



**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



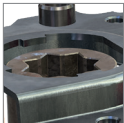
Integrated auxiliary switches

- Potential-free
- Fixed switching points



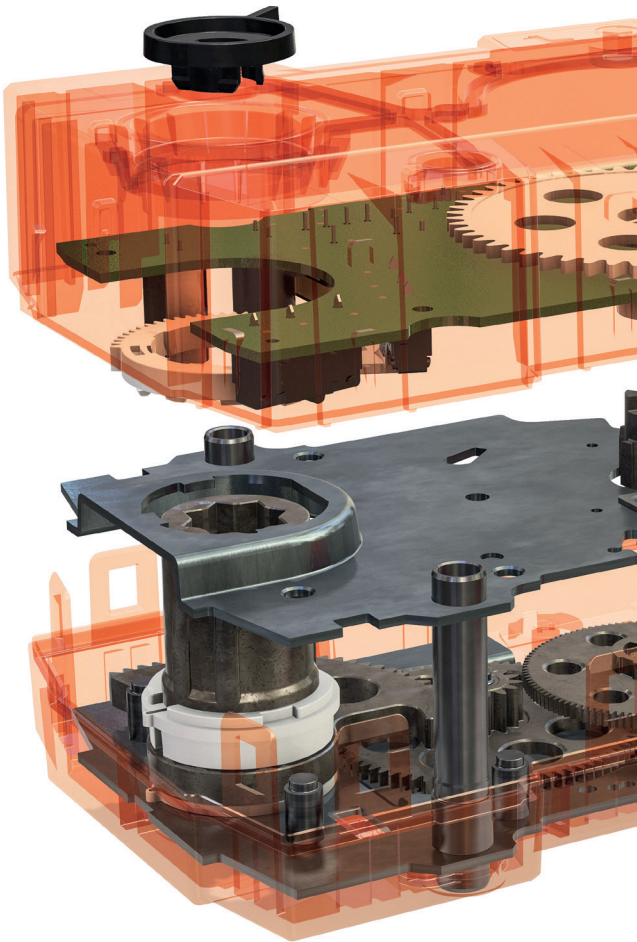
Form fit made of steel

- Safe connection to mechanical interface

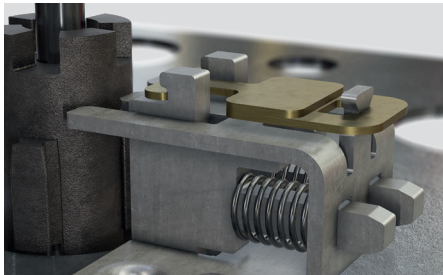


Safety Position Lock™

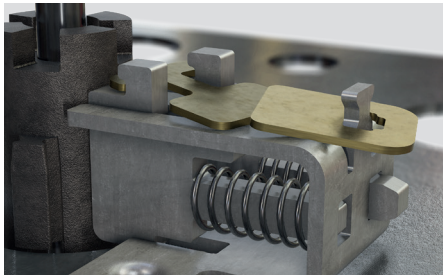
- Holds the smoke control damper reliably in the defined safety position
- Integrated as standard
- Not resettable



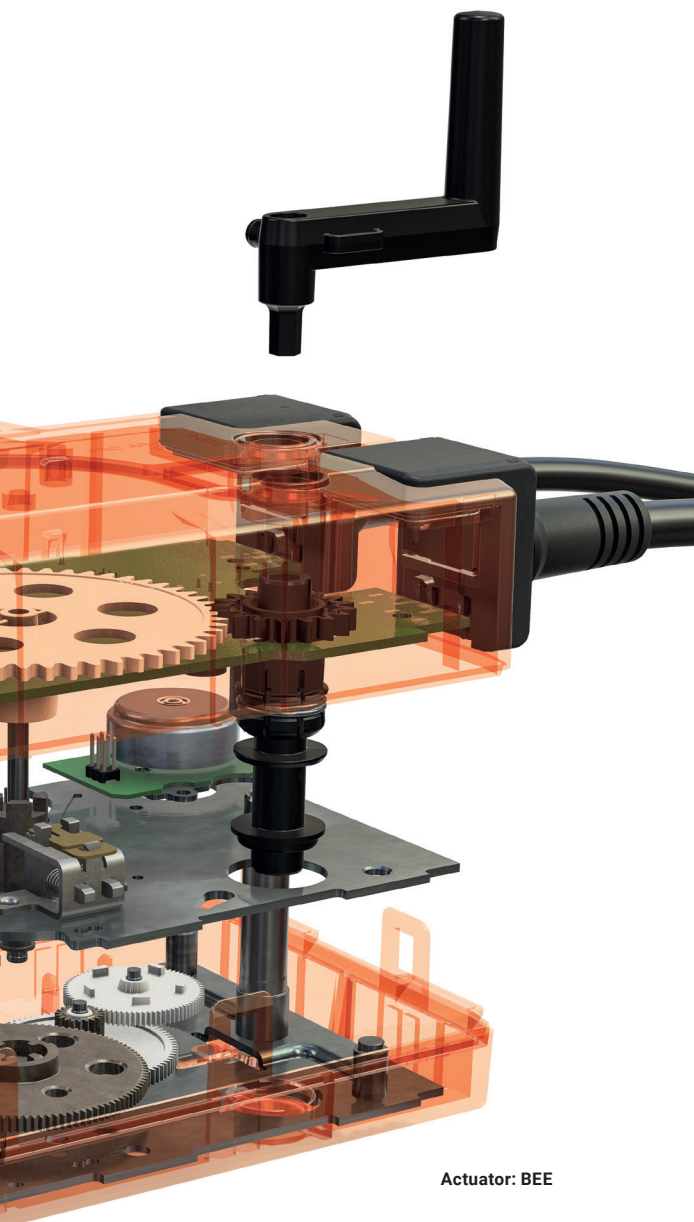
Safety Position Lock™



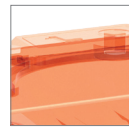
Normal operation



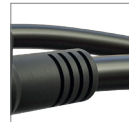
Fire condition



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

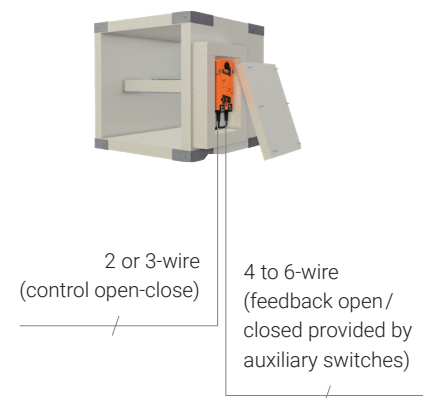
Torque	40 Nm
Power consumption:	
AC/DC 24 V	In operation 12 W / in rest position 0.5 W
AC 230 V	In operation 8 W / in rest position 0.5 W
Angle of Rotation	100°
Running time	< 60 s / 90°
Mechanical interface	Form fit 14 x 14 mm (12 x 12 mm possible)
Control	Open-close





Conventional and digital control and monitoring.

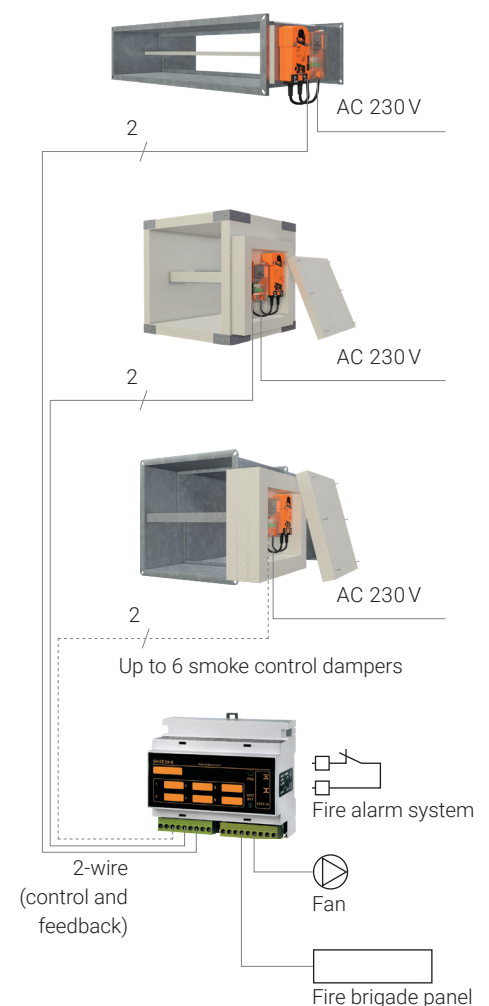
Conventional control with position feedback

Actuator types	BEN / BEE / BE / BLE: 24 / 24-12 / 230 / 230-12
Connection to control cabinet	<ul style="list-style-type: none"> – 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.



Control and monitoring via SBSE-Control

Actuator types	BEN / BEE / BE / BLE: 24-ST ST = with connector plug
Connection to the fire alarm system	<p>BKNE230-24 communication and power supply unit</p> <ul style="list-style-type: none"> – Decentralised power supply unit for 24V smoke control actuators with connector plug – Local power supply AC 230V – Signals the damper position – Receives the control command – Integrated status LED  <p>BKSE24-6 communication and control unit</p> <ul style="list-style-type: none"> – Controls and monitors up to 6 smoke control dampers – LED status display indicating operating states and fault messages – Function test of the smoke control actuators – Potential-free auxiliary contacts for integration into the system – Zone control, centralised alarms 



All inclusive.

Belimo as a global market leader develops innovative solutions for the controlling of heating, ventilation and air-conditioning systems. Actuators, valves and sensors represent our core business.

Always focusing on customer added value, we deliver more than only products. We offer you the complete product range for the regulation and control of HVAC systems from a single source. At the same time, we rely on tested Swiss quality with a five-year warranty. Our worldwide representatives in over 80 countries guarantee short delivery times and comprehensive support through the entire product life. Belimo does indeed include everything.

The "small" Belimo devices have a big impact on comfort, energy efficiency, safety, installation and maintenance.
In short: Small devices, big impact.



5-year warranty



On site around the globe



Complete product range



Tested quality



Short delivery times



Comprehensive support



BELIMO Automation AG

Brunnenbachstrasse 1, 8340 Hinwil, Switzerland

Fon + 41 43 843 61 11, info@belimo.ch, www.belimo.com

