

Datasheet - BN 80-10Z

Magnetic reed switch / BN 80



Preferred typ



(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 80-10Z |
| Article number | 101055844 |
| EAN code | 4030661010021 |

Approval

| | |
|----------|---|
| Approval | - |
|----------|---|

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 | 25 g |
| Recommended actuator | BP 8, BP 10, 2 x BP 10, BP 15, 2 x BP 15, 2 x BP 34, BP 20, BP 31, BP 11, BP 12 |

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 ... 32 mm BP 8 = 3 ... 8 mm BP 10 = 6 ... 12 mm 2 x BP 10 = 12 ... 20 mm BP 15 = 8 ... 14 mm 2 x BP 15 = 12 ... 22 mm 2 x BP 34 = 12 ... 26 mm BP 20 = 12 ... 24 mm BP 31 = 12 ... 24 mm BP 11 = 22 ... 28 mm BP 12 = 24 ... 32 mm |
| - notice | Actuating distance up to 32 mm depending on actuating magnet and version |
| Type of actuation | Magnet |
| resistance 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) | No |

Ambient conditions

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

Electrical data

| | |
|---------------------------|-------------------|
| Design of control element | Opener (NC) |
| Number of shutters | 1 piece |
| Number of openers | 0 piece |
| Switching time - Close | max. 2 ms |
| Switching time - Open | - |
| 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 |
|--------------------------|---------------|

LED switching conditions display

| | |
|--|----|
| LED switching conditions display (Y/N) | No |
|--|----|

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 |

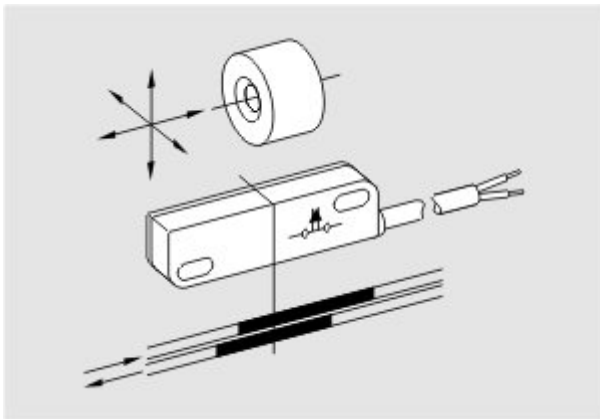
notice

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 (de) 188 kB, 10.07.2012

Code: __bn_p01

notice - Switch distance (de) 36 kB, 07.08.2009

Code: s_bnsp01

notice - Switch distance (nl) 39 kB, 07.08.2009

Code: s_bnsp04

notice - Switch distance (en) 42 kB, 07.08.2009

Code: s_bnsp02

notice - Switch distance (fr) 41 kB, 07.08.2009

Code: s_bnsp03

notice - Switch distance (pt) 39 kB, 07.08.2009

Code: s_bnsp10

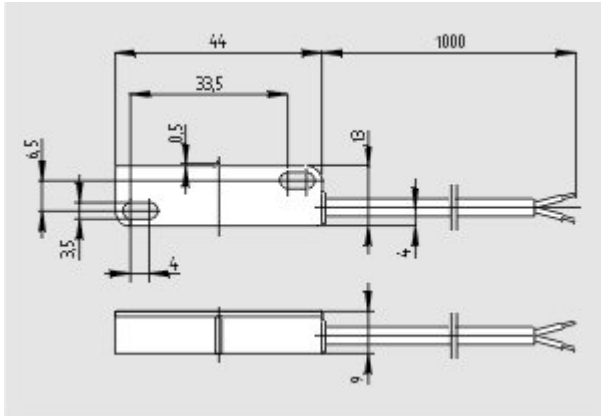
notice - Switch distance (it) 40 kB, 07.08.2009

Code: s_bnbsp05

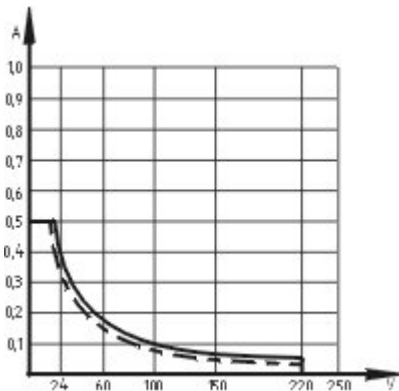
notice - Switch distance (es) 38 kB, 07.08.2009

Code: s_bnbsp09

Images



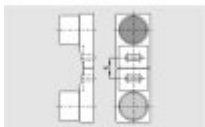
Dimensional drawing (basic component)



Characteristic curve

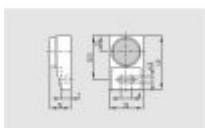
System components

Actuator



101059916 - BP 12

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

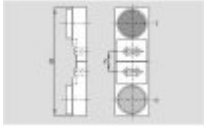


101057533 - BP 11 S

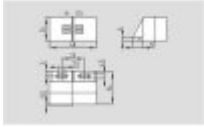
- Al-metal housing
 - S-pole marked red
 - Suitable for mounting on ferrous material
-

101059922 - BP 11

- Al-metal housing

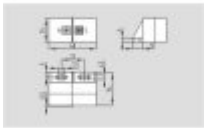


- S-pole marked red
- N-pole marked green
- Suitable for mounting on ferrous material



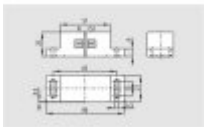
101057521 - BP 31 S

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



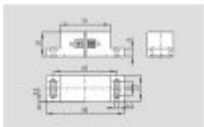
101057530 - BP 31

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



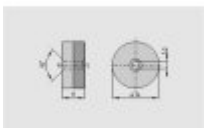
101057541 - BP 20 S

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



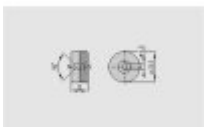
101057549 - BP 20

- 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



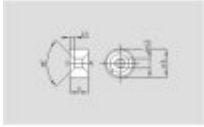
101057531 - BP 10

- Unenclosed
- Colour coding of poles by labels



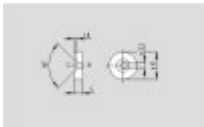
101054816 - BP 8

- Unenclosed
- S-pole marked red



101125556 - BP 7

- Unenclosed
- S-pole marked red



101091837 - BP 6

- Unenclosed
- S-pole marked red

K.A. Schmersal GmbH & Co. KG, Mödinghofe 30, D-42279 Wuppertal

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

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Image

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