



**EN** Operating instructions. . . . .pages 1 to 2  
Original

**Technical data**

Enclosure:	glass-fibre reinforced thermoplastic
Operating principle:	magnetic
Actuating magnet:	BP 6 S, BP 7 S, BP 10, BP 10 S, BP 15 S, 2 x BP 15 S, BP 34 S, 2 x BP 34 S, BP 20 S, BP 20 S, BP 31 S, BP 11 S, BP 12 S (not included in delivery)
Protection class:	IP67 to IEC 60529
Ambient temperature:	
- Storage temperature:	-25 °C ... +75 °C
Electrical connection:	Cable LiYY 2 x 0.25 mm <sup>2</sup> , 1 m
Switching voltage:	
- BN 80-RZ:	max. 200 VAC/DC
- BN 80-10Z/01Z:	max. 250 VAC/DC
Switching current:	
- BN 80-RZ:	max. 1.5 A
- BN 80-10Z/01Z:	max. 0.5 A
Switching capacity:	
- BN 80-RZ:	max. 30 VA, W
- BN 80-10Z/01Z:	max. 10 VA, 8 W
Sparkover voltage:	> 450 VAC (50 Hz)
Switching time "Close":	max. 2 ms
Switching time "Open":	max. 0.07 ms
Bounce duration:	max. 0.5 ms
Mechanical life:	1000000000 operations
Electrical life:	5,000,000 operations depending on load
Resistance to vibration:	15 g on sine wave oscillation



Further technical information can be found in the Schmersal catalogues or in the online catalogue on the Internet: [www.schmersal.net](http://www.schmersal.net).



The currently valid declaration of conformity can be downloaded from the internet at [www.schmersal.net](http://www.schmersal.net).

**Product description**

The magnetic reed switch has been developed for situations in which minimal clearance is available. Despite its compact dimensions, its switching capacity is sufficient to switch a relay.

The NC or NO function depends on the actuating direction and the polarity of the actuating magnet. The actuators for the magnetic safety sensors must be ordered separately.

**Ordering code**

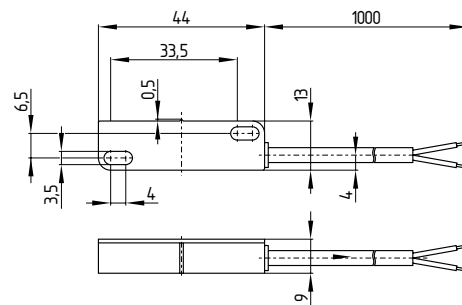
This operating instructions manual applies to the following types:

**BN 80-①Z**

No.	Option	Description
①	01	1 NC
	10	1 NO
	R	1 bistable contact

**Dimensions (in mm)**

Magnetic reed switches BN 80



### Mounting

Actuating distance up to 60 mm depending on version and actuating magnet.



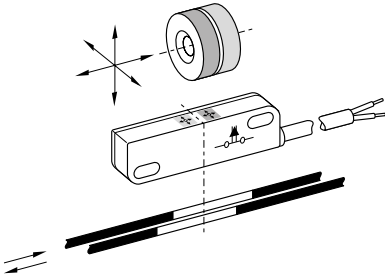
The user must observe the country-specific installation standards as well as all prevailing safety regulations and accident prevention rules.



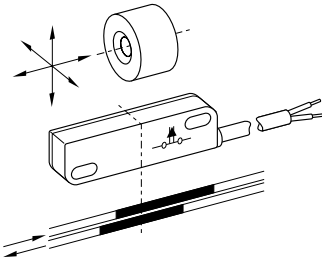
The electrical connection may only be carried out by authorised personnel in a de-energised condition.

### Actuation and switching distances

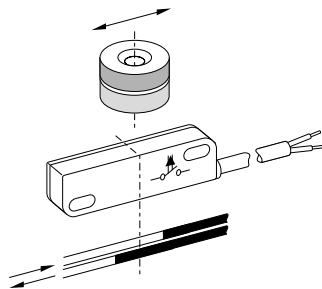
1 NC contact BN 80-01Z with N-S actuating magnet



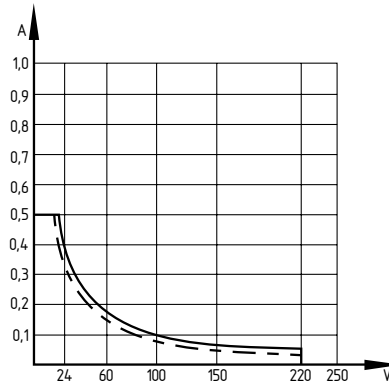
1 NO contact BN 80-10Z with N-S actuating magnet



1 bistable contact BN 80-RZ with N actuating magnet



### Switching capacity



### Switching distance

BN 80-01Z	up to 20 mm
BN 80-10Z	up to 32 mm
BN 80-RZ	up to 60 mm

### Disassembly and disposal

#### Disassembly

The switch must be disassembled in a de-energised condition only.

#### Disposal

The switch must be disposed of in an appropriate manner in accordance with the national prescriptions and legislations.

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