

Damper actuator for adjusting dampers in technical building installations

- Damper size up to approx. 3.2 m<sup>2</sup>
- Nominal torque 16 Nm
- Nominal voltage AC/DC 24 V
- Control: Open-close, 3-point
- Running time motor 20 s


**Technical data**

<b>Electrical data</b>	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2 V ... 28.8 V / DC 21.6 V ... 28.8 V
	Power consumption in operation	4 W
	Power consumption at rest	0.5 W
	Power consumption dimensioning	6.5 VA
	Power consumption dimensioning note	I <sub>max</sub> 8.2 A @ 5 ms
	Connection supply / control	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
<b>Functional data</b>	Torque motor	min. 16 Nm
	Direction of rotation motor	As an option with switch 0 (counter-clockwise rotation) / 1 (clockwise rotation)
	Manual override	Gear disengagement with push-button, can be locked
	Angle of rotation	max. 95 °, can be limited on both sides with adjustable mechanical end stops
	Running time motor	20 s / 90°
	Sound power level motor max.	55 dB (A)
	Spindle driver	Universal spindle clamp reversible 10...20 mm
	Position indication	mechanical, plug-in
<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
	Degree of protection NEMA/UL	NEMA 2, UL Enclosure Type 2
	EMC	CE in accordance with 2004/108/EC
	Certification IEC/EN	Certified to: IEC/EN 60730-1 and IEC/EN 60730-2-14
	Certification UL	CULus in accordance with UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02
	Mode of operation	Type 1
	Rated impulse voltage supply / control	0.8 kV
	Control pollution degree	3
<b>Weight</b>	Ambient temperature	-30 °C ... 50 °C
	Non-operating temperature	-40 °C ... 80 °C
	Ambient humidity	95% r.h., non-condensing
	Maintenance	Maintenance-free
	Weight approx.	1 kg

**Safety notes**


- The actuator is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with 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 cable must not be removed from the device.

## Safety notes

- 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>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>Adjustable angle of rotation</b>	Adjustable angle of rotation with mechanical end stops.
<b>High functional reliability</b>	The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.

## Accessories

	Description	Type
<b>Electrical accessories</b>	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
	Auxiliary switch, 1 x single-pole double-throw switch, add-on	S1A
	Auxiliary switch, 2 x single-pole double-throw switch, add-on	S2A
<b>Mechanical accessories</b>	Actuator arm, for standard spindle clamp (reversible) K-SA	AH-20
	Actuator arm, for one-sided spindle clamp K-ENSA	AH-25
	Shaft extension 250 mm	AV8-25
	Shaft extension 250 mm for CrNi	AV12-25-I
	Spindle clamp, one-sided for NM..A, SM..A	K-ENSA
	Spindle clamp, one-sided for SM..A for CrNi (INOX)	K-ENSA-I
	Damper crank arm, for damper spindles	KH8
	Angled ball joint, with M8, suitable for damper crank arms KH8	KG8
	Straight ball joint, with M8, suitable for damper crank arms KH8	KG10A
	Mounting kit for linkage operation SM..A	ZG-SMA
	Spindle clamp, reversible for SM..A and NMQ..	K-SA
	Form-fit insert 10x10, for NM..A / SM..A	ZF10-NSA
	Form-fit insert 12x12, for NM..A / SM..A	ZF12-NSA
	Form-fit insert 16x16, for NM..A / SM..A	ZF16-NSA
	Universal mounting bracket 180 mm	Z-ARS180
	Universal mounting bracket 230 mm	Z-ARS230
	Position indication for LM..A, NM..A, SM..A, GM..A	Z-PI
Base plate extension from SM..A to SM../AM../SMD24R	Z-SMA	

Electrical installation

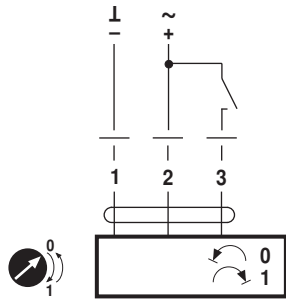


Notes

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

Wiring diagrams

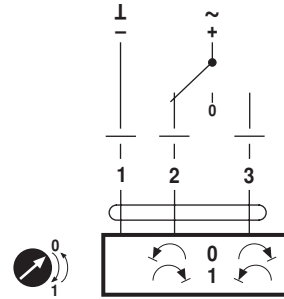
AC/DC 24 V, open-close (one-wire)



Cable colours:

- 1 = black
- 2 = red
- 3 = white

AC/DC 24 V, 3-point

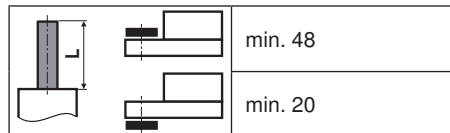


Cable colours:

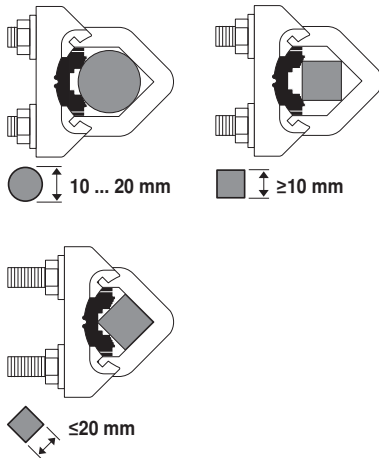
- 1 = black
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Dimensions [mm]

Damper spindle

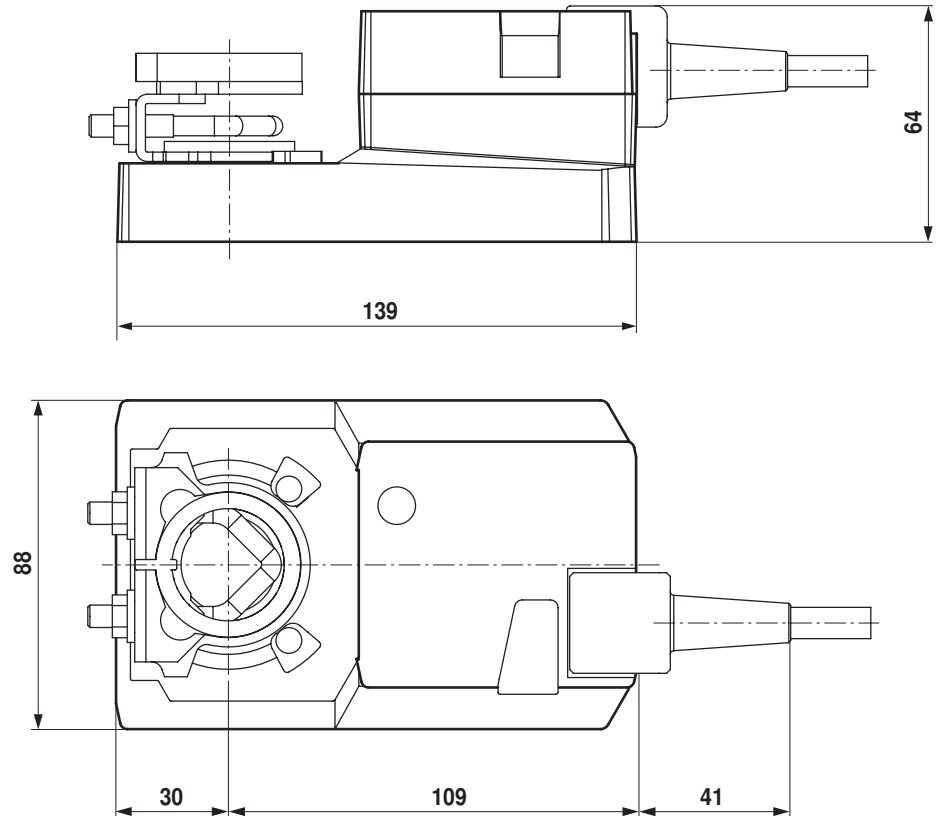


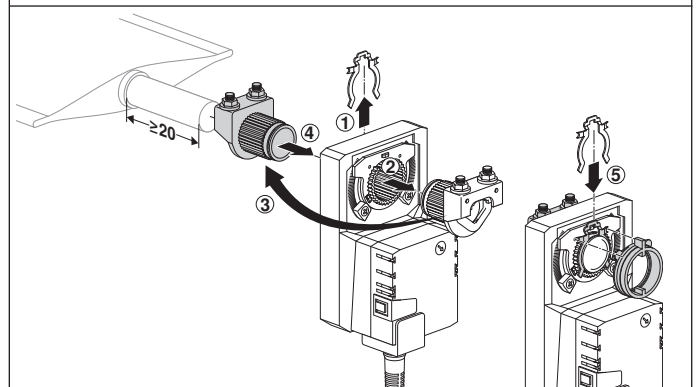
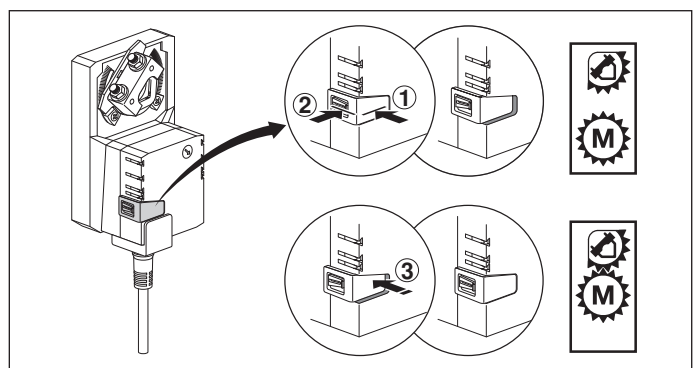
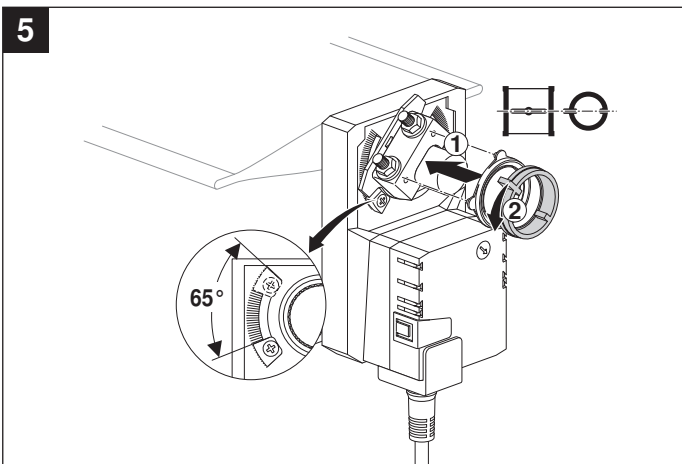
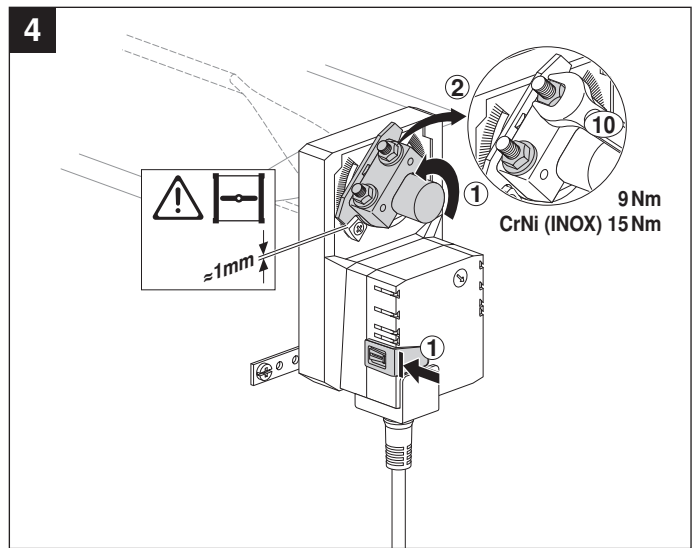
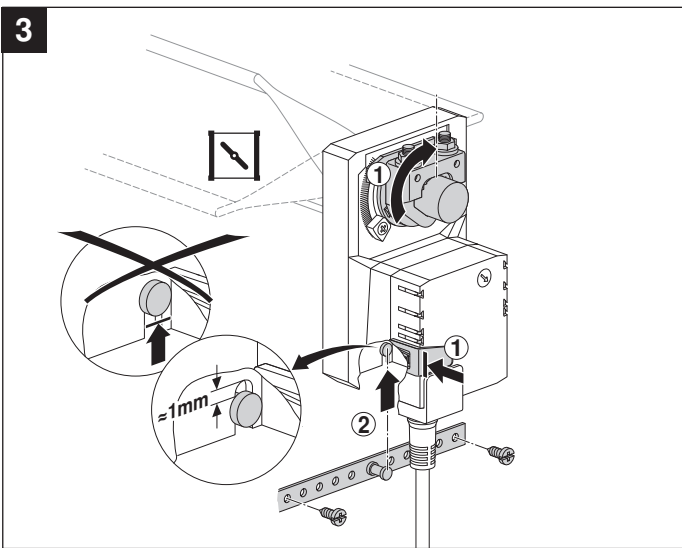
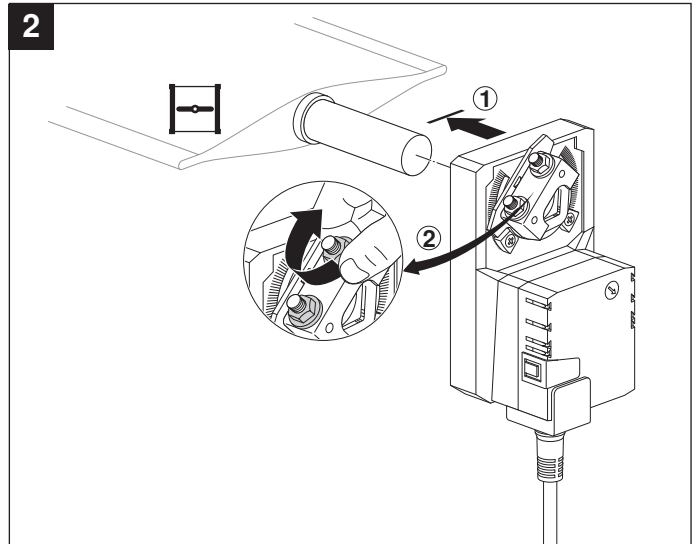
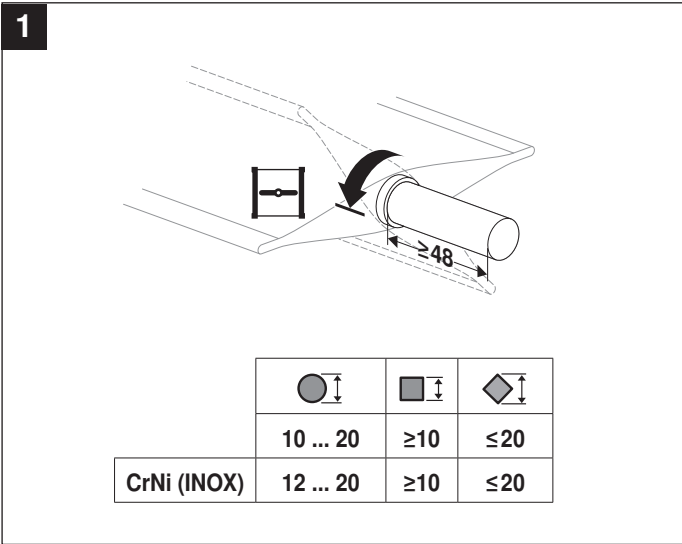
Clamping range

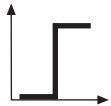
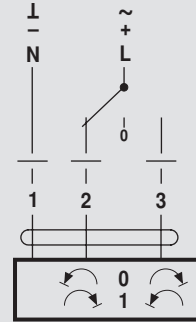
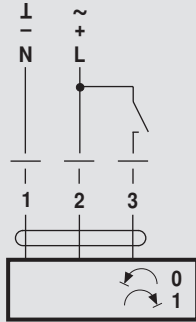


With utilisation of a round spindle made of CrNi (INOX):  $\varnothing$  12...20 mm

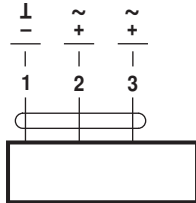
Dimensional drawings



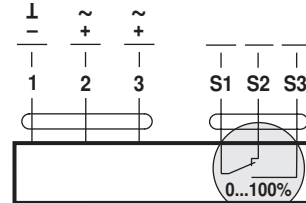




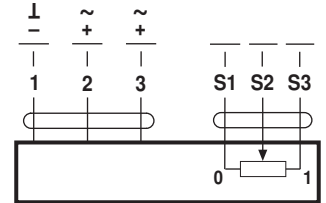
AC 24 V / DC 24 V



SM24A..  
SMD24A..

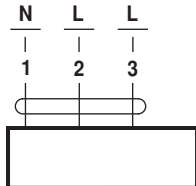


SM24A-S..

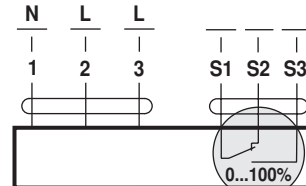


SM24AP5..

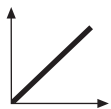
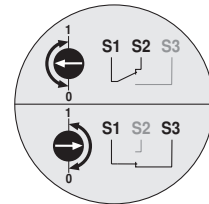
AC 100 ... 240 V ⚠



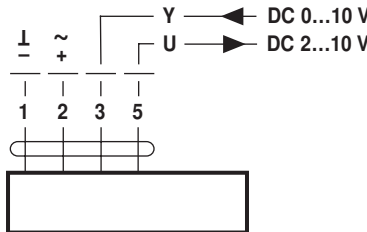
SM230A..  
SMD230A..



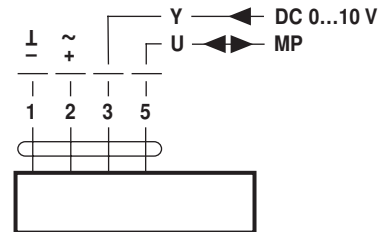
SM230A-S..



AC 24 V / DC 24 V

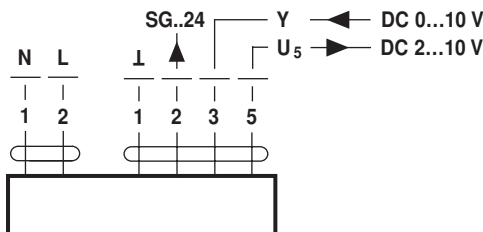


SM24A-SR..  
SM24A-MF..

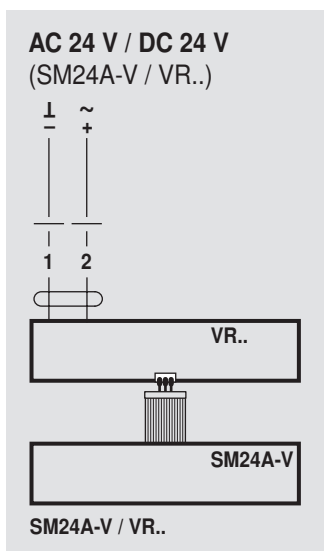


SM24A-MP..

AC 100 ... 240 V ⚠



SM230ASR..



AC 24 V / DC 24 V  
(SM24A-V / VR..)

SM24A-V / VR..