

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

- Actuating force 2500 N
- Nominal voltage AC/DC 24 V
- Control Open/close, 3-point
- Stroke 50 mm

**Technical data sheet** 

retro DFIT

EV24A-RE



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	2.5 W
	Power consumption in rest position	0.5 W
	Power consumption for wire sizing	4.5 VA
	Connection supply / control	Terminals 4 mm² (cable Ø410 mm)
	Parallel operation	Yes (note the performance data)
Functional data	Actuating force motor	2500 N
	Manual override	with push-button, can be locked
	Stroke	50 mm
	Running time motor	150 s / 40 mm (188 s / 50 mm)
	Sound power level, motor	56 dB(A)
	Position indication	Mechanically, 550 mm stroke
Safety data	Protection class IEC/EN	III, Safety Extra-Low Voltage (SELV)
	Power source 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, UL60730-2-14 and CAN/CSA E60730-1 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
	Pollution degree	3
	Ambient temperature	050°C
	Storage temperature	-4080°C
	Ambient humidity	Max. 95% RH, non-condensing
	Servicing	maintenance-free

3.2 kg

Weight

Weight



#### 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 device and that it is ensured that the ambient
  conditions remain within the thresholds according to the data sheet at any time.
- 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**

Mounting 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.

Mounting on Belimo valves

Use standard actuators from Belimo for mounting on Belimo globe valves.

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 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 motion

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

Restriction 3-point controller

It must be ensured that the pulsating 3-point controller stops when the end position is reached. If this is not possible on the system side, the multifunctional 24 V version of the actuator (..V24A-MP-..) must be used.

### Accessories

Electrical accessories	Description	Туре
	Auxiliary switch 2 x SPDT add-on	S2A-H
Mechanical accessories	Description	Туре
	Spacer ring for Sauter, stroke 50 mm	ZRV-301
	Spacer ring for Siebe, stroke 50 mm	ZRV-302
	Spacer ring for Johnson Control, stroke 50 mm	ZRV-303
	Washer Sauter for Sauter, stroke 50 mm	ZRV-304

# **Electrical installation**



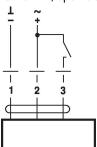
Supply from isolating transformer.

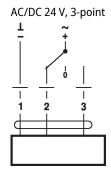
Parallel connection of other actuators possible. Observe the performance data. Direction of stroke switch factory setting: Actuator spindle retracted ( • ).



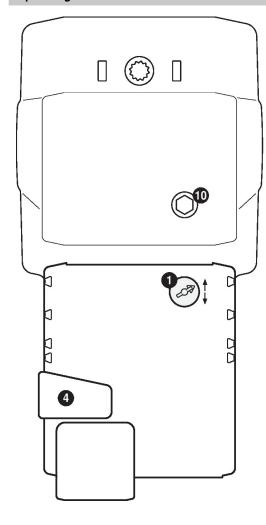
## Wiring diagrams

AC/DC 24 V, open/close





# **Operating controls and indicators**



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

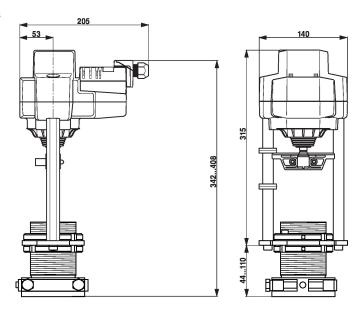
10 Manual override

Clockwise: Actuator spindle extends
Counterclockwise: Actuator spindle retracts



# **Dimensions**

# **Dimensional drawings**



# **Further documentation**

• Installation instructions for actuators