

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

- For air control dampers up to approx. 2 m<sup>2</sup>
- Torque 10 Nm
- Nominal voltage AC 100 ... 240 V
- Control: Open-close or 3-point
- Integrated auxiliary switch



### Technical data

Electrical data	Nominal voltage	AC 100 ... 240 V, 50/60 Hz	
	Nominal voltage range	AC 85 ... 265 V	
	Power consumption	In operation	2.5 W @ nominal torque
		At rest	0.6 W
	For wire sizing	6 VA	
	Auxiliary switch	1 x SPDT, 1 mA ... 3 (0.5) A, AC 250 V <input type="checkbox"/>	
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>	
Functional data	Torque (nominal torque)	Min. 10 Nm @ nominal voltage	
	Direction of rotation	Reversible with switch 0 ↺ or 1 ↻	
	Manual override	Gearing latch disengaged with pushbutton, self-resetting	
	Angle of rotation	Max. 95° ↺, limited on both sides by means of adjustable, mechanical end stops	
	Running time	150 s	
	Sound power level	Max. 35 dB (A)	
	Position indication	Mechanical, pluggable	
Safety	Protection class	II Totally insulated <input type="checkbox"/>	
	Degree of protection	IP54 in any mounting position	
	EMC	CE according to 89/336/EEC	
	Low voltage directive	CE according to 73/23/EEC	
	Mode of operation	Type 1 (to EN 60730-1)	
	Ambient temperature range	-30 ... +50 °C	
	Non-operating temperature	-40 ... +80 °C	
	Ambient humidity range	95% r.H., non-condensating (EN 60730-1)	
	Maintenance	Maintenance-free	
	Dimensions / Weight	Dimensions	See «Dimensions» on page 2
Weight		Approx. 850 g	

### Safety notes



- The damper actuator is not allowed to be used outside the specified field of application, especially not in aircraft or any other form of air transport.
- Caution: Power supply voltage !
- 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 cables 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.
- It is not permissible to use a screw instead of the anti-rotation strap.
- 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. It is not permissible to use a screw instead of the anti-rotation strap.
- Manual override** Manual operation is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed).
- 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-NM..A..

**Electrical installation**

**Wiring diagrams**

**Note**

- Caution: Power supply voltage !
- Other actuators can be connected in parallel. Please note the performance data.



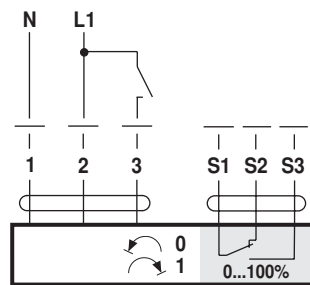
**Direction of rotation**



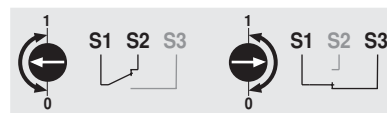
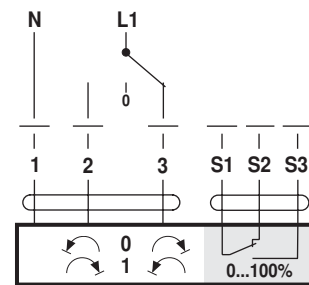
**Auxiliary switch**



**Open-close control**

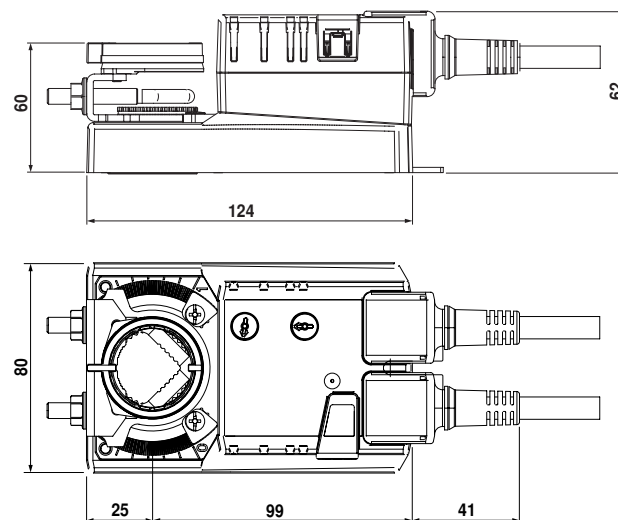


**3-point control**



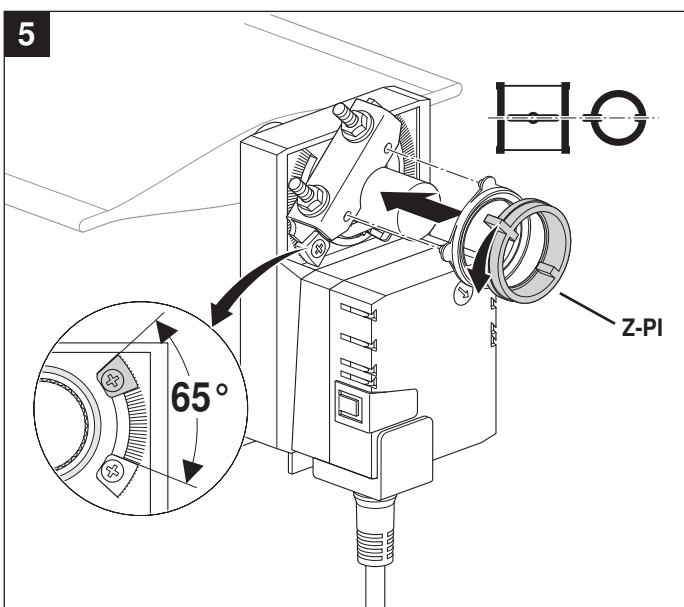
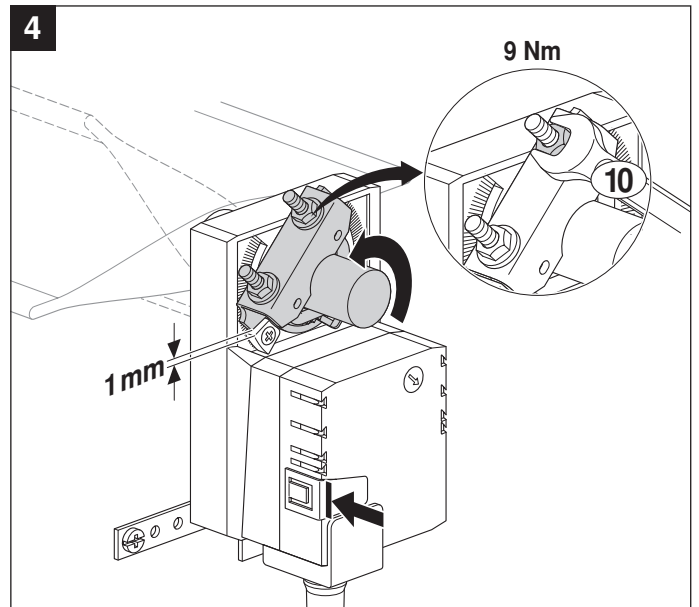
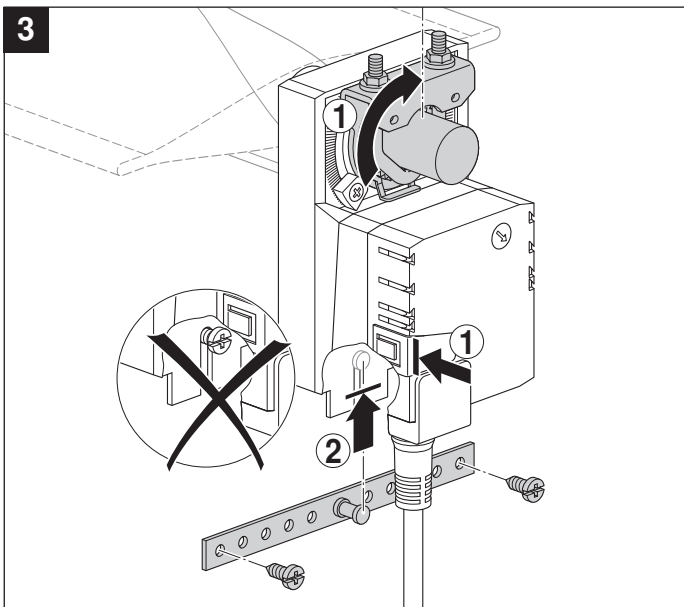
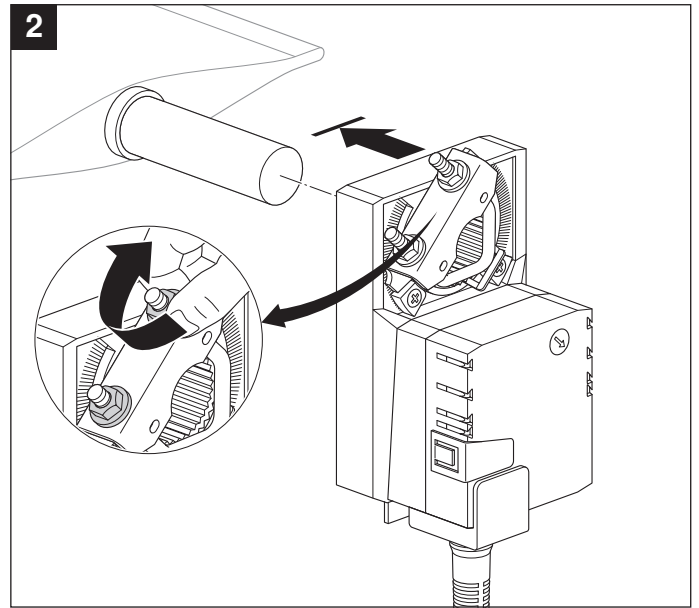
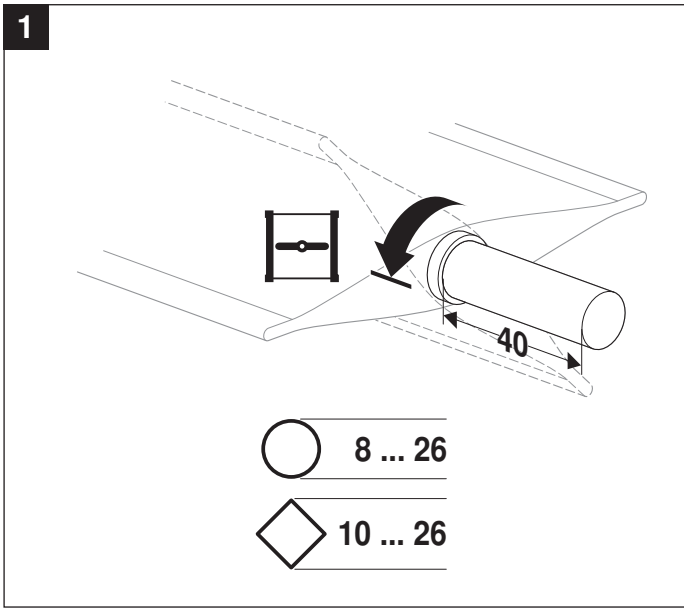
**Dimensions [mm]**

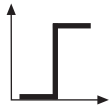
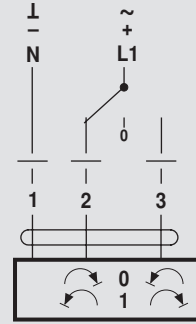
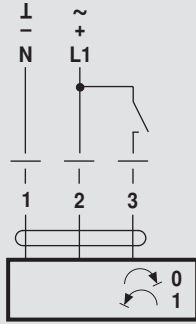
**Dimensional drawings**



Damper spindle	Length	⌀
Clamp on top	min. 40	8 ... 26.7
Clamp on bottom *	min. 20	8 ... 20

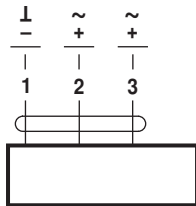
\* Option (Accessory K-NA)



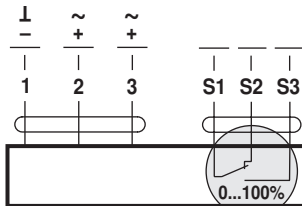


AC 24 V / DC 24 V

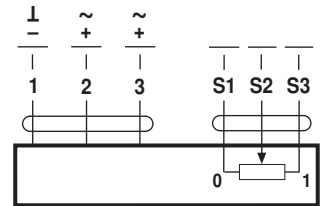
DC 48 ... 110 V  
(NM72A..)



NM24A..  
NM72A..

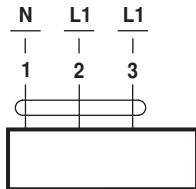


NM24A-S..

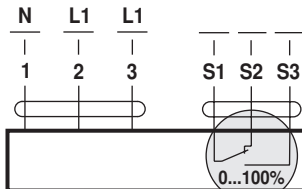


NM24AP5..

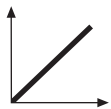
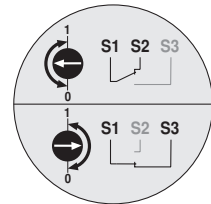
AC 100 ... 240 V



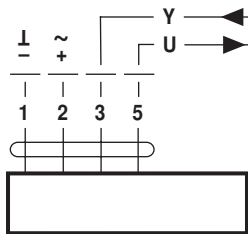
NM230A..



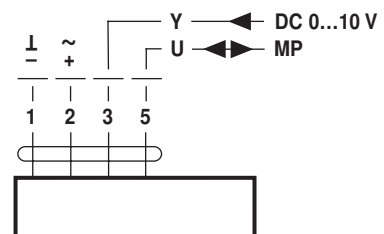
NM230A-S..



AC 24 V / DC 24 V

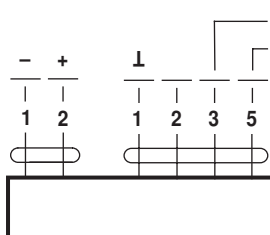


NM24A-SR..  
NM24A-MF..



NM24A-MP..

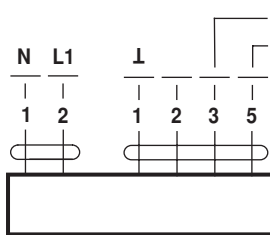
DC 48 ... 110 V  
(NM72A-SR..)



NM72A-SR..

Y ← DC 0...10 V  
U5 → DC 2...10 V

AC 100 ... 240 V



NM230ASR..

Y ← DC 0...10 V  
U5 → DC 2...10 V