

Globe valve actuator for 2-way and 3-way globe valves

• Actuating force 500 N

- Nominal voltage AC/DC 24 V
- Control Open/close, 3-point
- Stroke 20 mm





| Technical data  |                                        |                                                                                                       |
|-----------------|----------------------------------------|-------------------------------------------------------------------------------------------------------|
| Electrical data | Nominal voltage                        | AC/DC 24 V                                                                                            |
|                 | Nominal voltage frequency              | 50/60 Hz                                                                                              |
|                 | Nominal voltage range                  | AC 19.228.8 V / DC 21.628.8 V                                                                         |
|                 | Power consumption in operation         | 1.5 W                                                                                                 |
|                 | Power consumption in rest position     | 0.5 W                                                                                                 |
|                 | Power consumption for wire sizing      | 3 VA                                                                                                  |
|                 | Connection supply / control            | Terminals 4 mm <sup>2</sup> (cable Ø410 mm)                                                           |
|                 | Parallel operation                     | Yes (note the performance data)                                                                       |
| Functional data | Actuating force motor                  | 500 N                                                                                                 |
|                 | Manual override                        | with push-button, can be locked                                                                       |
|                 | Stroke                                 | 20 mm                                                                                                 |
|                 | Running time motor                     | 150 s / 15 mm (200 s / 20 mm)                                                                         |
|                 | Sound power level, motor               | 45 dB(A)                                                                                              |
|                 | Position indication                    | Mechanically, 520 mm stroke                                                                           |
| Safety          | Protection class IEC/EN                | III Safety Extra-Low Voltage (SELV)                                                                   |
|                 | Protection class UL                    | UL Class 2 Supply                                                                                     |
|                 | Degree of protection IEC/EN            | IP54                                                                                                  |
|                 | Degree of protection NEMA/UL           | NEMA 2                                                                                                |
|                 | Enclosure                              | UL Enclosure Type 2                                                                                   |
|                 | EMC                                    | 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-<br>14 and CAN/CSA E60730-1:02                               |
|                 | Certification UL note                  | The UL marking on the actuator depends on the production site, the device is UL-compliant in any case |
|                 | Mode of operation                      | Type 1                                                                                                |
|                 | Rated impulse voltage supply / control | 0.8 kV                                                                                                |
|                 | Control pollution degree               | 3                                                                                                     |
|                 | Ambient temperature                    | 050°C                                                                                                 |
|                 | Storage temperature                    | -4080°C                                                                                               |
|                 | Ambient humidity                       | Max. 95% r.H., non-condensing                                                                         |
|                 | Servicing                              | maintenance-free                                                                                      |
| Weight          | Weight                                 | 1.9 kg                                                                                                |
|                 |                                        |                                                                                                       |

# Globe valve actuator (Retrofit), Open/close, 3-point, AC/DC 24 V, 500 N



#### Safety notes



- This device has been designed for use in stationary heating, ventilation and airconditioning 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.
- 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 motion and so the closing point may be adjusted only by authorised specialists. The direction of motion is critical, particularly in connection with frost protection circuits.
- 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 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**

Installation on third-party valves

The retrofit actuators for installation on a wide range of valves from various manufacturers are comprised of an actuator, bracket, universal valve neck adapter and universal valve stem adapter. Adapt the valve neck and valve stem to begin with, then attach the retrofit bracket to the valve neck adapter. Now fit the retrofit actuator into the bracket and connect it to the valve. Whilst taking the position of the valve closing point into account, secure the actuator to the bracket and then conduct the commissioning process. The valve neck adapter/actuator can be rotated through 360° on the valve neck, provided it is permitted by the size of the installed valve.

Installation on Belimo valves

Use standard actuators from Belimo for mounting on Belimo globe valves. The installation of retrofit actuators on Belimo globe valves is technically possible.

Manual override

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

The stroke can be adjusted by using a hexagon socket screw key (4 mm), which is inserted into the top of the actuator. The stroke shaft extends when the key is rotated

clockwise.

High functional reliability

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

**Position indication** 

The stroke is indicated mechanically on the bracket with tabs. The stroke range adjusts itself automatically during operation.

Home position

Factory setting: Actuator spindle is retracted.

Setting direction of stroke

When actuated, the stroke direction switch changes the running direction in normal operation.

#### **Accessories**

|                        | Description                      | Туре  |
|------------------------|----------------------------------|-------|
| Electrical accessories | Auxiliary switch 2 x SPDT add-on | S2A-H |

#### **Electrical installation**



#### Notes

- · Connection via safety isolating transformer.
- Parallel connection of other actuators possible. Observe the performance data.
- Direction of stroke switch factory setting: Actuator spindle retracted (A).

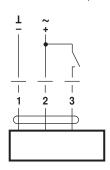


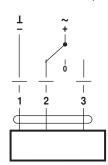
## **Electrical installation**

#### Wiring diagrams

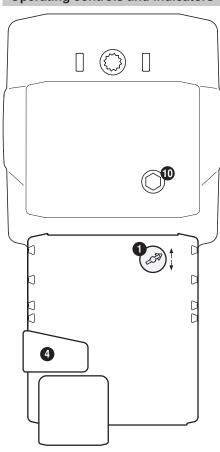
AC/DC 24 V, open/close

AC/DC 24 V, 3-point





## Operating controls and indicators



1 Direction of stroke switch

Switch over: Direction of stroke changes

4 Gear disengagement button

Press button: Gear disengages, motor stops, manual override possible

Release button: Gear engages, standard mode

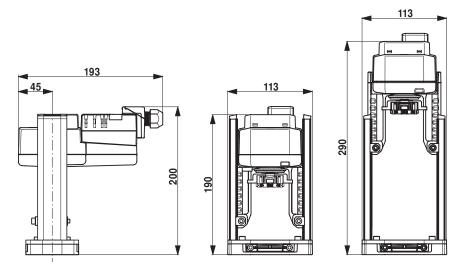
10 Manual override

Clockwise: Actuator spindle extends
Counterclockwise: Actuator spindle retracts



## Dimensions [mm]

## **Dimensional drawings**



# **Further documentation**

· Installation instructions for actuators