Datasheet - BN 65-10Z/1V

Magnetic reed switch / BN 65





- · With pre-wired cable
- Non-contact principle
- Long life
- · Actuation from front
- · without bias magnet
- Actuating surface and direction of actuation marked by switch symbol
- Construction form Ø 13 mm
- · Thermoplastic enclosure
- Actuating distance up to 60 mm depending on actuating magnet and version
- · with central mounting

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

Ordering details

Product type description

Article number

EAN code

BN 65-10Z/1V 101057096

Approval

Approval



Global Properties

Product name

Standards

Compliance with the Directives (Y/N) C
suitable for elevators (Y/N)

Mounting

Active principle

Materials

- Material of the housings
- Material of the cable mantle

Housing construction form

Weight

Recommended actuator

BN 65

_

Yes No

central with threated flange

Magnetic drive

Plastic, glass-fibre reinforced thermoplastic

H03VV-F

cylinder smooth

70 g

BP 10S, 2 x BP 10S, BP 15S, BP 34S, BP 20S, BP 31S, BP 11S, 2 x BP 11S, BP 12S, 2 x BP 12S, BP 21S, 2 x BP 21S, BP 22S, 2 x BP 22S, BE 20S

Mechanical data

Switch distance Sn

Type of actuation

restistance to shock

resistant to vibration

Bounce duration

bias magnet (Y/N)

Latching (Y/N)

Resistance to vibration

Design of electrical connection

Cable length 1 m

Conductors 2 x 0,75 mm²

AWG-Number

Mechanical life 1.000.000.e+9 operations

Electrical lifetime 1.000.000 operations ... 1.000.000.e+9 operations operations

Switching frequency max. 300/s front side Actuating planes Active area front side

notice Actuating distance up to 55 mm depending on actuating magnet and

5 mm ... 55 mm

Cable

version

BP 10S = 5 mm 2 x BP 10S = 10 mm BP 15S = 6 mm BP 34S = 20 mm BP 20S = 15 mm BP 31S = 15 mm BP 11S = 5 mm 2 x BP 11S = 15 mm BP 12S = 10 mm 2 x BP 12S = 25 mm BP 21S = 30 mm

2 x BP 21S = 20 ... 55 mm

BP 22S = 25 mm

2 x BP 22S = 15 ... 55 mm BE 20S = 6 mm mm

Magnet

30 g, on sine wave oscillation 30 g, on sine wave oscillation 10 ... 55 Hz, Amplitude 1 mm

0,3 ms ... 0,6 ms

No No

Tightening torque for nuts A/F 22 max. 300 Ncm

Actuating speed max. 18 m/s Switching point accuracy ± 0,25 mm

Ambient conditions

Ambient temperature

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

Electrical data

Design of control element Normally open contact (NO)

Number of shutters 1 piece Number of openers 0 piece

Switching time - Close 0,3 ms - 1.5 ms

Switching time - Open

Dielectric strength > 600 VAC (50 Hz) Switching voltage max. 250 VAC Switching current max. 3 A

Switching capacity max. 120 VA / W

Outputs

Design of control output	Reed contakts
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

- Length of sensor 103 mm

- Diameter of sensor 13 mm

notice

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

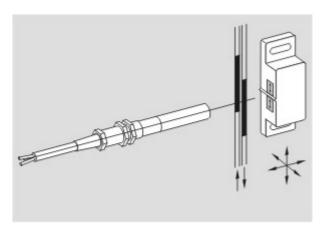
When the switches and actuators come together, the colours must coincide: Red (S) to red (S) and green (N) to green (N).

This does not apply to the bistable contact.

Included in delivery

Actuators must be ordered separately.

Diagram



Note Diagram

⊖ positive break NC contact





o-__-o Normally-open contact

o----- 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_bnsp01

notice - Switch distance (nl) 39 kB, 07.08.2009

Code: s_bnsp04

notice - Switch distance (fr) 41 kB, 07.08.2009

Code: s_bnsp03

notice - Switch distance (pt) 39 kB, 07.08.2009

Code: s_bnsp10

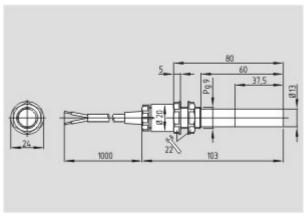
notice - Switch distance (it) 40 kB, 07.08.2009

Code: s_bnsp05

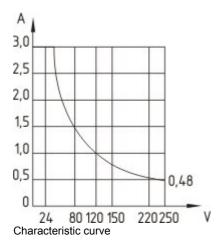
notice - Switch distance (es) 38 kB, 07.08.2009

Code: s_bnsp09

Images

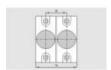


Dimensional drawing (basic component)



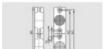
System components

Actuator



101057546 - BP 2x22/2 N(S)

- · Zn-metal housing
- N-pole marked green
- S-pole marked red
- 33% magnetic force
- Suitable for mounting on ferrous material
- Can be used as N or S magnet



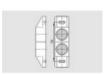
101057432 - BP 22 N (S)

- Zn-metal housing
- · S-pole marked red
- N-pole marked green
- · Suitable for mounting on ferrous material
- Can be used as N or S magnet



101059927 - BP 2x21 S

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



101059928 - BP 2x21 N

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



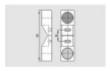
101057534 - BP 21 S

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



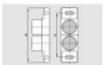
101057536 - BP 21 N

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

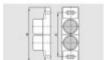


101059921 - BP 21

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

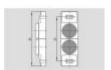


- Al-metal housing
- · S-pole marked red
- Suitable for mounting on ferrous material



101059925 - BP 2x12 N

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



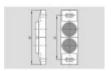
101059917 - BP 12 N

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



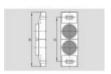
101059916 - BP 12

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



101059930 - BP 2x11 S

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



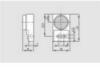
101059929 - BP 2x11 N

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



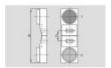
101057533 - BP 11 S

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



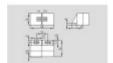
101059923 - BP 11 N

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



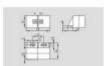
101059922 - BP 11

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



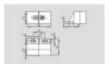
101057521 - BP 31 S

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



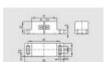
101057520 - BP 31 N

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



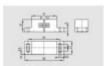
101057530 - BP 31

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



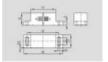
101057541 - BP 20 S

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



101057538 - BP 20 N

- · Al-metal housing
- N-pole marked green
- 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 lables

K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, D-42279 Wuppertal The data and values have been checked throroughly. Technical modifications and errors excepted. Generiert am 20.08.2014 - 00:27:02h Kasbase 2.2.18.F DBI



Image et=sS