### Datasheet - BN 65-01Z/V

Magnetic reed switch / BN 65













exist!)

(Minor differences between the printed image and the original product may

- · With pre-wired cable
- · Non-contact principle
- · Long life
- · Actuation from front
- Actuating surface and direction of actuation marked by switch symbol
- · with bias magnet
- Construction form Ø 13 mm
- Thermoplastic enclosure
- · Actuating distance up to 60 mm depending on actuating magnet and version
- · with central mounting

## **Ordering details**

Product type description BN 65-01Z/V Article number 101055831 **EAN Code** 4030661009872 eCl@ss 27-27-01-04

## **Approval**

Approval



## **Global Properties**

Permanent light

Standards

Compliance with the Directives (Y/N) € €

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 Yes

central with threated flange

Magnetic drive

Plastic, glass-fibre reinforced thermoplastic

H03VV-F

cylinder smooth

65

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

- Lift switchgear

BP 10, 2 x BP 10, BP 15, BP 34

#### **Mechanical data**

Cable Design of electrical connection

Cable length Conductors 2 x 0,75

AWG-Number

1.000.000.000 operations Mechanical life

Electrical lifetime 1.000.000 ... 1.000.000.000 operations

Switching frequency 300/ Actuating planes

front side Switch distance 5 ... 55

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

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

BP 22S = 25 mm

BP 21S = 30 mm

2 x BP 22S = 15 ... 55 mm

BE 20S = 6 mm

Actuating distance up to 55 mm depending on actuating magnet and

The specifications with regard to the switching distances apply to the actuation of the individually mounted devices without ferromagnetic influence. Any change of the

distance, positive either negative, is possible due to ferromagnetic interference. When multiple actuating magnets are used, the mutual

interference must be observed.

Type of actuation Magnet

restistance to shock 30 g, on sine wave oscillation resistant to vibration 30 g, on sine wave oscillation Resistance to vibration 10 ... 55 HZ, Amplitude 1 mm

Bounce duration 0,3 ... 0,6; 3

Latching (Y/N) No bias magnet (Y/N) Yes Tightening torque for nuts 22 300 Actuating speed 18

## **Ambient conditions**

Switching point accuracy

- notice

Ambient temperature

- Min. environmental temperature -25 - Max. environmental temperature +75

Protection class IP67 to IEC/EN 60529

### **Electrical data**

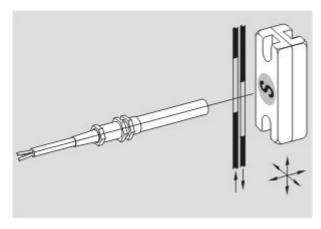
Design of control element

Opener (NC)

± 0,25 mm

Number of shutters	0
Number of openers	1
Switching time - Close	-
Switching time - Open	0,5
Switch frequency	< 300
Dielectric strength	> 600 (50 )
Switching voltage	250
Switching current	3 A
Switching capacity	120 /
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
- Diameter of sensor	13
notice	
	n of actuation, the actuating magnets and the polarity of the actuating magnets. urs must coincide: Red (S) to red (S) and green (N) to green (N).
notice	The switch is to be mounted on iron with a non-magnetic layer of at least 20 mm.
Included in delivery	
Actuators must be ordered separately.	

Diagram



Note Diagram

opositive break NC contact

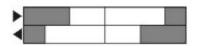
 $^{\scriptsize\textcircled{\scriptsize\textbf{1}}}_{\rm active}$ 

no active

----o Normally-open contact

o-t---o Normally-closed contact

## Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open

Setting range

(L) Break point

Positive opening sequence/- angle **VS** adjustable range of NO contact

VÖ adjustable range of NC contact

N after travel

### **Documents**

Declaration of conformity (en) 186 kB, 12.07.2018

Code: \_\_bn\_p01\_en

Declaration of conformity (de) 102 kB, 08.06.2016

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

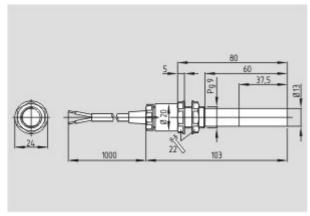
notice - Switch distance (it) 40 kB, 07.08.2009

Code: s\_bnsp05

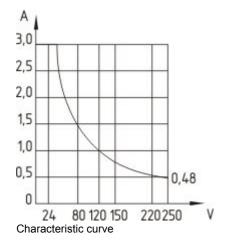
notice - Switch distance (es) 38 kB, 07.08.2009

Code: s\_bnsp09

### **Images**

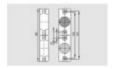


Dimensional drawing (basic component)



# **System components**

## **Actuator**



## 101057432 - BP 22 N (S)

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

## 101057534 - BP 21 S

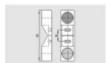
- -metal housing
- S-pole marked red
- Suitable for mounting on ferrous material





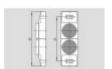
#### 101057536 - BP 21 N

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



#### 101059921 - BP 21

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



### 101059917 - BP 12 N

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



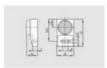
## 101059916 - BP 12

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



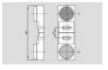
### 101057533 - BP 11 S

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



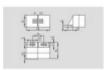
### 101059923 - BP 11 N

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



### 101059922 - BP 11

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



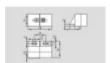
### 101057521 - BP 31 S

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



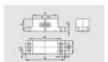
#### 101057520 - BP 31 N

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



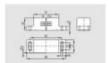
### 101057530 - BP 31

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



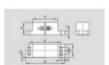
### 101057541 - BP 20 S

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



#### 101057538 - BP 20 N

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



### 101057549 - BP 20

- · -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 13.02.2019 - 13:12:08h Kasbase 3.3.0.F.64l