

Ready-to-connect damper actuator for VAV and CAV units in ventilation and air conditioning systems in buildings

- Air control damper size up to approx. 2 m²
- Torque 10 Nm
- Compatible with Belimo VAV controller VR...



Technical data					
Electrical data	Nominal voltage	AC 24 V, 50/60 Hz / DC 24 V (from VR controller)			
	Power consumption In operation At rest For wire sizing	3.5 W @ nominal torque 1.25 W 5.5 VA			
	Connection	0.5 m cable with 3-pin plug (compatible with VR controller)			
Functional data	Torque (nominal torque)	Min. 10 Nm @ nominal voltage			
	Control	6 V ±4 V (from VR controller)			
	Uni-rotation	±5%			
	Direction of rotation	Can be selected with 0 / 1 switch			
	Direction of motion at Y = 2 V	In switch position 0 🗸 or 1 🔿			
	Manual override	Disengaging the gearing latch by means			
		of a pushbutton, self-resetting			
	Angle of rotation	Max. 95°⊲, can be limited at both ends			
	<u> </u>	with adjustable mechanical end stops			
	Running time	150 s			
	Sound power level	Max. 35 dB (A)			
	Position indication	Mechanical, plug-on			
	Adaptation	Adaptation of the control range to the damper angle of rotation			
	Display	LED display for 24 V supply and states			
0.4.					
Safety	Protection class	III Safety extra-low voltage			
	Degree of protection	IP54 in all mounting positions			
	EMC	CE according to 89/336/EEC			
	Mode of operation	Type 1 (in acc. with EN 60730-1)			
	Rated impulse voltage Control pollution degree	0.8 kV (in acc. with EN 60730-1) 3 (in acc. with EN 60730-1)			
	Ambient temperature range	-30 +50°C			
	Non-operating temperature range	-30 +30 °C			
	Ambient humidity range	95% RH, non-condensating (EN 60730-1)			
	Maintenance	Maintenance-free			
Dimension					
Dimensions / weight	Dimensions	See "Dimensions" on page 2			
	Weight	Approx. 710 g			

Safety notes



- The damper actuator is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- It may only be installed by suitably trained personnel.
 All applicable legal or institutional installation regulations must be complied with.
- 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 is not allowed to be removed from the unit.
- When the required torque is calculated, the cross section, design and installation site as well as the air flow conditions must be observed.

www.belimo.com



Safety notes

(continued)

The device contains electrical and electronic components and is not allowed to be disposed
of as household refuse. The local and currently valid regulations and requirements must be
observed.

Product features

Mode of operation The actuator is controlled with a Belimo VAV controller VR.. and travels to the position

defined by the control signal.

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 self-resetting pushbutton possible (the gear is disengaged for as long as

the button is pressed).

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

Adaptation Angle-of-rotation sensing and adaptation of the control range. Triggered by pressing a button on

the actuator, with LEDs for status display.

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

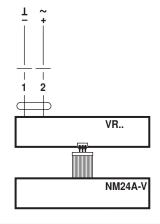
stop is reached.

Accessories

	Description	Data sheet
Electrical accessories	Auxiliary switch SA	T2 - SA
	Feedback potentiometer PA	T2 - PA
Mechanical accessories	Spindle extension AV6-20	T2 - Z-NMA

Electrical installation

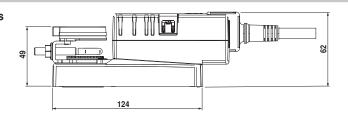
Wiring diagram

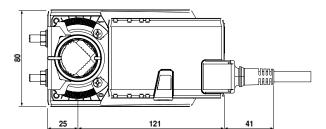


The ready-to-connect operating unit is connected to the VR.. controller with the 3-pin plug.

Dimensions [mm]

Dimensional diagrams



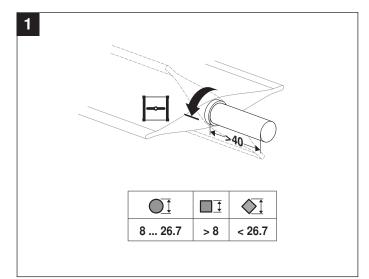


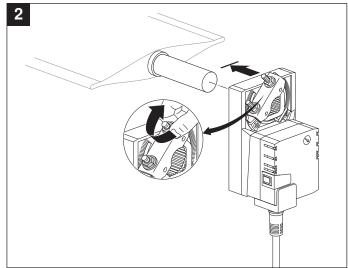
Damper spindle	Length	010
Clamp, top	min. 40	8 26,7
Clamp, bottom *	min. 20	8 20

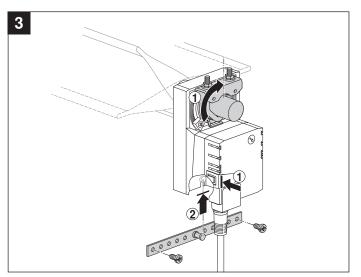
^{*} Option (accessorie K-NA)

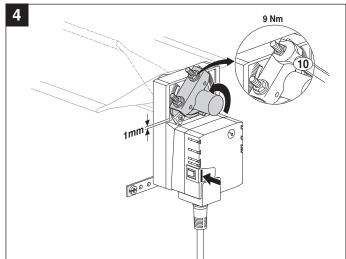
2

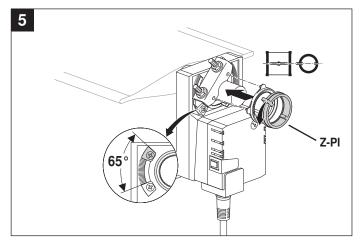
BELIMO

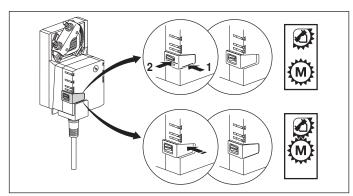






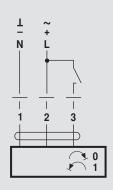


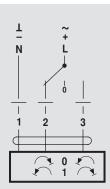








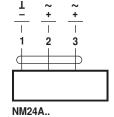


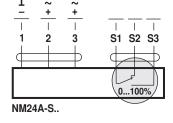


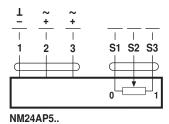


AC 24 V / DC 24 V $\,$

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

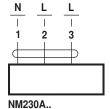


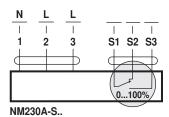


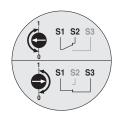


NM72A..

AC 100 ... 240 V

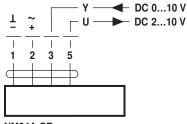




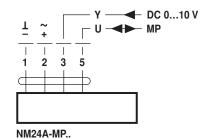




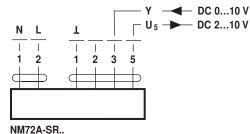
AC 24 V / DC 24 V



NM24A-SR.. NM24A-MF..



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



AC 100 ... 240 V

