13.02.2019

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Datasheet - BN 65-01Z

Magnetic reed switch / BN 65

X Preferred typ



- · With pre-wired cable
- Non-contact principle
- Long life
- Actuation from side
- Actuating surface and direction of actuation marked by switch symbol

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- 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

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

Ordering details

BN 65-01Z	
101055796	
4030661009476	
27-27-01-04	
	101055796 4030661009476

Approval

Approval



Global Properties

Permanent light Standards	BN 65 -
Compliance with the Directives (Y/N) CE	Yes
suitable for elevators (Y/N)	Yes
Mounting	central with threated flange
Active principle	Magnetic drive
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic
- Material of the cable mantle	H03VV-F
Housing construction form	cylinder smooth
Weight	65
Recommended actuator	BP 10, 2 x BP 10, BP 15, 2 x BP 15, 2 x BP 15/2, BP 34,BP 20, BP 31, BP
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Mechanical data

Design of electrical connection	Cable
Cable length	1
Conductors	2 x 0,75
AWG-Number	18
Mechanical life	1.000.000.000 operations
Electrical lifetime	1.000.000 1.000.000.000 operations
Switching frequency	300/
Actuating planes	Actuation from side
Switch distance	5 50 BP 10 = 5 mm 2 x BP 10 = 17 mm BP 15 = 6 mm 2 x BP 15 = 17mm 2 x BP 15/2 = 17 mm BP 34 = 15 20 mm BP 20 = 20 mm BP 31 = 20 mm BP 11 = 20 mm BP 12 = 10 30 mm BP 21 = 25 50 mm
- notice	Actuating distance up to 50 mm depending on actuating magnet and version
	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
Switching point accuracy	± 0,25 mm

Ambient conditions

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)	
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)	Νο	
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	

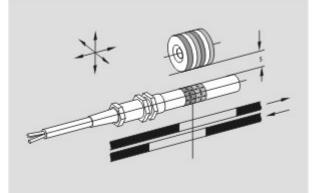
notice

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 ① active ② no active ___ ----^o Normally-open contact

o-it----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

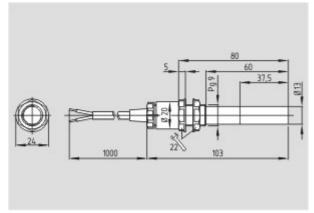
notice - Switch distance (fr) 41 kB, 07.08.2009 Code: s_bnsp03

notice - Switch distance (pt) 39 kB, 07.08.2009 Code: s_bnsp10

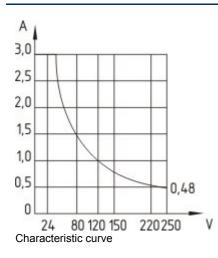
notice - Switch distance (it) 40 kB, 07.08.2009 Code: s_bnsp05

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

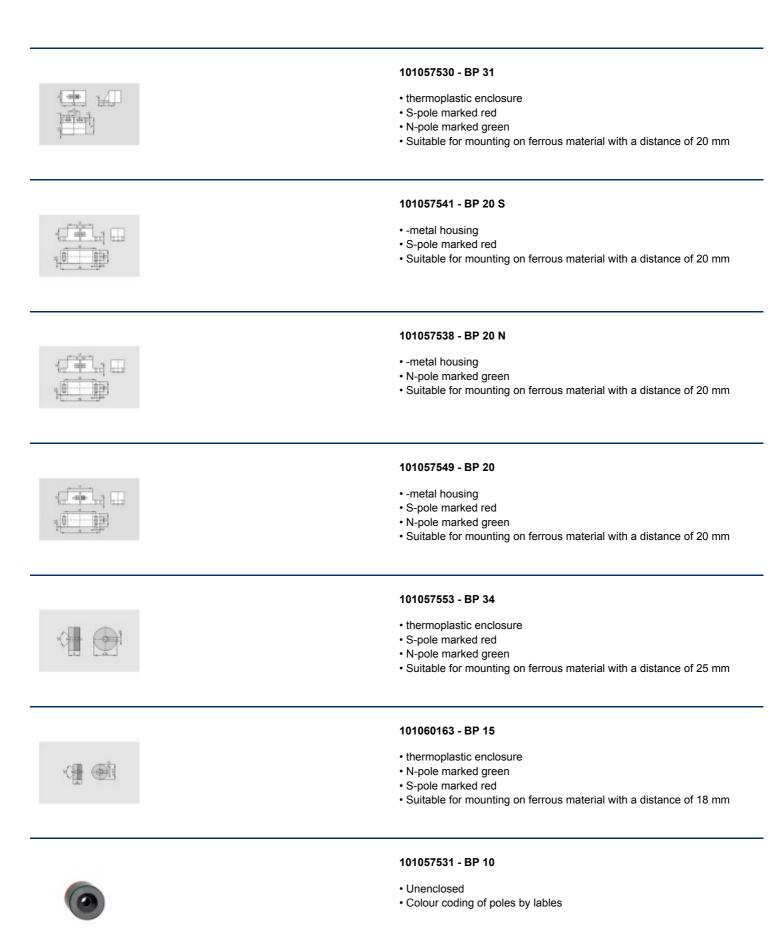
101057520 - BP 31 N

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



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 - 13:12:05h Kasbase 3.3.0.F.64I