Fire dampers
Type FKA-EU

FKA-EU
with fusible link for 72 °C

CE compliant according
to European regulations

With TROXNETCOM
as an option

Tested to VDI 6022

For diverse applications

Rectangular fire damper for the isolation of duct penetrations between two fire compartments, available in many different sizes and constructions

- Nominal sizes 200 × 200 – 1500 × 800 mm, in increments of 5 mm
- Low differential pressure and sound power level
- Optional stainless steel casing or powder-coated casing for increased corrosion protection
- Integration into the central BMS with TROXNETCOM

Optional equipment and accessories

- Electric actuator 24 V/230 V
- Release temperature 72 °C
- Duct smoke detectors

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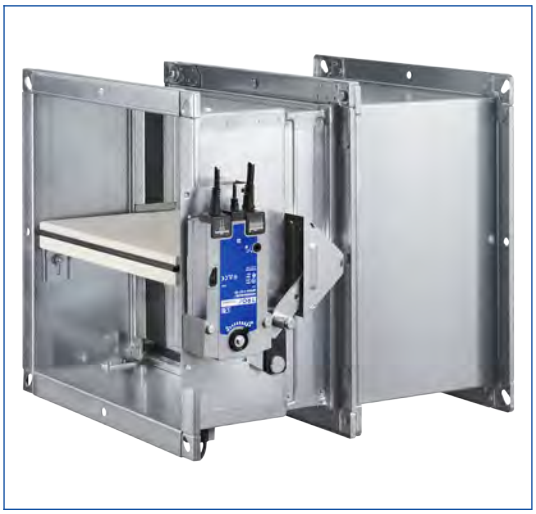
Variants

Product examples

FKA-EU with fusible link

FKA-EU with spring return actuator



Description

FKA-EU with spring return actuator

Application
- TROX fire dampers of type FKA-EU with CE marking and declaration of performance, for the isolation of duct penetrations between two fire compartments by automated closing 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 up to EI 120 (v_e, h_o, i ↔ o) S acc. to EN 13501-3

Variants
- With fusible link
- With spring return actuator

Nominal sizes
- B × H: 200 × 200 – 1500 × 800 mm (in increments of 5 mm))
- L: 240 mm or 500 mm

Attachments*
- Limit switch for damper blade position indication
- Spring return actuator for 24 V AC/DC or 230 V AC supply voltage
- Network module for the integration with AS-i or LON networks

*All attachments can be retrofitted

Accessories
- Flexible connectors
- Cover grille
- Circular spigots

Useful additions
- Duct smoke detector RM-O-3-D
- Duct smoke detector with airflow monitor RM-O-VS-D

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
- 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 (02/2010), 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 blade air leakage to EN 1751, class 2
- Casing air leakage to EN 1751, class C; (B + H) ≤ 700, class B
- Low differential pressure and sound power level
- Any airflow direction
- Integration into the central BMS with TROXNETCOM

Parts and characteristics
- Release temperature 72 °C

Construction features
- Single-handed operation
- Rectangular or square construction, rigid casing, both flanges with fixing holes
- Suitable for the connection of ducts, spigots, flexible connectors or a cover grille
- The release mechanism is accessible and can be tested from the outside
- Remote control with spring return actuator

Materials and surfaces
Casing:
- Galvanised sheet steel
- Galvanised sheet steel, powder-coated RAL 7001
- Stainless steel 1.4301

Damper blade:
- Special insulation material
- Special insulation material with impregnation

Other components:
- Damper blade shafts and drive linkage made of stainless steel
- Brass or stainless steel bearings
- Seals of polyurethane or elastomer

The construction variants with stainless steel or powder-coated casing meet even more critical requirements for corrosion protection. Detailed listing on request.

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

Dry mortarless installation:
- Remote from solid walls

Standards and guidelines
- Construction Products Regulation
- EN 15650:2010 Ventilation for buildings – Fire dampers
- EN 1366-2:2015 Fire resistance tests for service installations – Fire dampers
- EN 13501-3:2010 Fire classification of construction products and building elements
- EN 1751:2014 Ventilation for buildings – Air terminal devices

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Maintenance

- The functional reliability of the fire damper 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.
- A functional test involves closing the damper blade and opening it again; with a spring return actuator this can be done via remote control
- Fire dampers must be included in the regular cleaning schedule of the ventilation system.
- For details on functional tests, maintenance and inspection refer to the installation and operating manual

Technical data

Nominal sizes	200 × 200 – 1500 × 800 mm[1)]
Casing lengths	240 and 500 mm
Volume flow rate range	Up to 14400 l/s or up to 51840 m^3/h
Differential pressure range	Up to 2000 Pa
Temperature range	–20 – 50 °C **
Release temperature	72 °C
Upstream velocity*	≤ 8 m/s with standard construction; ≤ 12 m/s with spring return actuator

* Data applies to uniform upstream and downstream conditions for the fire dampers

** Temperatures may differ for units with attachments; details for other applications are available on request. Condensation and the intake of humid fresh air have to be avoided as otherwise operation will be impaired or not possible.

1) Damper blade with lip seal; with W × H ≤ 400 × 300 mm, from W × H > 400 × 300 mm with travel stop seal

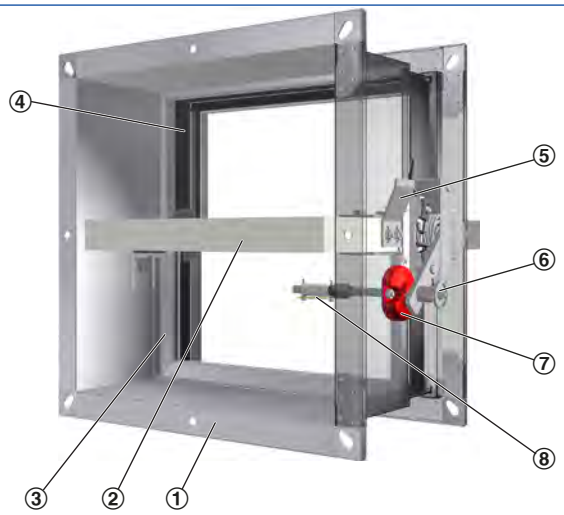
Function

Construction
with fusible link

Functional description

In the event of a fire, fire dampers 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. Optionally, limit switches are available for damper blade position indicator.

Schematic illustration of FKA-EU with fusible link



① Casing
② Damper blade
(with lip seal with W × H ≤ 400 × 300 mm)
③ Blade travel stop seal (W × H > 400 × 300 mm)
④ Seal
⑤ Interlock
⑥ Handle
⑦ Thermal release mechanism
⑧ Fusible link

1

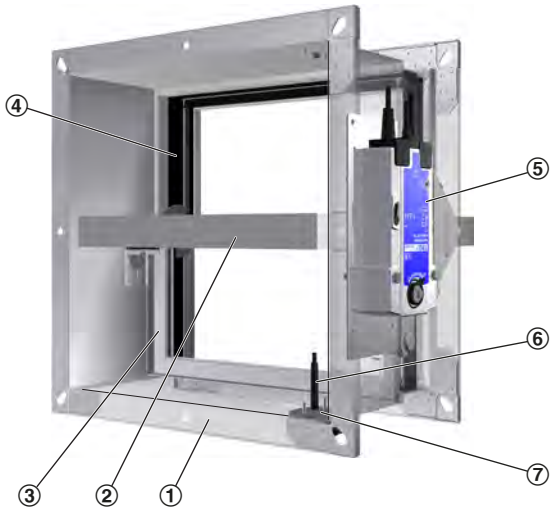
Function

Construction
with spring return actuator

Functional description

The spring return actuator enables the motorised opening and closing of the damper blade; it can be activated by the central BMS.
In the event of a fire, the damper is triggered thermoelectrically at 72 °C. As long as power is supplied to the actuator, the damper blade remains open. If the supply voltage fails, the damper closes (power off to close).
Motorised fire dampers can be used to shut off ducts. The torque of each actuator is sufficient to open and close the damper blade even while the fan is running. The spring return actuator is fitted with limit switches that can be used for capturing the damper blade position.

Schematic illustration of FKA-EU with spring return actuator



① Casing
② Damper blade
(with lip seal with W × H ≤ 400 × 300 mm)
③ Blade travel stop seal (W × H > 400 × 300 mm)
④ Seal
⑤ Spring return actuator
⑥ Temperature sensor
⑦ Thermoelectric release mechanism

Design information

- Approved only for use in ventilation and air conditioning systems
- If the fire damper is installed in solid walls and ceiling slabs, remote from solid walls as well as in lightweight partition walls with a lower fire resistance class than that of the fire damper, the fire resistance class of the wall or ceiling slab applies also to the FKA-EU (details upon request)
- Loads imposed on the casing may impair the function of the fire damper. Install and connect the damper in such a way that no loads will be imposed on the installed damper.
- For particular applications it is recommended that flexible connectors are used to connect rigid ducting to the unit.
- Inspection accesses are provided for maintenance and cleaning work
- 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

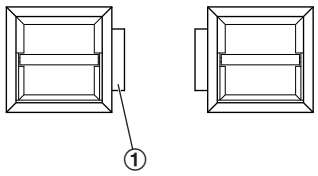
Essential characteristic: fire resistance — size [mm]: 200 × 200 to 1500 × 800				
Supporting construction	**Construction**	**Installation location**	**Installation type**	**Performance class (EI TT) up to**
 Solid wall	• d ≥ 115 mm	in the wall	Mortar-based installation	EI 120 (v_e i↔o) S
 Solid wall	• d ≥ 115 mm • Array, up to 3.2 m^2	in the wall	Mortar-based installation	EI 120 (v_e i↔o) S
 Solid wall	• d ≥ 115 mm • Cladding with fire barrier or mineral wool	remote from the wall	Dry mortarless installation	EI 120 (v_e i↔o) S

1

Essential characteristic: fire resistance — size [mm]: 200 × 200 to 1500 × 800				
Supporting construction	**Construction**	**Installation location**	**Installation type**	**Performance class (EI TT) up to**
 Lightweight partition wall	• Metal stud wall, gypsum plasterboard DF • d ≥ 125 mm • With mineral wool	in the wall	Mortar-based installation	EI 120 (v_e i↔o) S
 Lightweight partition wall	• Metal stud wall, gypsum plasterboard DF • d ≥ 100 mm • With or without mineral wool	in the wall	Mortar-based installation	EI 60 (v_e i↔o) S
 Solid ceiling slab	• d ≥ 150 mm	in the ceiling	Mortar-based installation	EI 120 (h_o i↔o) S

Installation orientation

Installation orientation with horizontal ducts



① Release mechanism (mechanical or spring return actuator)

Order code

FKA-EU

FKA – EU – 1 / PL / 600×400×500 / A0 / Z43
1 2 3 4 5 6

1 Type
FKA-EU Fire damper

2 Construction
No entry: standard construction
1 Powder-coated casing, RAL 7001
2 Stainless steel casing
7 Impregnated damper blade
1 – 7 Powder-coated casing RAL 7001 and impregnated damper blade
2 – 7 Stainless steel casing and impregnated damper blade

3 Country of destination
PL Poland
Other destination countries upon request

4 Nominal size [mm]
B × H × L

5 Accessories
No entry: none
A0 – SS

6 Attachments
Z00 – ZA07

Order examples

FKA-EU-1/PL/600×400×500/A0/A0/Z43

Construction variant	Casing powder-coated, RAL 7001, silver grey
Nominal size	600 × 400 × 500 mm
Accessories	Cover grille on operating side
Attachment	Spring return actuator 230 V AC

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Description

Cover grille

Application

- If only one end is to be ducted on site, the other end must have a cover grille
- For certain heights extension pieces may be required, see table
- Fire damper, cover grille and, if applicable, extension piece are factory assembled to form a unit
- The free area of the cover grille is approx. 70%
- The fixing holes in the cover grilles and extension pieces match those in the fire damper flanges
- Cover grilles are also available separately

Materials and surfaces

- Cover grilles made of galvanised sheet steel (and powder-coated silver grey, RAL 7001, when used with powder-coated (1) and stainless steel (2) dampers)

Note

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

/ A0 /
/ 0A /
/ AA /
5

Order code detail

Cover grille for FKA-EU

Operating side	Installation side	Order code
Cover grille	–	A0
–	Cover grille	0A
Cover grille	Cover grille	AA

Technical data

Arrangement and length of extension pieces (dimensions in mm)

H	Operating side	Installation side	L	Order code
200 – 300	–	–	500	A0
350 – 550	120	–	500	A0
200 – 300	–	–	500	0A
350 – 550	–	–	500	0A
600 – 800	–	120	500	0A
200 – 300	–	–	500	AA
350 – 550	120	–	500	AA
600 – 800	260	120	500	AA

The distance »a« between the open damper blade and the spigot should be approx. 50 mm.

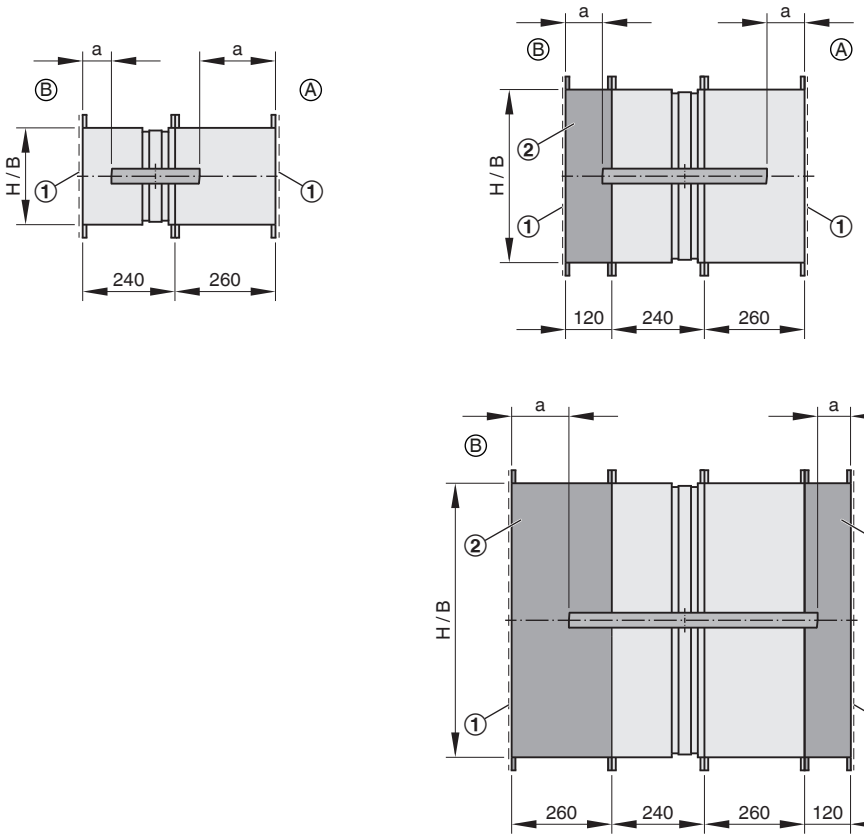
Cover grille

① Cover grille, mesh aperture 10 mm × 10 mm, wire width 2 mm

② Extension piece

The distance »a« between the open damper blade and the spigot should be approx. 50 mm.

Cover grille



Ⓐ Installation side
Ⓑ Operating side

① Cover grille, mesh aperture 10 mm × 10 mm, wire width 2 mm
② Extension piece

Extension piece and cover grille are supplied factory assembled.

1

Description

Application
- Circular spigots for rectangular FKA-EU fire dampers facilitate the direct connection of circular ducts
- For certain heights extension pieces may be required, see table
- Fire damper, spigot and, if applicable, extension piece are factory assembled to form a unit
- The fixing holes in the spigots and extension pieces match those in the fire damper flanges
- Spigots are also available separately.

Materials and surfaces
- Circular spigots made of galvanised sheet steel (and powder-coated silver grey, RAL 7001, when used with powder-coated (1) and stainless steel (2) dampers)

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

/ **R0** /
/ **0R** /
/ **RR** /
5

Order code detail

Circular spigot for FKA-EU

Operating side	Installation side	Order code
Spigot	–	R0
–	**Spigot**	0R
Spigot	**Spigot**	RR

Technical data

Arrangement and length of extension pieces (dimensions in mm)

H	Operating side	Installation side	L	Order code
200 – 300	–	–	500	R0
350 – 550	120	–	500	R0
200 – 300	–	–	500	0R
350 – 550	–	–	500	0R
600 – 800	–	120	500	0R
200 – 300	–	–	500	RR
350 – 550	120	–	500	RR
600 – 800	260	120	500	RR

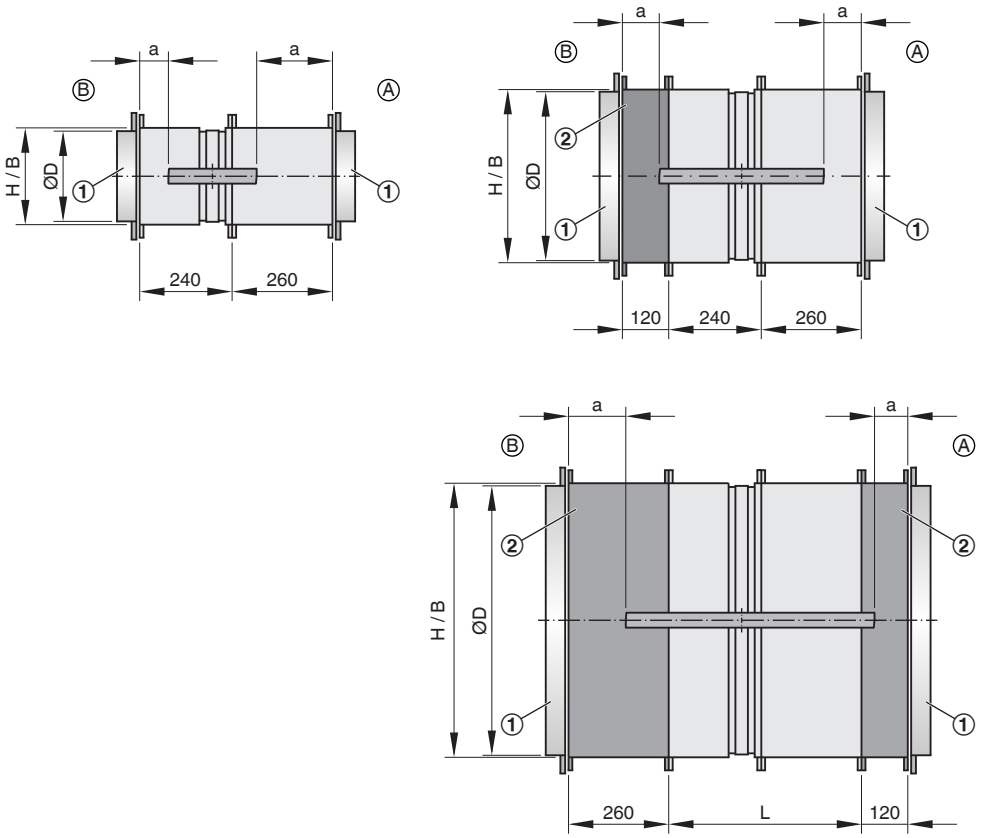
The distance »a« between the open damper blade and the spigot should be approx. 50 mm.

Circular spigot

① Circular spigot ② Extension piece

The distance »a« between the open damper blade and the spigot should be approx. 50 mm.

Circular spigot



Ⓐ Installation side
Ⓑ Operating side
① Circular spigot
② Extension piece

Extension piece and spigots are supplied factory assembled.

Dimensions [mm]

Nominal size	B × H	ØD
200	200 × 200	198
250	250 × 250	248
300	300 × 300	248
350	350 × 350	313
400	400 × 400	398
450	450 × 450	448
500	500 × 500	498
550	550 × 550	498
600	600 × 600	558
650	650 × 650	628
700	700 × 700	628
750	750 × 750	708
800	800 × 800	798

1

Description

Flexible connector

Application

- 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 and remote from solid walls
- Flexible connectors should be installed in such a way that both ends can compensate both tension and compression
- Flexible ducts can be used as an alternative
- For certain heights extension pieces may be required, see table
- The fixing holes in the flexible connectors and extension pieces match those in the fire damper flanges
- Flexible connectors are also available separately

Materials and surfaces

- Flexible connectors made of galvanised steel and 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.

/ **S0** /
/ **0S** /
/ **SS** /
5

Order code detail

Flexible connector for FKA-EU

Operating side	Installation side	Order code
Flexible connector	–	S0
–	**Flexible connector**	0S
Flexible connector	**Flexible connector**	SS

Technical data

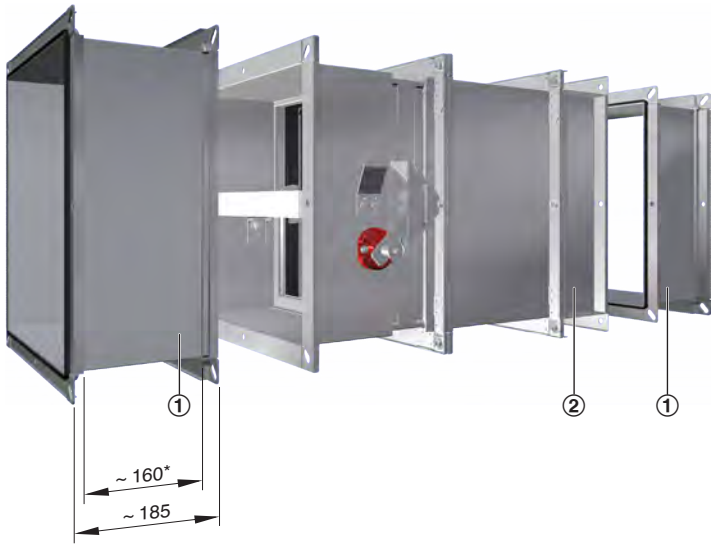
Arrangement and length of extension pieces (dimensions in mm)

H	Operating side	Installation side	L	Order code
200 – 300	–	–	500	S0
350 – 550	120	–	500	S0
200 – 300	–	–	500	0S
350 – 550	–	–	500	0S
600 – 800	–	120	500	0S
200 – 300	–	–	500	SS
350 – 550	120	–	500	SS
600 – 800	260	120	500	SS

Flexible connector

* flexible length ≥ 100 mm when installed

The distance »a« between the open damper blade and the flexible connector should be approx. 50 mm.

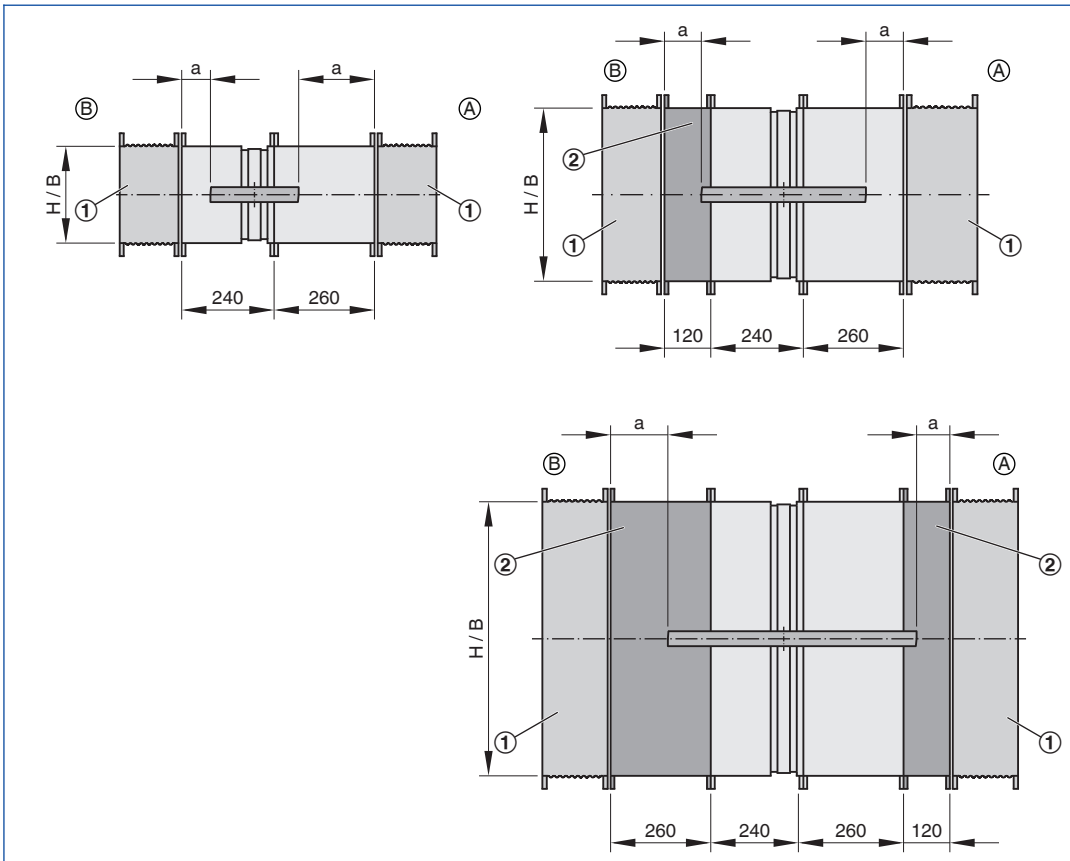


① Flexible connector ② Extension piece

* flexible length ≥ 100 mm when installed

The distance »a« between the open damper blade and the flexible connector should be approx. 50 mm.

Flexible connector



Ⓐ Installation side
Ⓑ Operating side
① Flexible connector
② Extension piece

Extension pieces are supplied factory assembled.
Flexible connectors are supplied unassembled, connection material is to be provided by others.

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Description

Extension piece

Application

- Fire dampers ordered with flexible connector, cover grille or circular spigot are supplied including extension pieces.
- Extension pieces are also available separately in the lengths 120 mm and 260 mm

Materials and surfaces

- Extension piece made of galvanised sheet steel (and powder-coated silver grey, RAL 7001, when used with powder-coated (1) and stainless steel (2) dampers)

Note

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

Technical data

When there are cover grilles, circular spigots or flexible connectors you may have to use an extension piece for certain heights.

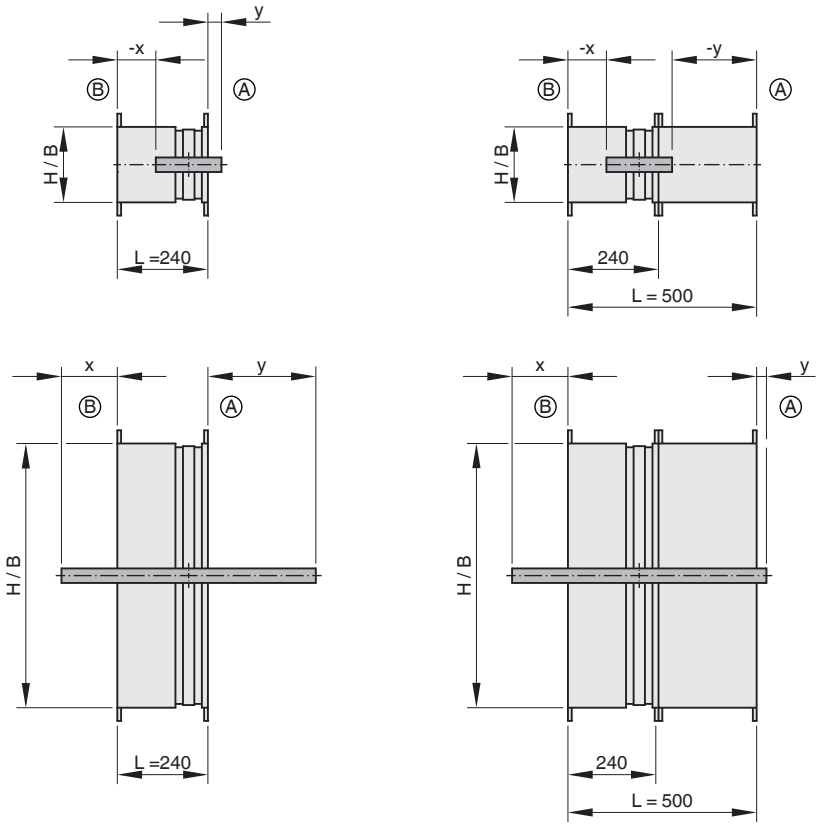
Dimensions [mm]

H	200	250	300	350	400	450	500	550	600	650	700	750	800
x	–103	–78	–53	–28*	–3*	22*	47*	72*	97*	122*	147*	172*	197*
y													
L = 240	35*	60*	85*	110*	135*	160*	185*	210*	235*	260*	285*	310*	335*
L = 500	–225	–200	–175	–150	–125	–100	–75	–50	–25*	0*	25*	50*	75*

* Extension piece required

The distance »a« between the open damper blade and the cover grille, circular spigot or flexible connector should be approx. 50 mm.

Open blade protrusion

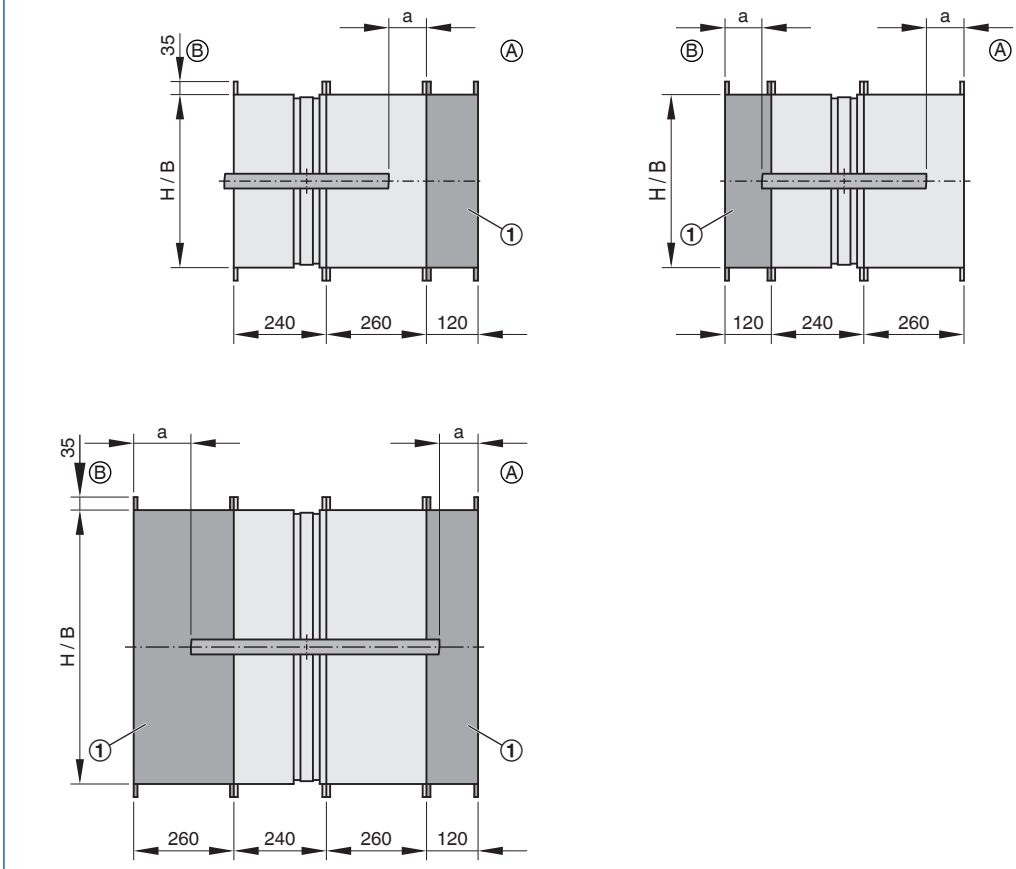


ⒶInstallation side

ⒷOperating side

The distance »a« between the open damper blade and the flexible connector should be approx. 50 mm.

Extension piece



Ⓐ Installation side
ⒷOperating side

① Extension piece, on operating and/or installation side

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Description

Limit switch

FKA-EU with limit switch

- Limit switches with volt-free contacts enable the damper blade 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 damper blade positions OPEN and CLOSED
- Fire dampers with a fusible link can be supplied with one or two limit switches; the switches can also be fitted later

/ **Z01**
/ **Z02**
/ **Z03**
6

Order code detail

Attachments	Order code
Limit switch for damper blade position "CLOSED"	Z01
Limit switch for damper blade position OPEN	Z02
Limit switches for damper blade positions CLOSED and OPEN	Z03

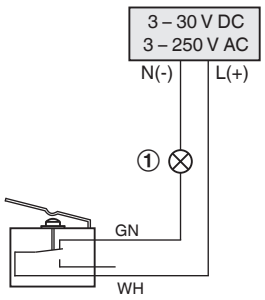
Technical data

Limit switch

Connecting cable length/cross section	1 m/3 x 0.34 mm^2
Protection level	IP 66
Type of contact	1 changeover contact, gold-plated
Maximum switching current	0.5 A
Maximum switching voltage	30 V DC, 250 V AC
Minimum switch rating	5 mA, 3 V
Contact resistance	Approx. 30 mΩ

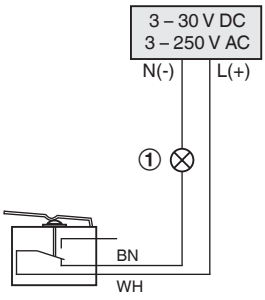
Wiring examples

Limit switch not actuated



① Indicator light or relay, to be provided by others

Limit switch actuated



① Indicator light or relay, to be provided by others

Description

FKA-EU
with spring return actuator

FKA-EU with spring return actuator

- An open/close actuator allows for the remote control of the fire damper and/or release by a suitable duct smoke detector
- If the supply voltage fails, or with thermoelectric release, the damper closes (power off to close)
- Fire dampers with spring return actuators can be functionally checked OPEN/CLOSED/OPEN
- Ambient temperature, normal operation –30 to 50 °C
- Two integral limit switches with volt-free contacts enable the damper blade position indication (OPEN and CLOSED)
- The connecting cables of the 24 V spring return actuator are fitted with plugs, which ensure quick and easy connection to the TROX AS-i bus system
- A conversion kit is available for adding an actuator to the standard construction
- In case of conventional wiring (Z45) the voltage is supplied by a safety transformer

/ **Z43**
/ **Z45**
/ **Z60**
/ **Z61**
6

Order code detail

Attachments	Order code
Spring return actuator 230 V	Z43
Spring return actuator 24 V AC/DC	Z45
Spring return actuator 24 V including power supply unit BKN230-24-C-MP TR	Z60
Spring return actuator 24 V including power supply unit BKN230-24-C-MP TR and control module BKS24-1 TR	Z61

Spring return actuator Type BFN for FKA-EU in sizes W × H = 200 × 200 – 1200 × 600 mm.
Spring return actuator Type BF for FKA-EU in sizes W × H = 1201 × 601 – 1500 × 800 mm.

Technical data

Spring return actuator

Type		BFN230-T TR	BF230-T TR
Supply voltage		230 V AC, 50/60 Hz	
Functional range		198 – 264 V AC	
Power rating	**Spring compression**	5 W	8.5 W
	Hold position	2.1 W	3 W
	Rating	10 VA	11 VA
Running time	**Actuator / spring return**	<60 s/<20 s	<120 s/approx. 16 s
Limit switch	**Type of contact**	2 changeover contacts	
	Switching voltage	5 – 120 V DC/5 – 250 V AC	
	Switching current	1 mA – 3 (0.5 inductive) A	1 mA – 6 A
	Contact resistance	<1 Ω (when new)	<100 mΩ
IEC protection class		II (protective insulation)	
Protection level		IP 54	
EC conformity		EMC acc. to 2014/30/EU, low voltage acc. to 2014/35/EU	
Connecting cable	**Actuator**	1 m/2 × 0.75 mm² (free of halogens)	
	Limit switch	1 m/6 × 0.75 mm² (free of halogens)	

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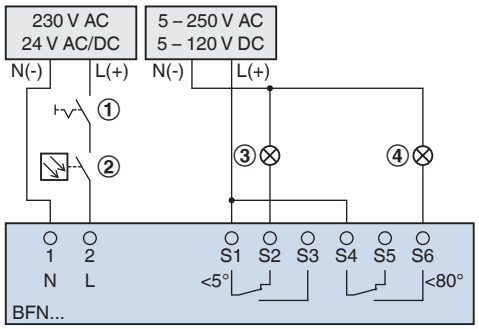
Technical data

Spring return actuator

Type		BFN24-T-ST TR	BF24-T-ST TR
Supply voltage		24 V AC/DC, 50/60 Hz	
Functional range		19.2 – 28.8 V AC 21.6 – 28.8 V DC	
Power rating	Spring compression	4 W	7 W
	Hold position	1.4 W	2 W
	Rating	6 VA	10 VA
Running time	Actuator / spring return	<60 s/20 s	<120 s/16 s
Limit switch	Type of contact	2 changeover contacts	
	Switching voltage	5 – 120 V DC/5 – 250 V AC	
	Switching current	1 mA – 3 (0.5 inductive) A	1 mA – 6 A
	Contact resistance	<1 Ω (when new)	<100 mΩ
IEC protection class		III (protective extra-low voltage)	
Protection level		IP 54	
EC conformity		EMC acc. to 2014/30/EU, low voltage acc. to 2014/35/EU	
Connecting cable	Actuator	1 m/2 × 0.75 mm² (free of halogens)	
	Limit switch	1 m/6 × 0.75 mm² (free of halogens)	

Wiring example

Spring return actuator in CLOSED position



Colour codes of BFN actuators:
S1 = violet
S2 = red
S3 = white
S4 = orange
S5 = pink
S6 = grey

① Switch for opening and closing, to be provided by others
② Optional duct smoke detector, e.g. RM-O-3-D or RM-O-VS-D
③ Indicator light for CLOSED position, to be provided by others
④ Indicator light for OPEN position, to be provided by others

Description

FKA-EU with TROXNETCOM module

For detailed information on TROXNETCOM see Chapter 6

FKA-EU with spring return actuator and TROXNETCOM

- Fire dampers with a 24 V spring return actuator and the modules described here as attachments form a functional unit ready for automatic operation
- The components are factory assembled and wired
- It enables the integration of different components (modules) into a network regardless of the manufacturer
- The modules control actuators and/or receive signals from sensors

Application

LON:

- LON indicates a standard local operating network system with manufacturer-independent communications
- Data transmission is based on a uniform protocol
- LonMark defines standards to ensure product compatibility
- Only the bus line and the supply voltage remain to be connected by others
- LON-WA1/B3: To provide the control input signal for up to two fire dampers
- WA1/B3-AD: Connection box for connecting the second fire damper with 24 V DC supply voltage to LON-WA1/B3
- WA1/B3-AD230: Connection box with integral 230/24 V power supply unit for the connection of a second actuator-driven 24 V fire damper to LON-WA1/B3

AS-i:

- The AS interface is a global standard bus system according to EN 50295 and IEC 62026-2
- The module transmits the control signals between the spring return actuator and the controller and power unit
- This allows for controlling the actuator and monitoring the actuator running time during functional testing
- The voltage (24 V DC) for the module and the actuator is supplied via the two-wire AS-i flat cable
- Function display: operation, 4 inputs, 2 outputs

/ **ZL09**
/ **ZL10**
/ **ZL11**
/ **ZA07**
6

Order code detail

Attachments	Order code
LON-WA1/B3 and BF(N)24-T-ST TR	ZL09
WA1/B3-AD and BF(N)24-T-ST TR	ZL10
WA1/B3-AD230 and BF(N)24-T-ST TR	ZL11
AS-EM and BF(N)24-T-ST TR	ZA07

Spring return actuator Type BFN for FKA-EU in sizes up to W × H = 200 × 200 – 1200 × 600 mm.
Spring return actuator Type BF for FKA-EU in sizes from W × H = 1201 × 601 – 1500 × 800 mm.

1

Description

Duct smoke detector
RM-O-3-D

Duct smoke detector
RM-O-VS-D

For detailed information on duct smoke detectors see Chapter 3

General

- To prevent smoke from spreading in buildings, it is extremely important that the smoke is detected at an early stage.
- Duct smoke detectors that operate on the principle of light scattering detect the smoke regardless of its temperature so that the fire dampers can be closed before the release temperature of 72 °C is reached
- If the air contains suspended particles, as is the case with smoke, beams of light are deflected off these. A sensor (photodiode), which does not receive light in clear air, is illuminated by the scattered light.
- The fire damper or smoke protection damper blade is released when the brightness of the scattered light exceeds a certain threshold

Note

For details please refer to the technical leaflets for RM-O-3-D and RM-O-VS-D.

Application

RM-O-3-D:

- Duct smoke detector for fire dampers and smoke protection dampers
- General building inspectorate licence Z-78.6-125
- For airflow velocities from 1 – 20 m/s
- Independent of the airflow direction
- Supply voltage 230 V AC, 50/60 Hz or 24 V DC with voltage monitoring module (VWM) (upon request)
- Volt-free signal and alarm relays
- Integral signal lamps
- Contamination level indicator
- Automatic adjustment of alarm threshold
- Long service life
- Temperature range 0 – 60 °C

RM-O-VS-D:

- Duct smoke detector for fire dampers and smoke protection dampers
- General building inspectorate licence Z-78.6-67
- For airflow velocities from 1 – 20 m/s
- Independent of the airflow direction
- Airflow monitoring with warning for lower limit 2 m/s
- Supply voltage 230 V AC, 50/60 Hz
- Volt-free signal and alarm relays
- Integral signal lamps
- Contamination level indicator
- Automatic adjustment of alarm threshold
- Long service life
- Temperature range 0 – 60 °C

Attachments	Order code
Duct smoke detector	RM-O-3-D
	RM-O-VS-D

Duct smoke detectors are attachments and to be ordered separately.

Volume flow rate $\dot{V}$ [m³/h] at differential pressure Δp_{st} < 35 Pa

B [mm]	L_{WA} [dB(A)]	H [mm]												
		200	250	300	350	400	450	500	550	600	650	700	750	800
200	35						1106	1256	1406	1556	1705	1854	2003	2151
	45						1573	1786	1999	2212	2424	2636	2847	3059
250	35						1474	1673	1872	2070	2268	2466	2663	2860
	45						2096	2379	2661	2943	3225	3505	3786	4066
300	35						1839	2087	2334	2580	2826	3072	3317	3561
	45						2615	2967	3318	3668	4018	4367	4715	5063
350	35						2202	2498	2793	3087	3381	3674	3966	4258
	45						3131	3552	3971	4389	4806	5223	5638	6053
400	35						2564	2908	3251	3592	3933	4273	4612	4951
	45						3645	4134	4621	5107	5591	6074	6556	7038
450	35						2925	3317	3707	4095	4483	4870	5256	5641
	45						4159	4715	5270	5822	6373	6923	7471	8019
500	35						3285	3724	4162	4597	5032	5465	5897	6329
	45						4671	5295	5916	6536	7153	7769	8384	8997
550	35						3645	4131	4616	5098	5579	6059	6537	7015
	45						5182	5873	6562	7248	7931	8613	9294	9973
600	35						4004	4538	5069	5598	6126	6652	7176	7700
	45						5692	6451	7206	7959	8708	9456	10202	10946
650	35	1376	1992	2595	3190	3778	4363	4944	5522	6098	6671	7243	7814	8383
	45	1956	2832	3689	4534	5372	6202	7028	7850	8669	9484	10297	11109	11918
700	35	1490	2157	2809	3452	4089	4721	5349	5974	6596	7216	7835	8451	9066
	45	2118	3066	3993	4908	5813	6712	7605	8493	9378	10259	11138	12014	12888
750	35	1604	2321	3023	3715	4400	5079	5754	6426	7095	7761	8425	9087	9748
	45	2281	3300	4298	5281	6255	7221	8181	9135	10086	11033	11977	12918	13858
800	35	1718	2486	3237	3978	4710	5437	6159	6877	7592	8305	9015	9723	10429
	45	2443	3534	4602	5655	6696	7730	8756	9777	10794	11806	12815	13822	14826
900	35	1946	2815	3665	4502	5331	6152	6968	7779	8587	9391	10193	10992	11789
	45	2766	4002	5210	6400	7578	8746	9906	11059	12207	13351	14490	15626	16759
1000	35	2174	3144	4092	5026	5950	6866	7776	8680	9580	10476	11369	12259	13147
	45	3090	4469	5817	7146	8459	9761	11054	12340	13619	14893	16163	17428	18690
1100	35	2401	3472	4519	5550	5670	7580	8583	9580	10572	11560	12544	13525	14503
	45	3413	4936	6424	7890	9339	10776	12202	13620	15030	16434	17833	19227	20617
1200	35	2628	3800	4946	6073	7188	8293	9390	10480	11564	12643	13718	14789	15857
	45	3737	5403	7031	8634	10219	11790	13348	14898	16439	17974	19502	21025	22543
1300	35	2856	4128	5372	6597	7807	9006	10196	11378	12554	13725	14891	16053	17211
	45	4060	5869	7637	9378	11098	12803	14494	16175	17847	19512	21169	22821	24467
1400	35	3083	4456	5798	7119	8425	9718	11001	12276	13544	14806	16063	17315	18563
	45	4382	6335	8243	10121	11977	13815	15639	17452	19255	21049	22836	24616	26390
1500	35	3310	4784	6224	7642	9042	10430	11806	13174	14533	15887	17234	18577	19915
	45	4705	6801	8849	10864	12855	14827	16784	18728	20661	22585	24501	26409	28311

Sizing example

Given data	Quick sizing
Volume flow rate: 8459 m³/h	FKA-EU / 1000 × 400 × 500
Maximum width: 1000 mm	
Sound power level: 45 dB(A)	

1

Volume flow rate $\dot{V}$ [l/s] at differential pressure Δp_{st} < 35 Pa

B [mm]	L_{WA} [dB(A)]	H [mm]												
		200	250	300	350	400	450	500	550	600	650	700	750	800
200	35						307	349	391	432	474	515	556	598
	45						437	496	555	614	673	732	791	850
250	35						409	465	520	575	630	685	740	794
	45						582	661	739	818	896	974	1052	1129
300	35						511	580	648	717	785	853	921	989
	45						726	824	922	1019	1116	1213	1310	1406
350	35						612	694	776	858	939	1021	1102	1183
	45						870	987	1103	1219	1335	1451	1566	1681
400	35						712	808	903	998	1093	1187	1281	1375
	45						1013	1148	1284	1419	1553	1687	1821	1955
450	35						813	921	1030	1138	1245	1353	1460	1567
	45						1155	1310	1464	1617	1770	1923	2075	2228
500	35						913	1034	1156	1277	1398	1518	1638	1758
	45						1298	1471	1643	1816	1987	2158	2329	2499
550	35						1013	1148	1282	1416	1550	1683	1816	1949
	45						1439	1631	1823	2013	2203	2393	2582	2770
600	35						1112	1261	1408	1555	1702	1848	1993	2139
	45						1581	1792	2002	2211	2419	2627	2834	3041
650	35	382	553	721	886	1049	1212	1373	1534	1694	1853	2012	2171	2329
	45	543	787	1025	1259	1492	1723	1952	2181	2408	2634	2860	3086	3311
700	35	414	599	780	959	1136	1311	1486	1659	1832	2004	2176	2348	2518
	45	588	852	1109	1363	1615	1864	2113	2359	2605	2850	3094	3337	3580
750	35	446	645	840	1032	1222	1411	1598	1785	1971	2156	2340	2524	2708
	45	634	917	1194	1467	1738	2006	2273	2538	2802	3065	3327	3588	3849
800	35	477	691	899	1105	1308	1510	1711	1910	2109	2307	2504	2701	2897
	45	679	982	1278	1571	1860	2147	2432	2716	2998	3279	3560	3839	4118
900	35	541	782	1018	1251	1481	1709	1936	2161	2385	2609	2831	3053	3275
	45	768	1112	1447	1778	2105	2429	2752	3072	3391	3709	4025	4341	4655
1000	35	604	873	1137	1396	1653	1907	2160	2411	2661	2910	3158	3405	3652
	45	858	1241	1616	1985	2350	2711	3071	3428	3783	4137	4490	4841	5192
1100	35	667	964	1255	1542	1575	2106	2384	2661	2937	3211	3484	3757	4029
	45	948	1371	1784	2192	2594	2993	3389	3783	4175	4565	4954	5341	5727
1200	35	730	1056	1374	1687	1997	2304	2608	2911	3212	3512	3811	4108	4405
	45	1038	1501	1953	2398	2839	3275	3708	4138	4566	4993	5417	5840	6262
1300	35	793	1147	1492	1833	2169	2502	2832	3161	3487	3813	4136	4459	4781
	45	1128	1630	2121	2605	3083	3556	4026	4493	4958	5420	5880	6339	6796
1400	35	856	1238	1611	1978	2340	2699	3056	3410	3762	4113	4462	4810	5156
	45	1217	1760	2290	2811	3327	3838	4344	4848	5349	5847	6343	6838	7331
1500	35	919	1329	1729	2123	2512	2897	3279	3659	4037	4413	4787	5160	5532
	45	1307	1889	2458	3018	3571	4119	4662	5202	5739	6274	6806	7336	7864

H [mm]	Parameter	B [mm]									
		200	250	300	350	400	450	500	550	600	650
200	A [m²]										0.059
	ζ										2.65
250	A [m²]										0.089
	ζ										1.54
300	A [m²]										0.118
	ζ										1.08
350	A [m²]										0.148
	ζ										0.84
400	A [m²]										0.177
	ζ										0.69
450	A [m²]	0.049	0.067	0.084	0.102	0.119	0.137	0.154	0.172	0.189	0.207
	ζ	1.54	1.17	0.98	0.86	0.78	0.72	0.67	0.64	0.61	0.59
500	A [m²]	0.056	0.076	0.096	0.116	0.136	0.156	0.176	0.196	0.216	0.236
	ζ	1.40	1.06	0.88	0.77	0.69	0.64	0.60	0.57	0.54	0.52

H [mm]	Parameter	B [mm]									
		700	750	800	900	1000	1100	1200	1300	1400	1500
200	A [m²]	0.064	0.069	0.074	0.084	0.094	0.104	0.114	0.124	0.134	0.144
	ζ	2.60	2.55	2.51	2.45	2.40	2.36	2.33	2.30	2.28	2.26
250	A [m²]	0.096	0.104	0.111	0.126	0.141	0.156	0.171	0.186	0.201	0.216
	ζ	1.50	1.47	1.44	1.40	1.37	1.34	1.32	1.31	1.29	1.28
300	A [m²]	0.128	0.138	0.148	0.168	0.188	0.208	0.228	0.248	0.268	0.288
	ζ	1.05	1.03	1.01	0.98	0.95	0.93	0.91	0.90	0.89	0.88
350	A [m²]	0.160	0.173	0.185	0.210	0.235	0.260	0.285	0.310	0.335	0.360
	ζ	0.81	0.79	0.78	0.75	0.73	0.71	0.70	0.69	0.68	0.67
400	A [m²]	0.192	0.207	0.222	0.252	0.282	0.312	0.342	0.372	0.402	0.432
	ζ	0.67	0.65	0.64	0.61	0.59	0.58	0.57	0.56	0.55	0.54
450	A [m²]	0.224	0.242	0.259	0.294	0.329	0.364	0.399	0.434	0.469	0.504
	ζ	0.57	0.56	0.54	0.52	0.50	0.49	0.48	0.47	0.46	0.45
500	A [m²]	0.256	0.276	0.296	0.336	0.376	0.416	0.456	0.496	0.536	0.576
	ζ	0.50	0.49	0.47	0.45	0.44	0.43	0.42	0.41	0.40	0.39

H [mm]	Parameter	B [mm]									
		200	250	300	350	400	450	500	550	600	650
550	A [m²]	0.063	0.086	0.108	0.131	0.153	0.176	0.198	0.221	0.243	0.266
	ζ	1.30	0.98	0.81	0.70	0.63	0.58	0.54	0.51	0.49	0.47
600	A [m²]	0.070	0.095	0.120	0.145	0.170	0.195	0.220	0.245	0.270	0.295
	ζ	1.22	0.91	0.75	0.65	0.58	0.53	0.50	0.47	0.44	0.43
650	A [m²]	0.077	0.105	0.132	0.160	0.187	0.215	0.242	0.270	0.297	0.325
	ζ	1.16	0.86	0.70	0.61	0.54	0.50	0.46	0.43	0.41	0.39
700	A [m²]	0.084	0.114	0.144	0.174	0.204	0.234	0.264	0.294	0.324	0.354
	ζ	1.11	0.82	0.67	0.57	0.51	0.47	0.43	0.41	0.38	0.37
750	A [m²]	0.091	0.124	0.156	0.189	0.221	0.254	0.286	0.319	0.351	0.384
	ζ	1.07	0.79	0.64	0.55	0.48	0.44	0.41	0.38	0.36	0.34
800	A [m²]	0.098	0.133	0.168	0.203	0.238	0.273	0.308	0.343	0.378	0.413
	ζ	1.03	0.76	0.61	0.52	0.46	0.42	0.39	0.36	0.34	0.33

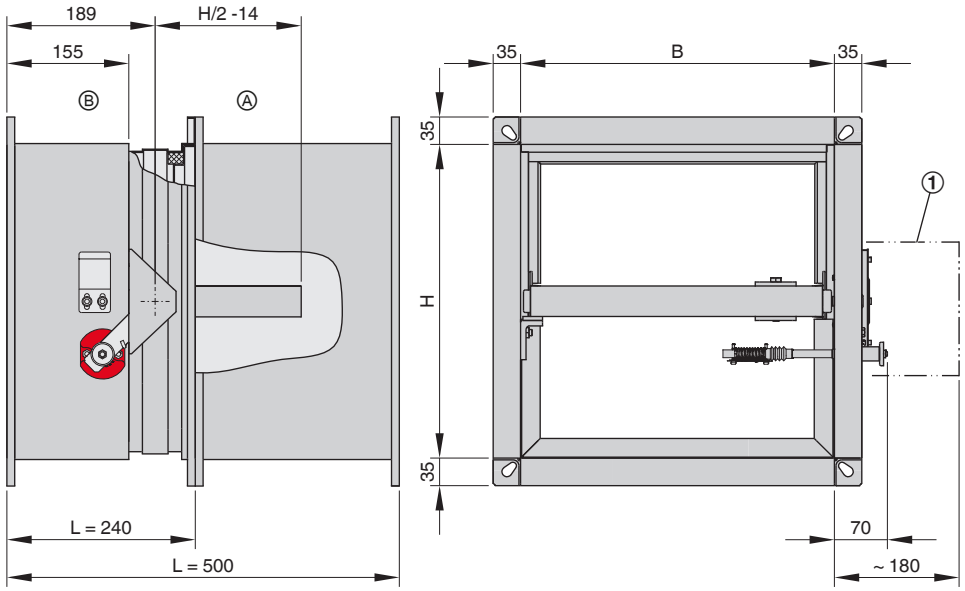
H [mm]	Parameter	B [mm]									
		700	750	800	900	1000	1100	1200	1300	1400	1500
550	A [m²]	0.288	0.311	0.333	0.378	0.423	0.468	0.513	0.558	0.603	0.648
	ζ	0.45	0.44	0.42	0.41	0.39	0.38	0.37	0.36	0.35	0.35
600	A [m²]	0.320	0.345	0.370	0.420	0.470	0.520	0.570	0.620	0.670	0.720
	ζ	0.41	0.40	0.39	0.37	0.35	0.34	0.33	0.32	0.32	0.31
650	A [m²]	0.352	0.380	0.407	0.462	0.517	0.572	0.627	0.682	0.737	0.792
	ζ	0.38	0.37	0.35	0.34	0.32	0.31	0.30	0.30	0.29	0.28
700	A [m²]	0.384	0.414	0.444	0.504	0.564	0.624	0.684	0.744	0.804	0.864
	ζ	0.35	0.34	0.33	0.31	0.30	0.29	0.28	0.27	0.27	0.26
750	A [m²]	0.416	0.449	0.481	0.546	0.611	0.676	0.741	0.806	0.871	0.936
	ζ	0.33	0.32	0.31	0.29	0.28	0.27	0.26	0.25	0.25	0.24
800	A [m²]	0.448	0.483	0.518	0.588	0.658	0.728	0.798	0.868	0.938	1.008
	ζ	0.31	0.30	0.29	0.27	0.26	0.25	0.24	0.24	0.23	0.23

1

Dimensions

FKA-EU with fusible link

FKA-EU with fusible link



① Keep clear to provide access to the release mechanism

Dimensions in mm / Weight in kg for L = 240 mm / L = 500 mm

H	B									
	200	250	300	350	400	450	500	550	600	650
200	7/11	8/12	8/13	9/14	10/15	10/16	11/17	12/18	13/19	13/20
250	8/12	8/13	9/14	10/15	11/16	12/17	13/19	13/20	14/21	15/22
300	8/13	9/14	10/15	11/16	12/18	13/19	14/20	15/21	16/23	17/24
350	9/14	10/15	11/16	12/18	13/19	14/21	15/22	16/23	17/25	18/26
400	10/15	11/16	12/18	13/19	14/21	16/22	17/24	18/25	19/27	20/28
450			13/19	14/21	16/22	17/24	18/25	20/26	21/28	22/30
500			14/20	15/22	17/24	18/25	19/27	21/28	22/30	23/32
550			15/22	16/23	18/25	19/27	21/29	22/30	23/32	25/34
600			16/23	17/25	19/27	21/28	22/30	23/32	25/34	27/36
650			17/24	19/26	21/28	22/30	23/32	25/34	27/36	29/38
700			18/25	20/27	22/29	23/32	25/34	26/35	29/38	31/40
750			19/27	21/28	23/31	25/33	26/35	28/37	30/40	32/42
800			20/28	22/30	24/32	26/35	28/37	30/40	32/42	34/44

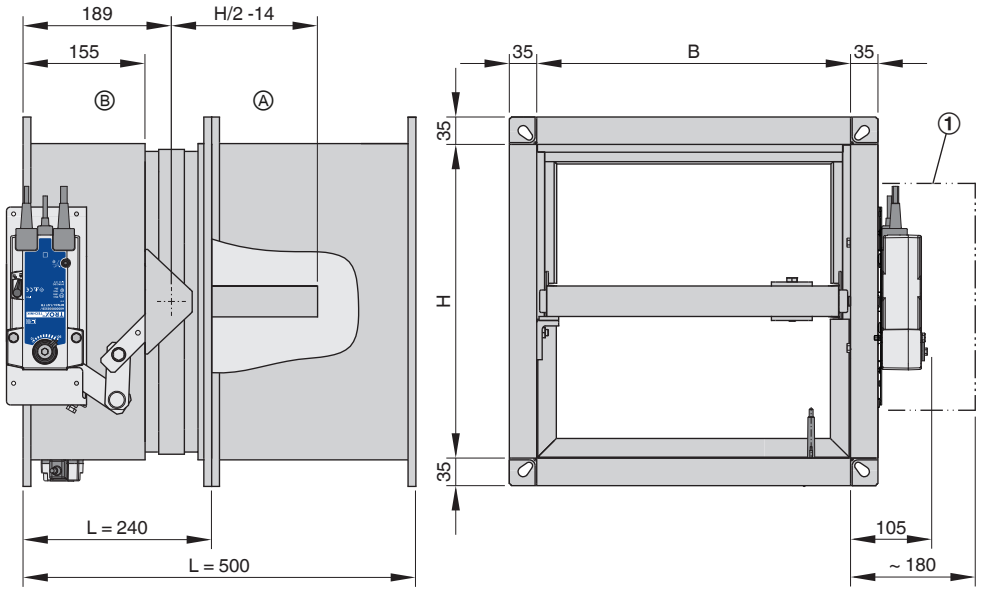
Dimensions in mm / Weight in kg for L = 240 mm / L = 500 mm

H	B									
	700	750	800	900	1000	1100	1200	1300	1400	1500
200	14/21	14/22	15/23	18/26	19/28	21/30	22/32	23/34	25/36	26/38
250	16/23	17/24	17/25	20/29	22/31	23/33	25/36	27/38	28/40	30/42
300	18/25	18/26	19/28	22/31	24/34	26/36	28/39	30/41	32/44	33/46
350	19/27	20/29	21/30	25/34	27/37	29/39	31/42	33/45	35/47	37/50
400	21/30	22/31	24/32	27/36	29/39	32/42	34/45	36/48	38/51	41/54
450	23/32	24/33	26/35	29/39	32/42	34/45	37/49	39/52	42/55	44/58
500	25/34	26/35	28/37	31/42	34/45	37/48	40/52	42/55	45/59	48/62
550	27/36	28/38	30/40	34/45	37/47	39/51	42/55	45/59	49/62	52/66
600	29/38	30/40	32/42	36/47	39/51	42/54	45/58	49/62	52/66	55/70
650	31/40	32/42	34/45	38/49	42/54	45/58	49/62	52/65	55/69	59/74
700	32/42	34/45	36/47	40/52	44/56	48/61	51/65	55/69	59/73	62/78
750	34/44	36/46	38/49	43/55	46/59	51/64	54/69	58/72	62/77	65/81
800	36/47	38/49	40/51	45/57	49/62	53/66	57/71	61/76	65/81	69/85

Dimensions

FKA-EU
with spring return actuator

FKA-EU with spring return actuator (FKA-EU/.../Z4*)



① Keep clear to provide access to the spring return actuator

Dimensions in mm / Weight in kg for L = 240 mm / L = 500 mm

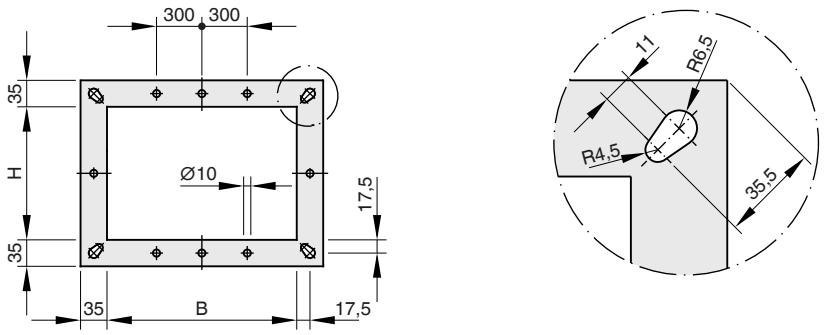
H	B									
	200	250	300	350	400	450	500	550	600	650
200	10/14	11/15	11/16	12/17	13/18	13/19	14/20	15/21	16/22	16/23
250	11/15	11/16	12/17	13/18	14/19	15/20	16/22	16/23	17/24	18/25
300	11/16	12/17	13/18	14/19	15/21	16/22	17/23	18/24	19/26	20/27
350	12/17	13/18	14/19	15/21	16/22	17/24	18/25	19/26	20/28	21/29
400	13/18	14/19	15/21	16/22	17/24	19/25	20/27	21/28	22/30	23/31
450			16/22	17/24	19/25	20/27	21/28	23/29	24/31	25/33
500			17/23	18/25	20/27	21/28	22/30	24/31	25/33	26/35
550			18/25	19/26	21/28	22/30	24/32	25/33	26/35	28/37
600			19/26	20/28	22/30	24/31	25/33	26/35	28/37	30/39
650			20/27	22/29	24/31	25/33	26/35	28/37	30/39	32/41
700			21/28	23/30	25/32	26/35	28/37	29/38	32/41	33/43
750			22/30	24/31	26/34	28/36	29/38	31/40	33/43	35/45
800			23/31	25/33	27/35	29/38	31/40	33/43	35/45	37/47

Dimensions in mm / Weight in kg for L = 240 mm / L = 500 mm

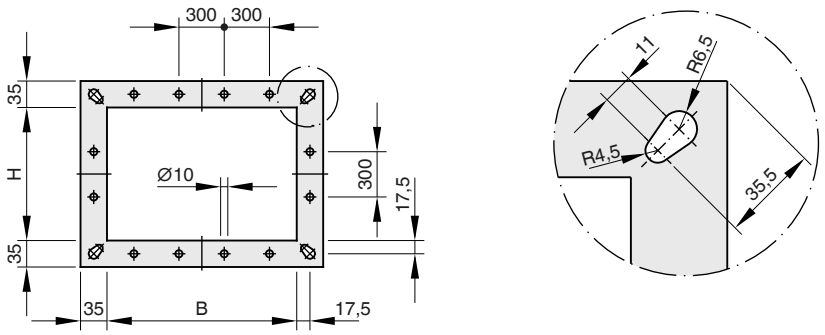
H	B									
	700	750	800	900	1000	1100	1200	1300	1400	1500
200	17/24	17/25	18/26	21/29	22/31	24/33	25/35	26/37	28/39	29/41
250	19/26	20/27	20/28	23/32	25/34	26/36	28/39	30/41	31/43	33/45
300	21/28	21/29	22/31	25/34	27/37	29/39	31/42	33/43	35/47	36/49
350	22/30	23/32	24/33	28/37	30/40	32/42	34/45	36/48	38/50	40/53
400	24/33	25/34	27/35	30/39	32/42	35/45	37/48	39/51	41/54	44/57
450	26/35	27/36	29/38	32/42	35/45	37/48	40/52	42/55	45/58	47/61
500	28/37	29/38	31/40	34/45	37/48	40/51	43/55	45/58	48/62	51/65
550	30/39	31/41	33/43	37/48	40/50	42/54	45/58	48/62	52/65	55/69
600	32/41	33/43	35/45	39/50	42/54	45/57	48/61	52/65	55/69	58/73
650	34/43	35/45	37/48	41/52	45/57	48/61	52/65	55/68	58/72	62/77
700	35/45	37/48	39/50	43/55	47/59	51/64	54/68	58/72	62/75	65/81
750	37/47	39/49	41/52	46/58	49/62	54/67	57/72	61/75	65/80	68/84
800	39/50	41/52	43/54	48/60	52/65	56/69	60/74	64/79	68/84	72/88

1 Dimensions

Flange – uneven number of holes



Flange – even number of holes



Dimensions [mm]

B or H	200	300	400	500	600	650	750	900	1100	1300	1500
	250	350	450	550		700	800	1000	1200	1400	
No. of holes horizontally (B)*			1	1	1	2	2	3	3	4	4
No. of holes vertically (H)*			1	1	1	2	2				

* excluding corner holes

Description

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

Rectangular or square fire dampers
for the isolation of duct penetrations
between fire compartments.
Tested for fire resistance properties to EN 1366-2,
with CE marking and declaration of performance
according to the Construction Products
Regulation.
Ready-for-operation unit, which includes
a fire-resistant damper blade
and a release mechanism.
For mortar-based installation into solid walls
and ceiling slabs, in lightweight partition walls
with metal support structure and cladding
on both sides as well as for dry mortarless
installation remote from solid walls.
Casing length 240 mm or 500 mm,
for the connection to ducts made
of non-combustible or combustible materials.
Thermal or thermoelectric release at 72 °C.
Constructions with spring return actuator
for opening and closing the fire damper
independent of the nominal size
and even while the ventilation system is running,
e.g. for a functional test.

Sizing data

- $\dot{V}$ _____ [m^3/h]
- Δp_{st} _____ [Pa]
- L_{WA} Air-regenerated noise _____ [dB(A)]

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
- 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 (02/2010), 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 blade air leakage to EN 1751, class 2
- Casing air leakage to EN 1751, class C; (B + H) ≤ 700, class B
- Low differential pressure and sound power level
- Any airflow direction
- Integration into the central BMS with TROXNETCOM

Materials and surfaces

Casing:
- Galvanised sheet steel
- Galvanised sheet steel, powder-coated RAL 7001
- Stainless steel 1.4301

Damper blade:
- Special insulation material
- Special insulation material with impregnation

Other components:
- Damper blade shafts and drive linkage made of stainless steel
- Brass or stainless steel bearings
- Seals of polyurethane or elastomer

The construction variants with stainless steel or powder-coated casing meet even more critical requirements for corrosion protection. Detailed listing on request.

Technical data

- Nominal sizes: 200 × 200 – 1500 × 800 mm[1)]
- Casing lengths: 240 and 500 mm
- Volume flow rate range: Up to 14400 l/s or 51840 m^3/h
- Differential pressure: up to 2000 Pa
- Temperature range: –20 – 50 °C
- Upstream velocity: ≤ 8 m/s with standard construction; ≤ 12 m/s with spring return actuator

[1)]Damper blade with lip seal;
with W × H ≤ 400 × 300 mm,
from W × H > 400 × 300 mm with travel stop seal

1 Order options

1 Type
FKA-EU Fire damper

2 Construction
No entry: standard construction
☐ **1** Powder-coated casing, RAL 7001
☐ **2** Stainless steel casing
☐ **7** Impregnated damper blade
☐ **1 – 7** Powder-coated casing RAL 7001 and impregnated damper blade
☐ **2 – 7** Stainless steel casing and impregnated damper blade

3 Country of destination
☐ **PL** Poland
Other destination countries upon request

4 Nominal size [mm]
☐ B × H × L

5 Accessories
No entry: none
☐ **A0 – SS**

6 Attachments
☐ **Z00 – ZA07**

Principal dimensions

Rectangular fire dampers

B [mm]
Width of the fire damper

H [mm]
Height of the fire damper

Circular fire dampers

Nominal size [mm]
Diameter of the fire damper

L [mm]
Length of the fire damper

Nomenclature

L [mm]
Length of the fire damper

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

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)

Δp_{st} [Pa]
Static differential pressure

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

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.