Datasheet - BN 32-11R

Magnetic reed switch / BN 32







- · Non-contact principle
- 1 Reed contakts
- · Long life
- Actuating surface and direction of actuation marked by switch symbol
- 85 mm x 26 mm x 24 mm
- Thermoplastic enclosure
- Actuating distance up to 55 mm depending on actuating magnet and version
- · Spade connector

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

Ordering details

Product type description BN 32-11R 101057243 Article number EAN code 4030661025520

Approval

Approval

Global Properties

Product name BN 32

Standards

Compliance with the Directives (Y/N) $\zeta \in$ suitable for elevators (Y/N) No

Active principle

- Material of the housings

- Material of the active surface

Housing construction form

Weight

Materials

Recommended actuator

Yes

Magnetic drive

Plastic, glass-fibre reinforced thermoplastic

Plastic Block

62 g

BP 10 N, BP 10 S, 2 x BP 10 N, 2 x BP 10 S, BP 15 N, BP 15 S, 2 x BP 15/2 N, 2 x BP 15/2 S, BP 34 N, BP 34 S, BP 20 N, BP 20 S, BP 31 N, BP 31 S, BP 11 N, BP 11 S, 2 x BP 11 N, 2 x BP 11 S, BP 12 N, BP 12 S, 2 x BP 12 N, 2 x BP 12 S, BP 21 N, BP 21 S, 2 x BP 21 N, 2 x BP 21 S, BE 20 N. BE 20 S

Mechanical data

Design of electrical connection Flat plug-in connector 4.8 mm

Mechanical life 1.000.000.e+9 operations

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

lateral

Switching frequency max. 200/s

Actuating planes Actuation from side

Active area

Switch distance Sn

BP 10N = 10 mm BP 10S = 10 mm 2 x BP 10N = 15 mm 2 x BP 10S = 15 mm

5 mm ... 55 mm

BP 15N = 12 mm BP 15S = 12 mm 2 x BP 15/2N = 17 mm

2 x BP 15/2S = 17mm BP 34N = 10 ... 25mm BP 34S = 10 ... 25 mm

BP 20N = 5 ... 20 mm BP 20S = 5 ... 20 mm

BP 31N = 5 ... 20 mm BP 31S = 5 ... 20 mm BP 11N = 10 mm

BP 11S = 10 mm 2 x BP 11N = 20 mm 2 x BP 11S = 20 mm BP 12N = 15 mm

BP 12S = 15 mm 2 x BP 12N = 10 ... 25 mm 2 x BP 12S = 10 ... 25 mm BP 21N = 15 ... 40 mm

BP 21S = 15 ... 40 mm 2 x BP 21N = 20 ... 55 mm 2 x BP 21S = 20 ... 55 mm

BE 20N = 15 mm BE 20S = 15 mm

mm

Actuating distance up to 55 mm depending on actuating magnet and

version

Magnet

restistance to shock -

resistant to vibration 15 g, on sine wave oscillation

Bounce duration 0,3 ms ... 0,6 ms

Latching (Y/N) Y

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

Ambient conditions

- notice

Type of actuation

Ambient temperature

- Min. environmental temperature -25 °C
- Max. environmental temperature +90 °C
Protection class IP67

Electrical data

Design of control element Normally open contact (NO) / Opener (NC)

Number of snap-in contacts-change-over contact

 $\begin{array}{lll} \mbox{Switching time - Close} & 0.3 \mbox{ ms} \dots 1.5 \mbox{ ms} \\ \mbox{Switching time - Open} & \mbox{max. 0,5 ms} \\ \end{array}$

Voltage type VAC

Dielectric strength > 350 VAC (50 Hz)
Switching voltage max. 220 VAC
Switching current max. 1 A
Switching capacity max. 60 VA/W

No

Outputs

Design of control output Reed contakts

LED switching conditions display

LED switching conditions display (Y/N)

ATEX

Explosion protection categories for gases

None
Explosion protected category for dusts

None

Dimensions

Dimensions of the sensor

- Width of sensor
 - Height of sensor
 - Length of sensor
 24 mm

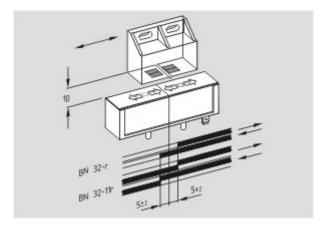
notice

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



no active

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 (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

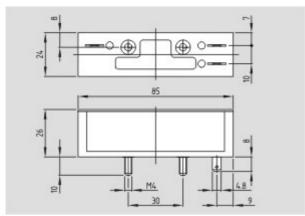
notice - Switch distance (it) 40 kB, 07.08.2009

Code: s_bnsp05

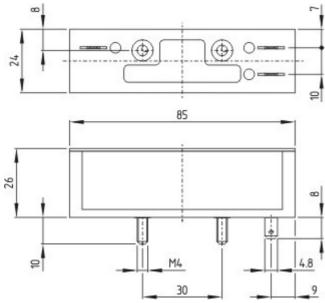
notice - Switch distance (es) 38 kB, 07.08.2009

Code: s_bnsp09

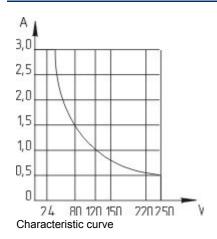
Images

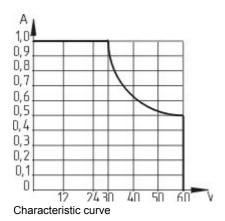


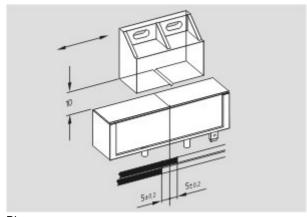
Dimensional drawing (basic component)



Dimensional drawing (basic component)







Diagram

System components

Actuator



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



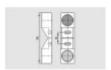
101057534 - BP 21 S

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



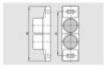
101057536 - BP 21 N

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



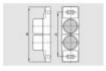
101059921 - BP 21

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



101059926 - BP 2x12 S

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

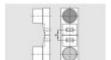


101059925 - BP 2x12 N

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

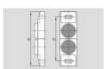
101059917 - BP 12 N

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



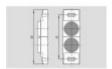
101059916 - BP 12

- · 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



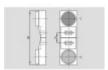
101057533 - BP 11 S

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



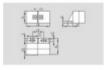
101059923 - BP 11 N

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



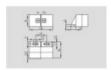
101059922 - BP 11

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



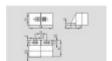
101057521 - BP 31 S

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



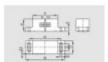
101057520 - BP 31 N

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



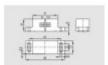
101057530 - BP 31

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



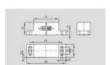
101057541 - BP 20 S

- 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



101060165 - BP 15/2

- Unenclosed
- Polarity stamped in
- Suitable for mounting on ferrous material with a distance of 18 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

 $\hbox{K.A. Schmersal GmbH \& Co. KG, M\"{o}ddinghofe 30, D-42279 Wuppertal}\\$ The data and values have been checked throroughly. Technical modifications and errors excepted. Generiert am 19.08.2014 - 04:58:49h Kasbase 2.2.18.F DBI

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