▸ Smoke control ▸▸

Keeps smoke at bay!

Smoke control damper EK-JZ

TROX® TECHNIK
The art of handling air
X Fans

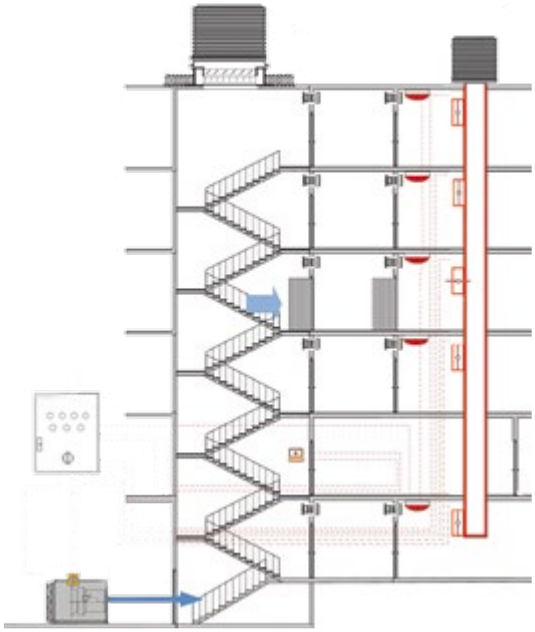
▶Maximum size, maximum performance ▶▶

EK-JZ in pressurisation systems

Keeping escape and rescue routes such as stairwells also over longer periods of time free from smoke is an essential requirement for maintaining viable evacuation and firefighting options.

Pressurisation systems control the fresh air intake to achieve a constant positive pressure level and hence keep escape and rescue routes free from smoke.

If someone opens a door to a stairwell, the positive pressure there prevents toxic gases in the fire compartment from escaping into the stairwell. This means, however, that smoke has to be removed otherwise, for example via actuator-operated windows or smoke control dampers. The effectiveness of such means depends largely on the cross section of the opening, which in case of windows is usually rather small.



The EK-JZ principle of operation

is quite different. It relies on the controlled smoke extract via large openings to smoke extract shafts. The larger the free area, the higher the volume flow rate that can be achieved with low airflow velocities. This helps to keep pressure losses to a minimum, thereby ensuring the faultless and safe function of the pressurisation system.

▶EK-JZ smoke control damper ▶▶

Ideal for keeping rescue routes free from smoke

The EK-JZ smoke control damper is CE marked and suitable for vertical installation in walls or ducts. It has been specially designed for installation in shafts used for smoke and heat extract from affected storeys; it is the ideal solution to keep stairwells free from smoke when a pressurisation system is used. EK-JZ can of course also be installed in fire-resistant smoke extract ducts and in underground car parks.

Superior quality

The dampers are made of calcium silicate panels and withstand very high temperatures; they feature aerodynamic blades and an innovative two-level sealing system, which ensures minimum leakage with both high and low temperatures. EK-EU smoke control dampers can be released manually or automatically.

Ideal dimensions

Due to their compact depth and the variable number of blades, EK-JZ smoke control dampers are ideal for confined spaces; even the smaller sizes offer maximum cross-sectional areas for the volume flow.

Overall safety

When combined with an intelligent control system such as TROXNETCOM, EK-JZ offers overall safety and integration with the central BMS.

Maximum size, maximum performance

- Different nominal sizes from 200 x 430 mm to 1200 x 2030 mm
- Classification EI 120/90 ($v_{edw,}$ i <–> o) S1000 C $_{10,000}$ MA multi to EN 13501-4
- CE marking to EN 12101-8 Smoke and heat control systems – Smoke control dampers
- Pressure level 2 (-1000 to 500 Pa)
- Quick and easy installation due to rectangular casing without any protruding parts
- Casing, damper blades and actuator encasing made of calcium silicate
- Only low pressure losses because of aerodynamic blade contours
- TROXNETCOM, Agnosys and SLC tested and certified
- Manual release; in the event of a fire, EK-JZ will open even after 25 minutes

CE

Volume flow rate up to
87,700 m3/h (24,360 l/s)

Nominal sizes from 200 x 430 mm
to 1200 x 2030 mm

Classification EI 120/90
($v_{edw,}$ i <–> o) S1000 C $_{10,000}$
MA multi to EN 13501-4

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