

# Fire damper

# WH45



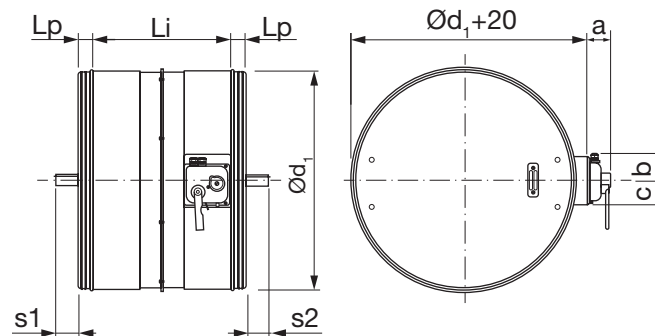
## Description

Circular fire damper for air duct system that penetrate fire resistance walls or floors. With 40 mm thick closing blade made from refractory material. Casing leakage performance class C according to Standard EN1751:2014 section C.3.

The damper prevents fire and smoke from spreading through the air duct system. Tested and classified in accordance with EN 1366-2 and EN 13501-3 with 500 Pa negative pressure and CE marked in accordance with EN 15650.

Product code		
Type	WH	Circular fire damper
Series	45	Blade thickness 40 mm
Connection	-	Standard
	U	Lindab Safe connection
Manual command		
Command type	B	Manual basic
	M	Manual with magnet
Position indication microswitches	S0	Without position microswitches
	SA	With open blade microswitch
	SC	With closed blade microswitch
	S2	With two position microswitches
Magnet	M0	Without magnet (only for command type "B")
	MR	With power supply interruption magnet 24 V DC
	MI	With power supply input magnet 24 V DC
	MY	With power supply interruption magnet, 230 V AC
	MZ	With power supply input magnet, 230 V AC
Motorized		
Motor type	VSS	Siemens motor GRA 126 (24V)
	DSS	Siemens motor GRA 326 (230V)
	VPS	Siemens motor GNA 126 (24V)
	DPS	Siemens motor GNA 326 (230V)
	VMB	Belimo motor BFN24T (24V)
	DMB	Belimo motor BFN230T (230V)
	VGS	Siemens motor GGA 126 (24V)
	DGS	Siemens motor GGA 326 (230V)
	VGB	Belimo motor BF24T (24V)
	DGB	Belimo motor BF230T (230V)
TMB	Belimo motor BFN24T-ST (24V)	
TGB	Belimo motor BF24T-ST (24V)	
Dimension	XYZ	Nominal diameter (mm)

## Dimensions



Ød <sub>1</sub> nom	WH45				WH45U				m [kg]
	s1 [mm]	Lp [mm]	Li [mm]	s2 [mm]	s1 [mm]	Lp [mm]	Li [mm]	s2 [mm]	
355	-	45	530	-	-	60	384	-	11,0
400	-	45	530	-	-	73	384	-	12,0
450	-	45	530	-	23	73	384	-	14,0
500	-	45	530	-	49	73	384	-	15,0
560	-	45	530	-	79	73	384	-	18,0
600	-	45	530	-	99	73	384	-	20,0
630	-	45	530	-	114	73	384	-	22,0
710	35	45	530	35	131	95	384	-	26,0
800	40	45	530	40	176	95	384	38	31,0

Dimensions Ø200-315 are available on request.

### Mechanism type:

WH45B - Manual basic

WH45M - Manual with magnet

WH45VGB/DGB - Belimo motorized version

WH45VPS/DPS - Siemens motorized version

## Ordering example

Mechanism type	WH45	U	200	SCMR
Connection type				
Dimension Ød <sub>1</sub>				
Control mechanism				

# Fire damper

WH45

## Technical data

Fire resistance classification according to EN 13501-3

		EI 180 S (500 Pa)	EI 120 S (500 Pa)	EI 90 S (500 Pa)	EI 60 S (500 Pa)	
Rigid wall	<b>EI 120 S – Installation within vertical rigid wall</b> Wall min. thickness 100 mm Wall min. density 500 kg/m <sup>3</sup> Mortar or plaster putty sealing ve (i↔o)	Wet sealing method	-	∅ min 200 max 800	∅ min 200 max 800	∅ min 200 max 800
	<b>EI 90 S – Installation within vertical rigid wall</b> Wall min. thickness 100 mm Wall min. density 500 kg/m <sup>3</sup> Plasterboard and rock wool 100 kg/m <sup>3</sup> sealing ve (i↔o)	Dry sealing method	-	-	∅ min 200 max 800	∅ min 200 max 800
Flexible wall	<b>EI 90 S – Installation within vertical light wall (plasterboard)</b> Wall min. thickness 100 mm Wall rock wool min. density 100 kg/m <sup>3</sup> Plasterboard and rock wool 100 kg/m <sup>3</sup> or mortar or plaster putty sealing ve (i↔o)	Dry and wet sealing method	-	-	∅ min 200 max 800	∅ min 200 max 800
	<b>EI 90 S – Installation within vertical light wall (gypsum block wall)</b> Wall min. thickness 70 mm Wall min. density 995 kg/m <sup>3</sup> Plaster putty sealing ve (i↔o)	Wet sealing method	-	-	∅ min 200 max 800	∅ min 200 max 800
	<b>EI 120 S – Installation within vertical light wall (gypsum block wall)</b> Wall min. thickness 100 mm Wall rock wool min. density 995 kg/m <sup>3</sup> Plaster putty sealing ve (i↔o)	Wet sealing method	-	∅ min 200 max 800	∅ min 200 max 800	∅ min 200 max 800
Floor	<b>EI 90 S – Installation within floor</b> Floor min. thickness 100 mm Floor min. density 650 kg/m <sup>3</sup> Mortar sealing ho (i↔o)	Wet sealing method	-	-	∅ min 200 max 800	∅ min 200 max 800
	<b>EI 120 S – Installation within floor</b> Floor min. thickness 150 mm Floor min. density 650 kg/m <sup>3</sup> Mortar sealing ho (i↔o)	Wet sealing method	-	∅ min 200 max 800	∅ min 200 max 800	∅ min 200 max 800
	<b>EI 180 S – Installation within floor</b> Floor min. thickness 150 mm Floor min. density 2200 kg/m <sup>3</sup> Mortar sealing ho (i↔o)	Wet sealing method	∅ min 200 max 800	∅ min 200 max 800	∅ min 200 max 800	∅ min 200 max 800

- ∅ nominal diameter of damper (mm)
- ve vertical installation
- ho horizontal installation
- (i↔o) origin of fire is irrelevant
- Pa negative pressure
- E integrity
- I thermal insulation
- S smoke seal

For more detailed information visit:  
<http://www.mp3-italia.it>

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.