# Rotary actuator for ball valves
- Torque motor 5 Nm
- Nominal voltage AC 230 V
- Control Open-close, 3-point

## Technical data

### Electrical data
- **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
- **Connection supply / control**: Cable 1 m, 3 x 0.75 mm²
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### Functional data
- **Nominal torque**: Min. 5 Nm
- **Manual override**: with push-button, can be locked
- **Running time motor**: 90 s / 90°
- **Sound power level motor**: 35 dB(A)
- **Position indication**: Mechanically, pluggable

### Safety
- **Protection class IEC/EN**: II reinforced insulation
- **Protection class UL**: II reinforced insulation
- **Degree of protection IEC/EN**: IP54
- **Degree of protection NEMA/UL**: NEMA 2, UL Enclosure Type 2
- **EMC**: CE according to 2014/30/EU
- **Low voltage directive**: CE according to 2014/30/EU
- **Certification IEC/EN**: IEC/EN 60730-1 and IEC/EN 60730-2-14
- **Certification UL**: cULus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1:02
- **Mode of operation**: Type 1
- **Rated impulse voltage supply / control**: 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

### Weight
- **Weight**: 0.46 kg

## Safety notes

- This device has been designed for use in stationary heating, ventilation and air conditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Outdoor application: only possible in case that no (sea)water, snow, ice, insolation or aggressive gases interfere directly with the actuator and that is ensured that the ambient conditions remain at any time within the thresholds according to the data sheet.
- 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.
- 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.
Safety notes

• Cables must not be removed from the device.
• The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Product features

Simple direct mounting
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.

Manual override
Manual override with push-button possible (the gear is disengaged for as long as the button is pressed or remains locked).

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

High functional reliability
The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.

Accessories

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

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

AC 230 V, 3-point

Cable colours:
1 = blue
2 = brown
3 = white
**Dimensional drawings**

- Length: 102 mm
- Width: 85 mm
- Height: 71 mm
- Thickness: 25 mm
- Diameter: 93 mm
- Radius: 42 mm

**Further documentation**

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