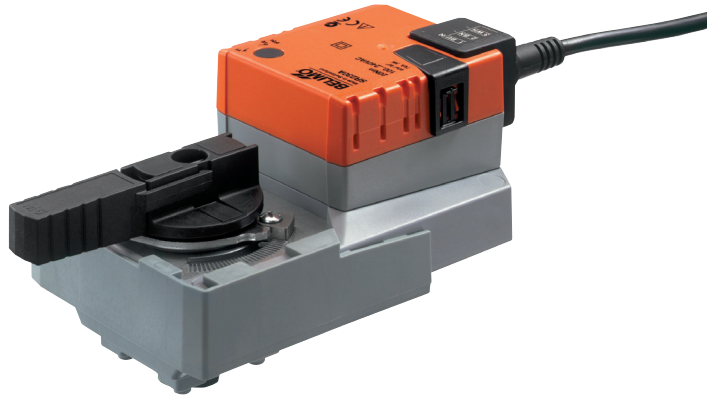


**Rotary actuator for ball valves**

- Nominal torque 20 Nm
- Nominal voltage AC 230 V
- Control Open-close, 3-point


**Technical data**

<b>Electrical data</b>	Nominal voltage	AC 230 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 85...265 V
	Power consumption in operation	3 W
	Power consumption in rest position	0.6 W
	Power consumption for wire sizing	7 VA
	Connection supply / control	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
	Parallel operation	Yes (note the performance data)
<b>Functional data</b>	Torque motor	Min. 20 Nm
	Manual override	Gear disengagement with push-button, can be locked
	Running time motor	90 s / 90°
	Sound power level motor max.	45 dB(A)
	Position indication	Mechanically, pluggable
<b>Safety</b>	Protection class IEC/EN	II Protective insulated
	Protection class UL	II Protective insulated
	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2, UL Enclosure Type 2
	EMC	CE according to 2004/108/EC
	Low voltage directive	CE according to 2006/95/EC
	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	-30...50°C
	Non-operating temperature	-40...80°C
Ambient humidity	95% r.h., non-condensing	
Maintenance	Maintenance-free	
<b>Weight</b>	Weight approx.	1 kg

**Safety notes**


- This device has been designed for use 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.
- Caution: Power supply voltage!
- 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 rotation may only be operated by authorised specialists. The direction of rotation must not in particular be reversed in a frost protection circuit.
- 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 cables 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>Direct mounting</b>	Straightforward direct mounting on the ball valve with only one central screw. The assembly tool is integrated in the plug-in position indication. The mounting orientation in relation to the ball valve can be selected in 90° steps.
<b>Manual override</b>	Manual override with push-button possible (the gear is disengaged for as long as the button is pressed or remains locked).
<b>High functional reliability</b>	The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.
<b>Adjustable angle of rotation</b>	Adjustable angle of rotation with mechanical end stops.

### Accessories

	Description	Type
<b>Electrical accessories</b>	Auxiliary switch, add-on, 1 x SPDT	S1A
	Auxiliary switch, add-on, 2 x SPDT	S2A
	Feedback potentiometer 140 Ohm, add-on	P140A
	Feedback potentiometer 200 Ohm, add-on	P200A
	Feedback potentiometer 500 Ohm, add-on	P500A
	Feedback potentiometer 1 kOhm, add-on	P1000A
	Feedback potentiometer 2.8 kOhm, add-on	P2800A
	Feedback potentiometer 5 kOhm, add-on	P5000A
	Feedback potentiometer 10 kOhm, add-on	P10000A

## Electrical installation

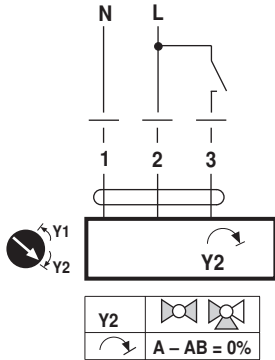


### Notes

- Caution: Power supply voltage!
- Parallel connection of other actuators possible. Observe the performance data.
- Direction of rotation switch is covered. Factory setting: Direction of rotation Y2.

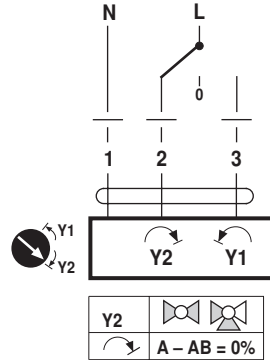
### Wiring diagrams

#### AC 230 V, open-close



Cable colours:  
1 = blue  
2 = brown  
3 = white

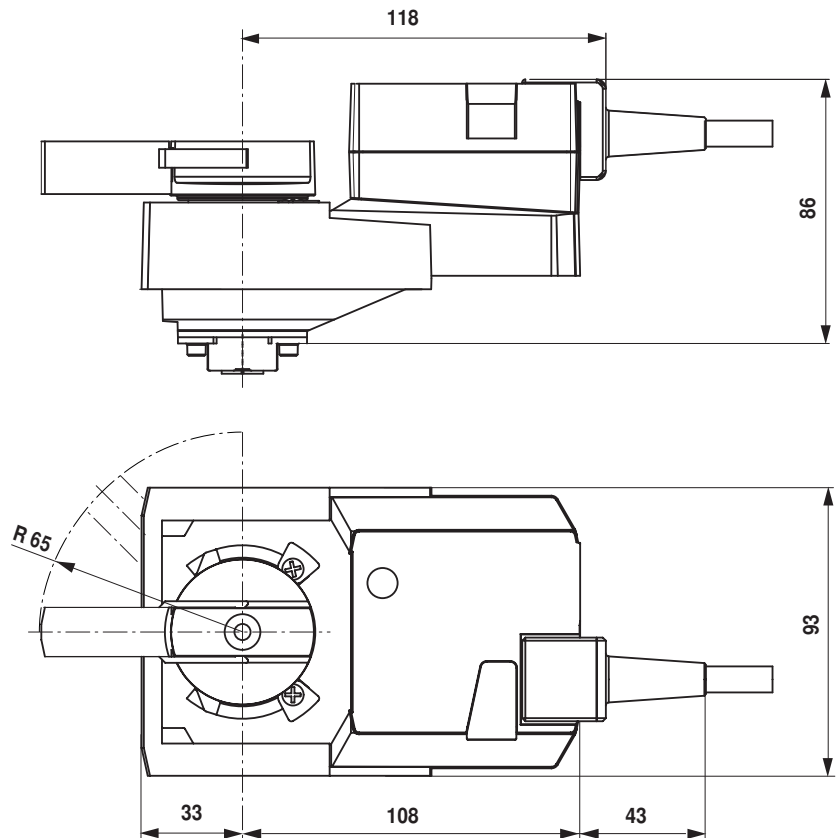
#### AC 230 V, 3-point



Cable colours:  
1 = blue  
2 = brown  
3 = white

## Dimensions [mm]

### Dimensional drawings



## Further documentation

- Overview Valve-actuator combinations
- Data sheets for ball valves
- Installation instructions for actuators and/or ball valves
- General notes for project planning

**Rotary actuator for ball valves**

- Nominal torque 20 Nm
- Nominal voltage AC 230 V
- Control Open-close, 3-point
- With integrated auxiliary switch


**Technical data**

<b>Electrical data</b>	Nominal voltage	AC 230 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 85...265 V
	Power consumption in operation	3 W
	Power consumption in rest position	0.6 W
	Power consumption for wire sizing	7 VA
	Auxiliary switch	1 x SPDT, 0...100%
	Switching capacity auxiliary switch	1 mA...3 (0.5) A, AC 250 V (II Protective insulated)
	Connection supply / control	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
	Connection auxiliary switch	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
Parallel operation	Yes (note the performance data)	
<b>Functional data</b>	Torque motor	Min. 20 Nm
	Manual override	Gear disengagement with push-button, can be locked
	Running time motor	90 s / 90°
	Sound power level motor max.	45 dB(A)
	Position indication	Mechanically, pluggable
<b>Safety</b>	Protection class IEC/EN	II Protective insulated
	Protection class UL	II Protective insulated
	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2, UL Enclosure Type 2
	EMC	CE according to 2004/108/EC
	Low voltage directive	CE according to 2006/95/EC
	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
	Rated impulse voltage auxiliary switch	2.5 kV
	Control pollution degree	3
	Ambient temperature	-30...50°C
Non-operating temperature	-40...80°C	
Ambient humidity	95% r.h., non-condensing	
Maintenance	Maintenance-free	
<b>Weight</b>	Weight approx.	1 kg

**Safety notes**


- This device has been designed for use 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.
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## Product features

<b>Direct mounting</b>	Straightforward direct mounting on the ball valve with only one central screw. The assembly tool is integrated in the plug-in position indication. The mounting orientation in relation to the ball valve can be selected in 90° steps.
<b>Manual override</b>	Manual override with push-button possible (the gear is disengaged for as long as the button is pressed or remains locked).
<b>High functional reliability</b>	The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.
<b>Adjustable angle of rotation</b>	Adjustable angle of rotation with mechanical end stops.
<b>Flexible signalization</b>	With adjustable auxiliary switch (0 ... 100%)

Auxiliary switch



## Accessories

	Description	Type
<b>Electrical accessories</b>	Auxiliary switch, add-on, 1 x SPDT	S1A
	Auxiliary switch, add-on, 2 x SPDT	S2A
	Feedback potentiometer 140 Ohm, add-on	P140A
	Feedback potentiometer 200 Ohm, add-on	P200A
	Feedback potentiometer 500 Ohm, add-on	P500A
	Feedback potentiometer 1 kOhm, add-on	P1000A
	Feedback potentiometer 2.8 kOhm, add-on	P2800A
	Feedback potentiometer 5 kOhm, add-on	P5000A
Feedback potentiometer 10 kOhm, add-on	P10000A	

Electrical installation

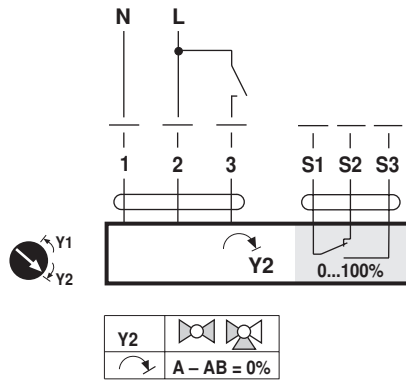


Notes

- Caution: Power supply voltage!
- Parallel connection of other actuators possible. Observe the performance data.
- Direction of rotation switch is covered. Factory setting: Direction of rotation Y2.

Wiring diagrams

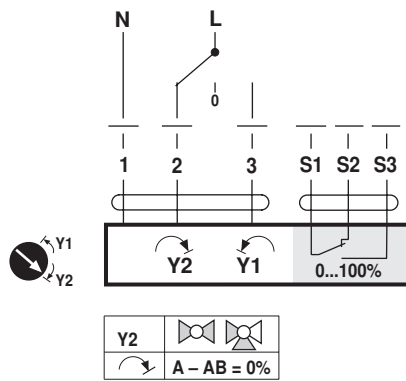
AC 230 V, open-close



Cable colours:

- 1 = blue
- 2 = brown
- 3 = white
- S1 = violet
- S2 = red
- S3 = white

AC 230 V, 3-point

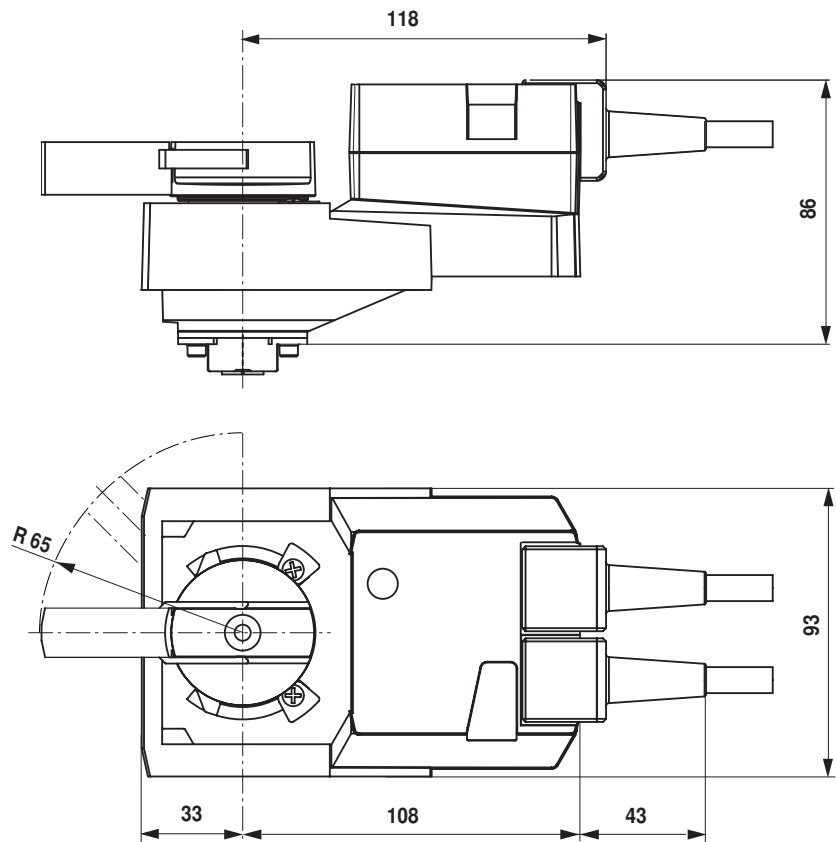


Cable colours:

- 1 = blue
- 2 = brown
- 3 = white
- S1 = violet
- S2 = red
- S3 = white

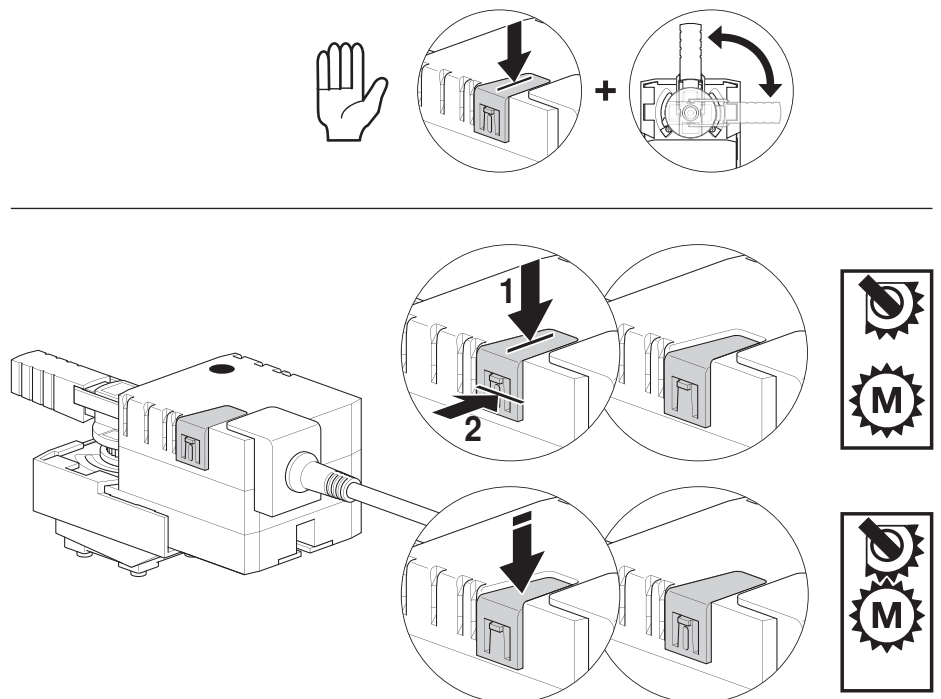
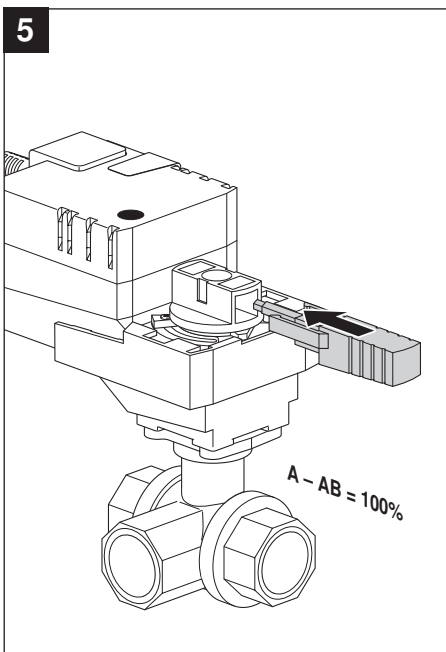
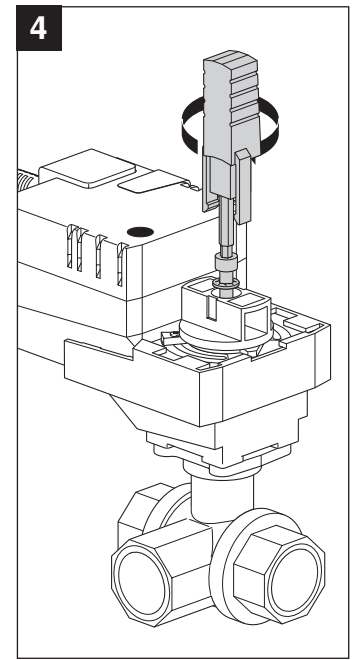
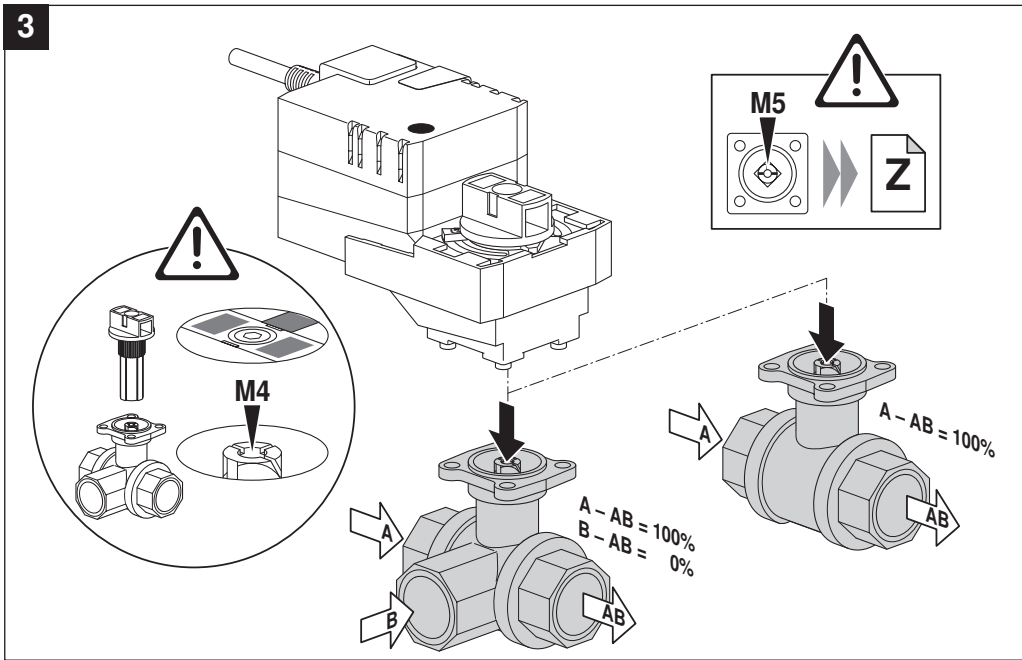
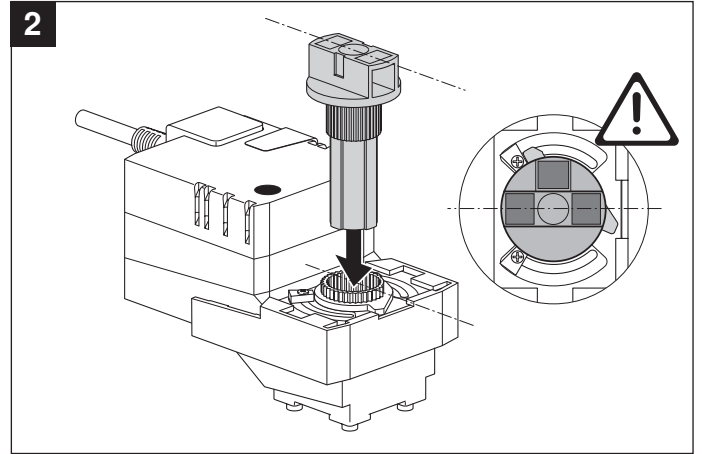
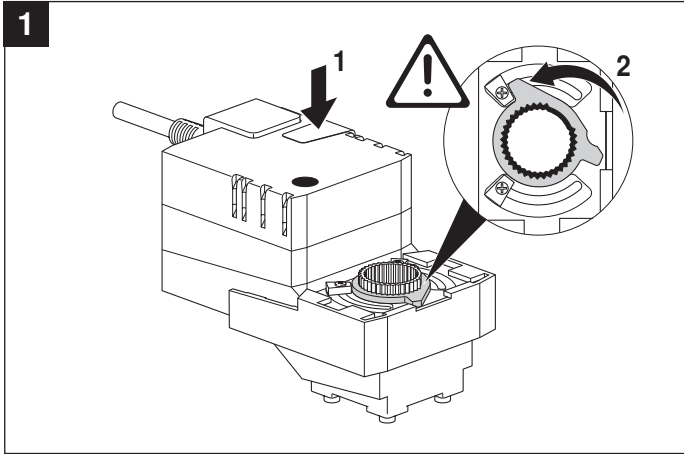
## Dimensions [mm]

## Dimensional drawings

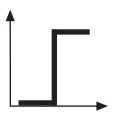
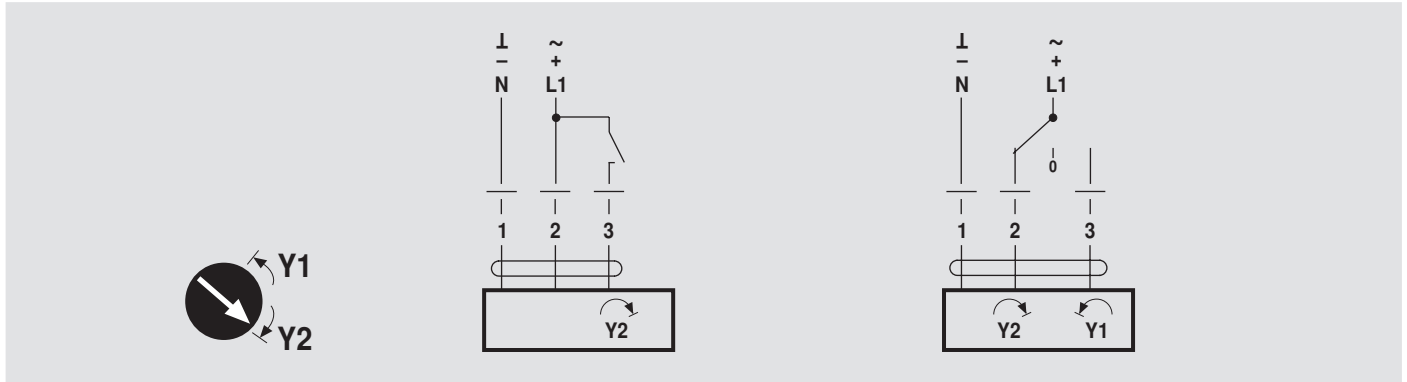


## Further documentation

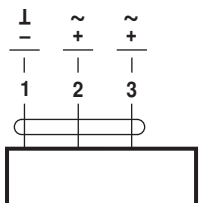
- Overview Valve-actuator combinations
- Data sheets for ball valves
- Installation instructions for actuators and/or ball valves
- General notes for project planning



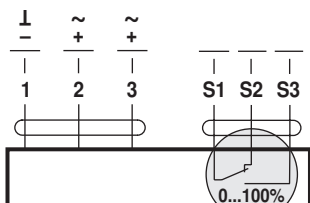




AC 24 V / DC 24 V

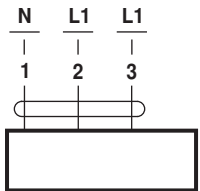


LR24A NR24A  
SR24A

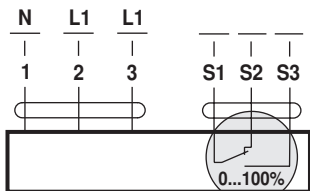


LR24A-S NR24A-S  
SR24A-S

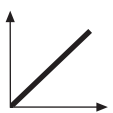
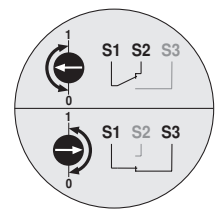
AC 100 ... 240 V ⚠



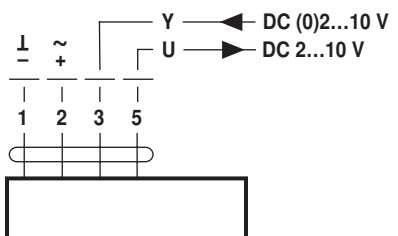
LR230A NR230A  
SR230A



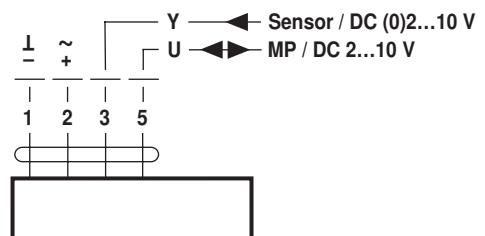
LR230A-S NR230A-S  
SR230A-S



AC 24 V / DC 24 V



TRC24A-SR LR24A-MF  
LR(C)24A-SR NR24A-MF  
NR(C)24A-SR SR24A-MF  
SR24A-SR



LR24A-MP NR24A-MP  
SR24A-MP

LONWORKS® AC 24 V / DC 24 V

