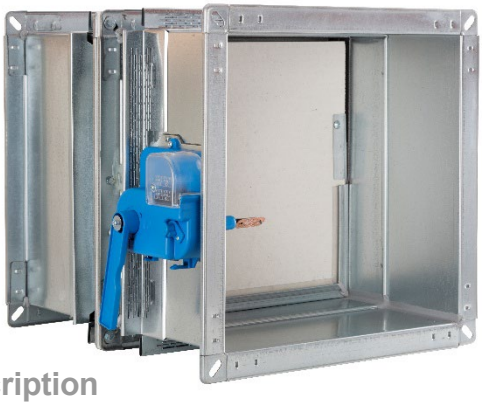
Fire damper WK45



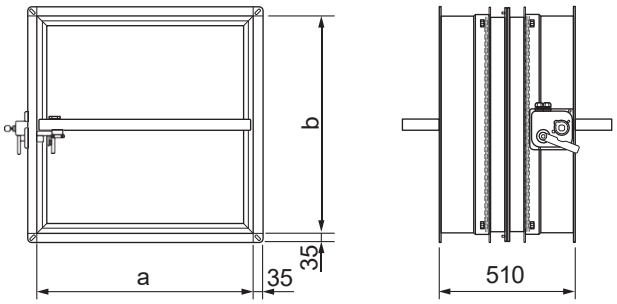
Description

Fire dampers WK45 are devices for use in heating, ventilation and air-conditioning (HVAC) systems at the compartament boundaries to maintain compartmentation and protect escape routes in case of fire. They satisfy integrity, insulation and smoke leakage criteria for the declared time of fire resistance. Fire dampers WK45 are manufactured in compliance with product standard EN 15650.
Tested and classified in accordance with EN 1366-2 and EN13501-3 standards with 500 Pa depression. Studied and optimized for small size ducts and reduced installation space focusing on aeraulic and acoustical performance.

Product code		
Type	WK	Rectangular fire damper
Series	45	Blade thickness 40 mm
Manual command		
Command type	B M	Manual command Manual command with magnet
Position indication microswitches	S0 S2	Without position microswitches With two position microswitches
	SA SC	With open blade microswitch With closed blade microswitches
Magnet	M0	Without magnet (only for command type “B”)
	MR	With power supply interruption magnet, 24 V DC only
	MI	With power supply input magnet, 24 V DC
	MY	With power supply interruption magnet 230 V DC
	MZ	With power supply input magnet 230 V DC

Motorized		
Motor type	VMBM	Belimo motor BFN24T (24V)
	VGBM	Belimo motor BF24T (24V)
	DMBM	Belimo motor BFN230T (230V)
	TMBM	Belimo motor BFN24T-ST (24V)
	TGBM	Belimo motor BF24T-ST(24V)
	DGBM	Belimo motor BF230T (230V)
	VSSM	Siemens motor GRA 126 (24V)
	DSSM	Siemens motor GRA 326 (230V)
	VPSM	Siemens motor GNA 126 (24V)
	DPSM	Siemens motor GNA 326 (230V)
	VGSM	Siemens motor GGA 126 (24V)
	DGSM	Siemens motor GGA 326 (230V)
	VSGM	Gruner motor 340TA24-05-S2 (24V)
	DSGM	Gruner motor 340TA-230-05-S2 (230V)
	VMGM	Gruner motor 360TA-024-12-S2 (24V)
	DMGM	Gruner motor 360TA-230-12-S2 (230V)
	VGGM	Gruner motor 360TA-024-20-S2 (24V)
	DGGM	Gruner motor 360TA-230-20-S2 (230V)
	TSGM	Gruner motor 340TA-024-05-S2-ST(24V)
	TMGM	Gruner motor 360TA-024-12-S2-ST (24V)
	TGGM	Gruner motor 360TA-024-20-S2-ST (24V)
Base (a)	XYZ	Nominal dimension (mm)
Height (b)	XYZ	Nominal dimension (mm)

Dimensions



a nom	b nom
200	200
250	250
300	300
350	350
400	400
450	450
500	500
550	550
600	600
650	650
700	700
750	750
800	800
850	
900	
950	
1000	
1050	
1100	
1150	
1200	
1250	
1300	
1350	
1400	
1450	
1500	

Combinations of base (a) and height (b) dimensions are available, not available combinations: 200x650, 200×700, 250×700, 200×750, 250×750, 300×750, 350×750, 200×800 250×800, 300×800, 350×800.

It is possible to pair two dampers for bigger duct dimension.

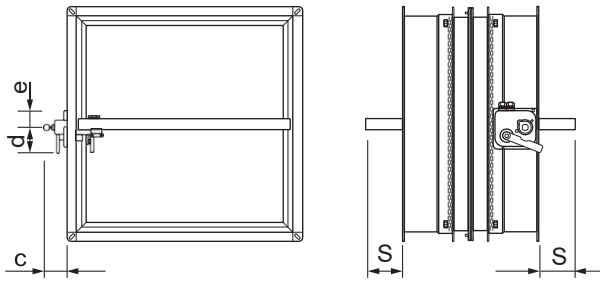
Ordering example

WK45M 400 450 SAMR

- Mechanism type
- Side a
- Side b
- Control mechanism

Fire damper WK45

Dimensions



b nom	S (blade exposition) mm
200	-
250	-
300	-
350	-
400	-
450	-
500	-
550	9
600	34
650	59
700	84
750	109
800	134

Mechanism type:
WK45B - Manual basic
WK45M - Manual with magnet
WK45 VMB/VGB/DMB/TMB/DGB/TGB Belimo motorized version
WK45 VSS/DSS/VPS/DPS/VGS/DGS Siemens motorized version
WK45 VSG/DSG/VMG/DMG/VGG/DGG/TSG/TMG/TGG Gruner motorized version

Mechanism type	c mm	d mm	e mm
WK45B	45	184	57
WK45M	84	184	57
WK45 VMB/VGB/DMB/TMB /DGB/TGB	53	104	63
WK45 VSS/DSS/VPS/DPS/VGS/ DGS	62	125	62
WK45 VSG/DSG/VMG/DMG/VG G/DGG/TSG/TMG/TGG	76	110	72

We reserve the right to make changes without prior notice

Fire damper WK45

Technical data

Fire resistance classification according to EN 13501-3

	Position	Support features	Sealing	Hole	Note	Fire resistance class
Rigid wall	within the wall	Min.thickness 140 mm, min density 550 kg/m³	mortar	square hole b+80 h+80 b+110 h+110	B D F	EI 180 (ve i↔o) S (500Pa)
		Min.thickness 100 mm, min density 550 kg/m³	mortar or plaster	square hole b+80 h+80 b+580 h+580	A B D F	EI 120 (ve i↔o) S (500Pa)
			rockwool and plasterboard/calcium silicate	square hole b+80 h+80 b+110 h+110	A B D F	EI 120 (ve i↔o) S (500Pa)
			sealed with Weichschott	square hole b+100 h+100 b+800 h+800	A B E F	EI 90 (ve i↔o) S (300Pa)

NOTE		
	A Installation without duct connection permitted	**B** minimum distance between two fire dampers 0 mm
	C minimum distance between two fire dampers 200 mm	**D** 75 mm from fire damper and ceiling or side wall
	E 50 mm from fire damper and ceiling or side wall	**F** horizontal or vertical blade axis direction

	Position	Support features	Sealing	Hole	Note	Fire resisteant class
Light wall	within the wall	F-type plasterboard wall min. thickness 100mm, metal studs, optional rock wool insulation	rockwool and plasterboard/calcium silicate	square hole b+75 h+75 b+95 h+95	A B D F	EI 90 (ve i↔o) S (500Pa)
			mortar or plaster	square hole b+100 h+100 b+580 h+580	A B D F	EI 120 (ve i↔o) S (500Pa)
			sealed with Weichschott	square hole b+100 h+100 b+800 h+800	A B E F	EI 90 (ve i↔o) S (300Pa)
	within the wall	F-type plasterboard wall min. thickness 100mm, metal studs, optional rock wool insulation, with sheet metal safety reinforcement	rockwool and plasterboard/calcium silicate	square hole b+100 h+100 b+580 h+580	A B D F	EI 120 (ve i↔o) S (500Pa)
			mortar or plaster	square hole b+100 h+100 b+580 h+580	A B D F	EI 120 (ve i↔o) S (500Pa)

NOTE		
	A Installation without duct connection permitted	**B** minimum distance between two fire dampers 0 mm
	C minimum distance between two fire dampers 200 mm	**D** 75 mm from fire damper and ceiling or side wall
	E 50 mm from fire damper and ceiling or side wall	**F** horizontal or vertical blade axis direction

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Fire damper WK45

Technical data

	Position	Support features	Sealing	Hole	Note	Fire resisteant class
Light wall	within the wall	gypsum blocks min. thickness 100 mm, density 995 kg/m³	plaster	square hole b+80 h+80 b+110 h+110	A B D F	EI 120 (ve i↔o) S (500Pa)
			sealed with Weichschott	square hole b+100 h+100 b+800 h+800	A B E F	EI 90 (ve i↔o) S (300Pa)
	within the wall	gypsum blocks min. thickness 70 mm, density 995 kg/m³	plaster	square hole b+80 h+80 b+110 h+110	A C D F	EI 90 (ve i↔o) S (500Pa)
Sandwich wall	within the wall	Sandwich thickness 100 mm density 100 kg/m³	sealed with Weichschott	square hole b+100 h+100 b+800 h+800	A B E F	EI 90 (ve i↔o) S (300Pa)

NOTE		
	A Installation without duct connection permitted	**B** minimum distance between two fire dampers 0 mm
	C minimum distance between two fire dampers 200 mm	**D** 75 mm from fire damper and ceiling or side wall
	E 50 mm from fire damper and ceiling or side wall	**F** horizontal or vertical blade axis direction

	Position	Support features	Sealing	Hole	Note	Fire resisteant class
Floor	within the floor	Floor min. thickness 140mm, density 2200kg/m³	mortar	square hole b+130 h+130 b+170 h+170	B D	EI 180 (ve i↔o) S (500Pa)
	within the floor	Floor min. thickness 150mm, density 650kg/m³	mortar	square hole b+130 h+130 b+170 h+170	A B D	EI 120 (ve i↔o) S (500Pa)
			sealed with Weichschott	square hole b+100 h+100 b+800 h+800	A B D	EI 120 (ve i↔o) S (300Pa)
	within the floor	Floor min. thickness 100mm, density 650kg/m³	mortar	square hole b+130 h+130 b+170 h+170	A B D	EI 90 (ve i↔o) S (500Pa)

NOTE		
	A Installation without duct connection permitted	**B** minimum distance between two fire dampers 0 mm
	C minimum distance between two fire dampers 200 mm	**D** 75 mm from fire damper and ceiling or side wall
	E 50 mm from fire damper and ceiling or side wall	**F** horizontal or vertical blade axis direction

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Fire damper WK45

For more detailed information visit:

https://www.lindab.com/

The fire resistance classifications refer to the conditions obtained by rigorously applying the instructions indicated in the Technical Manual, with reference both to the construction of the wall/ceiling and the installation of the damper.