

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

- Actuating force 500 N
- Nominal voltage AC/DC 24V
- Control: modulating DC (0) 0.5V...10V,
- · Nominal stroke 15 mm
- · Actuating time 35 s / 15 mm



Technical data sheet

Technical data		
Electrical data	Nominal voltage	AC/DC 24V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.228.8V / DC 21.628.8V
	Power consumption in operation	2 W
	Power consumption in rest position	0.5 W
	Power consumption for wire sizing	3.5 VA
	Connection supply / control	Terminals 4 mm ² and cable 1 m, 4 x 0.75 mm ²
	Parallel operation	Yes
Functional data	Actuating force	500 N
	Positioning signal Y	DC 010V
	Positioning signal Y note	Input impedance 100 kΩ
	Operating range Y	DC 0.510V
	Position feedback U	DC 0.510V
	Position feedback U note	max. 0.5 mA
	Position accuracy	5% absolute
	Manual override	Gear disengagement with push-button, can be locked
	Nominal stroke	15 mm
	Actuating time	35 s / 15 mm
	Sound power level motor max.	60 dB (A)
	Position indication	Mechanical 5 15 mm stroke
Safety	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

Safety notes



Weight

Weight approx.

 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.

1.330 kg

- 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.



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

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. The measuring voltage U serves for the electrical display of the actuator position 0 \dots 100% and as slave control

signal for other actuators.

Direct mounting 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.

Manual override 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 (4 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.

Combination valve/actuator Refer to the valve documentation for suitable valves, their permitted medium

temperatures and closing pressures.

Position indication The stroke is indicated mechanically on the bracket with tabs. The stroke range

adjusts itself automatically during operation.

Home position Setting ex-works: Actuator spindle is retracted.

When valve-actuator combinations are shipped, the direction of motion is set in

accordance with the closing point of the valve.

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

operation.

Adaption of stroke range 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.

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

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



Electrical installation

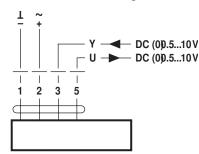


Notes

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

Wiring diagrams

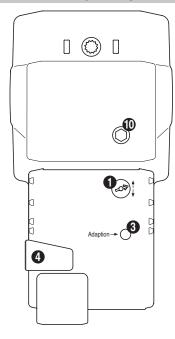
AC/DC 24V, modulating



Cable colours:

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

Indicators and operating controls



(1) Direction of stroke switch

Switching: Direction of stroke changes

(3) Push-button and LED display yellow

Off: Standard mode

Illuminated: Adaption procedure active

Press button: Triggers stroke adaption, followed by standard mode

(4) Gear disengagement button

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

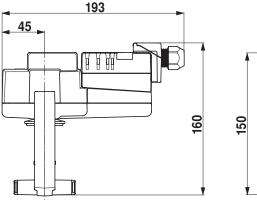
Release button: Gear engages, standard mode

(10) Manual override

Clockwise: Actuator spindle extends Counterclockwise: Actuator spindle retracts

Dimensions [mm]

Dimensional drawings

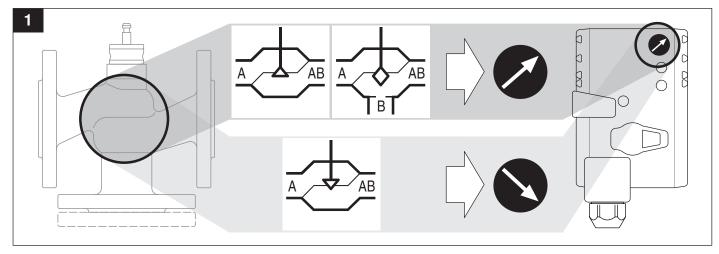


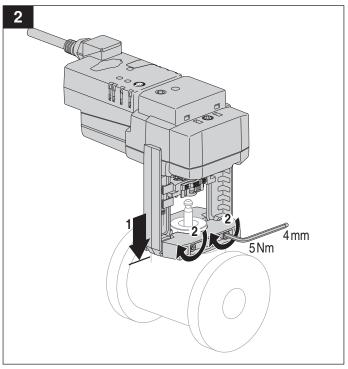


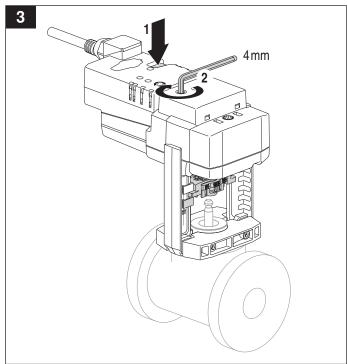
Further documentation

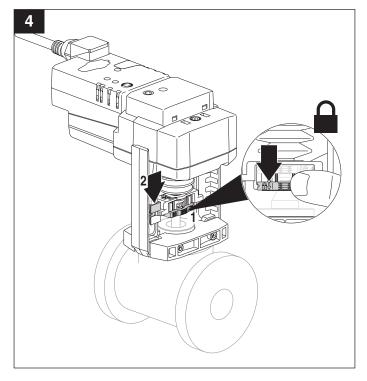
- · Data sheets for globe valves
- Installation instructions for actuators and/or globe valves, respectively
 Notes for project planning for 2-way and 3-way globe valves (hydraulic characteristic curves and circuits, design and dimension, installation instructions, etc.)
- Overview "Valve-actuator combinations"

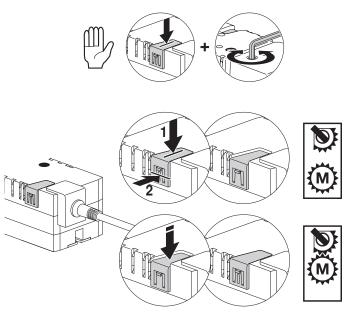








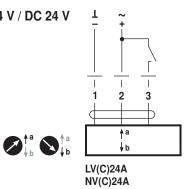








AC 24 V / DC 24 V

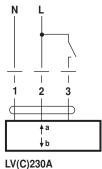


SV(C)24A

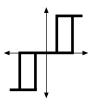
AC 230 V

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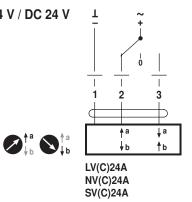
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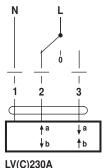
LV(C)230A NV(C)230A SV(C)230A



AC 24 V / DC 24 V



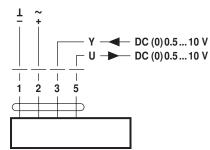
AC 230 V



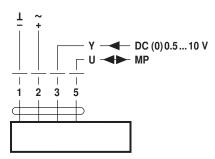
LV(C)230A NV(C)230A SV(C)230A



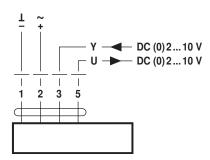
AC 24 V / DC 24 V



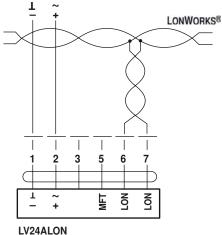
LV(C)24A-SZ LV(C)24A-MF NV(C)24A-SZ NV(C)24A-MF SV(C)24A-SZ SV(C)24A-MF



LV(C)24A-MP NV(C)24A-MP SV(C)24A-MP



LV(C)24A-SR NV(C)24A-SR SV(C)24A-SR



NV24ALON