



**Reliably keeping
escape and
rescue routes
free of smoke.**

Smoke control actuators

Efficient smoke control, more safety.

Mechanical smoke control systems with motorised smoke control dampers save lives in case of fire and provide many advantages:

- Low smoke levels are maintained in escape and rescue routes.
- The flashover is delayed or even prevented.
- Fire fighting and rescue work is made considerably easier.
- The building structure and tangible assets are protected.

Belimo smoke control actuators move the smoke control dampers into the defined safety position in the case of fire and hold them reliably.



Belimo offers more

As a reliable supplier of tested smoke control actuators, we provide you with safety through:

- Many years of experience
- Market-appropriate, proven solutions
- Tested Swiss quality
- Local, experienced contacts
- A complete product range
- Maximum delivery reliability

Motorised smoke control dampers

The smoke control actuators move the smoke control damper into the defined position (open or closed) in case of fire. The Safety Position Lock™ function holds the smoke control damper reliably in the safety position.

The smoke control actuators have been developed to comply with the specific requirements of the European standards.

All actuators are tested thoroughly prior to delivery.

Low power consumption in the rest position reduces energy consumption.

Standards and technology

In Europe, smoke control dampers are manufactured and certified according to the Product Standard EN 12101-8.

The test standard EN 1366-10 specifies the required tests in order to meet the classification according to EN 13501-4 for AA, MA and HOT applications.

The country-specific regulations must additionally be taken into account.

The Belimo smoke control actuators facilitate the prescribed inspections, which must be carried out and logged periodically.

Safety in the building

The goal is to effectively keep escape and rescue routes free of smoke in case of fire.

For maximum safety and reliability in case of fire, the use of a mechanical smoke control system is advisable, depending on the type of building and how it is used.

As a rule, the owner and/or the operator are responsible for the proper functioning of the smoke control system throughout the entire building life cycle.



Powerful technology in a compact design.

Position indicator



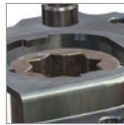
Integrated auxiliary switches

- Potential-free
- Fixed switching points



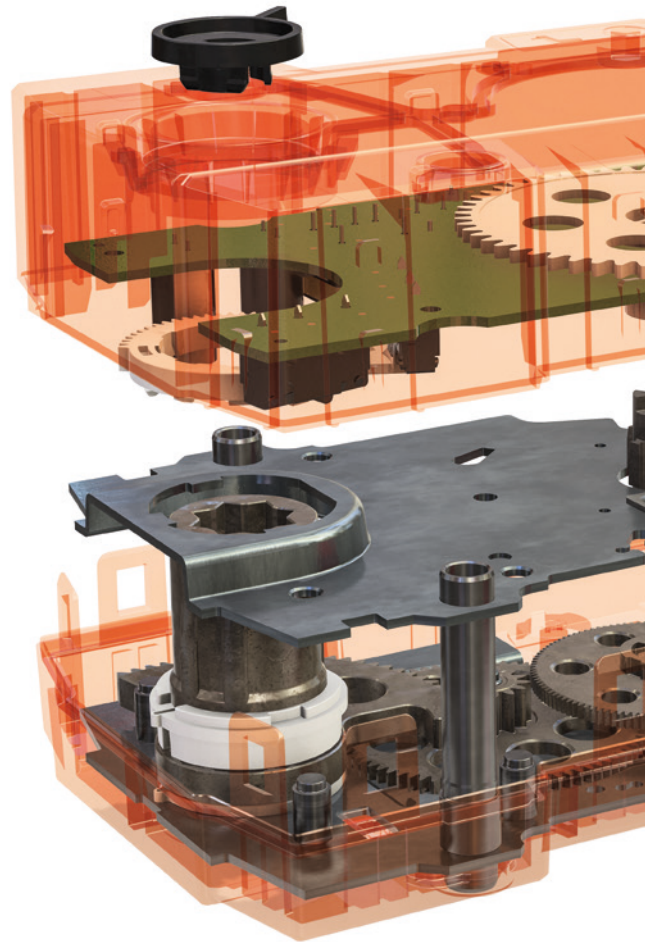
Form fit made of steel

- Safe connection to mechanical interface

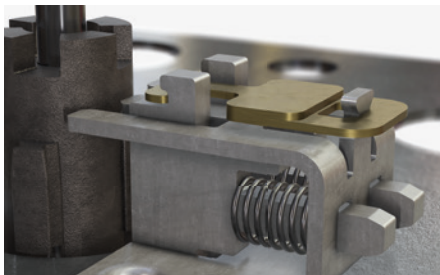


Safety Position Lock™

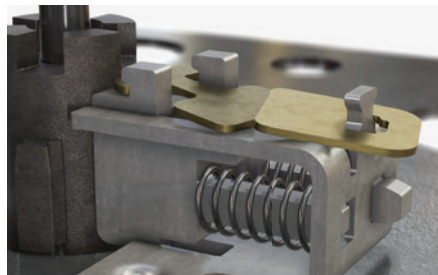
- Holds the smoke control damper reliably in the defined safety position
- Integrated as standard
- Not resettable



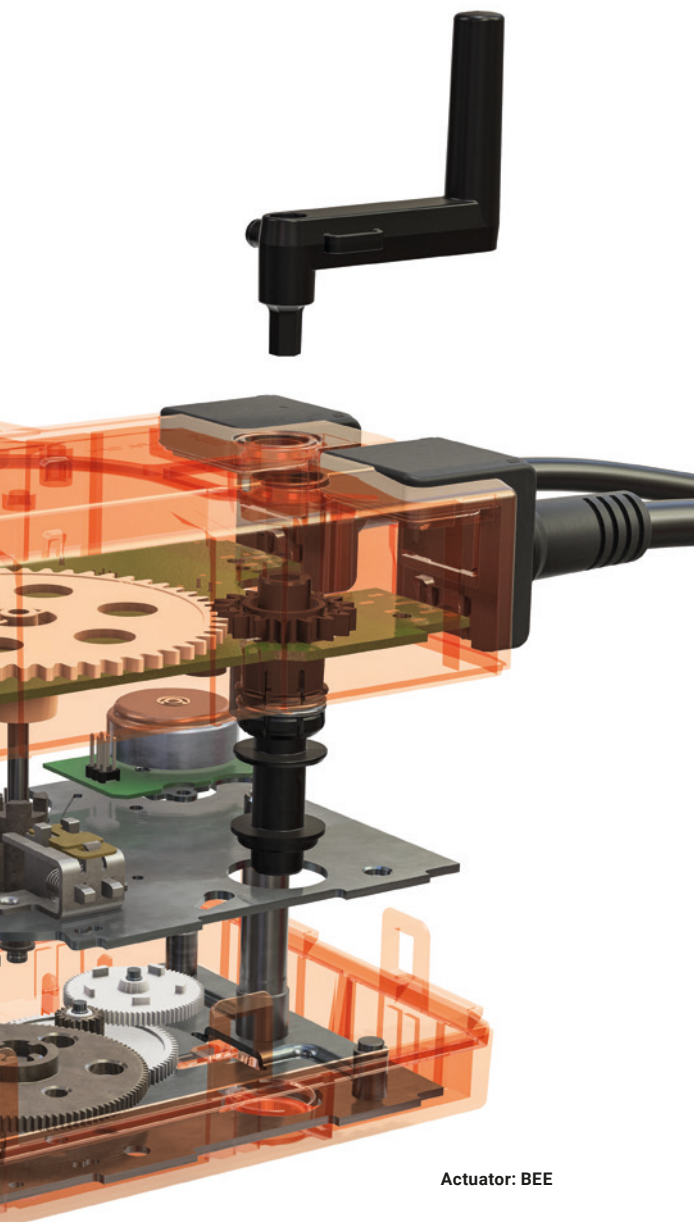
Safety Position Lock™



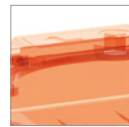
Normal operation



Fire condition



Actuator: BEE

**Housing**

- Fulfills the requirements of EN 12101-8
- Suitable for use in smoke control
- Halogen-free flame retardant
- High glow wire resistance

**Connecting cable**

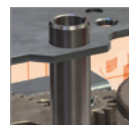
- Halogen-free
- Colour coding of the strands
- Optional with connector plug

**Manual override control**

- Smooth running
- Integrated overload protection

**Steel gear-box**

- Robust
- Fire-resistant

**Three steel hollow pillars**

- Quick and easy installation
- Robust and secure fastening

General Information

- Testing of all actuators prior to delivery
- High torque in a compact design
- Low power consumption in the rest position
- Maintenance-free

Graduated product range, economical solutions.

Belimo provides cost-effective and easy-to-integrate solutions for the motorisation of smoke control dampers.

BEN

Slim, compact design with high torque

Torque	15 Nm
Power consumption:	
AC/DC 24 V	In operation 3 W / in rest position 0.1 W
AC 230 V	In operation 4 W / in rest position 0.4 W
Angle of Rotation	95°
Running time	< 30 s / 90
Mechanical interface	Form fit 12 x 12 mm
Control	Open-close, modulating

Note

Actuators are only supplied to manufacturers of smoke control dampers.



BEE

Very high torque in a flat design

Torque	25 Nm
Power consumption:	
AC/DC 24 V	In operation 2.5 W / in rest position 0.1 W
AC 230 V	In operation 3.5 W / in rest position 0.4 W
Angle of Rotation	95°
Running time	< 60 s / 90°
Mechanical interface	Form fit 12 x 12 mm
Control	Open-close, modulating



BE

Proven actuators for large smoke control dampers

Torque	40 Nm
Power consumption:	
AC/DC 24 V	In operation 12 W / in rest position 0.5 W
AC 230 V	In operation 8 W / in rest position 0.5 W
Angle of Rotation	100°
Running time	< 60 s / 90°
Mechanical interface	Form fit 14 x 14 mm (12 x 12 mm possible)
Control	Open-close



Conventional control and monitoring.

Conventional control with position feedback

Actuator types	BEN / BEE / BE / BLE: 24 / 24-12 / 230 / 230-12
Connection to control cabinet	– Cables for motors and auxiliary switches wired directly to the control cabinet – Feedback of damper position by means of auxiliary switches
Note	For 24V actuators, the voltage drop over long lines should be noted. The voltage at the actuator must be within the tolerance stated in the data sheet.

