

**Rotary actuator for ball valves**

- Nominal torque 5 Nm
- Nominal voltage AC 230 V
- Control Open-close, 3-point
- With integrated auxiliary switch


**Technical data**

|                           |  |   |
|---------------------------|--|---|
| <b>Electrical data</b>    | Nominal voltage                        | AC 230 V  |
|                           | Nominal voltage frequency              | 50/60 Hz  |
|                           | Nominal voltage range                  | AC 85...265 V   |
|                           | Power consumption in operation         | 2 W   |
|                           | Power consumption in rest position     | 0.5 W   |
|                           | Power consumption for wire sizing      | 4 VA  |
|                           | Auxiliary switch                       | 1 x SPDT, 0...100%  |
|                           | Switching capacity auxiliary switch    | 1 mA...3 (0.5) A, AC 250 V (II Protective insulated)                  |
|                           | Connection supply / control            | Cable 1 m, 3 x 0.75 mm <sup>2</sup>                                   |
|                           | Connection auxiliary switch            | Cable 1 m, 3 x 0.75 mm <sup>2</sup>                                   |
| Parallel operation        | Yes (note the performance data)        |   |
| <b>Functional data</b>    | Torque motor                           | Min. 5 Nm   |
|                           | Manual override                        | Gear disengagement with push-button, can be locked                    |
|                           | Running time motor                     | 90 s / 90°  |
|                           | Sound power level motor max.           | 35 dB(A)  |
|                           | Position indication                    | Mechanically, pluggable   |
| <b>Safety</b>             | Protection class IEC/EN                | II Protective insulated   |
|                           | Protection class UL                    | II Protective insulated   |
|                           | Degree of protection IEC/EN            | IP54  |
|                           | Degree of protection NEMA/UL           | NEMA 2, UL Enclosure Type 2   |
|                           | EMC                                    | CE according to 2004/108/EC   |
|                           | Low voltage directive                  | CE according to 2006/95/EC  |
|                           | Certification IEC/EN                   | IEC/EN 60730-1 and IEC/EN 60730-2-14                                  |
|                           | Certification UL                       | cULus according to UL 60730-1A, UL 60730-2-14 and CAN/CSA E60730-1:02 |
|                           | Mode of operation                      | Type 1  |
|                           | Rated impulse voltage supply / control | 4 kV  |
|                           | Rated impulse voltage auxiliary switch | 2.5 kV  |
|                           | Control pollution degree               | 3   |
|                           | Ambient temperature                    | -30...50 °C   |
| Non-operating temperature | -40...80 °C                            |   |
| Ambient humidity          | 95% r.h., non-condensing               |   |
| Maintenance               | Maintenance-free                       |   |
| <b>Weight</b>             | Weight approx.                         | 0.6 kg  |

**Safety notes**


- This device has been designed for use in stationary heating, ventilation and air conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Caution: Power supply voltage!
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The switch for changing the direction of rotation may only be operated by authorised specialists. The direction of rotation must not in particular be reversed in a frost protection circuit.

## Safety notes

- 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.
- 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

|                                     |   |
|-------------------------------------|---|
| <b>Direct mounting</b>              | Straightforward direct mounting on the ball valve with only one central screw. The assembly tool is integrated in the plug-in position indication. The mounting orientation in relation to the ball valve can be selected in 90° steps. |
| <b>Manual override</b>              | Manual override with push-button possible (the gear is disengaged for as long as the button is pressed or remains locked).  |
| <b>High functional reliability</b>  | The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.  |
| <b>Adjustable angle of rotation</b> | Adjustable angle of rotation with mechanical end stops.   |
| <b>Flexible signalization</b>       | With adjustable auxiliary switch (0 ... 100%)   |

Auxiliary switch



## Accessories

|  | Description                             | Type   |
|--|---|--------|
| <b>Electrical accessories</b>          | Auxiliary switch, add-on, 1 x SPDT      | S1A    |
|  | Auxiliary switch, add-on, 2 x SPDT      | S2A    |
|  | Feedback potentiometer 140 Ohm, add-on  | P140A  |
|  | Feedback potentiometer 200 Ohm, add-on  | P200A  |
|  | Feedback potentiometer 500 Ohm, add-on  | P500A  |
|  | Feedback potentiometer 1 kOhm, add-on   | P1000A |
|  | Feedback potentiometer 2.8 kOhm, add-on | P2800A |
|  | Feedback potentiometer 5 kOhm, add-on   | P5000A |
| Feedback potentiometer 10 kOhm, add-on | P10000A                                 |        |

Electrical installation

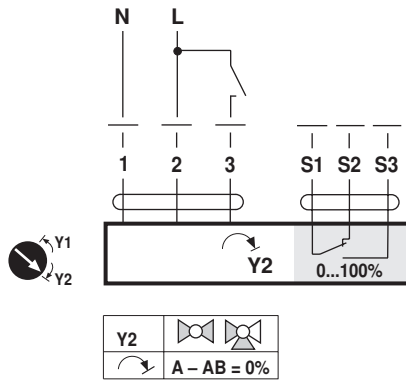


Notes

- Caution: Power supply voltage!
- Parallel connection of other actuators possible. Observe the performance data.
- Direction of rotation switch is covered. Factory setting: Direction of rotation Y2.

Wiring diagrams

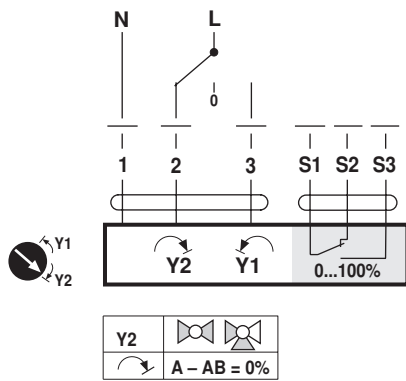
AC 230 V, open-close



Cable colours:

- 1 = blue
- 2 = brown
- 3 = white
- S1 = violet
- S2 = red
- S3 = white

AC 230 V, 3-point

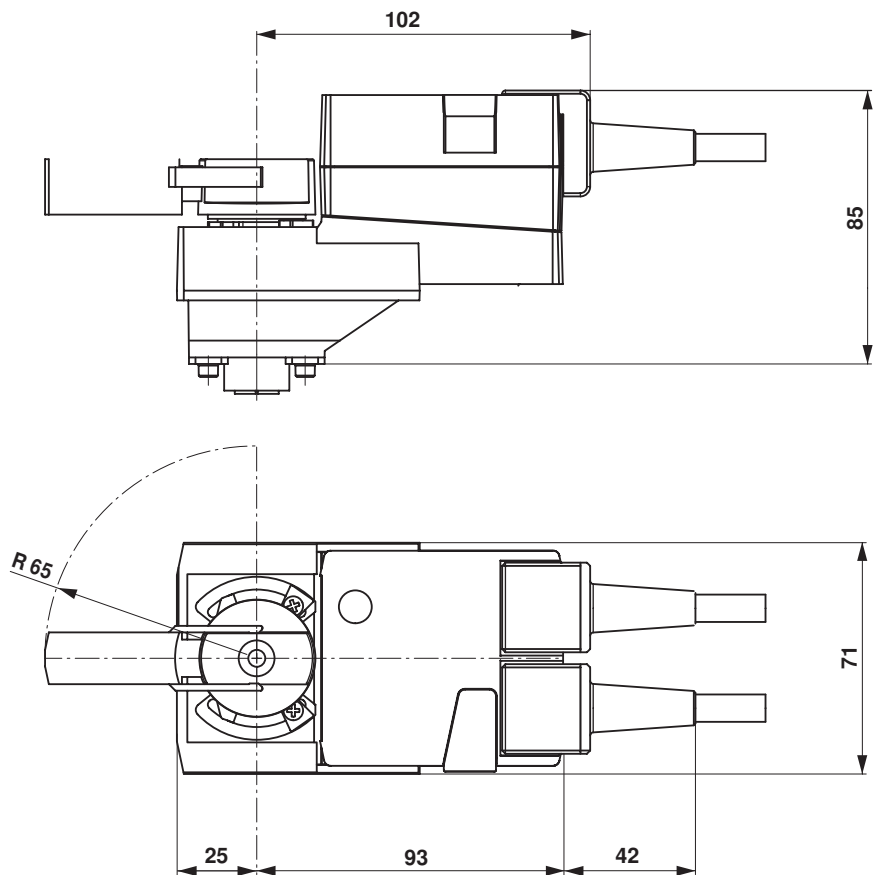


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## Dimensions [mm]

## Dimensional drawings



## Further documentation

- Overview Valve-actuator combinations
- Data sheets for ball valves
- Installation instructions for actuators and/or ball valves
- General notes for project planning