øD2	øD3	L1
100/125	12	10	M6	11	43
150/160/200	14	12	M8	13	57

Dimensions of accessories

Mounting frame (-ER)



Available Sizes / Mounting frame (-ER)

NW	øA	øC	øE	ød
100	99	125	119	98
125	124	150	144	123
150	149	175	169	148
160	159	185	179	158
200	199	225	218	198

Fire Damper Disc Valve SVA-FF

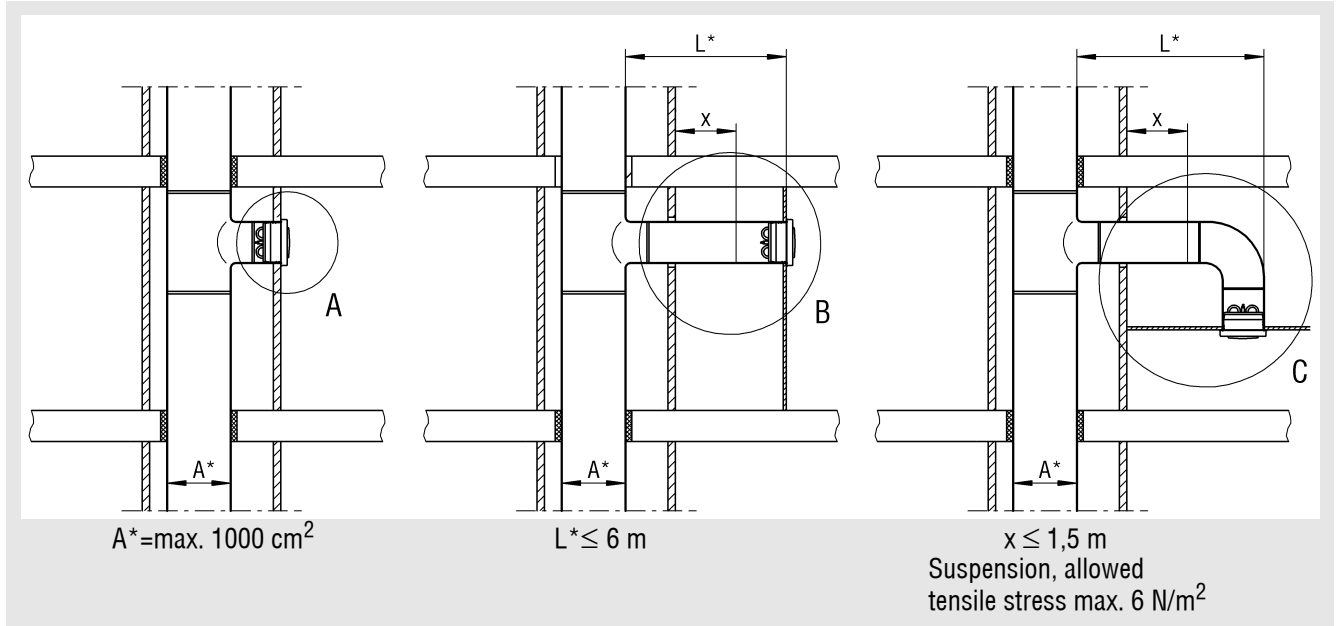
Installation

Installation of the fire protection disc valves type SVA-FF

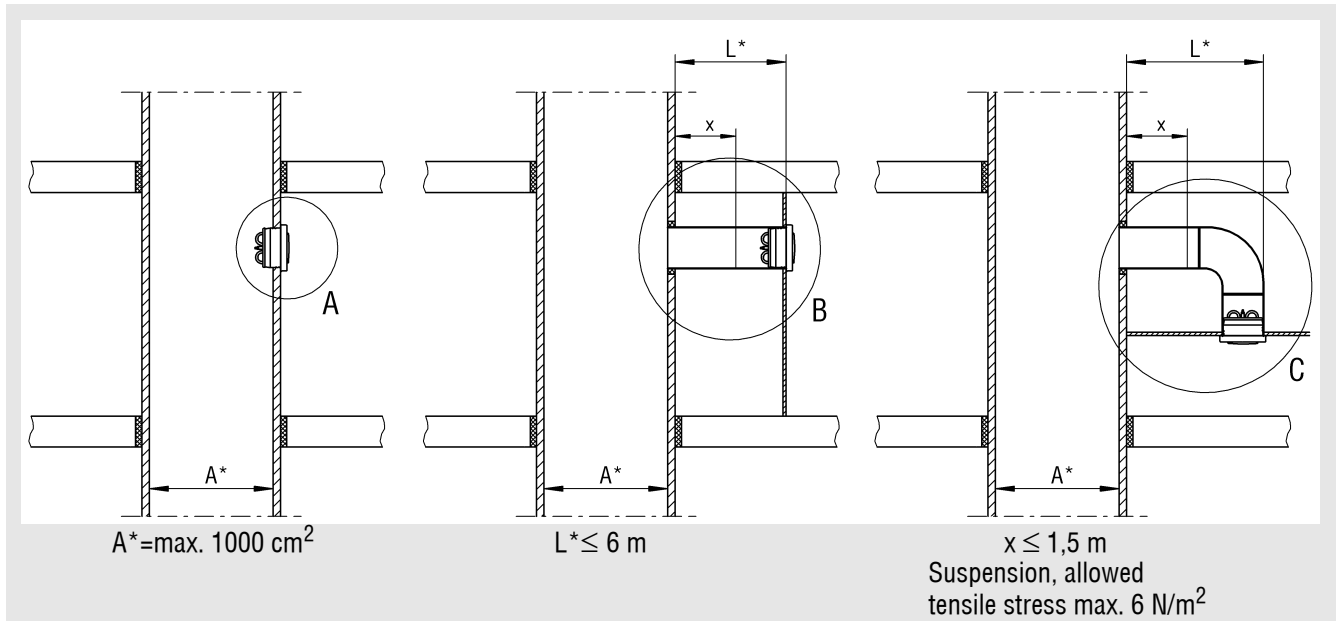
The mounting frame is fixed to the duct or pipe by means of rivets or tapping screws. The valve is fixed in the mounting frame by rotating it in such a way that the valve becomes clamped in the mounting frame. The fuse as trigger mechanism is built-in ready for use.

To set the amount of air flow or change the gap width "S", rotate the shut-off plate.,

Installation of the air ducts with application of a ceiling mortar

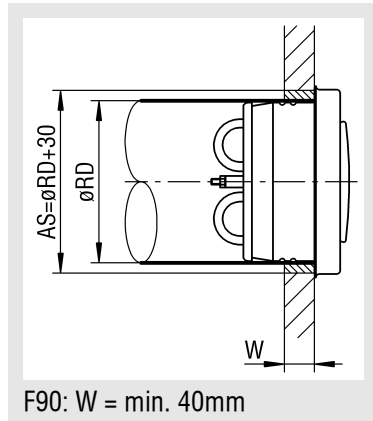


Installation in or outside of ventilation shafts



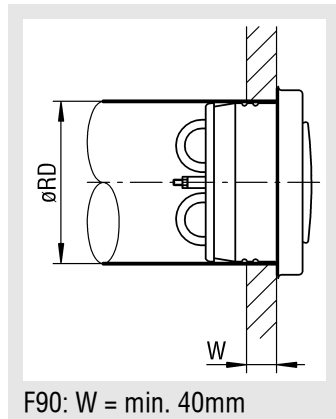
Fire Damper Disc Valve SVA-FF

Detail A



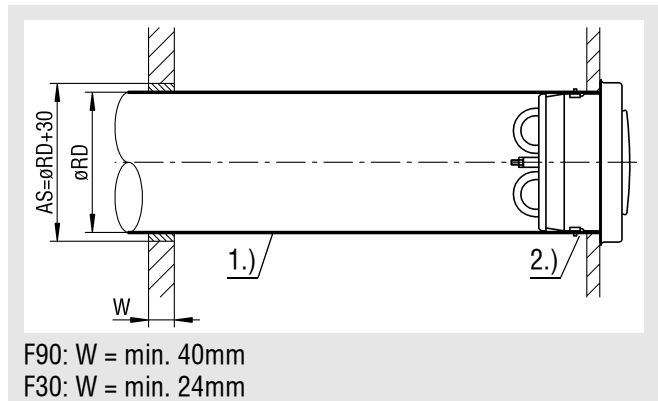
F90: $W = \text{min. } 40\text{mm}$

Detail A alternatively



F90: $W = \text{min. } 40\text{mm}$

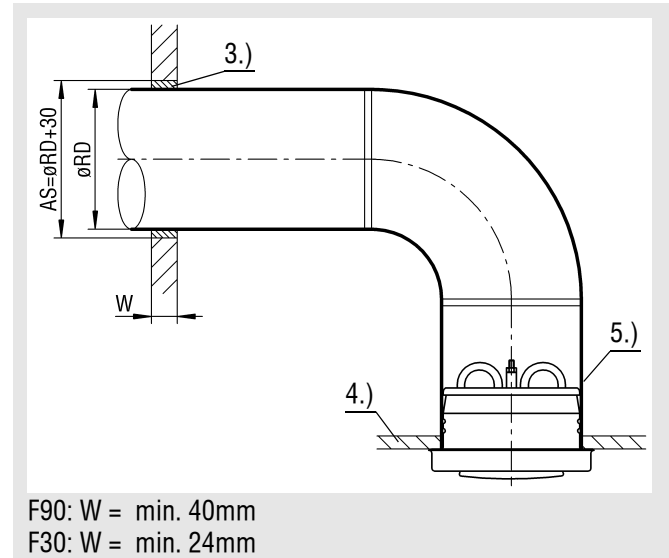
Detail B



F90: $W = \text{min. } 40\text{mm}$

F30: $W = \text{min. } 24\text{mm}$

Detail C



F90: $W = \text{min. } 40\text{mm}$

F30: $W = \text{min. } 24\text{mm}$

AS = Section
 $\varnothing RD$ = Nominal value (NW)
 W = Wall thickness

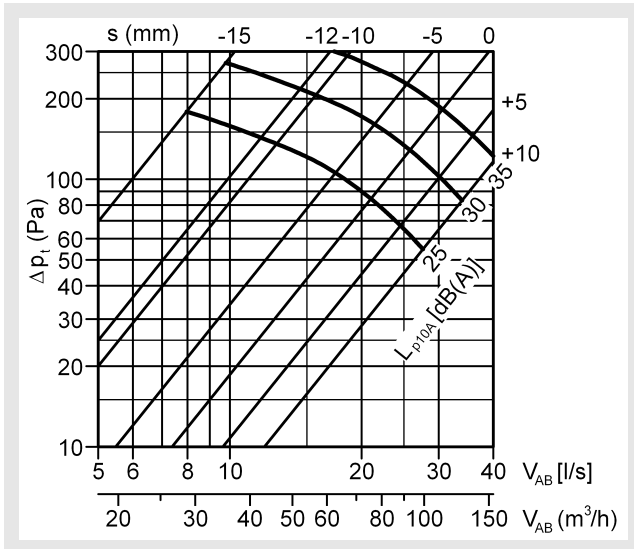
- 1.) Spiral duct or flexible sheet steel duct
- 2.) The mounting frame is riveted from the inside to the standardised spiral tube using steel rivets 3x6
- 3.) Plaster or joint mastic
- 4.) Non-fire-resistant suspended ceiling
- 5.) Shut-off damper

Fire Damper Disc Valve SVA-FF

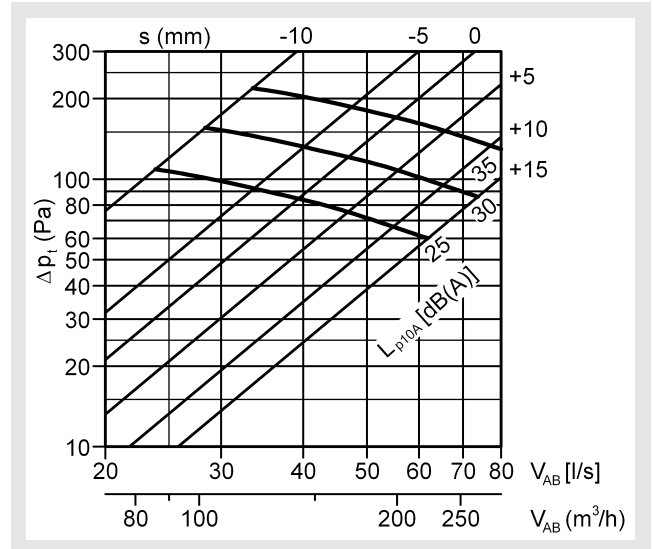
Technical Data

Pressure loss and noise level

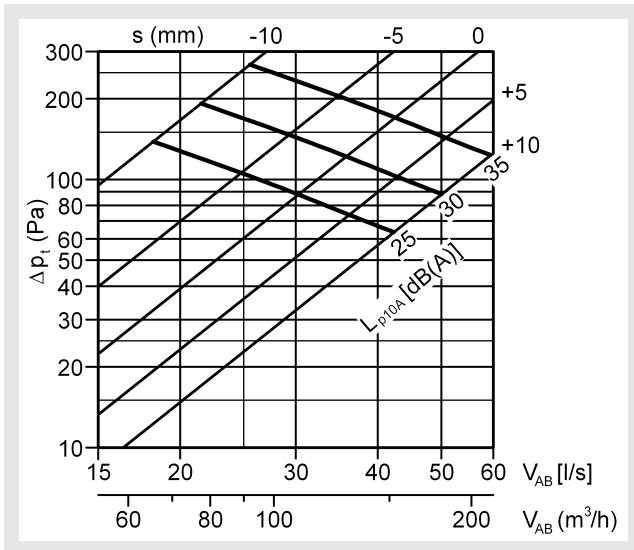
SVA-FF 100



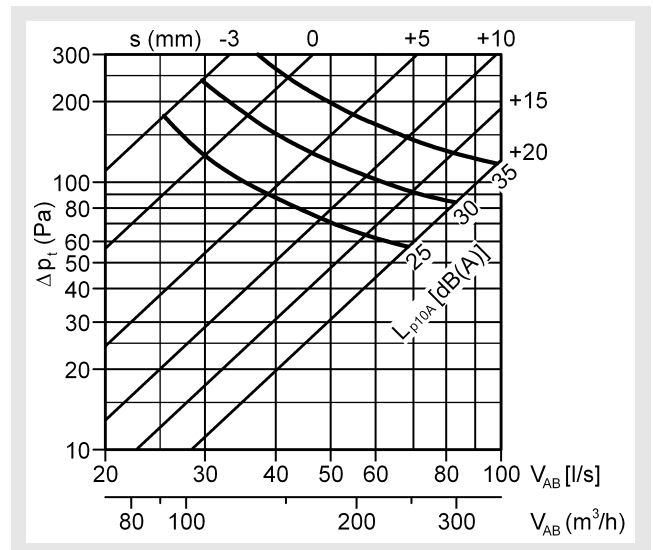
SVA-FF 150/160



SVA-FF 125



SVA-FF 200



Fire Damper Disc Valve SVA-FF

Sound power level

NW	KF (dB)						
	f _m (Hz)						
	125	250	500	1000	2000	4000	8000
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

To determine the sound power level in the octave band, the correction factor given in the table has to be added to the sound power level L_{p10A} dB(A) according to the following formula:

$$L_w = L_{p10A} + KF$$

The correction factor (KF) represents an average value for the entire application range of the SVA-FF.

Insertion loss

NW	s (mm)	D _e (dB)							
		f _m (Hz)							
		63	125	250	500	1000	2000	4000	8000
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

The average values of the insertion from the duct to the room for ceiling installation are shown in the above table.

Legend

V _{AB}	(m ³ /h) [l/s]	= Return air volume
Δp _t	(Pa)	= Pressure loss
L _{p10A}	[dB(A)]	= Sound pressure level at 10m ² sab room damping (=4 dB)
L _w	[dB(A)]	= Sound power level
D _e	(dB)	= Insertion loss (from the duct to the room)
KF	(dB)	= Correction factor
s	(mm)	= Gap distance

Specification texts

Return air fire protection disc valve, for installation in walls, ceilings and ventilating shafts. The valves are used to prevent fires from spreading in ventilation ducts according to DIN 18017 Part 3. Resistance class K90.

Consisting of a round valve casing and a valve disc made of sheet steel, painted to RAL 9010 (white). Valve disc adjustable by means of threaded spindle for air volume regulation. Fitted with fuse and mounting frame made of galvanised sheet steel. Manual triggering possible.

The valve is fixed to the mounting frame.

The fire protection disc valves may be joined inside and outside of the ventilation shaft only via ventilation ducts made of non-combustible materials (class A according to DIN 4102).

Approval certificate number: **Z-41.3-674**

Product: SCHAKO **type SVA-FF**

Accessories:

- Mounting frame (-ER), made of galvanised sheet steel