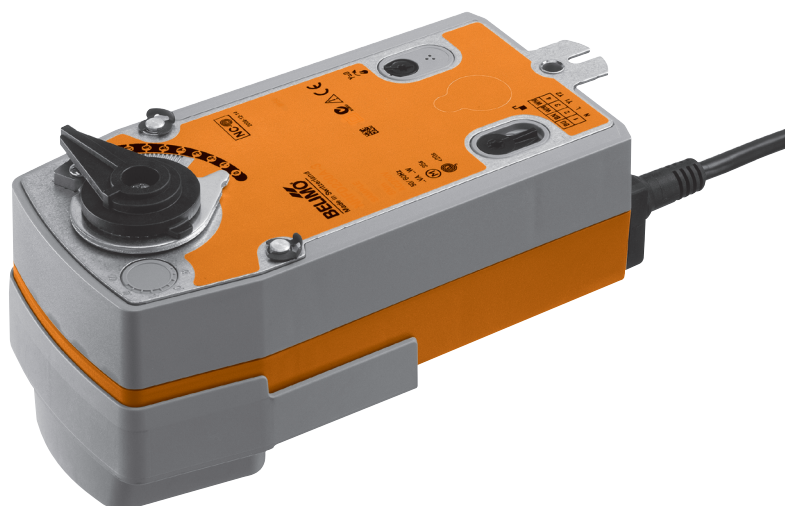


Rotary actuator with emergency function for 2- and 3-way ball valves

- Torque 20 Nm
- Nominal voltage AC/DC 24 V
- Control: Open-close
- SRF24A: Deenergised NC
- SRF24A-O: Deenergised NO



Technical data

| | | | |
|----------------------------|-----------------------|---|---|
| Electrical data | Nominal voltage | AC 24 V, 50/60 Hz / DC 24 V | |
| | Nominal voltage range | AC 19.2 ... 28.8 V / DC 21.6 ... 28.8 V | |
| | Power consumption | In operation 5 W @ nominal torque At rest 2.5 W For wire sizing 7.5 VA | |
| | Connection | Cable 1 m, 2 x 0.75 mm ² | |
| | Parallel connection | Yes (Note performance data for supply!) | |
| Functional data | Torque | Motor Min. 20 Nm @ nominal voltage Spring return Min. 20 Nm | |
| | Direction of rotation | Spring return – SRF24A Deenergised NC, ball valve closed (A – AB = 0%) – SRF24A-O Deenergised NO, ball valve open (A – AB = 100%) | |
| | Manual override | With hand crank and interlocking switch | |
| | Angle of rotation | Max. 90° ⇄ | |
| | Running time | Motor ≤75 s / 90° ⇄ Spring return ≤20 s @ –20 ... 50°C / max. 60 s @ –30°C | |
| | Sound power level | Motor ≤45 dB (A) Spring return ≤62 dB (A) | |
| | Position indication | Mechanical | |
| | Safety | Protection class | III Extra low voltage / UL Class 2 Supply |
| | | Degree of protection | IP54 NEMA 2, UL Enclosure Type 2 |
| | | EMC | CE according to 2004/108/EC |
| Certification | | cULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14 | |
| Mode of operation | | Type 1.AA | |
| Rated impulse voltage | | 0.8 kV | |
| Control pollution degree | | 3 | |
| Ambient temperature | | –30 ... +50°C | |
| Non-operating temperature | | –40 ... +80°C | |
| Ambient humidity | | 95% r.h., non-condensating | |
| Maintenance | Maintenance-free | | |
| Dimensions / Weight | Dimensions | See «Dimensions» on page 3 | |
| | Weight | Approx. 2 kg (without ball valve) | |

Safety notes



- The actuator 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.
- It may only be installed by suitably trained personnel.
All applicable legal or institutional installation regulations must be complied with.
- 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.
- 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

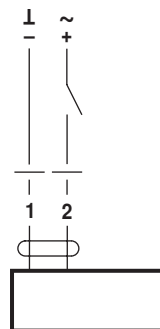
| | |
|-------------------------------------|--|
| Mode of operation | The actuator moves the ball valve to the operating position at the same time as tensioning the return spring. The ball valve is turned back to the safety position by spring force if the supply voltage is interrupted. |
| Simple direct mounting | Straightforward direct mounting on the ball valve with only one screw. The mounting position in relation to the ball valve can be selected in 90°-steps. |
| Manual override | Manual operation of the valve with the hand crank, locking in any position with the interlocking switch. Unlocking is manual or automatic by applying the operating voltage. |
| Adjustable angle of rotation | Adjustable angle of rotation with mechanical end stop. |
| High operational reliability | The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached. |
| Combination valve actuators | Refer to the valve documentation for suitable valves, their permitted media temperatures and closing pressures. |

Electrical installation

Wiring diagram

Notes

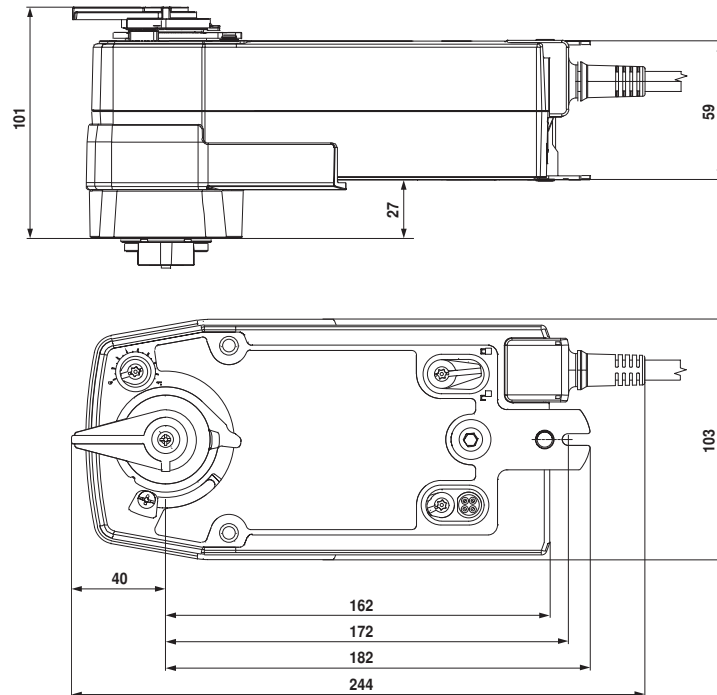
- Connect via safety isolation transformer.
- Parallel connection of other actuators possible.
Note the performance data.



Cable colours:
1 = black
2 = red

Dimensions [mm]

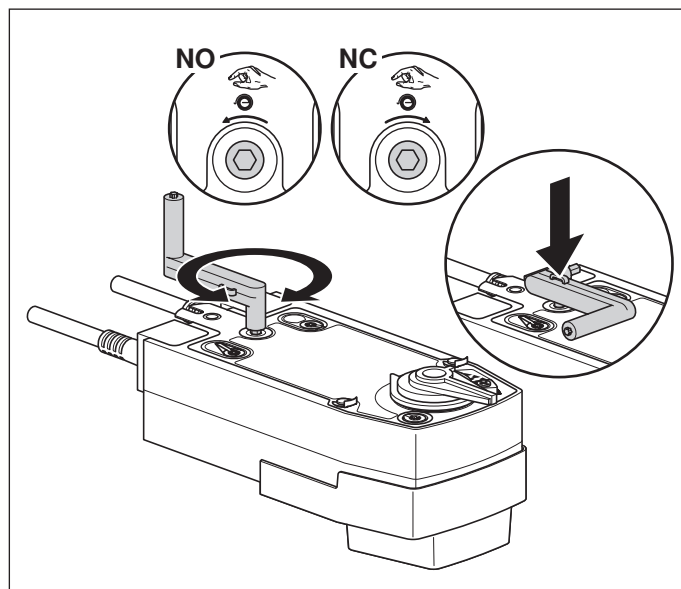
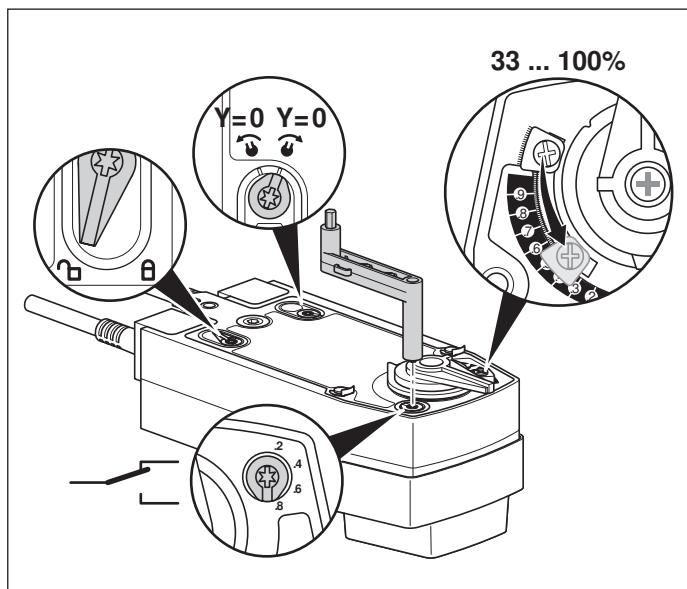
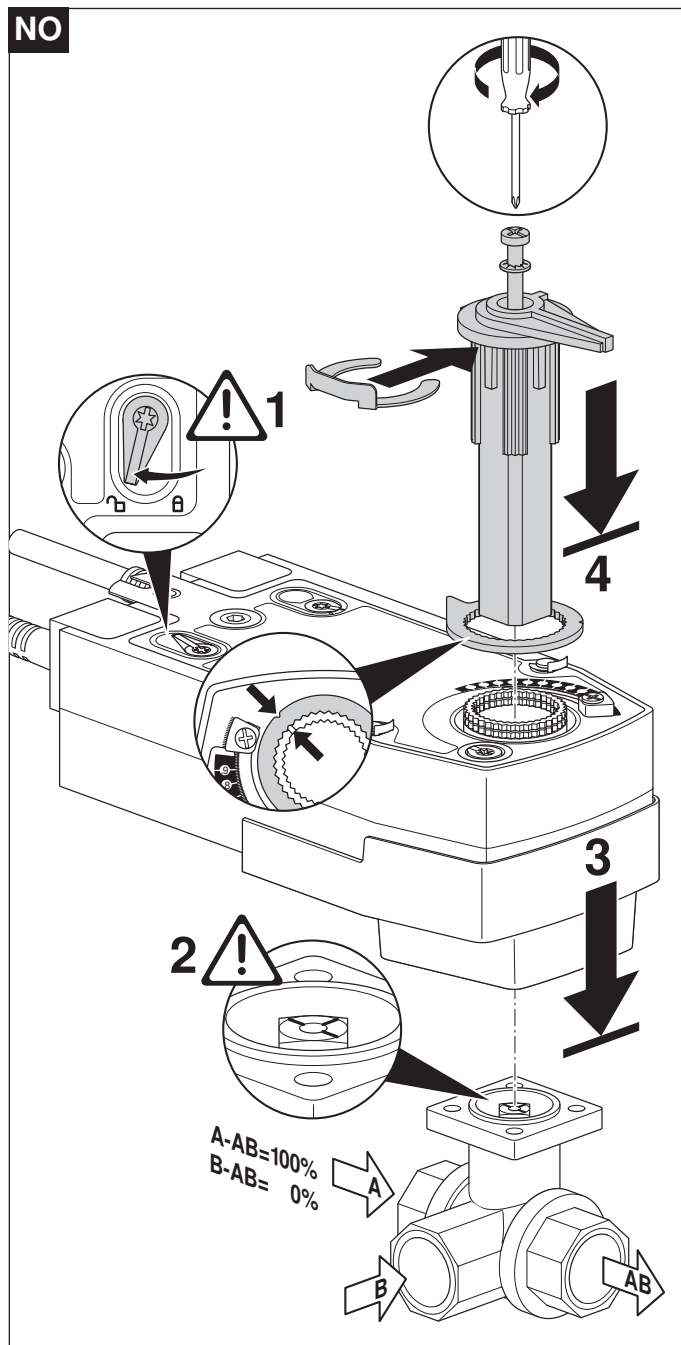
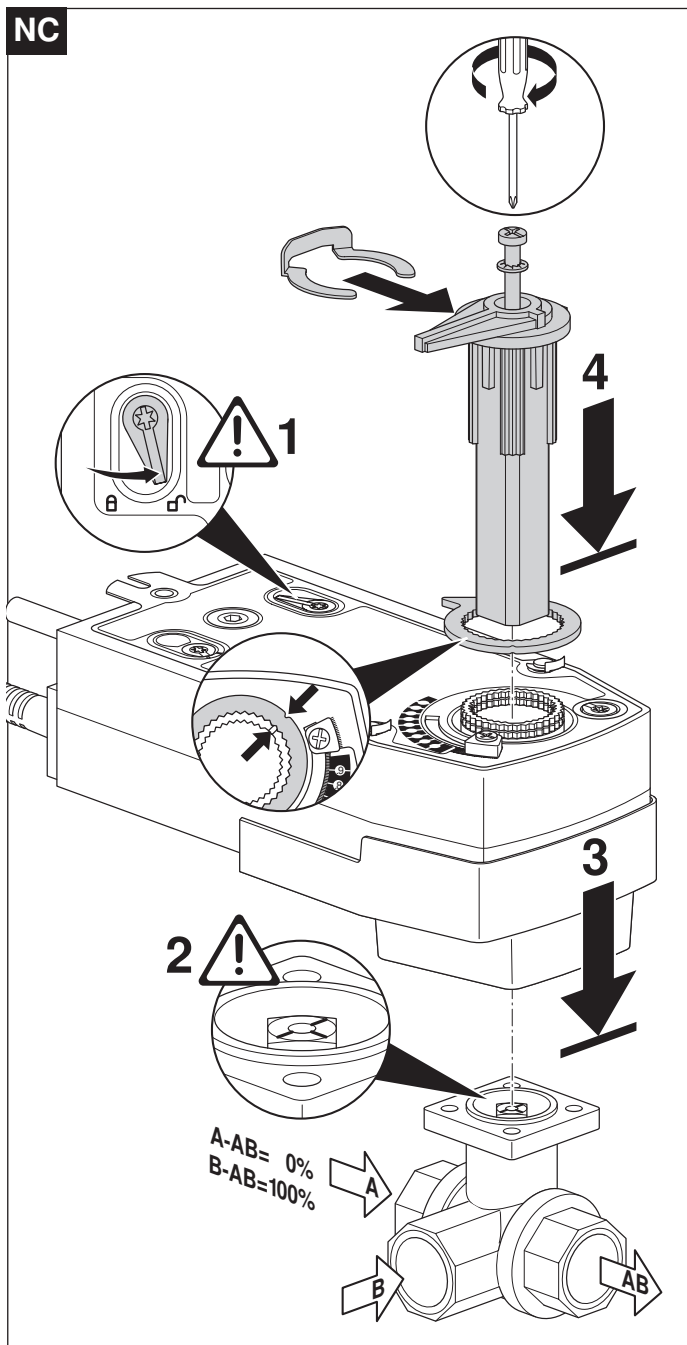
Dimensional drawings

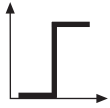


Further documentations

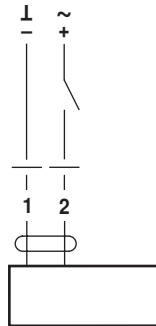
- Complete overview «The complete range of water solutions»
- Data sheets for ball valves
- Installation instructions for actuators and/or ball valves
- Notes for project planning (hydraulic characteristic curves and circuits, installation regulations, commissioning, maintenance etc.)

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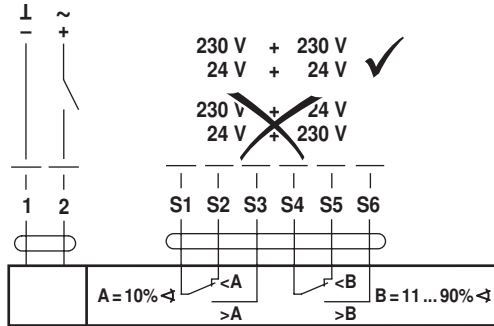




AC 24 V / DC 24 V



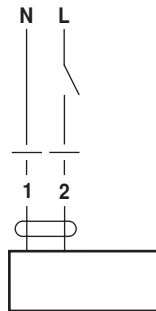
NRF24A(-O)
SRF24A(-O)



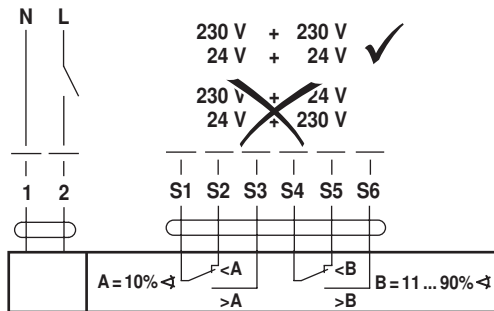
NRF24A-S2(-O)
SRF24A-S2(-O)

230 V + 230 V
24 V + 24 V ✓
~~230 V + 24 V~~
~~24 V + 230 V~~

AC 100 ... 240 V ⚠



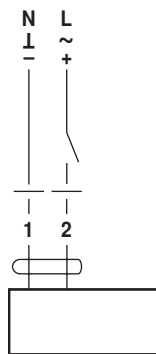
NRF230A(-O)
SRF230A(-O)



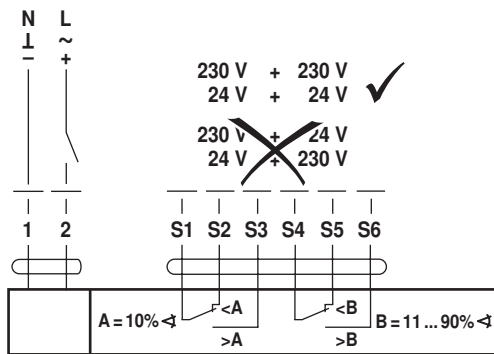
NRF230A-S2(-O)
SRF230A-S2(-O)

230 V + 230 V
24 V + 24 V ✓
~~230 V + 24 V~~
~~24 V + 230 V~~

AC 24 ... 240 V / DC 24 ... 125 V ⚠

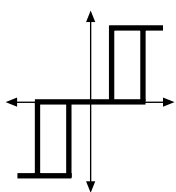


NRFA(-O)
SRFA(-O)

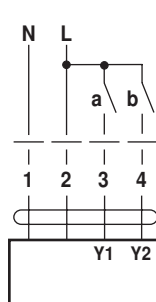


NRFA-S2(-O)
SRFA-S2(-O)

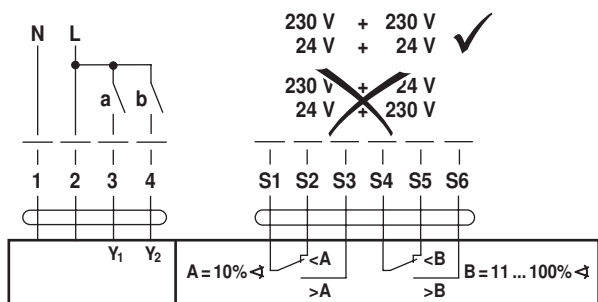
230 V + 230 V
24 V + 24 V ✓
~~230 V + 24 V~~
~~24 V + 230 V~~



AC 100 ... 240 V ⚠



NRF(D)230A-3(-O)
SRF230A-3(-O)



NRF(D)230A-3-S2(-O)
SRF230A-3-S2(-O)

230 V + 230 V
24 V + 24 V ✓
~~230 V + 24 V~~
~~24 V + 230 V~~

| | | NO | NC | |
|--------|--------|------|------|---------------|
| a (Y1) | b (Y2) | | | |
| | | | | A - AB = 100% |
| | | stop | stop | |
| | | | | A - AB = 0% |