

Damper actuator for adjusting air dampers in ventilation and air-conditioning systems for building services installations

- For air dampers up to approx. 4 m<sup>2</sup>
- Torque 20 Nm
- Nominal voltage AC/DC 24 V
- Control: Open-close or 3-point
- with integrated auxiliary switch



## Technical data

<b>Electrical data</b>	Nominal voltage	AC 24 V, 50/60 Hz / DC 24 V
	Nominal voltage range	AC 19.2 ... 28.8 V / DC 21.6 ... 28.8 V
	Power consumption	In operation 2 W @ nominal torque At rest 0.2 W For wire sizing 4 VA
	Auxiliary switch	1 x SPDT, 1 mA ... 3 (0.5) A, AC 250 V <input type="checkbox"/> (0 ... 100% adjustable)
	Connection Motor	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
	Auxiliary switch	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
<b>Functional data</b>	Torque (nominal torque)	Min. 20 Nm @ nominal voltage
	Direction of rotation	Reversible with switch 0 ↺ resp. 1 ↻
	Manual override	Gearing latch disengaged with pushbutton, can be locked
	Angle of rotation	Max. 95° ↻, can be limited at both ends with adjustable mechanical end stops
	Running time	150 s / 90° ↻
	Sound power level	Max. 45 dB (A)
	Position indication	Mechanical, pluggable
<b>Safety</b>	Protection class	III Safety extra-low voltage / UL Class 2 Supply
	Degree of protection	IP54 in any mounting position NEMA 2, UL Enclosure Type 2
<b>EMC</b>	CE	according to 2004/108/EC
	Certification	cULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14
<b>Dimensions / Weight</b>	Mode of operation	Type 1
	Rated impulse voltage	0.8 kV
	Control pollution degree	3
	Ambient temperature range	-30 ... +50 °C
	Non-operating temperature	-40 ... +80 °C
	Ambient humidity range	95% r.h., non-condensating
	Maintenance	Maintenance-free
	Dimensions	See «Dimensions» on page 2
	Weight	Approx. 1.1 kg

## Safety notes



- The actuator is not allowed to be used outside the specified field of application, especially in aircraft or any other form of air transport.
- Assembly must be carried out by trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
- 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.
- When calculating the required torque, the specifications supplied by the damper manufacturers (cross section, design, installation site), and the air flow 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**

- Simple direct mounting** Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap 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-proof, requires no limit switches and automatically stops when the end stop is reached.
- Flexible signalization** Flexible signalization with adjustable auxiliary switch (0 ... 100%).

**Accessories**

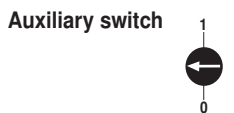
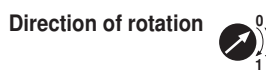
	Description	Data sheet
<b>Electrical accessories</b>	Auxiliary switch S..A..	T2 - S..A..
	Feedback potentiometer P..A..	T2 - P..A..
<b>Mechanical accessories</b>	Various accessories (clamps, shaft extensions etc.)	T2 - Z-SM..A..

**Electrical installation**

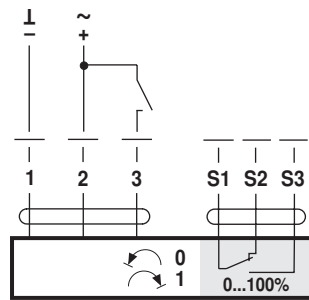
**Wiring diagrams**

**Notes**

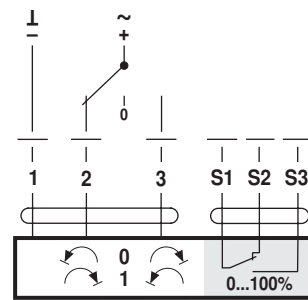
- Connection via safety isolating transformer.
- Other actuators can be connected in parallel. Please note the performance data.



**Open-close control**



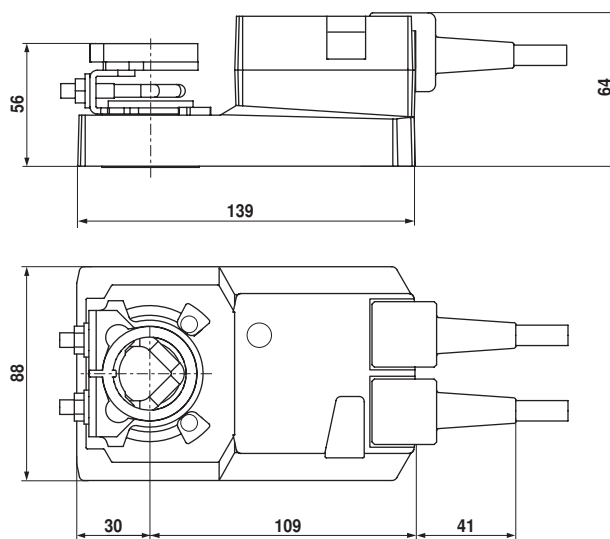
**3-point control**



**Cable colours:**  
 1 = black  
 2 = red  
 3 = white  
 S1 = violet  
 S2 = red  
 S3 = white

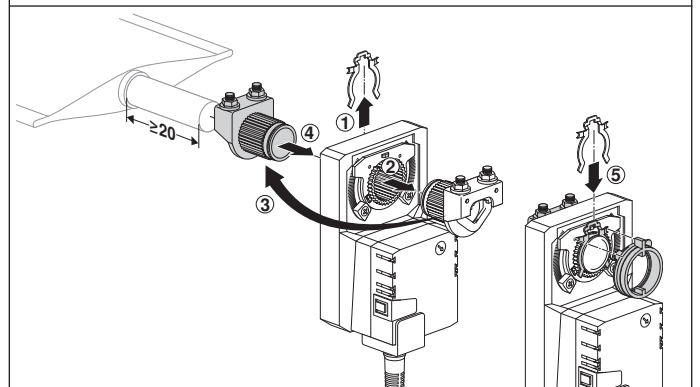
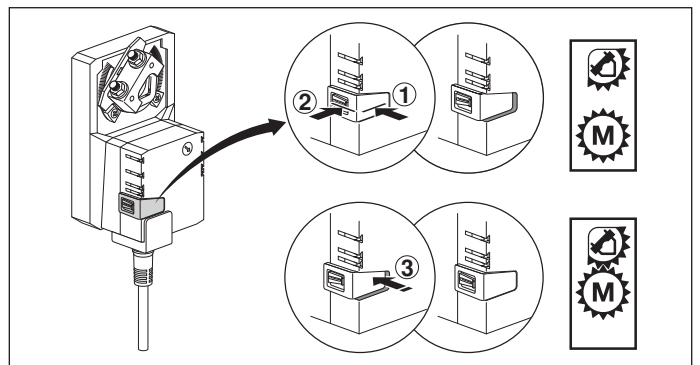
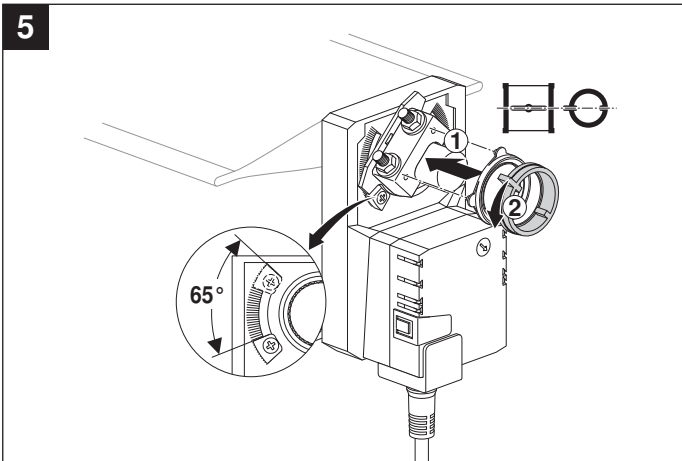
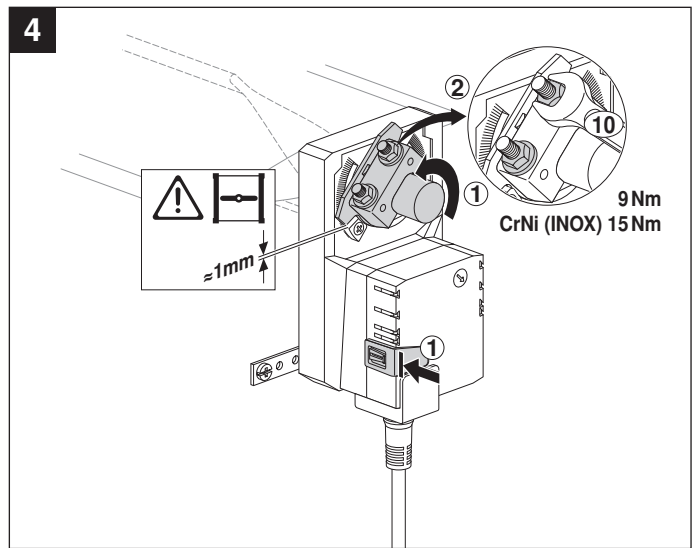
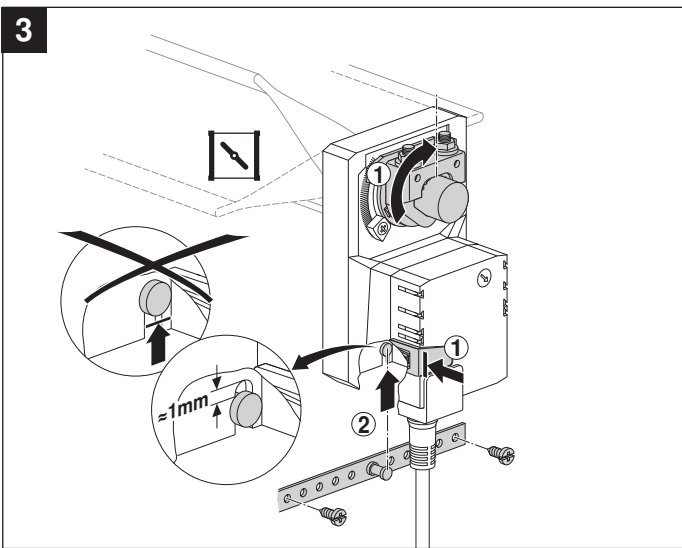
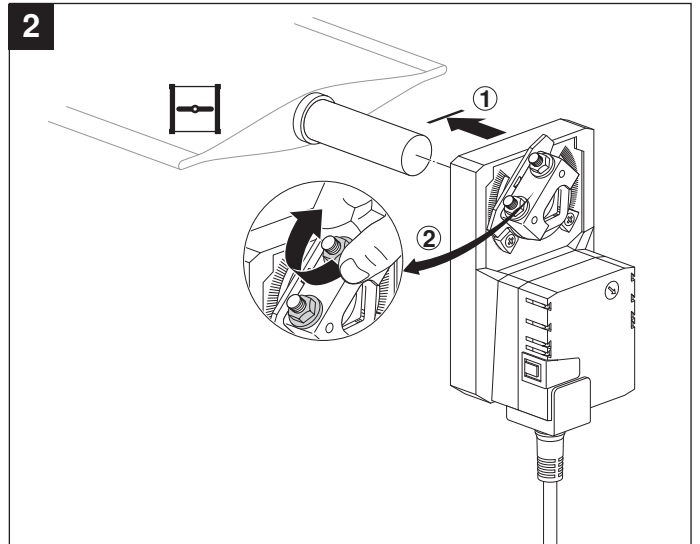
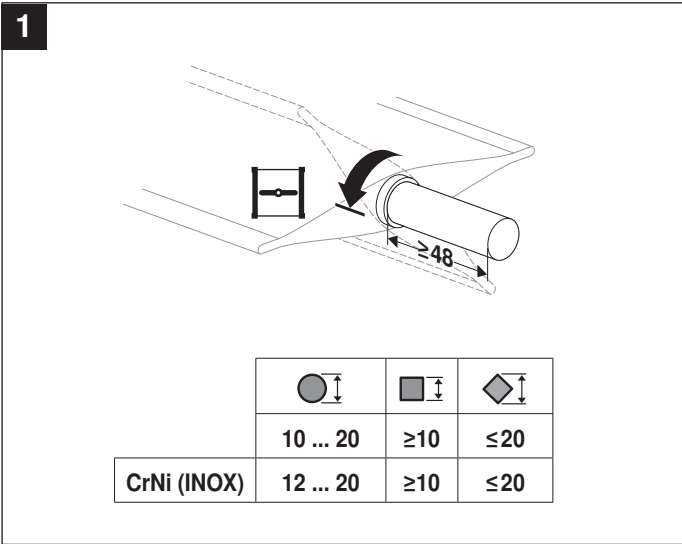
**Dimensions [mm]**

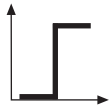
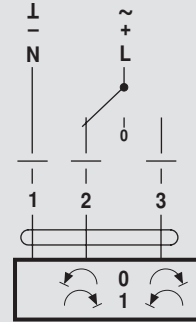
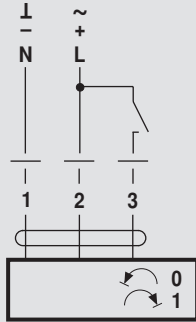
**Dimensional drawings**



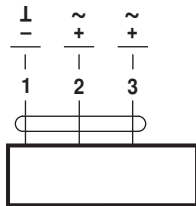
Damper spindle	Length	● I	■ I	◆ I
	≥48	10 ... 20 <sup>1)</sup>	≥10	≤20
	≥20	10 ... 20 <sup>1)</sup>	≥10	≤20

<sup>1)</sup> CrNi (INOX) 12 ... 20

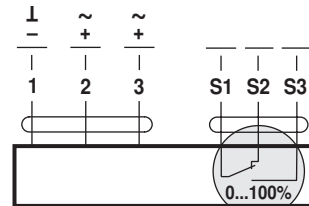




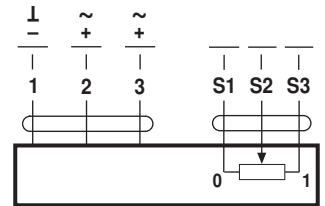
AC 24 V / DC 24 V



SM24A..  
SMD24A..

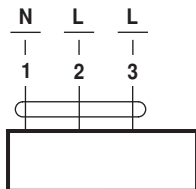


SM24A-S..

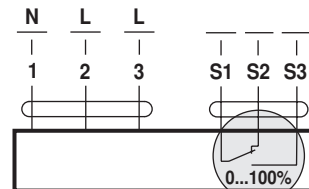


SM24AP5..

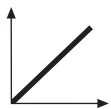
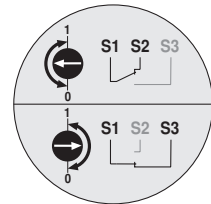
AC 100 ... 240 V ⚠



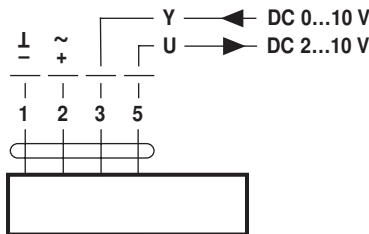
SM230A..  
SMD230A..



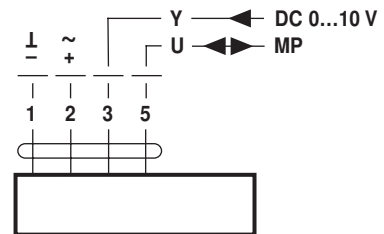
SM230A-S..



AC 24 V / DC 24 V

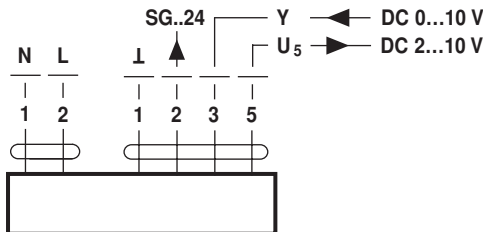


SM24A-SR..  
SM24A-MF..



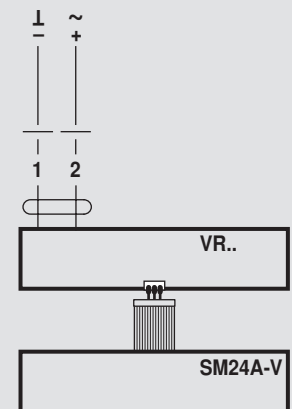
SM24A-MP..

AC 100 ... 240 V ⚠



SM230ASR..

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



SM24A-V / VR..