



BN 31-RZ-1978-3

- 1 Reed kontakts
- Non-contact principle
- Actuation from side
- Flat design
- Actuating surface and direction of actuation marked by switch symbol
- 88 mm x 25 mm x 13 mm
- Thermoplastic enclosure
- Actuating distance up to 60 mm depending on actuating magnet and version

Data

Ordering data

EAN (European Article Number) 4030661127491

General data

| | |
|---------------------------|---------------------------------------|
| Active principle | Magnetic drive |
| Housing construction form | rectangular |
| Enclosure material | Glass-fibre, reinforced thermoplastic |
| Gross weight | 20 g |

General data - Features

| | |
|------------------------|-----|
| Latching | Yes |
| Suitable for elevators | Yes |

| | |
|----------------------------|---|
| Number of snap-in contacts | 1 |
|----------------------------|---|

Mechanical data

| | |
|--------------------------|-------------------------------|
| Actuating element | Magnet |
| Mechanical life, minimum | 1,000,000,000 Operations |
| Repeat accuracy R R | 0.3 mm |
| Actuating speed, maximum | 18 m/s |
| Mounting | Enclosure with mounting slots |

Mechanical data - Switching distances according IEC 60947-5-3

| | |
|-----------------------------|---|
| Notice (Switch distance Sn) | Actuating distance up to 60 mm depending on actuating magnet and version. The specified switching distances are applicable for the actuation of individually mounted components without ferromagnetic influence. A change of the distance, either positive or negative, is possible due to ferromagnetic influences. The mutual interference between multiple actuating magnets must be observed. |
|-----------------------------|---|

Mechanical data - Connection technique

| | |
|------------------------------|-------------------------------|
| Terminal Connector | Connector M8, 4-pole, A-coded |
| Wire cross-section | 0.75 mm ² |
| Wire cross-section | 18 AWG |
| Material of the Cable mantle | H03VV-F |

Mechanical data - Dimensions

| | |
|------------------|-------|
| Length of sensor | 13 mm |
| Width of sensor | 88 mm |
| Height of sensor | 25 mm |

Ambient conditions

| | |
|--|------------------------------|
| Degree of protection | IP67 to EN 60529 |
| Ambient temperature, minimum | -25 °C |
| Ambient temperature, maximum | +75 °C |
| Resistance to vibrations to EN 60068-2-6 | 10 ... 55 Hz, amplitude 1 mm |
| Resistance to shock | 30 g / 11 ms |

Electrical data

| | |
|-----------------------------|-------|
| Switching current, maximum | 3 A |
| Switching capacity, maximum | 80 W |
| Switching capacity, maximum | 80 VA |

Electrical data - Digital Output

| | |
|----------|---------------|
| Versions | Reed contacts |
|----------|---------------|

Scope of delivery

| | |
|----------------------|---------------------------------------|
| Included in delivery | Actuators must be ordered separately. |
|----------------------|---------------------------------------|

Accessory

| | |
|------------------------------|---------------|
| Recommendation (actuator) | BP 10 S |
| | 2x BP 10 S |
| | BP 15 S |
| | BP 34 S |
| | BP 20 S |
| | BP 31 S |
| | BP 11 S |
| | 2x BP 11 S |
| | BP 12 S |
| | BP 21 S |
| | 2x BP 21 S |
| | BP 10 N |
| | 2x BP 10 N |
| | BP 15 N |
| | 2 x BP 15/2 N |
| | 2x BP 15/2 S |
| | BP 34 N |
| | BP 20 N |
| | BP 31 N |
| | BP 11 N |

Notes

| | |
|----------------|--|
| Note (General) | <p>The opening and closing functions depend on the direction of actuation, the actuating magnets and the polarity of the actuating magnets.</p> <p>When the switches and actuators come together, the colours must coincide: Red (S) to red (S) and green (N) to green (N). This does not apply to the bistable contact.</p> <p>The switch is to be mounted on iron with a non-magnetic layer of at least 20 mm.</p> |
|----------------|--|

Schmersal, Inc., 15 Skyline Drive, Hawthorne, NY 10532

The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

Generated on: 11/9/2021, 8:58 AM