





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 El 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 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 El 120 (v  $_{e}$ ,  $h_{o}$ , i  $\leftrightarrow$  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** 

EXPLOSION-PROOF ACTUATOR

FKRS-EU- CONVERTING A BLF ACTUATOR TO AN

FKRS-EU- CONVERTING A BLF ACTUATOR TO BFL ACTUATOR