



## 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
- 2 reed contacts

## Data

### Ordering data

Product type description	BN 31-RZ-1978-3
Article number (order number)	101143265
EAN (European Article Number)	4030661127491
eCl@ss number, version 12.0	27-27-43-02
eCl@ss number, version 11.0	27-27-01-05
eCl@ss number, version 9.0	27-27-01-05
ETIM number, version 7.0	EC002544
ETIM number, version 6.0	EC002544

### General data

Working principle	Magnetic drive
Housing construction form	rectangular
Housing 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
Actuating speed, maximum	18 m/s
Mounting	Enclosure with mounting slots

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

Note (Switching distance $S_n$ )	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.
Repeat accuracy R	0.3 mm

### Mechanical data - Connection technique

Termination	Connector M8, 4-pole, Latching interlocking
Wire cross-section	0.75 mm <sup>2</sup>
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
Ambient temperature	-25 ... +75 °C
Resistance to vibrations	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

## Electrical data - Digital Output

Design of control elements	Reed contacts
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## Scope of delivery

Scope of delivery	Actuator must be ordered separately.
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## 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

## Note

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>
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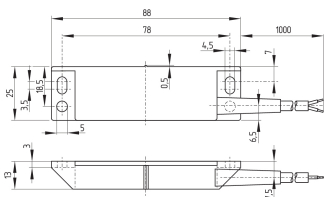
## Pictures

### Product picture (catalogue individual photo)



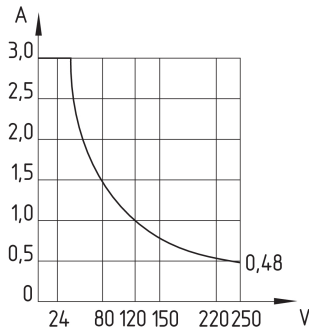
ID: kbn31f03  
 | 97.9 kB | .jpg | 352.778 x 97.719 mm - 1000 x 277 px - 72 dpi  
 | 12.8 kB | .png | 74.083 x 20.461 mm - 210 x 58 px - 72 dpi

### Dimensional drawing basic component



ID: kbn31g05  
 | 97.4 kB | .jpg | 352.778 x 210.608 mm - 1000 x 597 px - 72 dpi

## Characteristic curve



ID: kbn32d03

| 3.1 kB | .png | 73.731 x 77.964 mm - 209 x 221 px - 72 dpi

| 116.4 kB | .jpg | 352.425 x 371.828 mm - 999 x 1054 px - 72 dpi

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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.

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