

Type FKR-EU



FOR LARGE DIAMETERS, WITH OR WITHOUT A FLANGE

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

- Nominal sizes: 315 – 800 mm
- For mortar-based installation in solid walls, ceiling slabs and lightweight partition walls
- Dry mortarless installation into lightweight partition walls
- Low differential pressure and sound power level
- Flanges as an option
- Explosion-proof construction (ATEX) as an option
- 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 72/95 °C
- Duct smoke detectors



APPLICATION

Application

- Fire dampers of Type FKR-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 ($v_e, h_o, i \leftrightarrow o$) 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 4
- 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
- Explosion-proof constructions for zones 1, 2, 21, 22

Classification

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

Nominal sizes

- 315, 355, 400, 450, 500, 560, 630, 710, 800
- L: 495 mm or 550 mm (depending on casing construction)

DESCRIPTION

Variants

- With fusible link
- With fusible link for use in potentially explosive atmospheres
- With spring return actuator
- With spring return actuator for use in potentially explosive atmospheres

Parts and characteristics

- Release temperature 72 °C or 95 °C (for use in warm air ventilation systems)
- Single-handed operation

Attachments

- Limit switch for damper blade position indication
- Limit switch for damper blade position indication for use in potentially explosive atmospheres
- Spring return actuator for 24 V AC/DC or 230 V AC supply voltage
- Spring return actuator for 24 – 230 V supply voltage, for use in potentially explosive atmospheres
- Network module for the integration with AS-i or LON networks

Accessories

- Flexible connectors
- Cover grille
- Extension piece
- Installation kit TQ

Useful additions

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

Construction features

- Rigid, circular casing with spigot connections suitable for circular ducts. Spigots with lip seal on both ends, suitable for commercially available circular ducts to EN 1506 or EN 13180; alternatively with flanges on both ends. Flanges, to EN 12220
- The release mechanism is accessible and can be tested from the outside

- Suitable for the connection of ducts, flexible connectors or a cover grille
- 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 in 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

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