



KU-K30



TESTED TO VDI 6022

## TYPE KU-K30

### FOR DIFFUSERS IN SUSPENDED F30 CEILINGS

Square fire damper for installation in suspended fire-resistant F30 ceilings For the isolation of duct penetrations between fire compartments, available in five nominal nominal sizes

- Nominal sizes for diffusers sized 300 × 300 – 625 × 625 mm
- Satisfies high ventilation requirements when combined with a diffuser
- Coated construction meets high hygiene requirements
- Integration into the central BMS with TROXNETCOM

#### Optional equipment and accessories

- Ceiling diffusers/swirl diffusers
- External fusible link, 72 °C
- Electric actuator
- Release temperature 72/95 °C



WITH TROXNETCOM AS AN OPTION



KU-K30 WITH DIFFUSER OF TYPE DLQ

Lindner ceiling tile (by others)  
Diffuser (to be ordered separately)

## Application

### Application

- Fire dampers of Type KU-K30 for the isolation of air terminal devices in self supporting fire-resistant suspended ceilings in the event of a fire
- To prevent the propagation of fire and smoke through ductwork to adjacent designated fire compartments

### Special characteristics

- Licence Z-41.3-320
- Tested to DIN 4102-6 for fire resistance properties
- Classification to DIN 4102, K30-U
- Low differential pressure and sound power level
- For use with supply air or extract air systems (for supply air systems with perforated sheet metal)
- Integration into the central BMS with TROXNETCOM

### Classification

- Fire resistance class K30-U to DIN 4102-6

### Nominal sizes



- Fire damper: 300 × 300, 400 × 400, 500 × 500, 600 × 600, 625 × 625 mm
- Spigot Ø (depending on the nominal size): 160, 200, 250, 315 mm

## Description

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### Variants

- With fusible link
- With spring return actuator

### Parts and characteristics

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

### Attachments

- Limit switch for damper blade position indication
- Spring return actuator for 24 V or 230 V supply voltage
- External fusible link

### Useful additions

- Diffuser: FD, TDF-SilentAir, DLQ or ADLQ

### Construction features

- Casing made of calcium silicate
- Damper blade made of special insulation material

### Materials and surfaces

Plenum box:

- Special insulation material
- Special insulation material with RAL 7001 coating on the inside

Damper blade:

- Special insulation material
- Special insulation material with RAL 7001 coating
- Seal made of neoprene

Other components:

- Spigot and attachments made of galvanised sheet steel
- Fixing elements made of galvanised steel

### Standards and guidelines

- DIN 4102-6, standard fire resistance test
- EN 1751 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

## TECHNICAL INFORMATION

### Construction with fusible link

#### Functional description

Fire dampers for self supporting F30 suspended ceilings shut automatically in the event of a fire and prevent the propagation of fire and smoke through ductwork to adjacent designated fire compartments. In the event of a fire, the damper is triggered at 72 °C or at 95 °C (use in warm air ventilation systems) by a fusible link inside the damper. The release mechanism is accessible and can be tested from the outside (i.e. from the room).

### 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 or 95 °C (use in warm air ventilation systems).

As long as power is supplied to the actuator, the damper blade remains open.

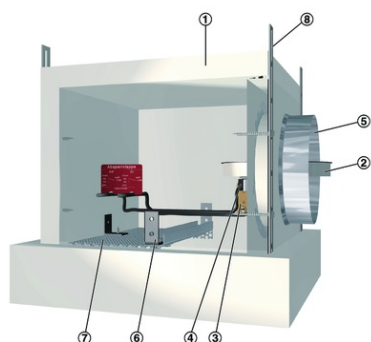
If the supply voltage fails, the damper closes (power off to close).

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.

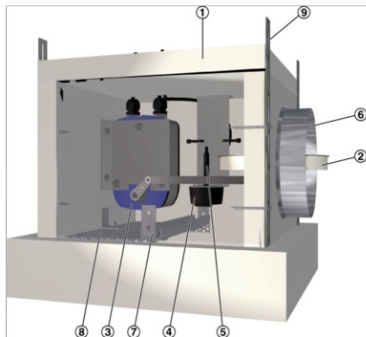
The spring return actuator is fitted with limit switches that can be used for capturing the damper blade position.

### Schematic illustration of KU-K30 with fusible link and limit switch



- ① Plenum box
- ② Damper blade with seal
- ③ Fusible link
- ④ Limit switch
- ⑤ Spigot
- ⑥ Cross bar
- ⑦ Perforated sheet metal (only with constructions ...-LB or ...-1-LB)
- ⑧ Suspension

### Schematic illustration of KU-K30 with spring return actuator BLF



- ① Plenum box
- ② Damper blade with seal
- ③ Spring return actuator
- ④ Thermoelectric release mechanism
- ⑤ Temperature sensor
- ⑥ Spigot
- ⑦ Cross bar
- ⑧ Perforated sheet metal (only with constructions ...-LB or ...-1-LB)
- ⑨ Suspension

Nominal sizes – fire damper	300, 400, 500, 600, 625 mm
Nominal sizes – spigot	160, 200, 250, 315 mm
Differential pressure range	Depends on the spigot and diffuser
Operating temperature	At least 0 – 50 °C **
Release temperature	72 °C or 95 °C (for warm air ventilation systems)
Upstream velocity	Depends on the spigot and diffuser, usually about 3 – 5 m/s

\*\* Temperatures may differ for units with attachments

Square fire damper for the isolation of ducts in self supporting fire-resistant suspended ceilings. Satisfies high ventilation requirements when combined with a non-combustible ceiling diffuser or swirl diffuser. Suitable for supply and extract air

Ready-for-operation unit, which includes a fire-resistant damper blade and a release mechanism. Fire resistance class: K30-U

For installation in self supporting F30 fire-resistant suspended ceilings: tile ceilings (screw-fixed or primed), metal ceilings, and gypsum friezes of metal ceilings.

Thermal or thermoelectric release at 72 °C or 95 °C (warm air ventilation systems).

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.

#### Special characteristics

- Licence Z-41.3-320
- Tested to DIN 4102-6 for fire resistance properties
- Classification to DIN 4102, K30-U
- Low differential pressure and sound power level
- For use with supply air or extract air systems (for supply air systems with perforated sheet metal)
- Integration into the central BMS with TROXNETCOM

#### Materials and surfaces

Plenum box:

- Special insulation material
- Special insulation material with RAL 7001 coating on the inside

Damper blade:

- Special insulation material
- Special insulation material with RAL 7001 coating
- Seal made of neoprene

Other components:

- Spigot and attachments made of galvanised sheet steel
- Fixing elements made of galvanised steel

#### Technical data

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- Nominal sizes – spigot: 160, 200, 250, 315 mm
- Differential pressure range: Depends on the spigot and diffuser
- Operating temperature: at least 0 – 50 °C \*\*
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## KU – K30 / LB / W / 300×160 / Z01



### 1 Type

KU-K30  
L-KU-K30<sup>1</sup>

### 2 Construction 1

No entry: standard construction  
**1** With RAL 7001 coating  
**LB** With perforated sheet metal  
**1-LB** With RAL 7001 coating and perforated sheet metal

### 3 Construction 2

**W** Release temperature 95 °C

### 4 Nominal size [mm] – fire damper<sup>2</sup>

300  
400  
500  
600  
625

### 5 Nominal size [mm] – spigot

160  
200  
250  
315

### 6 Attachments

**Z00** Standard construction  
**Z00 – ZL08**

<sup>1</sup> Type L-KU-K30: For Lindner metal ceilings LMD F30 Type 1, 3, 4, 5 and 6 – 11, with building inspectorate licence  
<sup>2</sup> Types DLQ ADLQ can only be combined with selected nominal sizes

#### Diffuser types (to be ordered separately)

FD  
TDF-SilentAir  
DLQ  
ADLQ

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