

Datasheet - BN 80-RZ

Magnetic reed switch / BN 80



(Minor differences between the printed image and the original product may exist!)

- Non-contact principle
- 1 Reed kontakts
- Long life
- Flat design
- Actuating distance up to 60 mm depending on actuating magnet and version
- 44 mm x 13 mm x 9 mm
- Thermoplastic enclosure
- Actuating surface marked by protrusion


Ordering details

Product type description	BN 80-RZ
Article number	101139647
EAN code	4030661282176

Approval

Approval	-
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Global Properties

Product name	BN 80
Standards	-
Compliance with the Directives (Y/N) 	Yes
suitable for elevators (Y/N)	No
Active principle	Magnetic drive
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic
- Material of the cable mantle	PVC
- Material of the active surface	Plastic
Housing construction form	Block
Weight	26 g
Recommended actuator	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 31 S, BP 11 S, BP 12 S

Mechanical data

Design of electrical connection	Cable
Cable length	1 m
Conductors	2 x 0,25 mm ²
AWG-Number	23
Mechanical life	1.000.000.e+9 operations
Electrical lifetime	5.000.000 operations
Actuating planes	Actuation from side
Active area	lateral

Switch distance S _n	0 mm ... 60 mm BP 6S = 4 ... 18 mm BP 7S = 6 ... 22 mm BP 10 = 2 ... 9 mm BP 10S = 10 ... 30 mm 2 x BP 10 = 2 ... 13 mm 2 x BP 10S = 12 ... 36 mm BP 15S = 12 ... 30 mm 2 x BP 15S = 13 ... 38 mm BP 34S = 20 ... 50 mm 2 x BP 34S = 22 ... 60 mm BP 20S = 10 ... 38 mm BP 31S = 12 ... 40 mm BP 11S = 10 ... 30 mm BP 12S = 10 ... 34 mm
- notice	Actuating distance up to 60 mm depending on actuating magnet and version
Type of actuation	Magnet
restistance to shock	15 g, on sine wave oscillation
resistant to vibration	15 g, on sine wave oscillation
Bounce duration	max. 0,5 ms
Latching (Y/N)	Yes

Ambient conditions

Ambient temperature	
- Min. environmental temperature	-25 °C
- Max. environmental temperature	+75 °C
Protection class	IP67

Electrical data

Design of control element	bistable contact
Number of snap-in contacts	1
Switching time - Close	max. 2 ms
Switching time - Open	max. 0,07 ms
Voltage type	VAC/DC
Dielectric strength	> 450 VAC (50 Hz)
Switching voltage	max. 250 VAC/DC
Switching current	max. 0,5 A
Switching capacity	max. 10 VA, 8 W

Outputs

Design of control output	Reed kontakts
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LED switching conditions display

LED switching conditions display (Y/N)	No
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ATEX

Explosion protection categories for gases	None
Explosion protected category for dusts	None

Dimensions

Dimensions of the sensor

- Width of sensor	44 mm
- Height of sensor	13 mm
- Length of sensor	9 mm

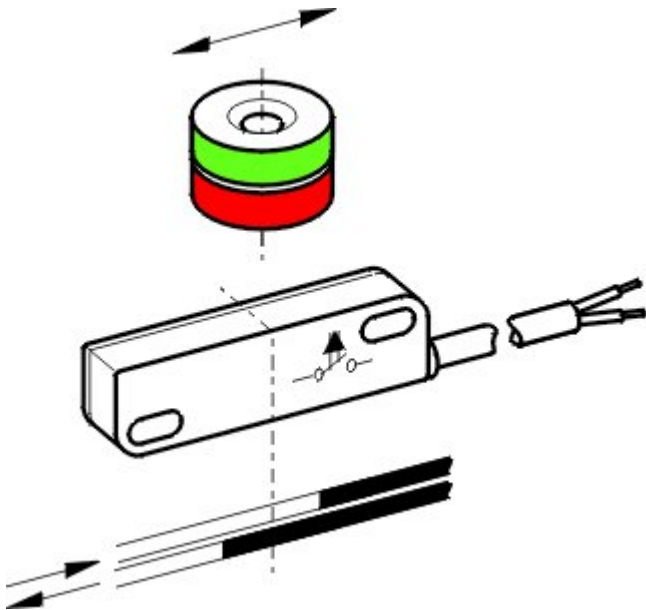
notice

The opening and closing functions depend on the direction of actuation, the actuating magnets and the polarity of the actuating magnets.






Included in delivery

Actuators must be ordered separately.

Diagram



Note Diagram

-  positive break NC contact
-  active
-  no active
-  Normally-open contact
-  Normally-closed contact

Documents

Declaration of conformity (en) 118 kB, 26.02.2014

Code: __bn_p01_en

Declaration of conformity (de) 188 kB, 10.07.2012

Code: __bn_p01

notice - Switch distance (de) 36 kB, 07.08.2009

Code: s_bnbsp01

notice - Switch distance (nl) 39 kB, 07.08.2009

Code: s_bnbsp04

notice - Switch distance (en) 42 kB, 07.08.2009

Code: s_bnbsp02

notice - Switch distance (fr) 41 kB, 07.08.2009

Code: s_bnbsp03

notice - Switch distance (pt) 39 kB, 07.08.2009

Code: s_bnbsp10

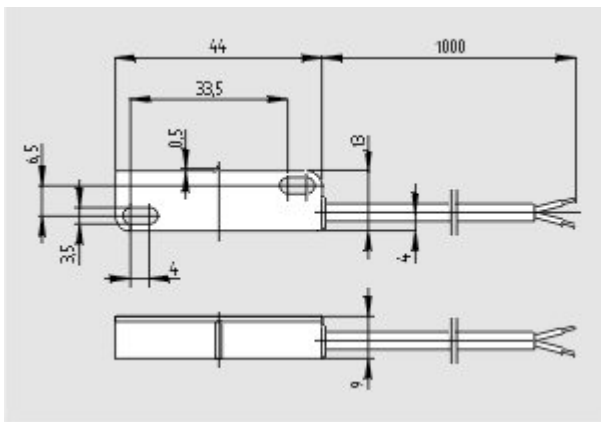
notice - Switch distance (it) 40 kB, 07.08.2009

Code: s_bnbsp05

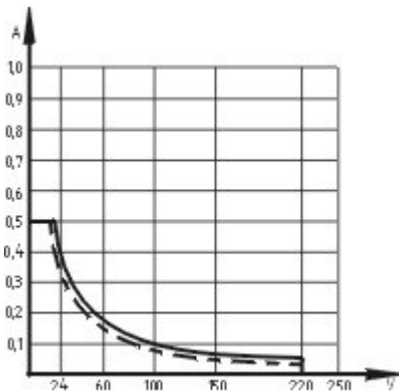
notice - Switch distance (es) 38 kB, 07.08.2009

Code: s_bnbsp09

Images



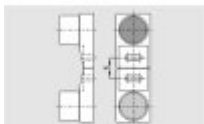
Dimensional drawing (basic component)



Characteristic curve

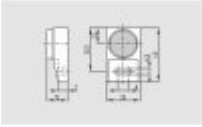
System components

Actuator



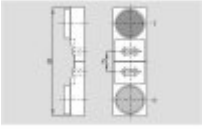
101059916 - BP 12

- Al-metal housing
- S-pole marked red
- N-pole marked green
- Suitable for mounting on ferrous material



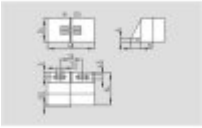
101057533 - BP 11 S

- Al-metal housing
- S-pole marked red
- Suitable for mounting on ferrous material



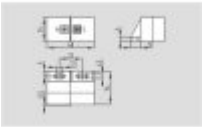
101059922 - BP 11

- Al-metal housing
- S-pole marked red
- N-pole marked green
- Suitable for mounting on ferrous material



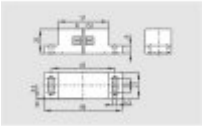
101057521 - BP 31 S

- thermoplastic enclosure
- S-pole marked red
- Suitable for mounting on ferrous material with a distance of 20 mm



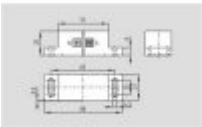
101057530 - BP 31

- thermoplastic enclosure
- S-pole marked red
- N-pole marked green
- Suitable for mounting on ferrous material with a distance of 20 mm



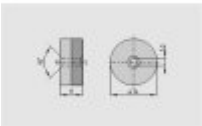
101057541 - BP 20 S

- Al-metal housing
- S-pole marked red
- Suitable for mounting on ferrous material with a distance of 20 mm



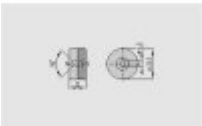
101057549 - BP 20

- Al-metal housing
- S-pole marked red
- N-pole marked green
- Suitable for mounting on ferrous material with a distance of 20 mm



101057553 - BP 34

- thermoplastic enclosure
- S-pole marked red
- N-pole marked green
- Suitable for mounting on ferrous material with a distance of 25 mm



101060163 - BP 15

- thermoplastic enclosure
- N-pole marked green
- S-pole marked red
- Suitable for mounting on ferrous material with a distance of 18 mm



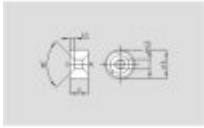
101057531 - BP 10

- Unenclosed
- Colour coding of poles by labels



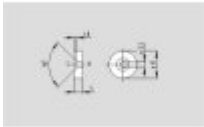
101054816 - BP 8

- Unenclosed
- S-pole marked red



101125556 - BP 7

- Unenclosed
- S-pole marked red



101091837 - BP 6

- Unenclosed
- S-pole marked red

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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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