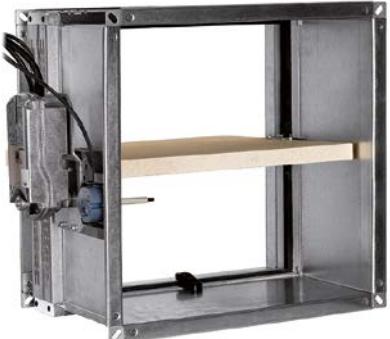


## Fire dampers

EN 1366-2 tested and CE marked  
according to EN 15650 fire dampers

# Fire dampers

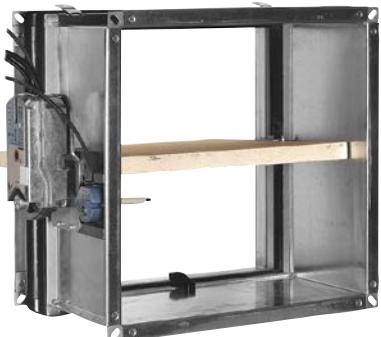
**WK25**



## Top performances

- Dimensions: from 100x200 to 1500x800 mm
- Light and compact: only 310 mm long (WK25)
- All "side by side" installations are CE certified (WK45, WK25, WKS25)
- All "near the wall/near the floor/near the corner" installations are CE certified (WKS25)
- Quick installation (WKS25)
- Smoke sealing tested at 500 Pa
- Casing leakage performance class C according to Standard EN1751:2014 section C.3
- Can be installed without special material or tools for sealing (WKS25)
- Manual mechanism, magnetic release or servomotor driven
- Replaceable mechanism even with installed damper
- Origin of fire is irrelevant
- Automatic closing in less than 30 seconds when reaching 70 °C
- No thermal bridge between ducts across the wall
- Heat and flame insulation
- Cold and hot smokes sealing

**WKS25**



## Tested and certified security

- Tested and certified at CSI laboratory in Bollate (Italy), MPA in Braunschweig (Germany) and Efectis (France)
- Aeraulic performances tested in CFD environment at Energo S.r.l. (Italy)
- Acoustic performances test at Peutz laboratories in Mook (Holland)

**WK45**



## Security everywhere

- Tested according to EN 1366-2 for every kind of support
- CE marked according to EN 15650

# Fire dampers

WH25



WH45



## Top performances

- Diameters: from 100mm to 800 mm
- Light and compact: only 350 mm long (WH25)
- Smoke sealing tested at 500 Pa
- Casing leakage performance class C according to Standard EN1751:2014 section C.3
- Manual mechanism, magnetic release or servomotor driven
- Replaceable mechanism even with installed damper
- Origin of fire is irrelevant
- Automatic closing in less than 30 seconds when reaching 70 °C
- No thermal bridge between ducts across the wall
- Heat and flame insulation
- Cold and hot smokes sealing

## Tested and certified security

- Tested and certified at CSI laboratory in Bollate (Italy), MPA in Braunschweig (Germany) and Efectis (France)
- Aerdraulic performances tested in CFD environment at Energo S.r.l. (Italy)
- Acoustic performances test at Peutz laboratories in Mook (Holland)

## Security everywhere

- Tested according to EN 1366-2 for every kind of support
- CE marked according to EN 15650



# WK25

All “side by side” installations are CE certified (WK25)

## Technical data

Fire resistance classification according to EN 13501-3

		El 180 S (500 Pa)	El 120 S (500 Pa)	El 90 S (500 Pa)	El 60 S (500 Pa)	
El 120 S Installation within vertical rigid wall p. 24						
Rigid wall	Wall minimum thickness 100 mm Wall minimum density 550 kg/m <sup>3</sup> Mortar or plaster putty sealing ve (i↔o)	W	-	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600
El 120S Installation within vertical rigid wall p. 24						
	Wall minimum thickness 100 mm Wall minimum density 550 kg/m <sup>3</sup> Plasterboard and rock wool 100 kg/m <sup>3</sup> sealing ve (i↔o)	D	-	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600
El 120 S Installation within vertical light wall (plasterboard) p. 26						
Flexible wall	Wall minimum thickness 100 mm Wall rock wool minimum density 100 kg/m <sup>3</sup> Plasterboard and rock wool 100 kg/m <sup>3</sup> sealing ve (i↔o)	D	-	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600
El 120 S Installation within vertical light wall (gypsum blocks wall) p. 27						
	Wall minimum thickness 100 mm Wall minimum density 995 kg/m <sup>3</sup> Plasterboard sealing ve (i↔o)	D	-	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600
El 90 S Installation within vertical light wall (gypsum blocks wall) p. 27						
	Wall minimum thickness 70 mm Wall minimum density 995 kg/m <sup>3</sup> Plasterboard sealing ve (i↔o)	D	-	-	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600
El 180 S Installation within floor p. 28						
Floor	Floor minimum thickness 150 mm Floor minimum density 2200 kg/m <sup>3</sup> Mortar sealing ho (i↔o)	W	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600
El 120 S Installation within floor p. 28						
	Floor minimum thickness 150 mm Floor minimum density 650 kg/m <sup>3</sup> Mortar sealing ho (i↔o)	W	-	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600
El 90 S Installation within floor p. 28						
	Floor minimum thickness 100 mm Floor minimum density 650 kg/m <sup>3</sup> Mortar sealing ho (i↔o)	W	-	-	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600

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

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.

If the fire resistance class of the wall/floor is different from that of the fire damper in the specific installation conditions, the fire class to be used as reference will be the lesser of the two.



# WKS25

**All “side by side” and “near the wall/near the floor/near the corner” installations are CE certified (WKS25)**

## Technical data

Fire resistance classification according to EN 13501-3

		EI 120 S (500 Pa)	EI 90 S (500 Pa)	EI 60 S (500 Pa)	
<b>Rigid wall</b>	EI 120 S Installation within vertical rigid wall p. 21				
	Wall minimum thickness 100 mm Wall minimum density 550 kg/m <sup>3</sup> Plasterboard and rock wool 100 kg/m <sup>3</sup> sealing ve (i↔o)	D	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600
<b>Flexible wall</b>	EI 120 S Installation within vertical light wall (plasterboard) p. 23				
	Wall minimum thickness 100 mm Wall rock wool minimum density 100 kg/m <sup>3</sup> Plasterboard sealing ve (i↔o)	D	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600
	EI 90 S Installation within vertical light wall (gypsum blocks wall) p. 26				
	Wall minimum thickness 70 mm Wall minimum density 995 kg/m <sup>3</sup> Plasterboard sealing ve (i↔o)	D	-	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600
	EI 120 S Installation within vertical light wall (gypsum blocks wall) p. 27				
	Wall minimum thickness 100 mm Wall minimum density 995 kg/m <sup>3</sup> Plasterboard sealing ve (i↔o)	D	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600	B x H min 100 x 200 max 800 x 600

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

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.  
 If the fire resistance class of the wall/floor is different from that of the fire damper in the specific installation conditions, the fire class to be used as reference will be the lesser of the two.

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

### Installations within vertical light wall (Shaft wall)

		EI 90 S (300 Pa)	EI 60 S (300 Pa)	
<b>Flexible wall</b>	EI 90 S Installation within vertical light wall (Shaft wall) p. 29			
	Wall minimum thickness 90 mm Plasterboard sealing ve (i↔o)	D	B X H min 100 X 200 max 800 X 600	B X H min 100 X 200 max 800 X 600



# WK45

## Technical data

Fire resistance classification according to EN 13501-3

			El 180 S (500 Pa)	El 120 S (500 Pa)	El 90 S (500 Pa)	El 60 S (500 Pa)
El 120 S Installation within vertical rigid wall p. 23						
Rigid wall	Wall minimum thickness 100 mm Wall minimum density 500 kg/m <sup>3</sup> Mortar or plaster putty sealing ve (i↔o)	W	-	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800
	El 120S Installation within vertical rigid wall p. 23	D	-	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800
	El 180 S Installation within vertical rigid wall p. 23	W	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800
El 120 S Installation within vertical light wall (plasterboard) p. 25						
Flexible wall	Wall minimum thickness 100 mm Wall rock wool minimum density 100 kg/m <sup>3</sup> Plasterboard and mortar or plaster putty sealing ve (i↔o)	W	-	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800
	El 90 S Installation within vertical light wall (plasterboard) p. 25	D	-	-	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800
	El 120 S Installation within vertical light wall (gypsum blocks wall) p. 27	W	-	B X H min 200 X 200 max 1000 X 600	B X H min 200 X 200 max 1000 X 600	B X H min 200 X 200 max 1000 X 600
El 90 S Installation within vertical light wall (gypsum blocks wall) p. 27						
Floor	Wall minimum thickness 70 mm Wall minimum density 995 kg/m <sup>3</sup> Plaster putty sealing ve (i↔o)	W	-	-	B X H min 200 X 200 max 1000 X 600	B X H min 200 X 200 max 1000 X 600
	El 180 S Installation within floor p. 28	W	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800
	El 120 S Installation within floor p. 28	W	-	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800
El 90 S Installation within floor p. 28						
	Floor minimum thickness 100 mm Floor minimum density 650 kg/m <sup>3</sup> Mortar sealing ve (i↔o)	W	-	-	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800
	El 180 S Installation within floor p. 28	W	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800

## Technical data

Fire resistance classification according to EN 13501-3

		El 120 S (300 Pa)	El 90 S (300 Pa)	El 60 S (300 Pa)
Rigid wall	El 90 S Installation within vertical rigid wall with Fire Batt (Weichschott) sealing p. 29 Wall minimum thickness 100 mm Wall rock wool minimum density 500 kg/m <sup>3</sup> Rock wool 140 kg/m <sup>3</sup> and endothermic varnish sealing ve (i↔o)	W	-	B X H min 200 X 200 max 1500 X 800
Flexible wall	El 90 S Installation within vertical light wall (plasterboard) with Fire Batt (Weichschott) sealing p. 29 Wall minimum thickness 100 mm Wall rock wool minimum density 100 kg/m <sup>3</sup> Rock wool 140 kg/m <sup>3</sup> and endothermic varnish sealing ve (i↔o)	W	-	B X H min 200 X 200 max 1500 X 800
Floor	El 90 S Installation within vertical light wall (gypsum blocks wall) with Fire Batt (Weichschott) sealing p. 29 Wall minimum thickness 100 mm Wall minimum density 995 kg/m <sup>3</sup> Rock Wool 140 kg/m <sup>3</sup> and endothermic varnish sealing ve (i↔o)	W	-	B X H min 200 X 200 max 1500 X 800
	El 120 S Installation within floor with Fire Batt (Weichschott) sealing p. 30 Floor minimum thickness 150 mm Floor minimum density 650 kg/m <sup>3</sup> Rock Wool 140 kg/m <sup>3</sup> and endothermic varnish sealing ho (i↔o)	W	B X H min 200 X 200 max 1500 X 800	B X H min 200 X 200 max 1500 X 800

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

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.

If the fire resistance class of the wall/floor is different from that of the fire damper in the specific installation conditions, the fire class to be used as reference will be the lesser of the two.



# WH25

## Technical data

Fire resistance classification according to EN 13501-3

		El 120 S (500 Pa)	El 90 S (500 Pa)	El 60 S (500 Pa)
Rigid wall	El 120 S Installation within vertical rigid wall p. 20			
	Wall minimum thickness 100 mm			
	Wall minimum density 550 kg/m <sup>3</sup>			
	Mortar or plaster putty sealing ve (i↔o)	W	Ø min 100 max 315	Ø min 100 max 315
	El 90 S Installation within vertical rigid wall p. 20			
	Wall minimum thickness 100 mm			
	Wall minimum density 550 kg/m <sup>3</sup>	D	-	Ø min 100 max 315
	Plasterboard and rock wool 100 kg/m <sup>3</sup> sealing ve (i↔o)			Ø min 100 max 315
	El 60 S Installation within vertical light wall (plasterboard) p. 22			
	Wall minimum thickness 100 mm	D	-	Ø min 100 max 315
Flexible wall	Wall rock wool minimum density 80 kg/m <sup>3</sup>			
	Plasterboard and rock wool 80 kg/m <sup>3</sup> sealing ve (i↔o)			
	El 90 S Installation within vertical light wall (plasterboard) p. 22			
	Wall minimum thickness 100 mm	D	-	Ø min 100 max 315
	Wall rock wool minimum density 80 kg/m <sup>3</sup>			
	Plasterboard and rock wool 100 kg/m <sup>3</sup> sealing ve (i↔o)			
	El 120 S Installation within vertical light wall (plasterboard) p. 22			
	Wall minimum thickness 100 mm	W	Ø min 100 max 315	Ø min 100 max 315
	Wall rock wool minimum density 80 kg/m <sup>3</sup>			
	Plasterboard and mortar or plaster putty sealing ve (i↔o)			
Floor	El 90 S Installation within vertical light wall (gypsum blocks wall) p. 23			
	Wall minimum thickness 70 mm	W	-	Ø min 100 max 315
	Wall minimum density 995 kg/m <sup>3</sup>			
	Plaster putty sealing ve (i↔o)			
	El 120 S Installation within vertical light wall (gypsum blocks wall) p. 23			
	Wall minimum thickness 100 mm	W	Ø min 100 max 315	Ø min 100 max 315
	Wall minimum density 995 kg/m <sup>3</sup>			
	Plaster putty sealing ve (i↔o)			
	El 90 S Installation within floor p. 24			
	Floor minimum thickness 100 mm	W	-	Ø min 100 max 315
	Floor minimum density 650 kg/m <sup>3</sup>			
	Mortar sealing ho (i↔o)			
	El 120 S Installation within floor p. 24			
	Floor minimum thickness 150 mm	W	Ø min 100 max 315	Ø min 100 max 315
	Floor minimum density 650 kg/m <sup>3</sup>			
	Mortar sealing ho (i↔o)			

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.

If the fire resistance class of the wall/floor is different from that of the fire damper in the specific installation conditions, the fire class to be used as reference will be the lesser of the two.



# 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)
EI 120 S Installation within vertical rigid wall p.<?>					
Rigid wall	Wall minimum thickness 100 mm Wall minimum density 500 kg/m <sup>3</sup> Mortar or plaster putty sealing ve (i↔o)	W	-	∅ min 200 max 800	∅ min 200 max 800
EI 90 S Installation within vertical rigid wall p.<?>					
	Wall minimum thickness 100 mm Wall minimum density 500 kg/m <sup>3</sup> Plasterboard and rock wool 100 kg/m <sup>3</sup> sealing ve (i↔o)	D	-	-	∅ min 200 max 800
EI 90 S Installation within vertical light wall (plasterboard) p.<?>					
Flexible wall	Wall minimum thickness 100 mm Wall rock wool minimum 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)	D/W	-	-	∅ min 200 max 800
EI 90 S Installation within vertical light wall (gypsum blocks wall) p.<?>					
	Wall minimum thickness 70 mm Wall minimum density 995 kg/m <sup>3</sup> Plaster putty sealing ve (i↔o)	W	-	-	∅ min 200 max 800
EI 120 S Installation within vertical light wall (gypsum blocks wall) p.<?>					
	Wall minimum thickness 100 mm Wall minimum density 995 kg/m <sup>3</sup> Plaster putty sealing ve (i↔o)	W	-	∅ min 200 max 800	∅ min 200 max 800
EI 90 S Installation within floor p.<?>					
Floor	Floor minimum thickness 100 mm Floor minimum density 650 kg/m <sup>3</sup> Mortar sealing ho (i↔o)	W	-	-	∅ min 200 max 800
EI 120 S Installation within floor p.<?>					
	Floor minimum thickness 150 mm Floor minimum density 650 kg/m <sup>3</sup> Mortar sealing ho (i↔o)	W	-	∅ min 200 max 800	∅ min 200 max 800
EI 180 S Installation within floor p.<?>					
	Floor minimum thickness 150 mm Floor minimum density 2200 kg/m <sup>3</sup> Mortar sealing ho (i↔o)	W	∅ 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

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.

If the fire resistance class of the wall/floor is different from that of the fire damper in the specific installation conditions, the fire class to be used as reference will be the lesser of the two.



**At Lindab** we simplify construction for our customers. We do that by designing easy-to-use products and solutions, as well as offering efficient availability and logistics. We are also working on ways to reduce our impact on our environment and climate. We do that by developing methods to produce our solutions using a minimum of energy and natural resources, and by reducing negative effects on the environment. We use steel in our products. It's one of few materials that can be recycled an infinite number of times without losing any of its properties. That means less carbon emissions in nature and less energy wasted.

**We simplify construction**