

### **Technical data sheet**

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 100 ... 240 V
- Control: Open-close or 3-point
- · with 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 🗆                    |
|                   |                                | (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>                     |
| Functional data   | 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                                   |
| Safety            | Protection class               | II Totally insulated 🗆                                  |
|                   | Degree of protection           | IP54 in any mounting position                           |
|                   |                                | NEMA 2, UL Enclosure Type 2                             |
|                   | EMC                            | CE according to 2004/108/EC                             |
|                   | Low voltage directive          | CE according to 2006/95/EC                              |
|                   | Certification                  | cULus according to UL 60730-1A and UL 60730-2-14        |
|                   |                                | and CAN/CSA E60730-1:02                                 |
|                   | Made of exercises              | Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14       |
|                   | Mode of operation              |   |
|                   | Rated impulse voltage          | 2.5 kV<br>3   |
|                   | Control pollution degree       |   |
|                   | Ambient temperature range      | -30 +50°C   |
|                   | Non-operating temperature      | -40 +80 °C  |
|                   | Ambient humidity range         | 95% r.h., non-condensating                              |
|                   | Maintenance                    | Maintenance-free  |
| nensions / Weight | Dimensions                     | See «Dimensions» on page 2                              |
|                   | Weight                         | Approx. 1.1 kg  |
|                   |                                |   |

#### Safety notes

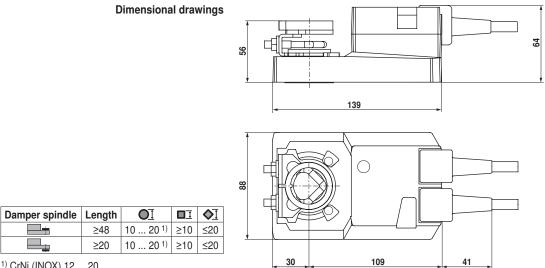


Dim

- The actuator is not allowed to be used outside the specified field of application, especially 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 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.

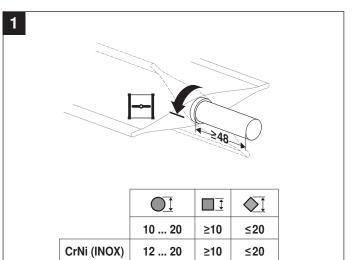
| SM230A-S   | Damper actuator, AC 100 240 V, 20 Nm, with integrated auxiliary switch   | BELIMO   |  |
|--|--|--|--|
| Safety notes   | (Continued)  |  |  |
|  | <ul> <li>The device contains electrical and electronic components and is not a<br/>of as household refuse. All locally valid regulations and requirements</li> </ul> |  |  |
| 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 butto pressed or remains locked).   |  |  |  |
| Adjustable angle of rotation Adjustable angle of rotation with mechanical end stops.   |  |  |  |
| High functional reliability  | 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   |  |
| Electrical accessories   | Auxiliary switch SA  | T2 - SA  |  |
| Mechanical accessories   | Feedback potentiometer PA<br>Various accessories (clamps, shaft extensions etc.)   | T2 - PA<br>T2 - Z-SMA  |  |
| mechanical accessories   |  | 12 - 2-0WIA  |  |
| Electrical installation  |  |  |  |
| Wiring diagrams  | Open-close control 3-point control   |  |  |
| Notes<br>• Caution: Power supply voltage!<br>• Other actuators can be connected in parallel.<br>Please note the performance data.<br>Direction of rotation<br>Auxiliary switch | $N = \begin{bmatrix} 1 & 2 & 3 & 51 & 52 & 53 \\ \hline & & & & & & \\ \hline & & & & & & \\ \hline & & & &$   | <b>Cable colours:</b><br>1 = blue<br>2 = brown<br>3 = white<br>S1 = violet<br>S2 = red<br>S3 = white |  |
| <b>P</b>   |  |  |  |

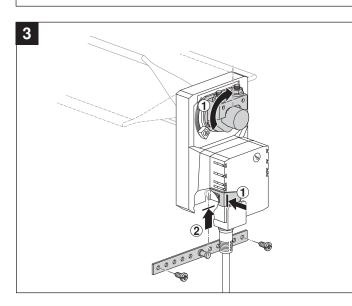
# Dimensions [mm]

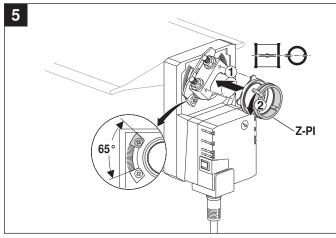


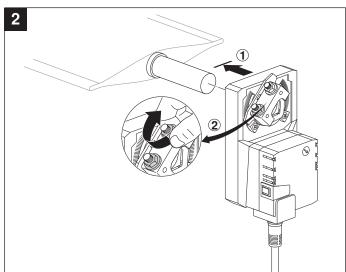
<sup>1)</sup> CrNi (INOX) 12 ... 20

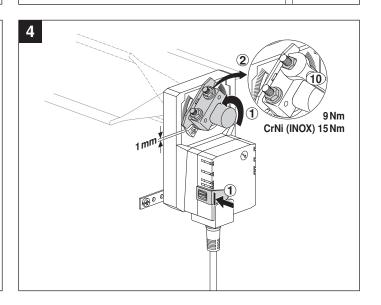


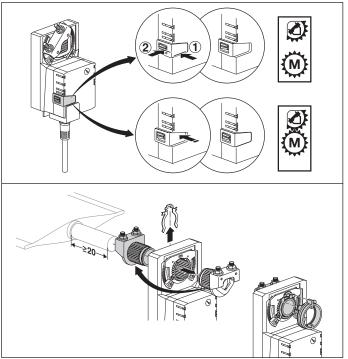














## SM..A..



