

Auxiliary switch for damper actuators and rotary actuators

- Two switches (SPDT)
- Adjustable switching points
- PWIS/LABS-compliant according to VDMA 24364



Technical data

| | | |
|------------------------|--|---|
| Electrical data | Auxiliary switch | 2x SPDT, 0...100%, adjustable |
| | Switching capacity auxiliary switch | 1 mA...3 A (0.5 A inductive), DC 5 V...AC 250 V / 1 mA...0.5 A (0.2 A inductive; L/R = 3.4 ms), DC 5 V...DC 110 V |
| | Switching points auxiliary switch | Adjustable across the entire range of rotation 0...1 of the actuator. Presetting with scale possible. |
| | Connection auxiliary switch | Cable 1 m, 6 x 0.75 mm ² |
| Safety data | Protection class IEC/EN | II, reinforced insulation |
| | Protection class UL | II, reinforced insulation |
| | 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 |
| | Low voltage directive | CE according to 2014/35/EU |
| | Certification IEC/EN | IEC/EN 60730-1 and IEC/EN 60730-2-14 |
| | UL Approval | cULus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1 |
| | PWIS/LABS-conformity | According to VDMA 24364 (test class C1) Approved for use in zone II Cleaning with low-pressure plasma treatment |
| | Hygiene test | According to VDI 6022 Part 1 / SWKI VA 104-01, cleanable and disinfected, low emission |
| | Type of action | Type 1.B |
| | Rated impulse voltage auxiliary switch | 4 kV |
| | Pollution degree | 3 |
| | Ambient humidity | Max. 95% RH, non-condensing |
| Ambient temperature | -30...50°C [-22...122°F] | |
| Storage temperature | -10...40°C [14...104°F] | |
| Servicing | maintenance-free | |
| Weight | Weight | 0.26 kg |

Safety notes



- The device must not be used outside the specified field of application, especially not 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 with during installation.
- 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.
- Cables must not be removed from the device.
- 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.
- PWIS/LABS-conformity is guaranteed as long as the packaging is unopened. Once the PWIS/LABS-compliant packaging has been opened, the proper handling of the products is the responsibility of the customer. PWIS/LABS-conformity of unopened products is guaranteed for a period of one year after cleaning, provided they are handled properly, professionally and cleanly. Proof of proper, professional and clean handling is the responsibility of the purchaser. Ensure that the required cleanliness of the products is maintained. Do not touch the products with bare hands. Belimo accepts no liability for the consequences resulting from the contamination of a product caused by the customer.

Product features

- Operating mode** A carrier plate uses adaptation to make a positive fit on the shaft clamp (damper actuators) or on the position indication (rotary actuators) and transfers the position directly to the switching cams of the micro switches.
Switching points can be freely selected with an adjustment dial. The current switch position can be read off at any time.
- Application** The auxiliary switch unit is used for signaling the position or for exercising switching functions in any given angle setting.
- Simple direct mounting** The auxiliary switches are attached directly by the shaft clamp (damper actuators) or on the position indication (rotary actuators). The guiding grooves between the housing and the switch ensure a tightly sealing fit.

Accessories

| Mechanical accessories | Description | Type |
|------------------------|--|-------|
| | Adapter for auxiliary switch and feedback potentiometer, Multipack 20 pcs. | Z-SPA |

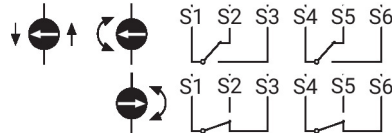
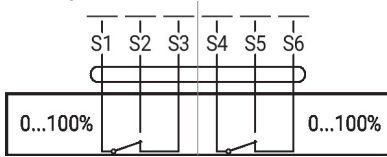
Electrical installation

- Wire colours:**
- S1 = violet
 - S2 = red
 - S3 = white
 - S4 = orange
 - S5 = pink
 - S6 = grey

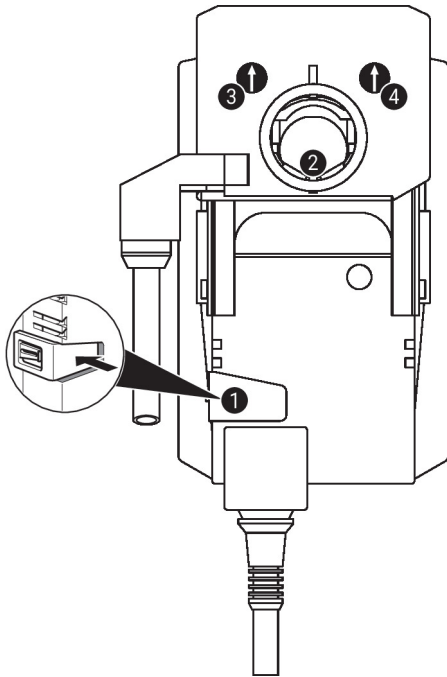
Electrical installation

Wiring diagrams

Auxiliary switch



Operating controls and indicators



Auxiliary switch settings



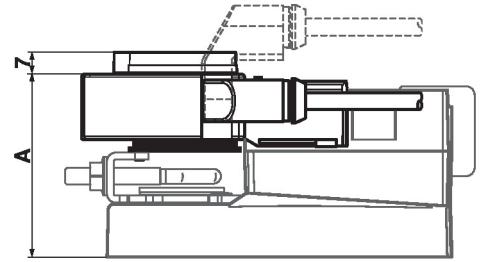
Note: Perform settings on the auxiliary switch only in deenergised state.

For the auxiliary switch position settings, carry out points ❶ to ❸ successively.

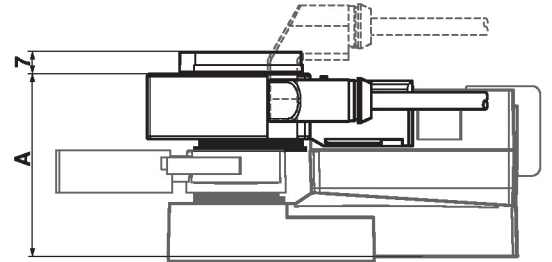
- ❶ **Manual override button**
Holding button pressed down (or fix): Gear train disengages.
Manual override is possible.
- ❷ **Shaft clamp**
Turn the shaft clamp of the actuator into the desired switching position of the auxiliary switch
- ❸ **Auxiliary switch - 1**
Turn rotary knob until the arrow points to the vertical line.
Turn the shaft clamp ❷ and consider the arrow direction of the auxiliary switch rotary knob at the same time.
The arrow direction always indicates the switching position (S1-S2 or S1-S3).
If the auxiliary switch should switch in the opposite direction, rotate the auxiliary switch rotary knob by 180°. Alternatively the switching position can be checked with a continuity tester on the cable of the auxiliary switch.
Release (or disengage) button ❶.
- ❹ **Auxiliary switch - 2**
Same procedure as for auxiliary switch 1 (step ❶ to ❸).

Dimensions

| | A | | A |
|-----------------|----|----------|----|
| TM..A., LM..A.. | 66 | LMQ..A.. | 80 |
| NM..A.. | 69 | NMQ..A.. | 83 |
| SM..A.. | 71 | SMQ..A.. | 89 |
| SMD..A.. | 71 | NKQ..A.. | 87 |
| GM..A.. | 78 | GK..A.. | 94 |



| | A | | A |
|-----------------|----|----------|----|
| TR..A., LR..A.. | 66 | LRQ..A.. | 80 |
| NR..A.. | 69 | NRQ..A.. | 83 |
| SR..A.. | 71 | GRK..A.. | 94 |
| GR..A.. | 78 | | |



| | A |
|----------|----|
| DR..A.. | 78 |
| DRK..A.. | 94 |

