



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

- For air control dampers up to approx. 4 m<sup>2</sup>
- Torque 20 Nm
- · Nominal voltage AC/DC 24 V
- · Control: Open-close or 3-point
- · Integrated feedback potentiometer



echnical data		
Electrical data	Nominal voltage	AC 24 V, 50/60 Hz DC 24 V
	Nominal voltage range	AC/DC 19.2 28.8 V
	Power consumption In operation	2 W @ nominal torque
	At rest	0.2 W
	For wire sizing	4 VA
	Feedback potentiometer	5 kΩ ±5% 1 W
	Connection Motor	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
	Feedback potentiometer	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
Functional data	Torque (nominal torque)	Min. 20 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. 45 dB (A)
	Position indication	Mechanical, pluggable
Safety	Protection class	III Safety extra-low voltage
	Degree of protection	IP54 in any mounting position
	EMC	CE according to 89/336/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. 1'100 g

# Safety notes



- The damper 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 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.
- 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 on the damper spindle with a universal spindle clamp, supplied with Simple direct mounting

an anti-rotation strap to prevent the actuator from rotating.

Manual operation is possible with the self-resetting pushbutton (the gearing latch remains Manual override

disengaged as long as the pushbutton is pressed).

Adjustable angle of rotation with mechanical end stops. Adjustable angle of rotation

High functional reliability The actuator is overload-proof, requires no limit switches and automatically stops when the

end stop is reached.

Open-close control

Position feedback with integrated feedback potentiometer 0 ... 100%. Position feedback

## **Accessories**

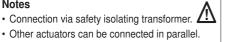
	Description	Data sheet
Electrical accessories	Auxiliary switch SA	T2 - SA
	Feedback potentiometer PA	T2 - PA
Mechanical accessories	Various accessories (clamps, shaft extensions etc.)	T2 - 7-SM A

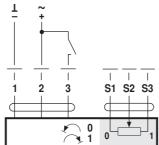
# **Electrical installation**

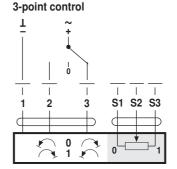
Please note the performance data.

#### Wiring diagrams

# Notes





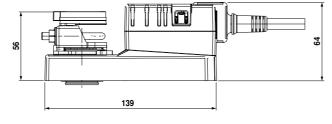


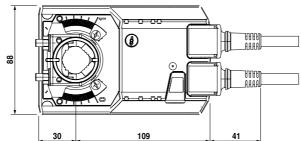
**Direction of rotation** 



# **Dimensions [mm]**

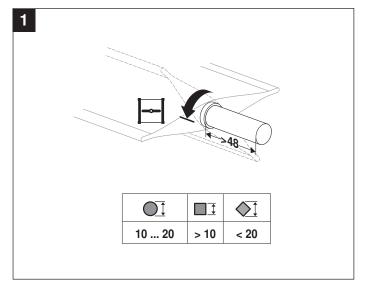
#### **Dimensional drawings**

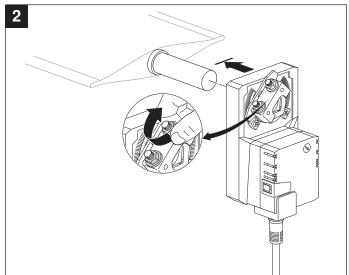


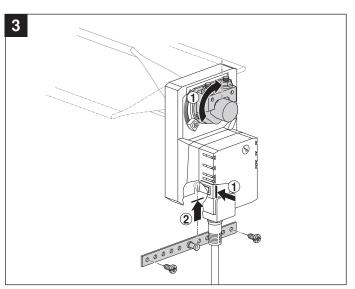


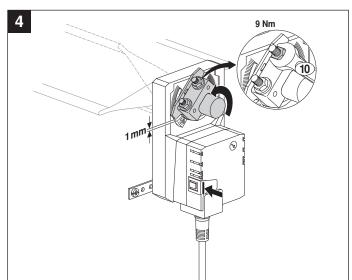
Damper spindle	Length	<u>O</u>
Clamp on top	min. 42	10 20 (26.7)
Clamp on bottom	min. 20	10 20

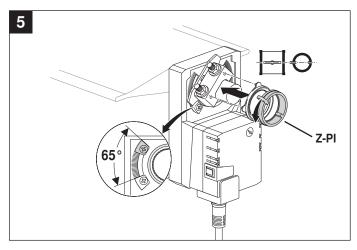
BELIMO

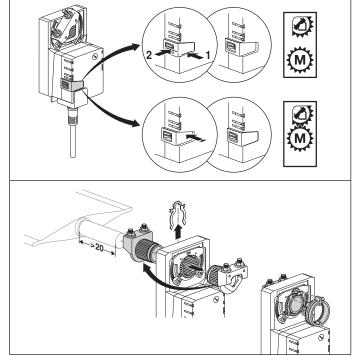






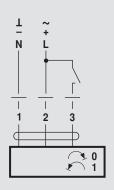


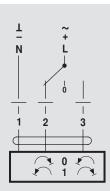






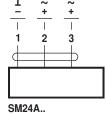


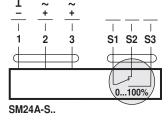


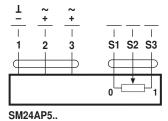




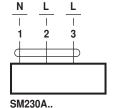
AC 24 V / DC 24 V

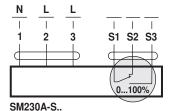


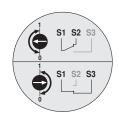




AC 100 ... 240 V



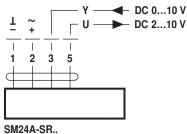


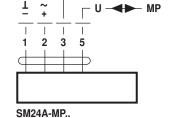


**←** DC 0...10 V



AC 24 V / DC 24 V





SM24A-SR.. SM24A-MF..

