

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

- · Actuating force 2500 N
- Nominal voltage AC 230 V
- · Control Open-close, 3-point
- Nominal stroke 50 mm

Technical



RETRO PIFIT

| data            |  |  |
|-----------------|--|--|
| Electrical data | Nominal voltage                        | AC 230 V                                     |
|                 | Nominal voltage frequency              | 50/60 Hz                                     |
|                 | Nominal voltage range                  | AC 85265 V                                   |
|                 | Power consumption in operation         | 5.5 W  |
|                 | Power consumption in rest position     | 1 W  |
|                 | Power consumption for wire sizing      | 9.5 VA                                       |
|                 | Connection supply / control            | Terminals 4 mm <sup>2</sup> (cable Ø 410 mm) |
|                 | Parallel operation                     | Yes (note the performance data)              |
| Functional data | Actuating force motor                  | 2500 N                                       |
|                 | Manual override                        | With push-button, can be locked              |
|                 | Nominal stroke                         | 50 mm  |
|                 | Actuating time motor                   | 150 s / 40 mm (188 s / 50 mm)                |
|                 | Sound power level motor                | 56 dB(A)                                     |
|                 | Position indication                    | Mechanically, 550 mm stroke                  |
| Safety          | Protection class IEC/EN                | II Protective insulated                      |
|                 | 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 2014/30/EU                   |
|                 | Low voltage directive                  | CE according to 2014/35/EU                   |
|                 | 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   |
|                 | Control pollution degree               | 3  |
|                 | Ambient temperature range              | 050°C  |
|                 | Non-operating temperature              | -4080°C                                      |
|                 | Ambient humidity                       | 95% r.h., non-condensing                     |
|                 | Maintenance                            | Maintenance-free                             |
| Weight          | Weight                                 | 7.4 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.
- 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.

# Globe valve actuator, Open-close, 3-point, AC 230 V, 2500 N



### **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, universal valve neck adapter and universal valve stem adapter. Adapt the valve neck and valve stem to begin with, then attach the retrofit actuator to the valve neck adapter, connect to the valve and start up. 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 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 (5 mm), which is inserted into the top of the actuator. The stroke spindle 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.

**Direction of stroke switch** When actuated, the direction of stroke switch changes the running direction in normal

operation.

**Restriction 3-point controller** Steps must be taken to ensure that the pulsating 3-point controller stops when the

end position is reached. If this is not possible on the system side, the multifunctional

version of the actuator (..-MP..) must be used.

#### **Accessories**

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

## **Electrical installation**

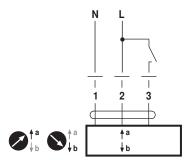


#### Notes

- · Caution: Power supply voltage!
- Parallel connection of other actuators possible. Observe the performance data.
- · Direction of stroke switch factory setting: Actuator spindle retracted.

## Wiring diagrams

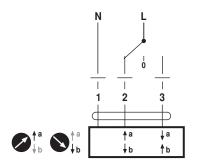
AC 230 V, open-close (one-wire)



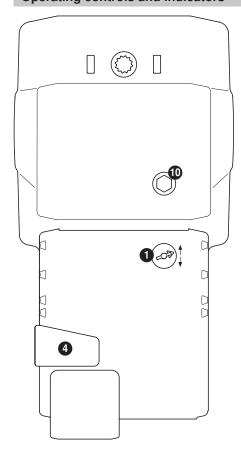


# **Electrical installation**

AC 230 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, followed by standard mode

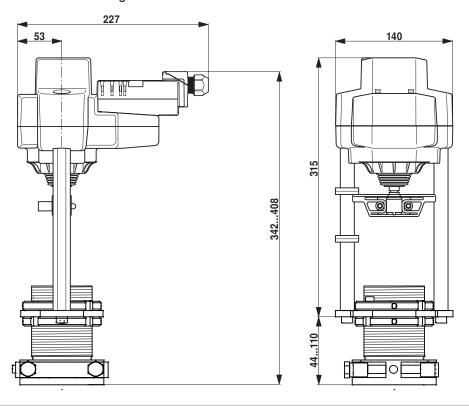
10 Manual override

Clockwise: Actuator spindle extends Counterclockwise: Actuator spindle retracts



# Dimensions [mm]

# **Dimensional drawings**



# **Further documentation**

· Installation instructions for actuators