

Fire dampers

Type FV-EU



CE compliant according to European regulations



LONMARK PARTNER

With TROXNETCOM as an option



Tested to VDI 6022

Fire protection valves for supply and extract air

Circular fire protection valve for the isolation of duct penetrations between fire compartments; suitable for supply air and extract air systems. They also satisfy ventilation requirements

- Nominal sizes Ø 100, 125, 160, 200 mm
- For installation in walls and ceilings
- Low differential pressure and sound power level
- Integration into the central BMS with TROXNETCOM

Optional equipment and accessories

- Electric limit switch
- Extension piece
- Trim ring, circular or square

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Variant

FV-EU

Product example



Description

For detailed information on attachments see Chapter K4 – 1.2.

Application

- Fire protection valves of Type FV-EU, with CE marking and declaration of performance, for the isolation of duct penetrations between fire compartments in the event of a fire
- To prevent the propagation of fire and smoke through ductwork to adjacent designated fire compartments

Classification

- Class of performance to EN 13501-3, up to EI 120 ($v_e, h_o, i \leftrightarrow o$) S

Variants

- With fusible link
- With fusible link and limit switch

Nominal sizes

- Ø100, 125, 160, 200 mm
- L: 150 mm

Attachments

- Limit switch for capturing the valve position
- Network module for the integration with AS-i networks

Accessories

Mortar-based installation

- Trim ring, circular
- Trim ring, square
- Flexible connectors
- Extension piece

Special characteristics

- Declaration of performance according to Construction Products Regulation
- Classification to EN 13501-3, up to EI 120 ($v_e, h_o, i \leftrightarrow o$) S
- Building inspectorate licence Z-56.4212-991 for fire resistance properties
- Complies with the requirements of EN 15650
- Tested to EN 1366-2 for fire resistance properties
- Hygiene complies with VDI 6022 part 1 (07/2011), VDI 3803 (10/2002), DIN 1946 part 4 (12/2008), and EN 13779 (09/2007)
- Corrosion protection according to EN 15650 in connection with EN 60068-2-52
- Closed valve cone air leakage to EN 1751, class 2
- Low differential pressure and sound power level
- Any airflow direction

Construction features

- Adjustment device for large or small air volumes
- Valve cone with bayonet fixing
- Integration into the central BMS with TROXNETCOM

Materials and surfaces

- Installation subframe, spigot and valve disc made of sheet steel
- Installation subframe and spigot with stove-enamelled finish, black
- Exposed surface of valve disc powder-coated RAL 9010
- Valve cone made of special insulation material
- Seal made of polyurethane
- Attachments made of galvanised steel
- Increased corrosion protection due to powder-coated casing

Installation and commissioning

Installation is carried out according to the installation and operating manual.

Mortar-based installation:

- In solid walls and ceiling slabs
- In lightweight partition walls with metal support structure and cladding on both sides

Standards and guidelines

- Construction Products Regulation
- EN 15650:2010 Ventilation for buildings – fire dampers
- EN 1366-2:1999 Fire resistance tests for service installations – Fire dampers
- EN 13501-3:2010 Fire classification of construction products and building elements
- EN 1751:1999 Ventilation for buildings – Air terminal devices

Maintenance

- The functional reliability of the fire protection valve must be tested at least every six months; this has to be arranged by the owner of the ventilation system; functional tests must be carried out in compliance with the basic maintenance principles stated in EN 13306 and DIN 31051. If two consecutive tests, one 6 months after the other, are successful, the next test can be conducted one year later.
- Fire protection valves must be included in the regular cleaning schedule of the ventilation system
- For details on maintenance and inspection, refer to the installation and operating manual

Technical data

Nominal sizes	Ø100, 125, 160, 200 mm
Casing length	150 mm (300 mm with extension piece)
Release temperature	72 °C
Operating temperature	0 to 50 °C
Volume flow rate range	Extract air up to 400 m³/h or supply air up to 210 m³/h

Function

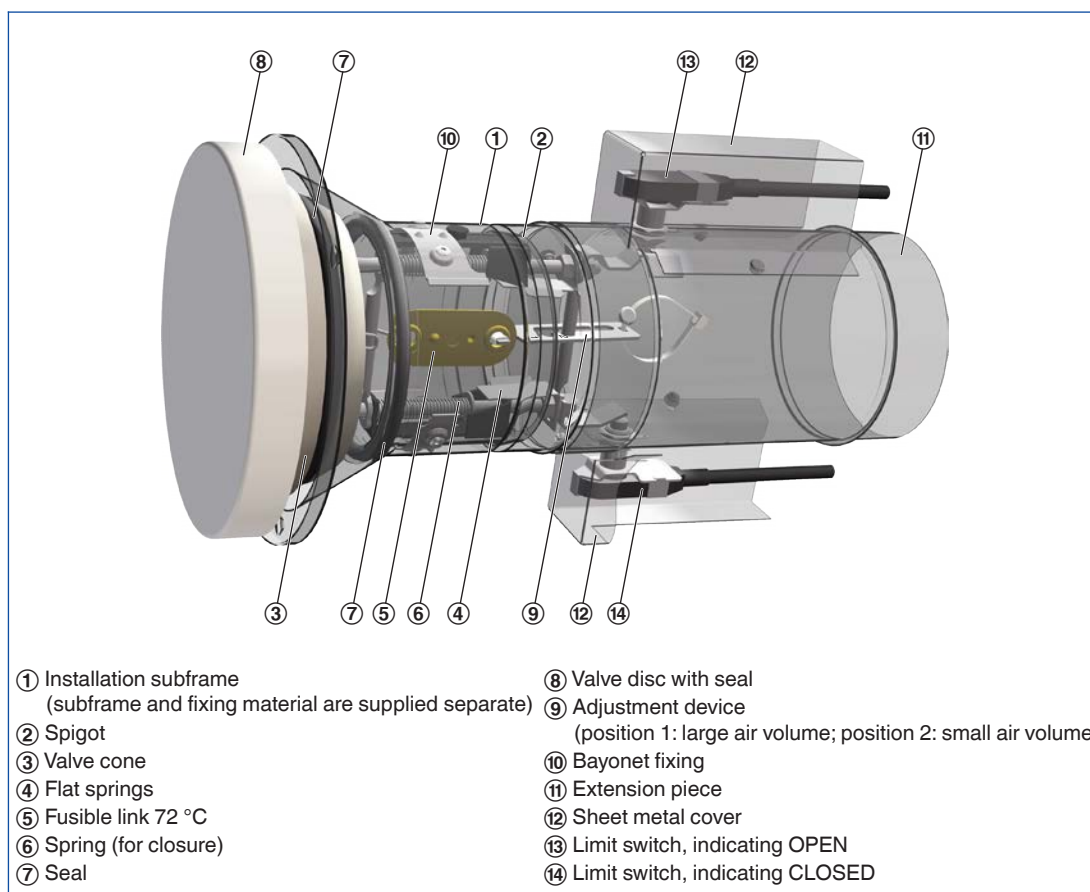
Construction with fusible link

Functional description

In the event of a fire, fire protection valves shut automatically to prevent the propagation of fire and smoke through ductwork to adjacent designated fire compartments.

In the event of a fire, the valve is triggered at 72 °C by a fusible link. The release mechanism is accessible and can be tested from the outside.

Schematic illustration of the FV-EU with extension piece and limit switches



Design information

- Approved only for use in ventilation and air conditioning systems
- If the fire protection valve is installed in a solid wall, solid ceiling slab or lightweight partition wall with a lower fire resistance class than that of the fire protection valve FV-EU, the fire resistance class of the wall or ceiling slab applies also to the FV-EU (details are available upon request)
- Ducting must be installed in such a manner that it does not impose any significant loads on the fire protection valve in the event of a fire
- For particular applications it is recommended that flexible connectors are used to connect rigid ducting to the unit.
- For further information relevant to design, in particular information on installation situations, please refer to the operating and installation manual.



Incorrect use

Never use the fire damper

- in areas with potentially explosive atmospheres
- as a smoke control damper
- outdoors without sufficient protection against the effects of weather
- in atmospheres where chemical reactions, whether planned or unplanned, may cause damage to the fire damper or lead to corrosion



If this fire damper is used in Germany:

- Allowed only for installation situations to which 'i ↔ o' applies
- Do not use it as an air transfer application.
- Do not use it in extract air systems in commercial kitchens.

Essential characteristic: fire resistance — size [mm]: Ø 100 to Ø 200				
Supporting construction	Construction details	Installation location	Installation type	Class of performance (EI TT)
 Solid wall	<ul style="list-style-type: none"> • $d \geq 100 \text{ mm}$ • $\rho \geq 500 \text{ kg/m}^3$ 	in the wall	Mortar-based installation	EI 120 (v_e i↔o) S
	<ul style="list-style-type: none"> • $d \geq 100 \text{ mm}$ • $\rho \geq 500 \text{ kg/m}^3$ 	in the wall	Dry mortarless installation	EI 90 (v_e o → i) S (*)
 Lightweight partition wall	<ul style="list-style-type: none"> • Metal stud wall, gypsum plasterboard DF • $d \geq 100 \text{ mm}$ 	in the wall	Mortar-based installation	EI 120 (v_e i↔o) S

(*) o → i: tested with the connection on the non-exposed side

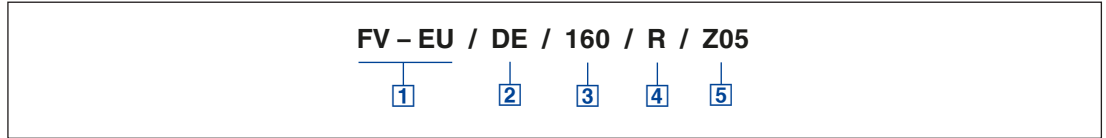
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Essential characteristic: fire resistance – size [mm]: Ø 100 to Ø 200				
Supporting construction	Construction details	Installation location	Installation type	Class of performance (EI TT)
 <p>Lightweight partition wall</p>	<ul style="list-style-type: none"> • Metal stud wall, gypsum plasterboard DF • $d \geq 100 \text{ mm}$ 	in the wall	Dry mortarless installation	EI 60 (v_e o → i) S (*)
 <p>Solid ceiling slab</p>	<ul style="list-style-type: none"> • $d \geq 150 \text{ mm}$ • $\rho \geq 600 \text{ kg/m}^3$ 	in the ceiling	Mortar-based installation	EI 90 (h_o i ↔ o) S
	<ul style="list-style-type: none"> • $d \geq 150 \text{ mm}$ • $\rho \geq 600 \text{ kg/m}^3$ 	in the ceiling	Mortar-based installation	EI 120 (h_o o → i) S (*)
	<ul style="list-style-type: none"> • $d \geq 150 \text{ mm}$ • $\rho \geq 600 \text{ kg/m}^3$ 	in the ceiling	Dry mortarless installation	EI 60 (h_o o → i) S (*)

(*) o → i: connection on the non-exposed side

Order code

FV-EU



1 Type

FV-EU Fire protection valve

2 Country of destination

DE Germany
Other destination countries upon request

3 Nominal size [mm]

100
125
160
200

4 Accessories

No entry: none
R Trim ring - circular
Q Trim ring - square

5 Attachments

Z04 - Z07

Order examples

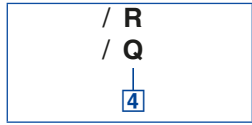
FV-EU

Make TROX
Type FV-EU / DE / 160

FV-EU with circular trim ring, extension piece and limit switch for indicating CLOSED

Make TROX
Type FV-EU / DE / 160 / R / Z05

Description



Order code detail

Application

- For mortar-based installation a trim ring may be used (trim ring and fixing tabs are supplied extra and are to be fixed to the valve by others)

Materials and surfaces

- Trim ring, circular or square, made of galvanised sheet steel, powder-coated RAL 9010

Note

For further information relevant to design, in particular information on installation situations, please refer to the operating and installation manual.

Accessories

Mortar-based installation	Dry mortarless installation	Order code
Trim ring, circular	-	R
Trim ring, square	-	Q

Technical data

Installation opening/trim ring dimensions [mm]

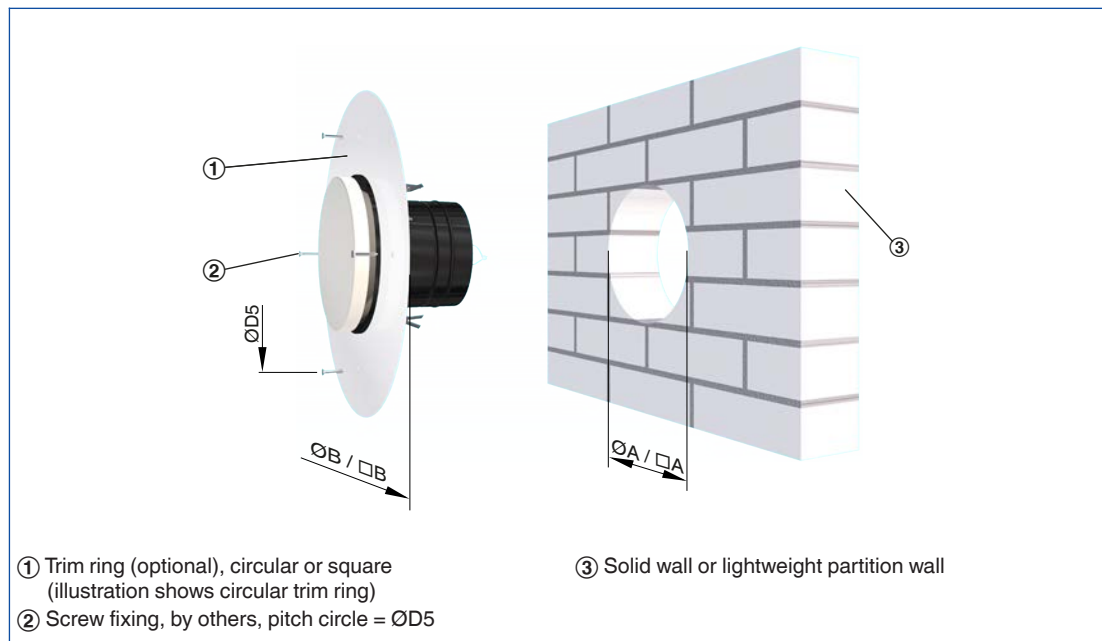
Nominal size	100	125	160	200
Trim ring, circular [ØB]	375	410	460	515
Trim ring, square [□B]	290	315	350	390
ØD5*	270	295	330	370

Lightweight partition wall = □A = 80...120 mm

Solid wall = ØA / □A ≥ 80 mm

* Applies to square/circular trim ring

FV-EU with trim ring (mortar-based installation)



Description



Flexible connector
for FV-EU

Application

- For information on how to limit such loads please refer to the guideline regarding fire protection requirements on ventilation systems (Lüftungsanlagen-Richtlinie, LüAR)
- As ducts may expand and walls may become deformed in the event of a fire, we recommend using flexible connectors for installation in lightweight partition walls
- Flexible connectors should be installed in such a way that they can compensate both tension and compression
- Flexible ducts can be used as an alternative
- Flexible connectors are to be ordered separately

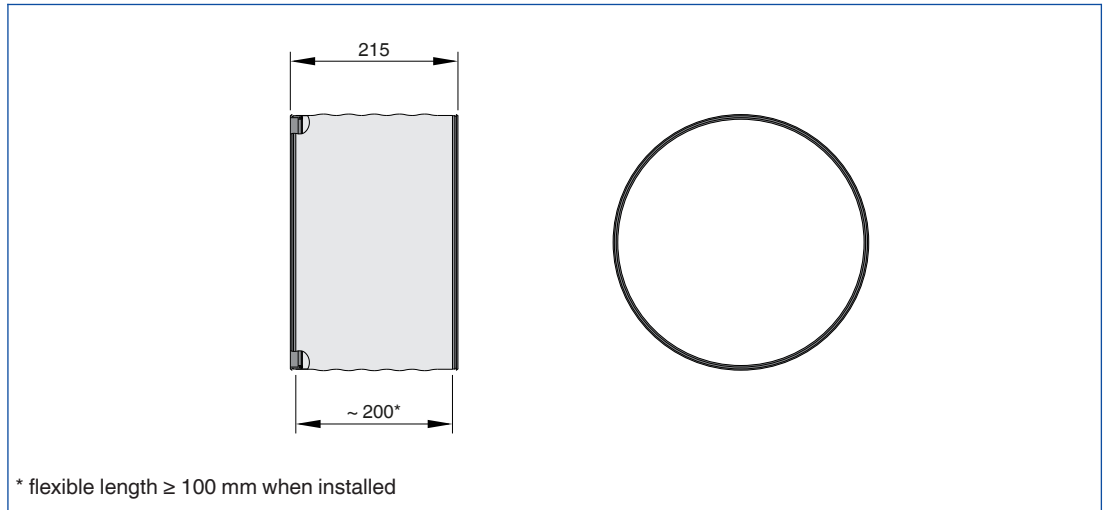
Materials and surfaces

- Flexible connectors made of fibre-reinforced plastic
- Fire resistance properties to 4102; B2

Note

For further information relevant to design, in particular information on installation situations, please refer to the operating and installation manual.

Flexible connector



1 Description

Application

- Fire protection valves with limit switches are supplied with extension pieces
- Extension pieces are also available separately

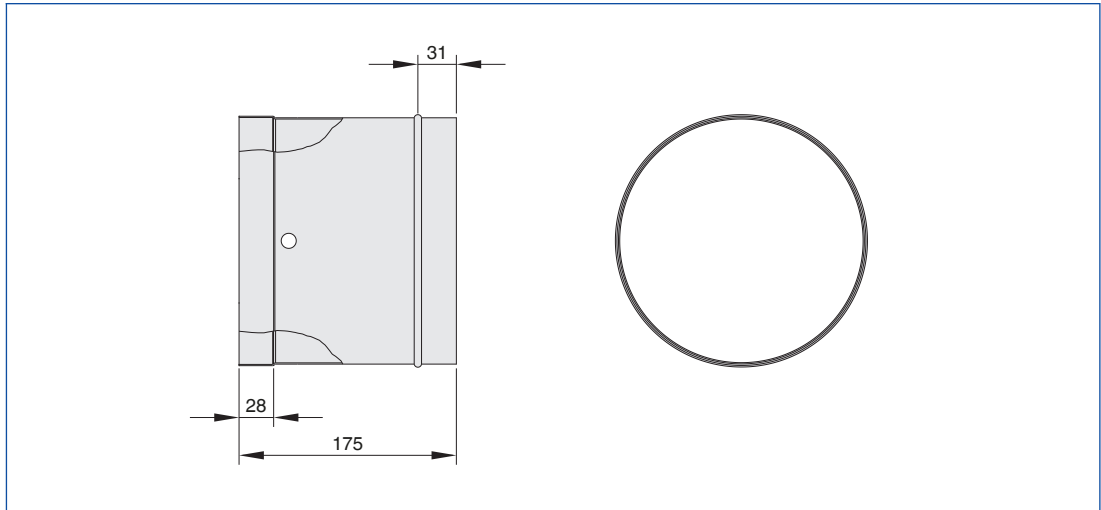
Materials and surfaces

- Extension piece made of galvanised sheet steel, powder-coated black (RAL 9005)

Note

For further information relevant to design, in particular information on installation situations, please refer to the operating and installation manual.

Extension piece



Description



Limit switch

For detailed information on limit switches see Chapter 1.2

Application

- Limit switches with volt-free contacts enable the valve position indication
- Up to the maximum switch rating, relays or indicator lights for fire alarm systems can be used
- One limit switch each is required for valve positions OPEN and CLOSED.
- Fire protection valves can be supplied with one or two limit switches; the switches can also be fitted later (this depends on the installation situation and access from the rear)
- Limit switches require an extension piece
- The TROXNETCOM AS-Interface system allows for integrating valves into a bus system. For more information please refer to catalogue K4-6.2 (AS-i modules, AS-EP)

/ Z04
/ Z05
/ Z06
/ Z07
6

Order code detail

Attachments	Order code
Extension piece	Z04
Extension piece Z04 and limit switch for indicating CLOSED	Z05
Extension piece Z04 and limit switch for indicating OPEN	Z06
Extension piece Z04 and limit switches for indicating CLOSED and OPEN	Z07

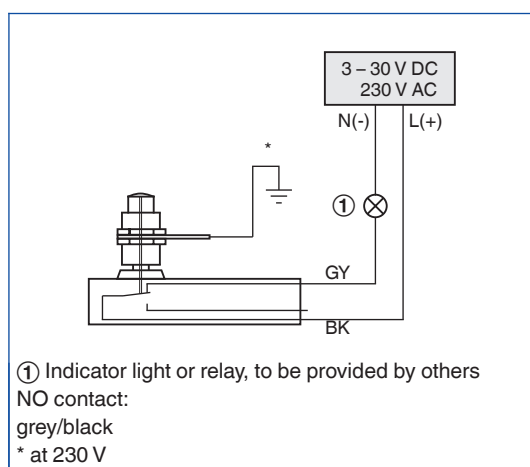
Technical data

Limit switch

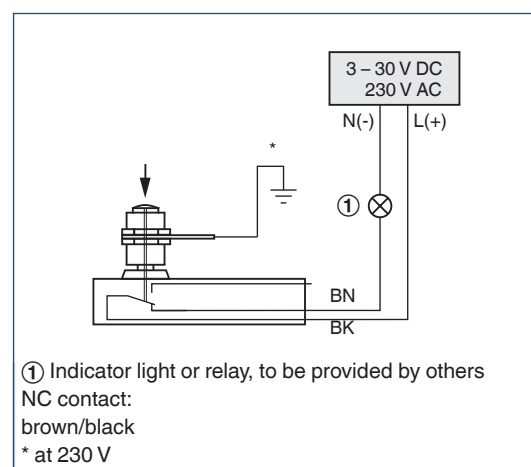
Connecting cable length/cross section	2 m/3 × 0.75 mm ²
Protection level	IP 56
IEC protection class	I with protective earth; III without protective earth
Maximum switching current	5 A
Maximum switching voltage	30 V DC, 250 V AC

Wiring Examples

CLOSED or OPEN position reached – limit switch is actuated



CLOSED or OPEN position not reached – limit switch is not actuated



1 Volume flow rate at differential pressure $\Delta p_{st} < 35$ Pa (supply air)

L_{WA} [dB(A)]	25		35		45		25		35		45	
Nominal size	\dot{V}											
mm	l/s	Pa	l/s	Pa	l/s	Pa	m ³ /h	Pa	m ³ /h	Pa	m ³ /h	Pa
100	15	22	21	42	29	82	55	22	75	42	105	82
125	20	19	29	39	40	72	73	19	105	39	143	72
160	19	13	28	28	39	57	68	13	100	28	142	57
200	24	14	33	28	49	60	85	14	120	28	175	60

Volume flow rate at differential pressure $\Delta p_{st} < 35$ Pa (extract air)

L_{WA} [dB(A)]	25		35		45		25		35		45	
Nominal size	\dot{V}											
mm	l/s	Pa	l/s	Pa	l/s	Pa	m ³ /h	Pa	m ³ /h	Pa	m ³ /h	Pa
100	17	18	25	38	35	75	62	18	90	38	126	75
125	13	5	27	21	58	99	48	5	97	21	210	99
160	21	11	36	32	58	83	75	11	130	32	210	83
200	24	10	39	27	67	81	85	10	140	27	240	81

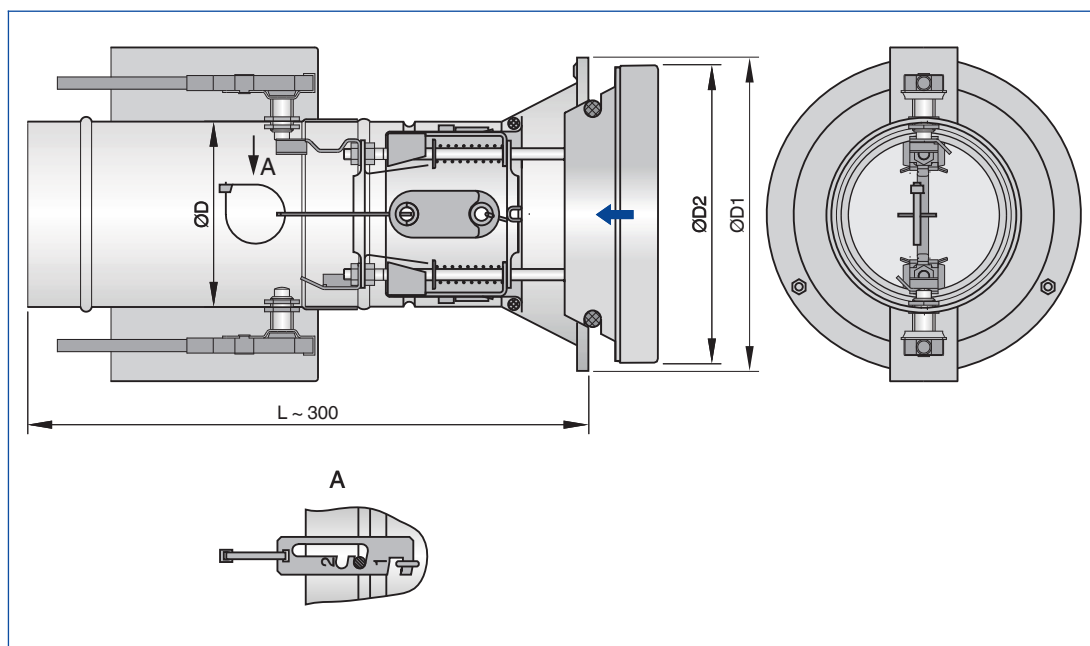
Description

1



FV-EU with fusible link

FV-EU with extension piece and limit switch



Dimensions [mm] / Weight [kg]

Nominal size	100	125	160	200
ØD	98	123	158	198
ØD1	164	189	224	264
ØD2	158	183	218	258
Weight	2.9	3.5	4.7	5.7
Weight*	1.7	2.2	3.0	4.0

* without extension piece and limit switches

Description

This specification text describes the general properties of the product. Texts for variants can be generated with our Easy Product Finder design programme.

Fire protection valve for the isolation of duct penetrations between fire compartments. For use in supply air and extract air systems; with two-stage adjustment device for adjusting the air volume. Ready-for-operation unit, which includes a fire-resistant valve cone and a release mechanism. Tested for fire resistance properties to EN 1366-2, with CE marking and declaration of performance according to the Construction Products Regulation. For mortar-based installation into solid walls and ceiling slabs, and into lightweight partition walls with metal support structure and cladding on both sides. Casing length 150 mm (300 mm with extension piece) For the connection to ducts made of non-combustible or combustible materials. Thermal release at 72 °C.

Special characteristics

- Declaration of performance according to Construction Products Regulation
- Classification to EN 13501-3, up to EI 120 (v_e, h_o, i ↔ o) S
- Building inspectorate licence Z-56.4212-991 for fire resistance properties
- Complies with the requirements of EN 15650
- Tested to EN 1366-2 for fire resistance properties
- Hygiene complies with VDI 6022 part 1 (07/2011), VDI 3803 (10/2002), DIN 1946 part 4 (12/2008), and EN 13779 (09/2007)
- Corrosion protection according to EN 15650 in connection with EN 60068-2-52
- Closed valve cone air leakage to EN 1751, class 2
- Low differential pressure and sound power level
- Any airflow direction

Materials and surfaces

- Installation subframe, spigot and valve disc made of sheet steel
- Installation subframe and spigot with stove-enamelled finish, black
- Exposed surface of valve disc powder-coated RAL 9010
- Valve cone made of special insulation material
- Seal made of polyurethane
- Attachments made of galvanised steel
- Increased corrosion protection due to powder-coated casing

Technical data

- Nominal sizes: Ø100, 125, 160, 200 mm
- Casing length 150 mm (300 mm with extension piece)
- Release temperature: 72 °C
- Operating temperature: 0 to 50 °C
- Volume flow rate range: Extract air up to 400 m³/h or supply air up to 210 m³/h

Sizing data

- \dot{V} _____ [m³/h]
- Δp_{st} _____ [Pa]
- L_{WA} Air-regenerated noise _____ [dB(A)]

Order options

1 Type

FV-EU Fire protection valve

2 Country of destination

- DE** Germany
- Other destination countries upon request

3 Nominal size [mm]

- 100**
- 125**
- 160**
- 200**

4 Accessories

No entry: none

- R** Trim ring - circular
- Q** Trim ring - square

5 Attachments

- Z04 – Z07**

Fire dampers

Basic information and nomenclature



- Product selection
- Principal dimensions
- Nomenclature
- Colour codes according to IEC 60757
- Sizing
- Easy Product Finder

Fire dampers

Basic information and nomenclature

Product selection

1 Fire dampers

Usage			Type							
Installation location	Construction/ building material	Minimum thickness	FK-EU				FKS-EU		FKR-EU	
			Mortar-based installation		Dry mortarless installation		Mortar-based installation	Dry mortarless installation	Mortar-based installation	Dry mortarless installation
		perimeter	partially ^{2 5}	Fire batt	Installation kit ²	perimeter	Installation kit ²	perimeter	Installation kit ²	
		mm	Fire resistance class							
In solid walls	Walls/gross density $\geq 500 \text{ kg/m}^3$	100	EI 90 S	EI 90 S	EI 120 S	EI 90 S	EI 120 S	EI 90 S	EI 120 S	-
In solid walls with movement joint	Walls/gross density $\geq 500 \text{ kg/m}^3$	100	-	EI 90 S	-	-	-	-	-	-
On the face of solid walls	Walls/gross density $\geq 500 \text{ kg/m}^3$	100	-	-	-	EI 90 S	-	-	-	-
Adjacent to solid walls ¹	Walls/gross density $\geq 500 \text{ kg/m}^3$	100	-	-	-	EI 90 S	-	-	-	-
Remote from solid walls ¹	Walls/gross density $\geq 500 \text{ kg/m}^3$	100	-	-	-	EI 90 S	-	-	-	-
In solid ceiling slabs	Ceiling slabs/gross density $\geq 600 \text{ kg/m}^3$	125	EI 90 S	-	-	-	-	-	-	-
In solid ceiling slabs	Ceiling slabs/gross density $\geq 600 \text{ kg/m}^3$	150	EI 90 S	-	EI 120 S/ EI 180 S	-	EI 120 S	EI 90 S	EI 120 S	-
In solid ceiling slabs, with concrete base	Ceiling slabs/gross density $\geq 600 \text{ kg/m}^3$	125	EI 90 S	-	-	-	-	-	-	-
In solid ceiling slabs, with concrete base	Ceiling slabs/gross density $\geq 600 \text{ kg/m}^3$	150	EI 90 S	-	-	-	EI 90 S	-	EI 90 S	-
Remote from solid ceiling slabs ¹	Ceiling slabs/gross density $\geq 600 \text{ kg/m}^3$	125	-	-	-	EI 90 S	-	-	-	-
Lightweight partition walls with metal support structure and cladding on both sides	Lightweight partition walls	100	EI 90 S	-	EI 120 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S
Lightweight partition walls with metal support structure and cladding on both sides	Lightweight partition walls	75	EI 30 S	-	-	EI 30 S	EI 30 S	EI 30 S	EI 30 S	EI 30 S
Lightweight partition walls with metal support structure and cladding on both sides, and with flexible ceiling joint ³	Lightweight partition walls	100	-	-	-	EI 90 S	-	-	-	-
In self supporting fire-resistant suspended ceilings	Metal ceilings	-	-	-	-	-	-	-	-	-

¹ Not for FK-EU as air transfer damper

² Installation kit for the selected installation situation

³ For ØDN 100 to 200 in lightweight partition wall with metal support structure and mineral wool

⁴ 50 only for FKR-EU

⁵ Additional mineral wool

Fire dampers

Basic information and nomenclature

Product selection

Fire dampers

1

Usage			Type							
Installation location	Construction/ building material	Minimum thickness	FK-EU				FKS-EU		FKR-EU	
			Mortar-based installation		Dry mortarless installation		Mortar-based installation	Dry mortarless installation	Mortar-based installation	Dry mortarless installation
			peri- meter	parti- ally ^{2 5}	Fire batt	Installation kit ²	peri- meter	Installation kit ²	peri- meter	Installation kit ²
		mm	Fire resistance class							
Fire walls with metal support structure and cladding on both sides	Fire walls	115	EI 90 S	-	-	EI 90 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S
Lightweight partition walls with metal support structure and cladding on one side	Shaft walls	90	-	-	-	EI 90 S	EI 90 S	EI 90 S	EI 90 S	-
Lightweight partition walls without metal support structure and cladding on one side	Shaft walls	40 or 50 ⁴	-	-	-	EI 90 S	-	-	EI 90 S	-
In self supporting fire-resistant suspended ceilings	Tile ceilings, screw-fixed and primed	-	-	-	-	-	-	-	-	-
In self supporting fire-resistant suspended ceilings	Lay-in ceiling tiles made of panel materials	-	-	-	-	-	-	-	-	-
In self supporting fire-resistant suspended ceilings	Metal ceilings	-	-	-	-	-	-	-	-	-

¹ Not for FK-EU as air transfer damper

² Installation kit for the selected installation situation

³ For ØDN 100 to 200 in lightweight partition wall with metal support structure and mineral wool

⁴ 50 only for FKR-EU

⁵ Additional mineral wool

Fire dampers

Basic information and nomenclature

Product selection

1 Fire dampers

Usage			Type						
Installation location	Construction/ building material	Minimum thickness	FKRS-EU			FV-EU	KA-EU	FVZ-K30	KU-K30
			Mortar-based installation	Dry mortarless installation		Mortar-based installation			Dry mortarless installation
				peri-meter	Fire batt	Installation kit ²	peri-meter	Mortar-based installation	
mm			Fire resistance class						
In solid walls	Walls/gross density $\geq 500 \text{ kg/m}^3$	100	EI 120 S	EI 120 S	EI 90 S	EI 120 S	EI 90 S/ K90	-	-
In solid walls with movement joint	Walls/gross density $\geq 500 \text{ kg/m}^3$	100	EI 90 S	-	-	-	-	-	-
On the face of solid walls	Walls/gross density $\geq 500 \text{ kg/m}^3$	100	-	-	EI 90 S	-	-	-	-
Adjacent to solid walls ¹	Walls/gross density $\geq 500 \text{ kg/m}^3$	100	-	-	-	-	-	-	-
Remote from solid walls ¹	Walls/gross density $\geq 500 \text{ kg/m}^3$	100	-	-	-	-	-	-	-
In solid ceiling slabs	Ceiling slabs/gross density $\geq 600 \text{ kg/m}^3$	125	-	-	-	-	-	-	-
In solid ceiling slabs	Ceiling slabs/gross density $\geq 600 \text{ kg/m}^3$	150	EI 120 S	EI 120 S	EI 90 S	EI 120 S	EI 90 S/ K90	-	-
In solid ceiling slabs, with concrete base	Ceiling slabs/gross density $\geq 600 \text{ kg/m}^3$	125	-	-	-	-	-	-	-
In solid ceiling slabs, with concrete base	Ceiling slabs/gross density $\geq 600 \text{ kg/m}^3$	150	-	-	-	-	-	-	-
Remote from solid ceiling slabs ¹	Ceiling slabs/gross density $\geq 600 \text{ kg/m}^3$	125	-	-	-	-	-	-	-
Lightweight partition walls with metal support structure and cladding on both sides	Lightweight partition walls	100	EI 120 S ³ , EI 90 S	EI 120 S	EI 90 S	EI 120 S	EI 90 S/ K90	-	-
Lightweight partition walls with metal support structure and cladding on both sides	Lightweight partition walls	75	EI 30 S	-	EI 30 S	-	-	-	-
Lightweight partition walls with metal support structure and cladding on both sides, and with flexible ceiling joint ⁵	Lightweight partition walls	100	-	-	EI 90 S	-	-	-	-
Fire walls with metal support structure and cladding on both sides	Fire walls	115	EI 90 S	-	EI 90 S	-	EI 90 S/ K90	-	-

¹ Not for FK-EU as air transfer damper

² Installation kit for the selected installation situation

³ For ØDN 100 to 200 in lightweight partition wall with metal support structure and mineral wool

⁴ 50 only for FK-R-EU

⁵ Additional mineral wool

Fire dampers

Basic information and nomenclature

Product selection

Fire dampers

1

Usage			Type						
Installation location	Construction/ building material	Minimum thickness	FKRS-EU			FV-EU	KA-EU	FVZ-K30	KU-K30
			Mortar-based installation	Dry mortarless installation		Mortar-based installation			Dry mortarless installation
		mm	peri-meter	Fire batt	Installation kit ²	peri-meter	Mortar-based installation	Installation kit	
Fire resistance class									
Lightweight partition walls with metal support structure and cladding on one side	Shaft walls	90	EI 90 S	-	EI 90 S	-	-	-	-
Lightweight partition walls without metal support structure and cladding on one side	Shaft walls	40 or 50 ⁴	-	-	EI 90 S	-	-	-	-
In self supporting fire-resistant suspended ceilings	Tile ceilings, screw-fixed and primed	-	-	-	-	-	-	K30-U	K30-U
In self supporting fire-resistant suspended ceilings	Lay-in ceiling tiles made of panel materials	-	-	-	-	-	-	K30-U	-
In self supporting fire-resistant suspended ceilings	Metal ceilings (for approved ceilings see the general building inspectorate licence)	-	-	-	-	-	-	K30-U	K30-U

¹ Not for FK-EU as air transfer damper

² Installation kit for the selected installation situation

³ For ØDN 100 to 200 in lightweight partition wall with metal support structure and mineral wool

⁴ 50 only for FKR-EU

⁵ Additional mineral wool

Fire dampers

Basic information and nomenclature

Principal dimensions

Rectangular fire dampers

Circular fire dampers

B [mm]
Width of the fire damper

Nominal size [mm]
Diameter of the fire damper

H [mm]
Height of the fire damper

L [mm]
Length of the fire damper

Nomenclature

L [mm]
Length of the fire damper

Δp_{st} [Pa]
Static differential pressure

\dot{V} [m³/h] and [l/s]
Volume flow rate

v [m/s]
Airflow velocity based on the upstream cross section (B × H or diameter)

L_{WA} [dB(A)]
A-weighted sound power level of air-regenerated noise for the fire damper

A [m²]
Free area

ζ
Resistance coefficient (fully ducted)

Wiring

Colour codes according to IEC 60757

Code	Colour
BK	black
BN	brown
RD	red
Upper floor	orange
YE	yellow
GN	green
BU	blue

Colour codes according to IEC 60757

Code	Colour
VT	violet
GY	grey
WH	white
PK	pink
TQ	turquoise
GNYE	green-yellow

Sizing with the help of this catalogue

This catalogue provides convenient quick sizing tables for fire dampers. The volume flow rates for all available dimensions and nominal sizes are provided based on a particular differential pressure and a given sound power level (35 or 45 dB(A)). Sizing data for other volume flow rates and differential pressures can be determined quickly and precisely using the Easy Product Finder design programme.

Easy Product Finder



The Easy Product Finder allows you to size products using your project-specific data.

You will find the Easy Product Finder on our website.

