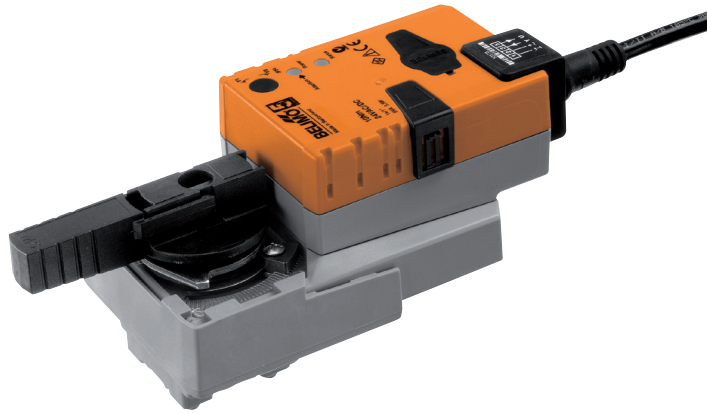


Modulating rotary actuator for ball valves

- Nominal torque 10 Nm
- Nominal voltage AC/DC 24 V
- Control Modulating DC (0)2...10 V
- Position feedback DC 2...10 V
- Running time motor 45 s


Technical data

| | | |
|---------------------------|--|---|
| Electrical data | Nominal voltage | AC/DC 24 V |
| | Nominal voltage frequency | 50/60 Hz |
| | Nominal voltage range | AC 19.2...28.8 V / DC 19.2...28.8 V |
| | Power consumption in operation | 1.5 W |
| | Power consumption in rest position | 0.2 W |
| | Power consumption for wire sizing | 3.5 VA |
| | Connection supply / control | Cable 1 m, 4 x 0.75 mm ² |
| | Parallel operation | Yes (note the performance data) |
| Functional data | Torque motor | Min. 10 Nm |
| | Positioning signal Y | DC 0...10 V |
| | Positioning signal Y note | Input impedance 100 kΩ |
| | Operating range Y | DC 2...10 V |
| | Position feedback U | DC 2...10 V |
| | Position feedback U note | Max. 1 mA |
| | Position accuracy | ±5% |
| | Manual override | Gear disengagement with push-button, can be locked |
| | Running time motor | 45 s / 90° |
| | Sound power level motor | 45 dB(A) |
| Position indication | Mechanically, pluggable | |
| Safety | Protection class IEC/EN | III Safety extra-low voltage |
| | Protection class UL | UL Class 2 Supply |
| | Degree of protection IEC/EN | IP54 |
| | Degree of protection NEMA/UL | NEMA 2, UL Enclosure Type 2 |
| | EMC | CE according to 2004/108/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 | 0.8 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 approx. | 0.74 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.
- 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.
- 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

| | |
|-------------------------------------|--|
| Principle of operation | The actuator is connected with a standard modulating signal of DC 0...10V and travels to the position defined by the positioning signal. Measuring voltage U serves for the electrical display of the valve position 0...100% and as slave control signal for other actuators. |
| 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). |
| High functional reliability | The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached. |
| Adjustable angle of rotation | Adjustable angle of rotation with mechanical end stops. |

Accessories

| | Description | Type |
|-------------------------------|---|--------|
| Electrical accessories | 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 |

Electrical installation

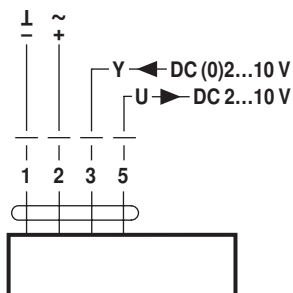


Notes

- Connection via safety isolating transformer.
- Parallel connection of other actuators possible. Observe the performance data.
- Direction of rotation switch is covered. Factory setting: Direction of rotation Y2.

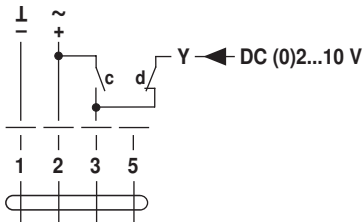
Wiring diagrams

AC/DC 24 V, modulating



Electrical installation

Override control (frost protection circuit)



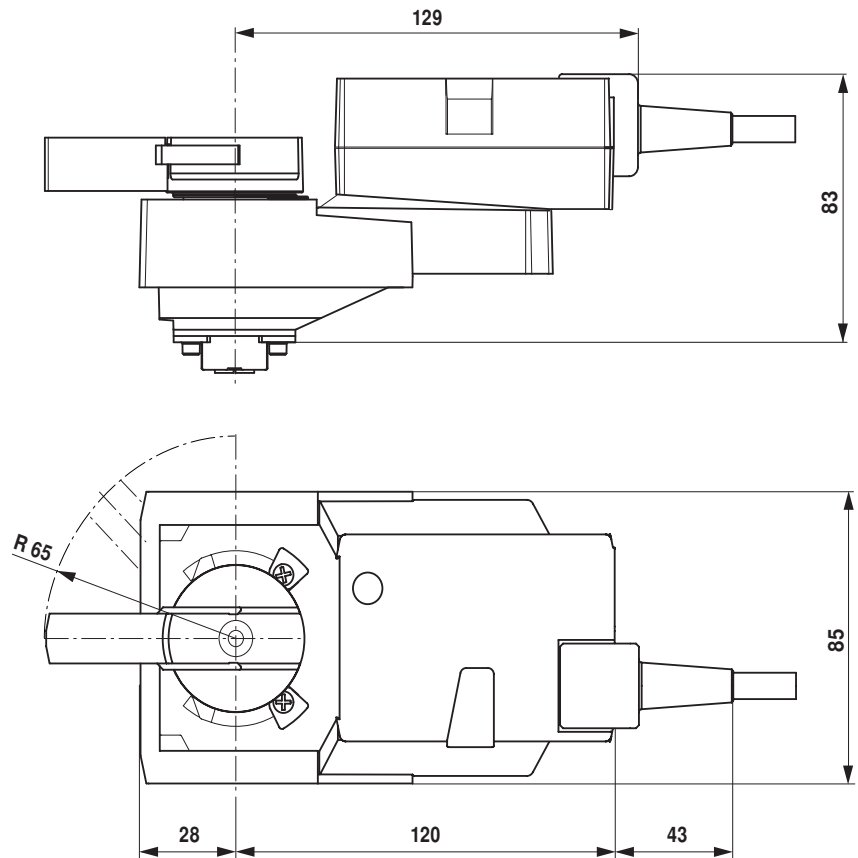
| c | d | Y1 / Y2 | |
|---|---|----------------|---------------|
| | | Y1 | A - AB = 100% |
| | | Y2 | A - AB = 0% |
| | | DC (0)2...10 V | |

Cable colours:

- 1 = black
- 2 = red
- 3 = white
- 5 = orange

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