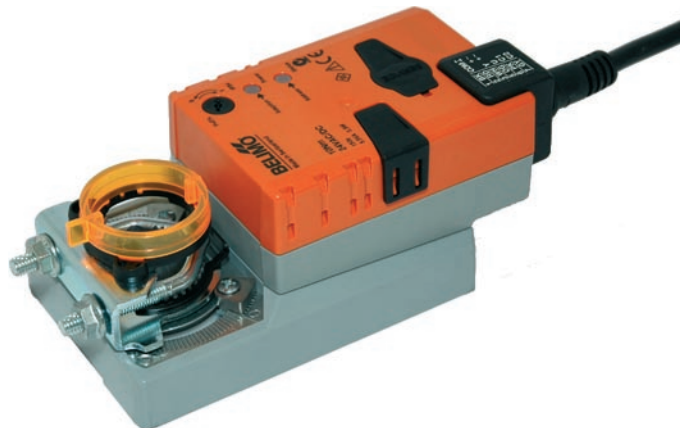


Ready-to-connect damper actuator for VAV and CAV units in ventilation and air conditioning systems in buildings

- Air control damper size up to approx. 2 m<sup>2</sup>
- Torque 10 Nm
- Compatible with Belimo VAV controller VR..


**Technical data**

|                            |                                                                 |                                                                             |                        |
|----------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------|
| <b>Electrical data</b>     | Nominal voltage                                                 | AC 24 V, 50/60 Hz / DC 24 V<br>(from VR.. controller)                       |                        |
|                            | Power consumption                                               | In operation                                                                | 3.5 W @ nominal torque |
|                            |                                                                 | At rest                                                                     | 1.25 W                 |
| For wire sizing            |                                                                 | 5.5 VA                                                                      |                        |
| Connection                 |                                                                 | 0.5 m cable with 3-pin plug<br>(compatible with VR.. controller)            |                        |
| <b>Functional data</b>     | 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 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                          |                                                                             |                        |
| <b>Safety</b>              | 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                                           | 0.8 kV (in acc. with EN 60730-1)                                            |                        |
|                            | Control pollution degree                                        | 3 (in acc. with EN 60730-1)                                                 |                        |
|                            | Ambient temperature range                                       | -30 ... +50 °C                                                              |                        |
|                            | Non-operating temperature range                                 | -40 ... +80 °C                                                              |                        |
|                            | Ambient humidity range                                          | 95% RH, non-condensating (EN 60730-1)                                       |                        |
|                            | Maintenance                                                     | Maintenance-free                                                            |                        |
| <b>Dimensions / weight</b> | 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.

**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**

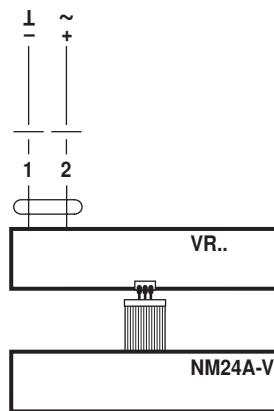
|                                     |                                                                                                                                                          |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mode of operation</b>            | The actuator is controlled with a Belimo VAV controller VR.. and travels to the position defined by the control signal.                                  |
| <b>Simple direct mounting</b>       | Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating. |
| <b>Manual override</b>              | Manual override with self-resetting pushbutton possible (the gear is disengaged for as long as the button is pressed).                                   |
| <b>Adjustable angle of rotation</b> | Adjustable angle of rotation with mechanical end stops.                                                                                                  |
| <b>Adaptation</b>                   | Angle-of-rotation sensing and adaptation of the control range. Triggered by pressing a button on the actuator, with LEDs for status display.             |
| <b>High functional reliability</b>  | 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 S..A..       | T2 - S..A..    |
|                        | Feedback potentiometer P..A.. | T2 - P..A..    |
| Mechanical accessories | Spindle extension AV6-20      | T2 - Z-NM..A.. |

**Electrical installation**

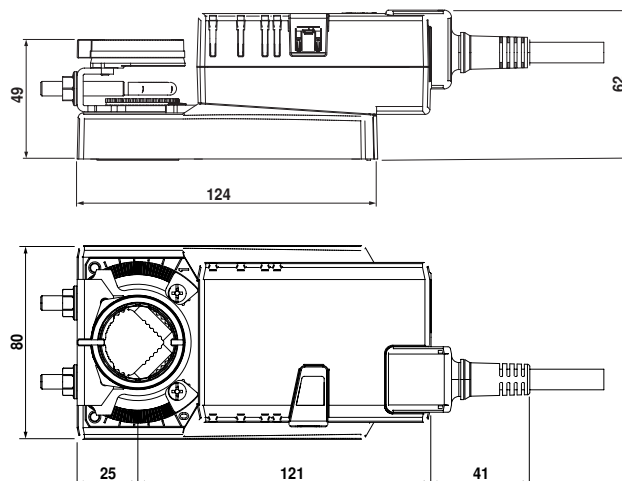
Wiring diagram



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

**Dimensions [mm]**

Dimensional diagrams



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

\* Option (accessorie K-NA)