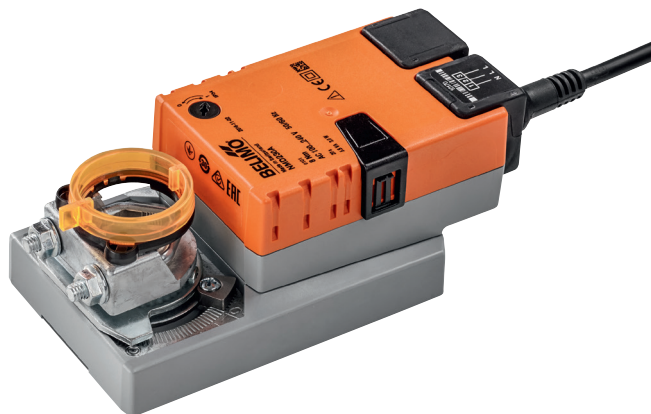


Damper actuator for adjusting dampers in technical building installations

- Air damper size up to approx. 1.5 m²
- Nominal torque 8 Nm
- Nominal voltage AC 230 V
- Control Open-close, 3-point
- Running time motor 20 s


Technical data

Electrical data	Nominal voltage	AC 230 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 85...265 V
	Power consumption in operation	3 W
	Power consumption in rest position	1 W
	Power consumption for wire sizing	5.5 VA
	Connection supply / control	Cable 1 m, 3 x 0.75 mm ²
	Parallel operation	Yes (note the performance data)
Functional data	Torque motor	Min. 8 Nm
	Direction of motion motor	selectable with switch 0 (ccw rotation) / 1 (cw rotation)
	Manual override	with push-button, can be locked
	Angle of rotation	Max. 95°
	Angle of rotation note	can be limited on both sides with adjustable mechanical end stops
	Running time motor	20 s / 90°
	Sound power level motor	55 dB(A)
	Spindle driver	Universal spindle clamp reversible 10...20 mm
	Position indication	Mechanically, pluggable
	Safety	Protection class IEC/EN
Protection class UL		II reinforced insulation
Degree of protection IEC/EN		IP54
Degree of protection NEMA/UL		NEMA 2, UL Enclosure Type 2
EMC		CE according to 2014/30/EU
Low voltage directive		CE according to 2014/35/EU
Certification IEC/EN		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 impulse voltage supply / control		4 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	
Weight	Weight	0.98 kg

Safety notes


- The device must not be used outside the specified field of application, especially not in aircraft or in any other airborne means of transport.
- Outdoor application: only possible in case that no (sea)water, snow, ice, insolation or aggressive gases interfere directly with the actuator and that is ensured that the ambient conditions remain at any time within the thresholds according to the data sheet.
- Caution: Power supply voltage!
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.

Safety notes

- 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.
- Cables must not be removed from the device.
- To calculate the torque required, the specifications supplied by the damper manufacturers concerning the cross-section, the design, the installation site and the ventilation conditions must be observed.
- The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Product features

Simple direct mounting	Simple direct mounting on the damper spindle with an universal spindle clamp, supplied with an anti-rotation device to prevent the actuator from rotating.
Manual override	Manual override with push-button possible (the gear is disengaged for as long as the button is pressed or remains locked).
Adjustable angle of rotation	Adjustable angle of rotation with mechanical end stops.
High functional reliability	The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.

Accessories

	Description	Type
Electrical accessories	Auxiliary switch, add-on, 1 x SPDT	S1A
	Auxiliary switch, add-on, 2 x SPDT	S2A
	Feedback potentiometer 200 Ohm, add-on	P200A
	Feedback potentiometer 500 Ohm, add-on	P500A
	Feedback potentiometer 500 Ohm, add-on, grey	P500A GR
	Feedback potentiometer 1 kOhm, add-on	P1000A
	Feedback potentiometer 2.8 kOhm, add-on	P2800A
	Feedback potentiometer 2.8 kOhm, add-on, grey	P2800A GR
	Feedback potentiometer 1 kOhm, add-on, grey	P1000A GR
	Feedback potentiometer 5 kOhm, add-on	P5000A
	Feedback potentiometer 5 kOhm, add-on, grey	P5000A GR
	Feedback potentiometer 10 kOhm, add-on	P10000A
Feedback potentiometer 10 kOhm, add-on, grey	P10000A GR	
Mechanical accessories	Description	Type
	Actuator arm, for standard spindle clamp (reversible) K-SA	AH-20
	Shaft extension 240 mm for damper spindels Ø 12...25 mm CrNi (INOX)	AV12-25-I
	Shaft extension 240 mm, for damper spindels Ø 8...25 mm, resp.Ø 10...25 mm	AV8-25
	Angled ball joint with M8, suitable for damper crank arm KH8	KG8
	Straight ball joint with M8, suitable for damper crank arm KH8	KG10A
	Damper crank arm, for damper spindels	KH8
	Spindle clamp, one side for NM..A, SM..A	K-ENSA
	Spindle clamp, one side for SM..A	K-ENSA-I
	Universal mounting bracket 180 mm	Z-ARS180
	Universal mounting bracket 230 mm	Z-ARS230
	Angle of rotation limiter, for K-NA and K-SA	20334-00001
	Form fit insert 10x10 mm, for NM..A / SM..A	ZF10-NSA
	Form fit insert 12x12 mm, for NM..A / SM..A	ZF12-NSA
	Form fit insert 15x15 mm, for NM..A / SM..A	ZF15-NSA
	Form fit insert 16x16 mm, for NM..A / SM..A	ZF16-NSA
	Position indication for LM..A, NM..A, SM..A, GM..A	Z-PI

Electrical installation

Electrical installation

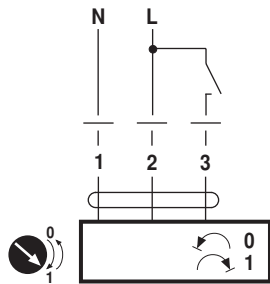


Notes

- Caution: Power supply voltage!
- Parallel connection of other actuators possible. Observe the performance data.

Wiring diagrams

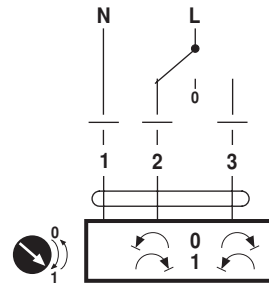
AC 230 V, open-close



Cable colours:

- 1 = blue
- 2 = brown
- 3 = white

AC 230 V, 3-point

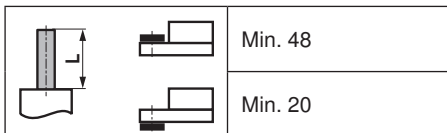


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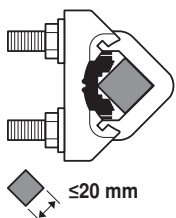
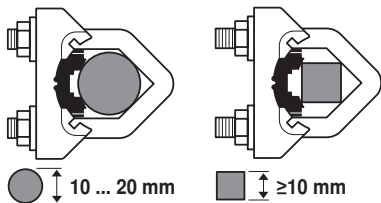
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Dimensions [mm]

Spindle length



Clamping range



With utilisation of a round spindle made of CrNi (INOX): Ø 12...20 mm

Dimensional drawings

