

**Modulating globe valve actuator for 2-way and 3-way globe valves**

- Actuating force 2500 N
- Nominal voltage AC/DC 24 V
- Control: modulating DC (0) 2 V...10 V
- Nominal stroke 40 mm
- Actuating time 35 s / 40 mm


**Technical data**

|  |                                    |  |                              |
|--|------------------------------------|--|------------------------------|
| <b>Electrical data</b>                 | Nominal voltage                    | AC/DC 24 V   |                              |
|  | Nominal voltage frequency          | 50/60 Hz   |                              |
|  | Nominal voltage range              | AC 19.2 V...28.8 V / DC 21.6 V...28.8 V            |                              |
|  | Power consumption in operation     | 11 W   |                              |
|  | Power consumption in rest position | 1.5 W  |                              |
|  | Power consumption for wire sizing  | 18 VA  |                              |
|  | Connection supply / control        | Cable 1 m, 4 x 0.75 mm <sup>2</sup>                |                              |
|  | Parallel operation                 | Yes  |                              |
| <b>Functional data</b>                 | Actuating force                    | 2500 N   |                              |
|  | Positioning signal Y               | DC 0 V...10 V                                      |                              |
|  | Positioning signal Y note          | Input impedance 100 kΩ                             |                              |
|  | Operating range Y                  | DC 2 V...10 V                                      |                              |
|  | Position feedback U                | DC 2 V...10 V                                      |                              |
|  | Position feedback U note           | max. 0.5 mA  |                              |
|  | Position accuracy                  | 5% absolute  |                              |
|  | Manual override                    | Gear disengagement with push-button, can be locked |                              |
|  | Nominal stroke                     | 40 mm  |                              |
|  | Actuating time                     | 35 s / 40 mm                                       |                              |
|  | Sound power level motor max.       | 65 dB (A)  |                              |
|  | Position indication                | Mechanical 5 ... 40 mm stroke                      |                              |
|  | <b>Safety</b>                      | Protection class IEC/EN                            | III Safety extra-low voltage |
|  |                                    | Degree of protection IEC/EN                        | IP54                         |
| EMC                                    |                                    | CE in accordance with 2004/108/EC                  |                              |
| Certification IEC/EN                   |                                    | Certified to: IEC/EN 60730-1 and IEC/EN 60730-2-14 |                              |
| Mode of operation                      |                                    | Type 1   |                              |
| Rated impulse voltage supply / control |                                    | 0.8 kV   |                              |
| Control pollution degree               |                                    | 3  |                              |
| Ambient temperature                    |                                    | 0 °C ... 50 °C                                     |                              |
| Non-operating temperature              |                                    | -40 °C ... 80 °C                                   |                              |
| Ambient humidity                       |                                    | 95% r.h., non-condensing                           |                              |
| Maintenance                            | Maintenance-free                   |  |                              |
| <b>Weight</b>                          | Weight approx.                     | 4.320 kg   |                              |

**Safety notes**


- This actuator has been designed for application 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 with during installation.
- The switch for changing the direction of motion/the closing point may be adjusted only by authorised personnel. The direction of stroke 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 cable must not be removed from the device.

## Safety notes

- 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>Principle of operation</b>      | The actuator is connected with a standard modulating signal of DC 0 ... 10V and travels to the position defined by the positioning signal. The measuring voltage U serves for the electrical display of the actuator position 0 ... 100% and as slave control signal for other actuators.  |
| <b>Direct mounting</b>             | Simple direct mounting on the globe valve by means of form-fit hollow clamping jaws. The actuator can be rotated by 360° on the valve neck.  |
| <b>Manual override</b>             | Manual override with push-button possible - temporary, permanently. The gear is disengaged and the actuator decoupled for as long as the button is pressed / latched. The stroke can be adjusted by using a hexagon socket screw key (5 mm), which is inserted into the top of the actuator. The stroke spindle extends when the key is rotated clockwise.   |
| <b>High functional reliability</b> | The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.   |
| <b>Combination valve/actuator</b>  | Refer to the valve documentation for suitable valves, their permitted medium temperatures and closing pressures.   |
| <b>Position indication</b>         | The stroke is indicated mechanically on the bracket with tabs. The stroke range adjusts itself automatically during operation.   |
| <b>Home position</b>               | Setting ex-works: Actuator spindle is retracted.<br>When valve-actuator combinations are shipped, the direction of motion is set in accordance with the closing point of the valve.  |
| <b>Direction of stroke switch</b>  | When actuated, the direction of stroke switch changes the running direction in normal operation.   |
| <b>Adaption of stroke range</b>    | The first time the supply voltage is switched on, i.e. at the time of commissioning, the actuator carries out a stroke adaption, which is when the operating range and position feedback adjust themselves to the mechanical stroke.<br>Manual triggering of the adaption can be carried out by pressing the "Adaption" button. The actuator then moves into the position defined by the positioning signal. |

## Accessories

|                               | <b>Description</b>                | <b>Type</b> |
|-------------------------------|-----------------------------------|-------------|
| <b>Electrical accessories</b> | Auxiliary switch add-on, 2 x SPDT | S2A-H       |

## Electrical installation

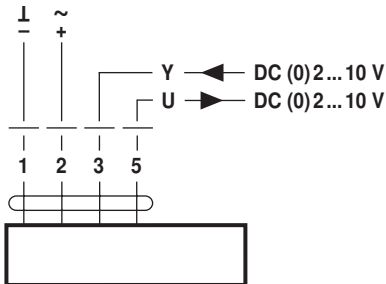


### Notes

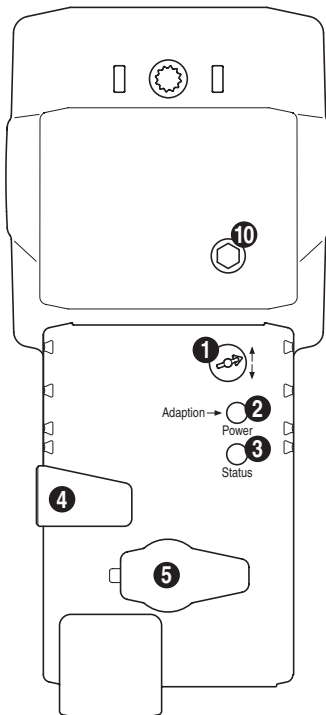
- Connection via safety isolating transformer.
- Parallel connection of other actuators possible.
- Direction of stroke switch factory setting: Actuator spindle retracted.

## Wiring diagrams

### AC/DC 24V, modulating



## Indicators and operating controls



### (1) Direction of stroke switch

Switching: Direction of stroke changes

### (2) Push-button and LED display green

Off: No power supply or malfunction

Illuminated: In operation

Press button: Triggers stroke adaption, followed by standard mode

### (3) LED display yellow

Off: Standard mode

Illuminated: Adaption procedure active

### (4) Gear disengagement button

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

Release button: Gear engages, standard mode

### (5) Service plug

No function

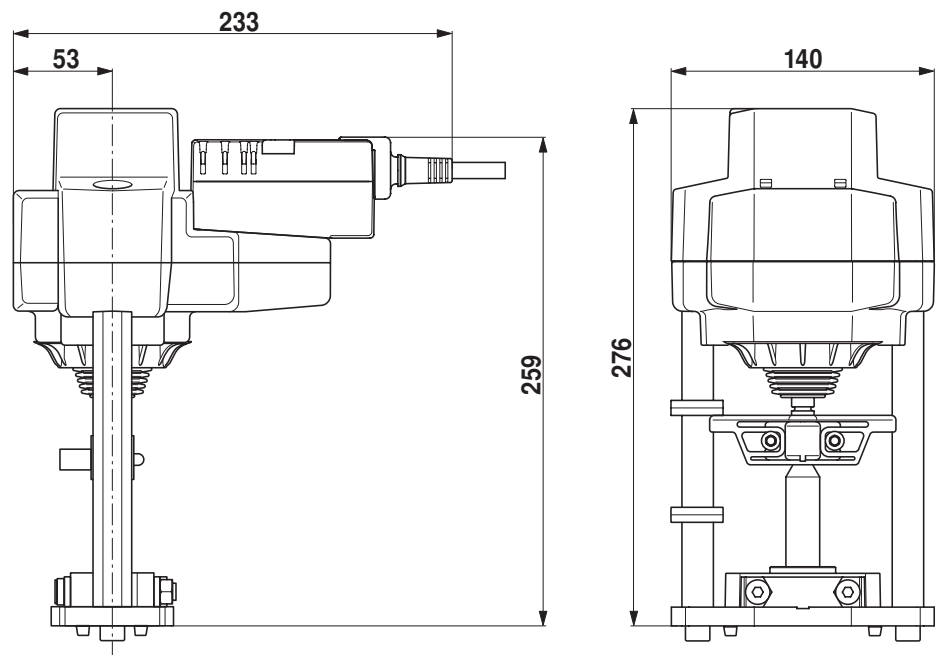
### (10) Manual override

Clockwise: Actuator spindle extends

Counterclockwise: Actuator spindle retracts

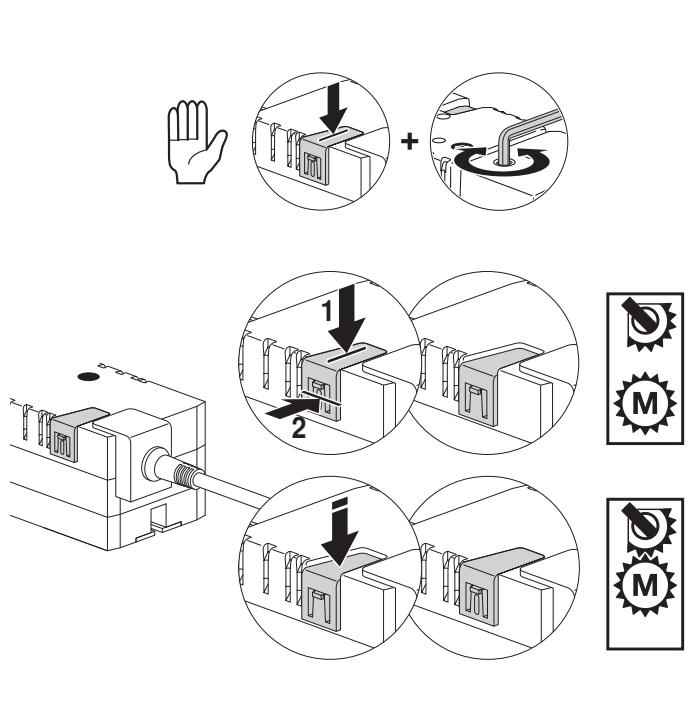
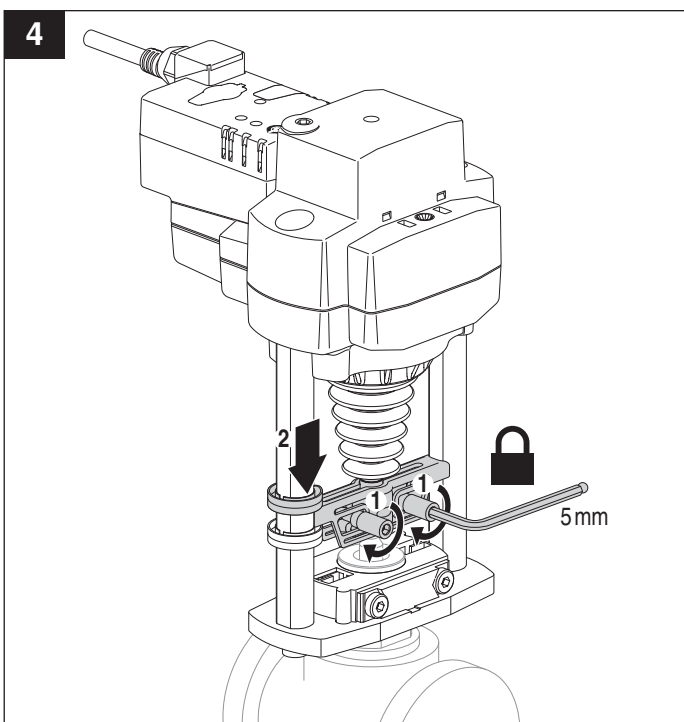
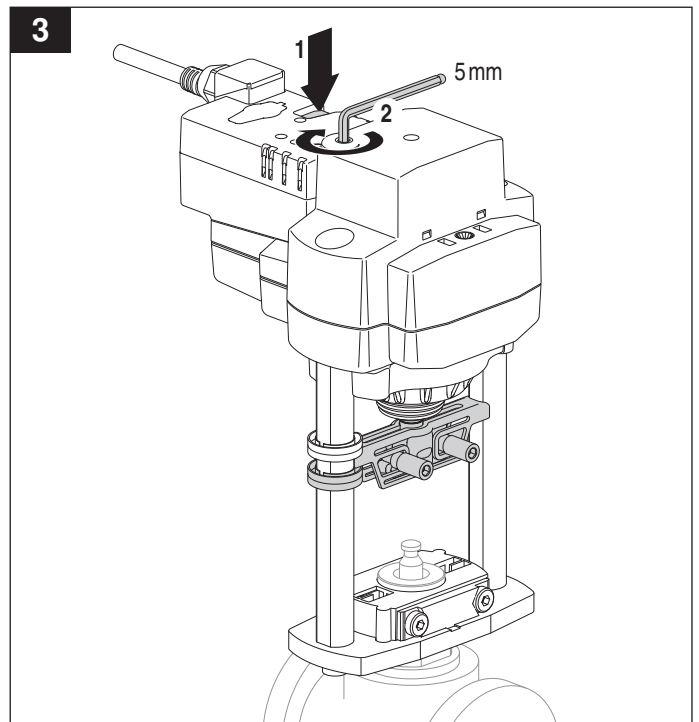
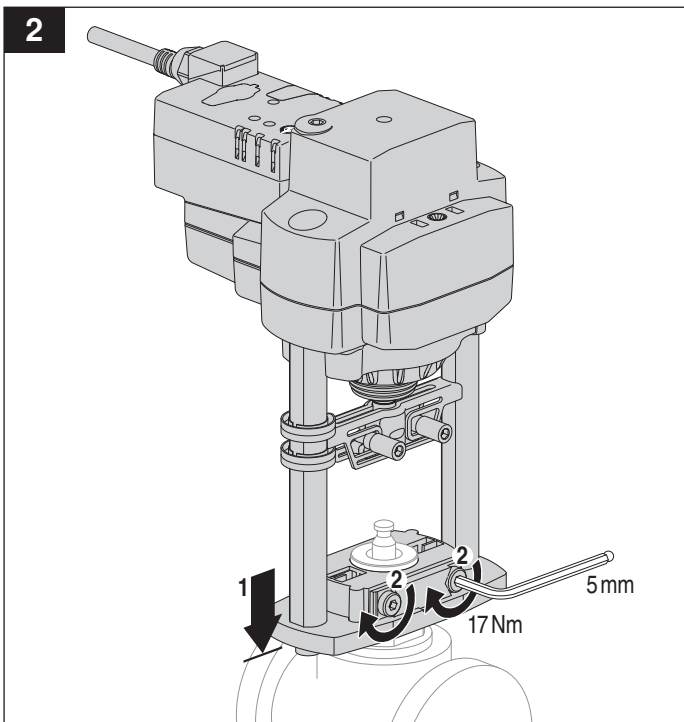
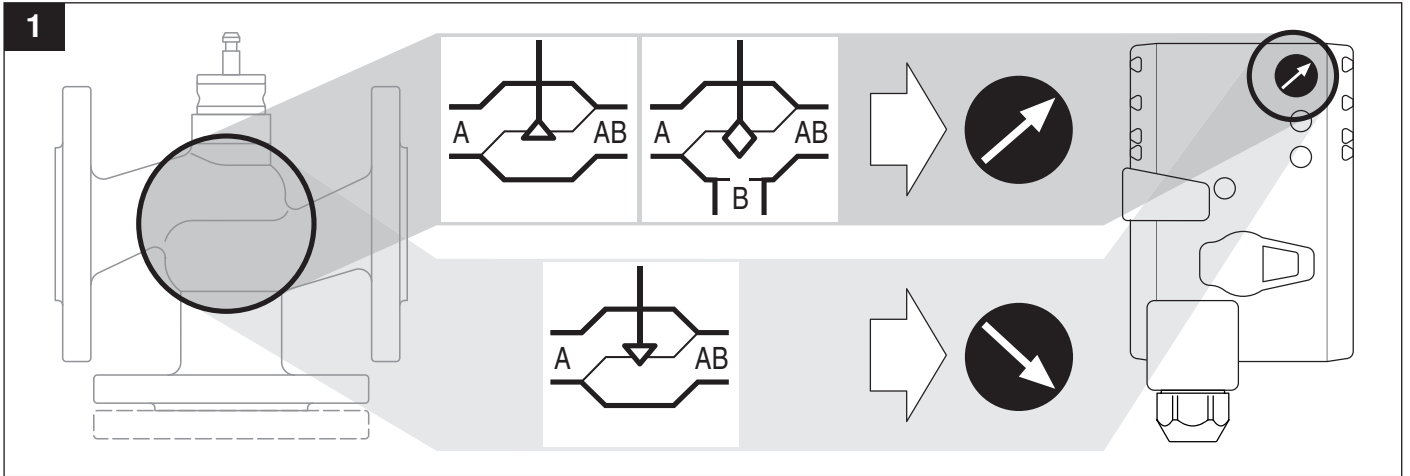
## Dimensions [mm]

## Dimensional drawings



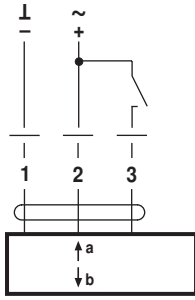
## Further documentation

- Data sheets for globe valves
- Installation instructions for actuators and/or globe valves, respectively
- Notes for project planning for 2-way and 3-way globe valves (hydraulic characteristic curves and circuits, design and dimension, installation instructions, etc.)
- Overview "Valve-actuator combinations"



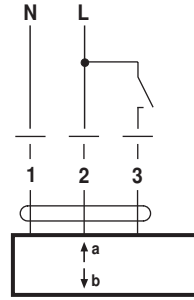


AC 24 V / DC 24 V

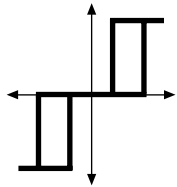


SVL(C)24A  
EV(C)24A

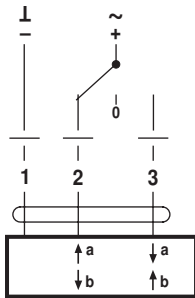
AC 230 V ⚠



SVL(C)230A  
EV(C)230A

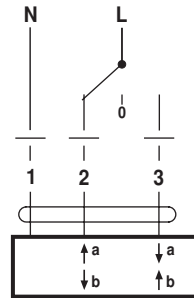


AC 24 V / DC 24 V

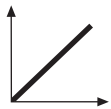


SVL(C)24A  
EV(C)24A

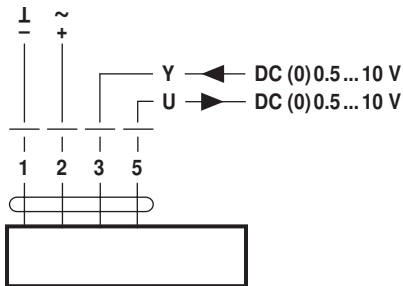
AC 230 V ⚠



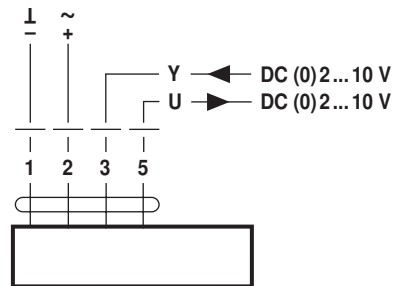
SVL(C)230A  
EV(C)230A



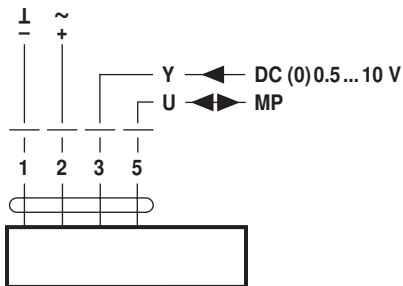
AC 24 V / DC 24 V



SVL(C)24A-SZ SVL(C)24A-MF  
EV(C)24A-SZ EV(C)24A-MF  
RV24A-SZ RV24A-MF



SVL(C)24A-SR  
EV(C)24A-SR  
RV24A-SR



SVL(C)24A-MP  
EV(C)24A-MP  
RV24A-MP