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FKRS-EU Series
Fire Dampers



Small circular fire dampers for the isolation of duct penetrations between fire compartments, ideal for use in restricted spaces.



TESTED TO VDI 6022



WITH TROXNETCOM AS
AN OPTION



CE COMPLIANT
ACCORDING TO
EUROPEAN
REGULATIONS



FKRS-EU WITH FUSIBLE
LINK FOR 72 °C OR 95 °C



ATEX-ZERTIFIZIERUNG

ATEX-Zertifizierung

FKRS-EU

COMPACT DIMENSIONS, IDEAL FOR RESTRICTED SPACES

Small circular fire damper for the isolation of duct penetrations between fire compartments, available in ten nominal sizes

- Nominal sizes: 100 – 315 mm
- Low differential pressure and sound power level
- Optional stainless steel casing or powder-coated casing for increased corrosion protection
- Can also be used as an air transfer unit
- Integration into the central BMS with TROXNETCOM
- Universal installation options

Optional equipment and accessories

- Electric actuator 24 V/230 V
- Release temperature 72/95 °C
- Duct smoke detector RM-O-3-D

Application



Application

- Fire dampers of Type FKRS-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

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 blade air leakage to EN 1751, class 3
- Casing air leakage to EN 1751, class C
- Low differential pressure and sound power level
- Any airflow direction
- Integration into the central BMS with TROXNETCOM

Classification

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

Nominal sizes

- 100, 125, 150, 160, 180, 200, 224, 250, 280, 315
- L: 400 mm

Description



Variants

- With fusible link
- With spring return actuator
- With cover grilles both ends as air transfer unit with general building inspectorate licence: Z-19.18-2128

Parts and characteristics

- Dry mortarless installation into solid walls and ceiling slabs, lightweight partition walls, fire walls, and shaft walls using an installation block
- Installation with wall face frame on the face of solid walls
- Release temperature 72 °C or 95 °C (for use in warm air ventilation systems)
- Approved installation orientation from 0° to 360°

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

Accessories

- Circular installation block ER
- Square installation kit TQ
- Wall face frame WA
- Installation kit GL
- Cover grille
- Flexible connectors
- Extension piece

Useful additions

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

Construction features

- Rigid circular casing suitable for push fitting into cut circular holes without additional drilling and chiselling being required
- Spigot connections with lip seal on both ends, suitable for ventilation ducts according to EN 1506 and EN 13180 plus non-standard but commercial nominal sizes 180, 224 and 280
- Suitable for the connection of flexible connectors or cover grilles
- The release mechanism is accessible and can be tested from the outside
- One inspection access panel
- 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 coating

Other components:

- Damper blade shaft made of galvanised steel or stainless steel
- Plastic bearings
- Seals of elastomer

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

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 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 maintenance and inspection refer to the installation and operating manual

INSTALLATION VIDEO

In the past, openings for the installation of fire dampers in solid walls or ceiling slabs had to be of the exact size; only minimal tolerances were allowed, if at all. This has changed with fire batt solutions as they provide a new level of flexibility. With a fire batt, fire dampers can in fact be installed in openings that are much larger than the fire damper casing – the perimeter gap may be up to 400 mm wide. It is no longer a strict requirement that an installation opening fits the fire damper exactly.

INSTALLATION VIDEO

Conversion kits are available to fit TROX fire dampers with a spring return actuator.

Type BLF230 (230 V AC)

Type BLF24 (24 V AC/DC)

INSTALLATION VIDEO

FKRS-EU MOUNTING LIMIT SWITCH

FKRS-EU- CONVERTING A BLF ACTUATOR TO AN EXPLOSION-PROOF ACTUATOR

FKRS-EU- CONVERTING A BLF ACTUATOR TO BFL ACTUATOR