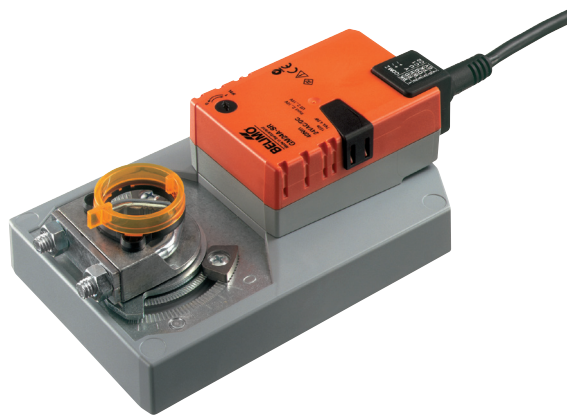


Modulating damper actuator for adjusting dampers in technical building installations

- Air damper size up to approx. 8 m<sup>2</sup>
- Nominal torque 40 Nm
- Nominal voltage AC/DC 24 V
- Control modulating DC 0 ... 10 V
- Position feedback DC 2...10 V


**Technical data**

<b>Electrical data</b>	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V / DC 19.2...28.8 V
	Power consumption in operation	4.5 W
	Power consumption at rest	2 W
	Power consumption for wire sizing	6.5 VA
	Sensor element	Cable 1 m, 4 x 0.75 mm <sup>2</sup>
<b>Functional data</b>	Torque motor	min. 40 Nm
	Control positioning signal Y	DC 0...10 V
	Control positioning signal Y note	Typical input impedance 100 kΩ
	Control operating range	DC 2...10 V
	Position feedback (measuring voltage U)	DC 2...10 V
	Position feedback measuring voltage U note	Max. 1 mA
	Position accuracy	±5%
	Direction of rotation motor	Can be selected with switch 0/1
	Running direction	Y = 0 V: At switch position 0 (counter-clockwise rotation) / 1 (clockwise rotation)
	Manual override	Gear disengagement with push-button, can be locked
	Angle of rotation	max. 95°
	Running time motor	150 s / 90°
	Sound power level motor max.	45 dB(A)
	Spindle driver	Universal spindle clamp reversible 12...26 mm
Position indication	Mechanical, pluggable	
<b>Safety</b>	Protection class IEC/EN	III Safety extra-low voltage
	Protection class UL	UL Class 2 Supply
	Degree of protection IEC/EN	IP54 in all mounting positions
	Degree of protection NEMA/UL	NEMA 2, UL Enclosure Type 2
	Electromagnetic compatibility	CE according to 89/336/EC
	Certification IEC/EN	Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14
	Certification UL	cULus according to UL 60730-1A, UL 60730-2-14 and CAN/CSA E60730-1:02
	Mode of operation	Type 1
	Rated current voltage motor	0.8 kV
	Control pollution degree	3
Ambient temperature	-30...50 °C	
Non-operating temperature	-40...80 °C	
Ambient humidity	95% r.h., non-condensing	
Maintenance	Maintenance-free	
<b>Weight</b>	Weight approx.	1.7 kg

**Safety notes**


- The actuator is not allowed to be used outside the specified field of application, especially not in aircraft or in any other airborne means of transport.

## Safety notes

- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- The cables must not be removed from the device.
- When calculating the torque required, the specifications supplied by the damper manufacturers (cross-section, construction, place of installation), and the ventilation conditions must be observed.
- The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

## Product features

<b>Mode of operation</b>	The actuator is connected with a standard modulating signal of DC 0 ... 10V and travels to the position defined by the positioning signal. Measuring voltage U serves for the electrical display of the damper position 0 ... 100% and as slave control signal for other actuators.
<b>Direct mounting</b>	Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with a universal mounting bracket to prevent the actuator from rotating.
<b>Manual override</b>	Manual override with push-button possible (the gear is disengaged for as long as the button is pressed or remains locked).
<b>High functional reliability</b>	The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.
<b>Adjustable angle of rotation</b>	Adjustable angle of rotation with mechanical end stops.

## Accessories

	Description	Type
<b>Electrical accessories</b>	Auxiliary switch, add-on, 1 x SPDT	S1A
	Auxiliary switch, add-on, 2 x SPDT	S2A
	Feedback potentiometer 140 Ohm, add-on	P140A
	Feedback potentiometer 200 Ohm, add-on	P200A
	Feedback potentiometer 500 Ohm, add-on	P500A
	Feedback potentiometer 1 kOhm, add-on	P1000A
	Feedback potentiometer 2.8 kOhm, add-on	P2800A
	Feedback potentiometer 5 kOhm, add-on	P5000A
	Feedback potentiometer 10 kOhm, add-on	P10000A
	Range controller for wall mounting, adjustable electron. Min./max. angle of rotation limitation	SBG24
	Positioner for wall mounting, range 0...100%	SGA24
	Positioner for front-panel mounting, range 0...100%	SGF24
	Positioner in a conduit box, range 0...100%	SGE24
	Positioner for wall mounting, range 0...100%	CRP24-B1
	Signal converter voltage/current, supply AC/DC 24V	Z-UIC
Digital position indicator for front-panel mounting, 0...99%, front mass 72 x 72 mm	ZAD24	
<b>Mechanical accessories</b>	Actuator arm, for standard spindle clamp (reversible) K-SA	AH-GMA
	Mounting kit for linkage operation, GM..A	ZG-GMA
	Base plate extension from GM..A to GM..	Z-GMA
	Straight ball joint with M8, suitable for damper crank arms KH8	KG10A
	Damper crank arm, for damper spindles	KH10

Electrical installation

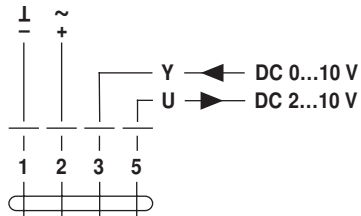


Notes

- Connection via safety isolating transformer.
- Parallel connection of other actuators possible. Observe the performance data.

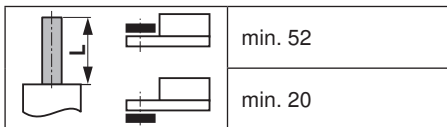
Wiring diagrams

AC/DC 24 V, modulating



Cable colours:  
 1 = black  
 2 = red  
 3 = white  
 5 = orange

Dimensions [mm]



Clamping ranges

	12...22	12...18
	22...26.7	12...18

Dimensional drawings

