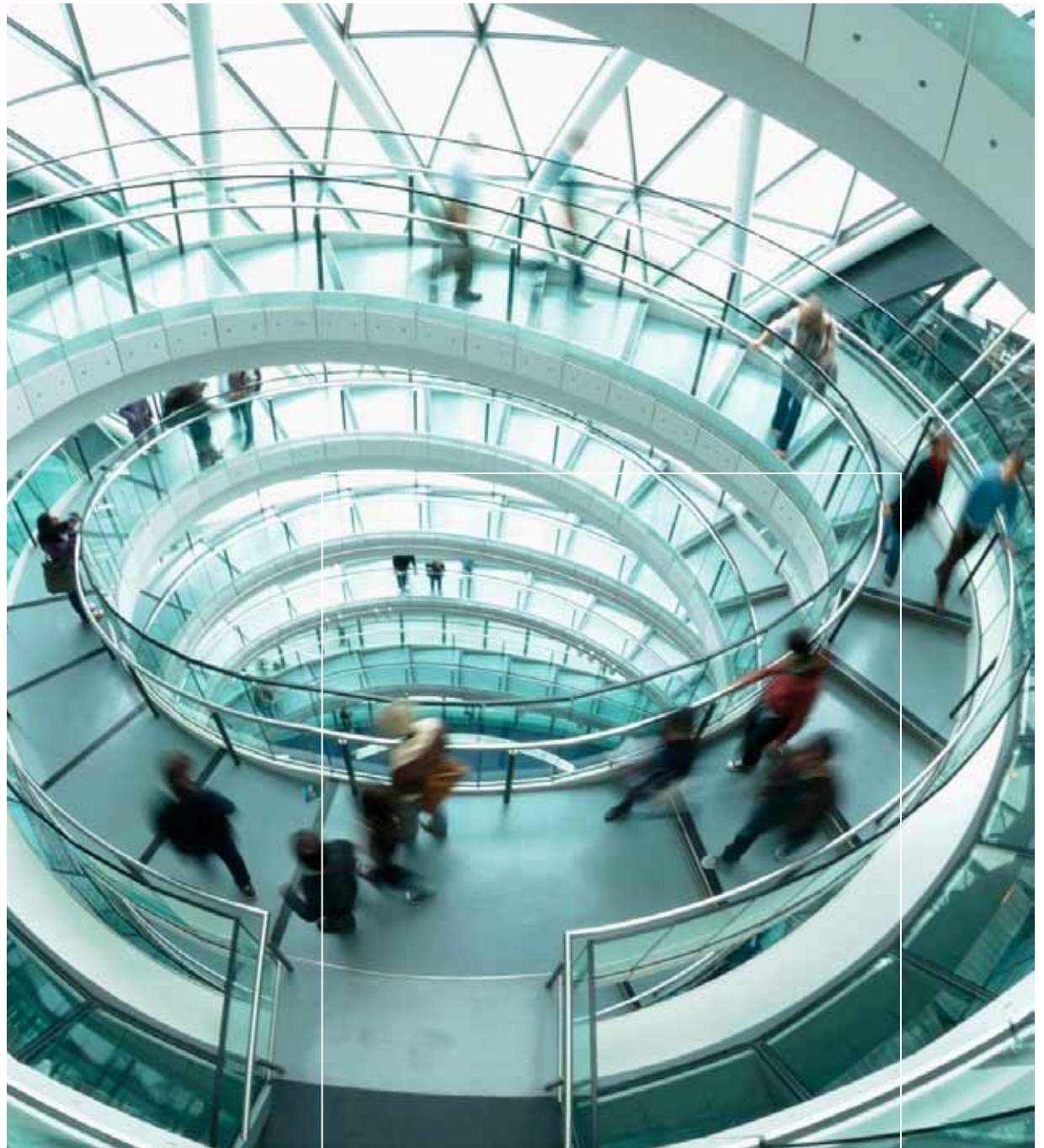


PROTECT  LIFE
FAIL-SAFE SOLUTIONS BY BELIMO

Motorised fire protection.
Perfected by the inventor.


BELIMO[®]



Fires represent the greatest potential threat to persons and tangible assets in buildings. Efficient fire protection saves lives in case of emergency, helps minimise property damage and secures the continued operation of companies.

The best protection against the spread of fire and smoke through the air ducts is provided by the motorised fire dampers to form fire compartments.

In case of fire, Belimo safety actuators for fire dampers automatically move into their safety positions and keep the dampers closed during the fire.

Protecting people and tangible assets responsibly.



Safety is the top priority

- Statutory fire protection regulations prescribe only minimal requirements.
- Responsible fire protection requires practical solutions which go beyond basic statutory requirements.
- The maximum of protection and safety in case of fire must be ensured at an economically defensible cost.

State-of-the-art

- Motorised fire dampers are regarded as «state-of-the-art technology»¹⁾. These should take precedence over technical regulations (e.g. standards).
- The dampers are controlled and monitored by conventional or digital systems.
- In Europe, fire dampers are manufactured in accordance with the product standard EN 15650 and checked with fire resistance testing pursuant to EN 1366-2 and classified in accordance with EN 13501-3.

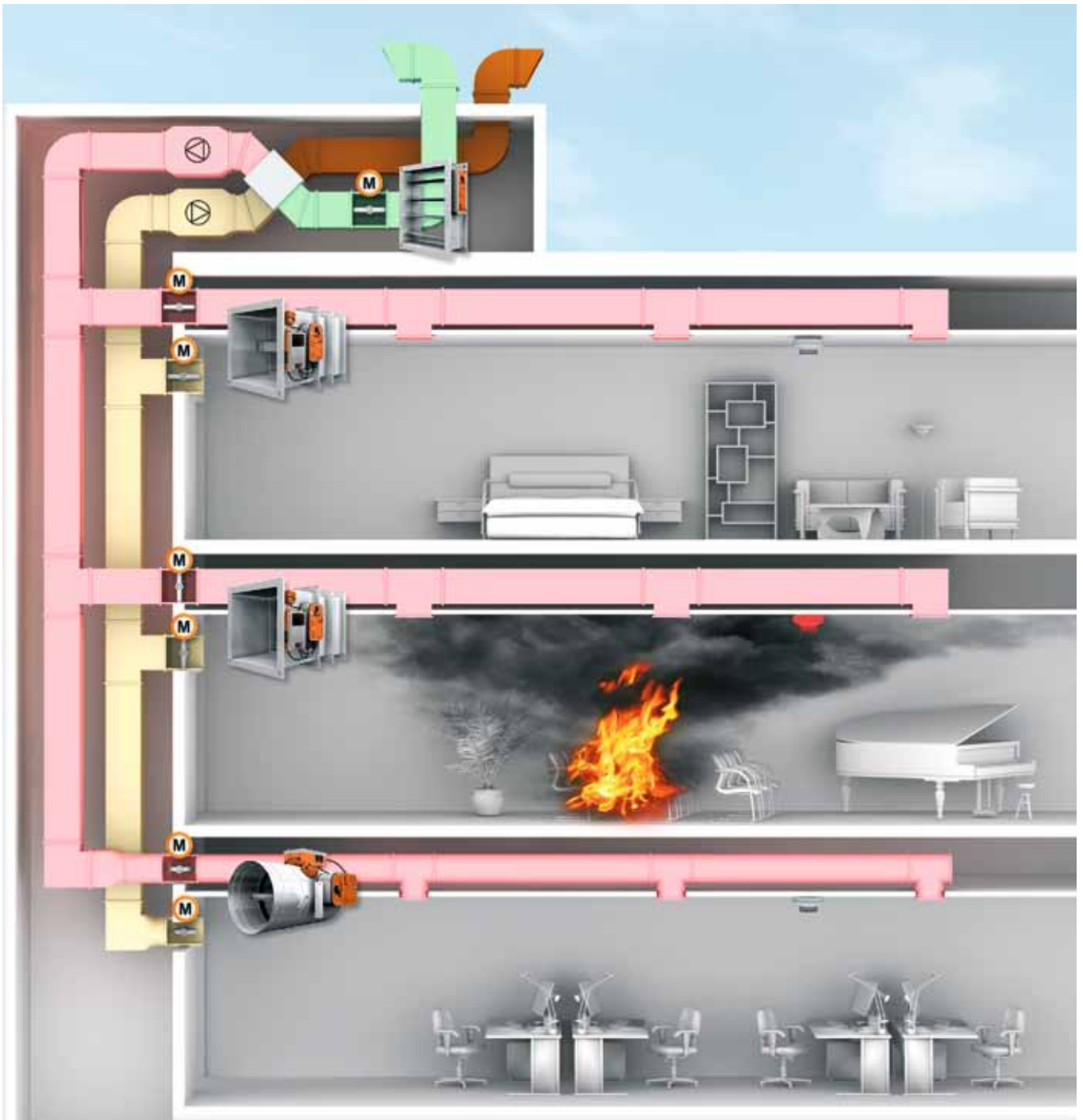
Responsibility in operation

- As a rule, the builder and the operator are responsible for the proper functioning of the fire protection systems during the entire building life cycle.
- The prescribed inspections must be carried out and logged periodically.
- Regular maintenance of the fire dampers is to be carried out in accordance with the manufacturer's operating instructions.

1) Further literature on the subject:




– Expert report «Motorisierte Brandschutzklappen und die allgemein anerkannten Regeln der Technik» from the attorneys Heiermann Franke Knipp, Essen (DE), 2002
– Technical Paper «The role of motorised damper control in legislation» by Peter E. Jackman, International Fire Consultants Ltd., Great Britain, 2004

Early triggering – Prevention of the spread of fire and smoke.



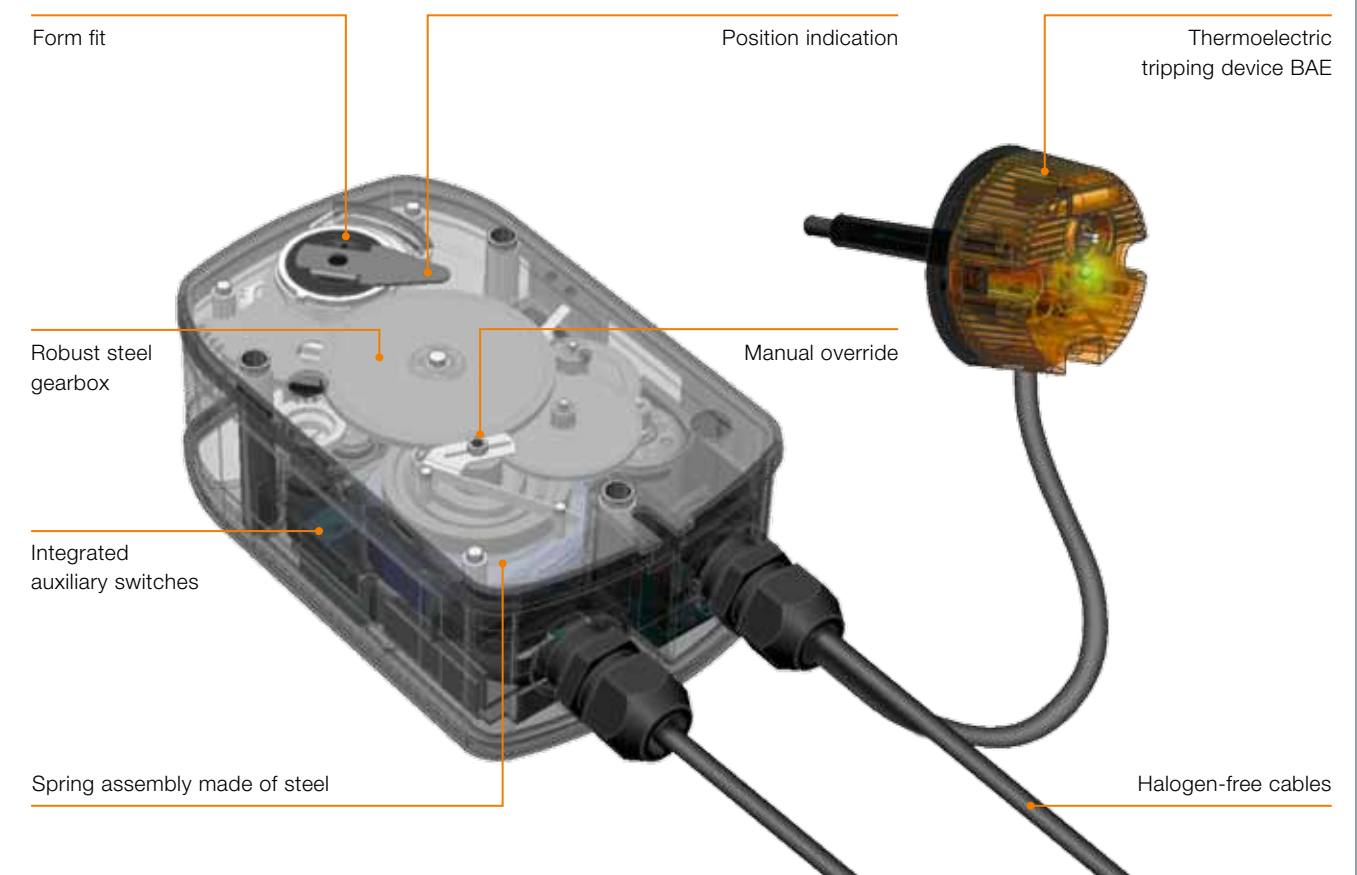
Sealing-off of the affected fire compartment by means of fire dampers, triggered by smoke detector or thermoelectric tripping device.

More performance – More value – more safety.

 <p>Motorised fire dampers</p>	<p>They prevent the spread of fire and smoke through the ventilation ducts. In case of fire, they are moved into safety position (closed) by means of the spring energy of the fire damper actuator:</p> <ul style="list-style-type: none"> • When the operating temperature is exceeded in the duct or in the environment • When triggered by smoke detector • In the event of power failure • In case of air conditioning plant shutdown.
 <p>Reliability and profitability</p>	<p>Additional customer benefits ensured thanks to:</p> <ul style="list-style-type: none"> • Maximum safety through early triggering • The possibility of scenario control by means of intelligent controls and the integration of sensors • The protection of the infrastructure in the event of power failure through automatic closing in case of electricity interruptions • Considerable lowering of operating costs through central monitoring and automated function tests.
 <p>Belimo offers more</p>	<p>As a reliable partner in fire protection issues, we provide you with safety through:</p> <ul style="list-style-type: none"> • Long years of experience • Market-appropriate, proven solutions • Uncompromising, tested Swiss quality • Local, experienced contacts • Fire protection solutions which are oriented to the building life cycle • A complete product range and the maximum in delivery reliability.

Fire protection actuators. High quality – robust – reliable.

Example: Fire protection actuator Type BLF with thermoelectric tripping device BAE

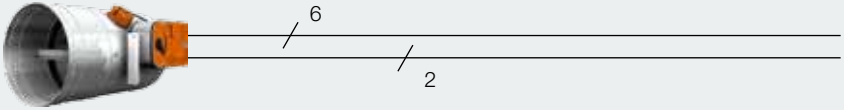


- Tested, fireproof steel gearbox to ensure the safety function in the event of fire
- Damper driven through form fit made of steel
- Thermoelectric tripping device with function-protected supply line, test switch and LED status display
- Halogen-free connecting cable with or without plug
- Easily recognisable position indication
- Permanently set, potential-free auxiliary switches
- Manual override with integrated position stop
- 100% testing of the functions of all actuators prior to delivery
- 60,000 safety functions guaranteed under nominal load
- Protective closing reduces the wear on the damper mechanism and the stress on the air duct system
- Maintenance-free
- Triggering by smoke detector possible
- Simple installation
- Reduction of current consumption in the operating position (open)

Control and system integration. Complete solutions from a single source.

Conventional control and monitoring

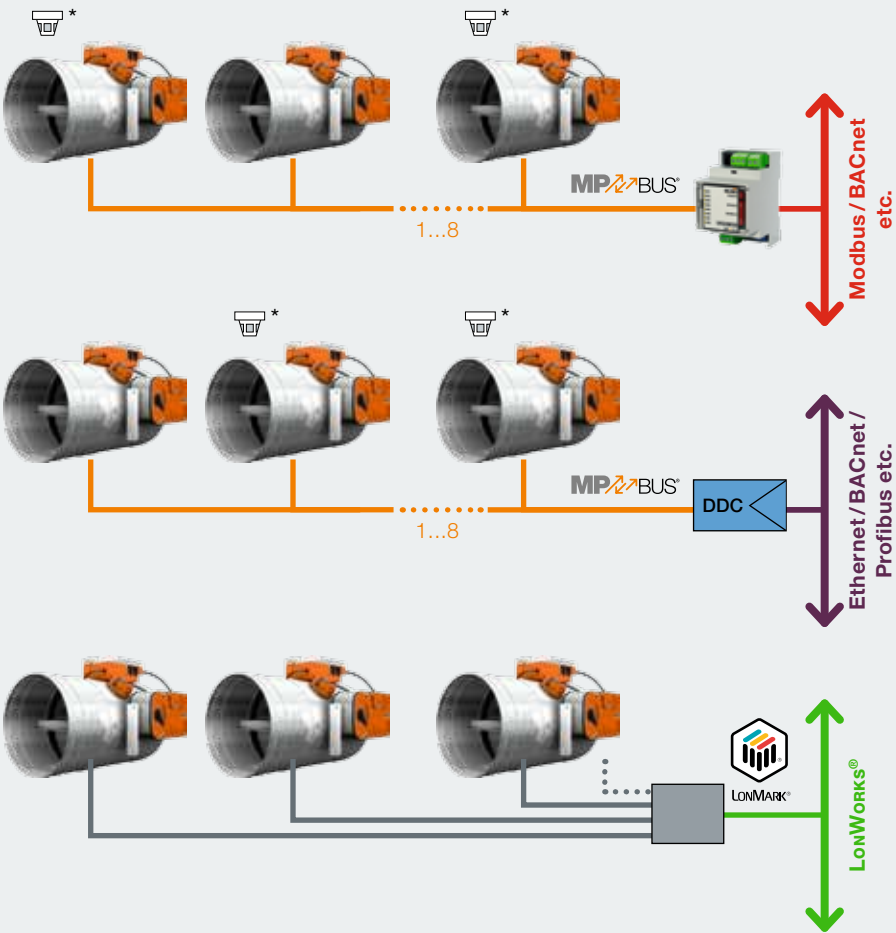
- For smaller buildings
- Individual cabling to the control cabinet
- Feedback of damper position by means of auxiliary switches



Communicative system integration (examples)

(Note: national and regional laws, directives, and standards shall be observed)

- For mid-sized to larger buildings
- Bus installation to the automation station
- Detailed status and fault feedback via bus communication
- Simple integration in various network protocols possible
- Easy installation
- Reduced fire load



* Smoke detector optional



5-year
warranty



On site around
the globe



A complete
range of products
from one source



Tested quality



Short delivery
times



Comprehensive
support

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