Datasheet - BN 65-10Z/1

Magnetic reed switch / BN 65

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

- With pre-wired cable
- Non-contact principle
- Actuation from side
- Long life
- 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

Ordering details

Product type description	BN 65-10Z/1
Article number	101055805
EAN code	4030661009612

Approval

Approval	USA/CAN

Global Properties

Product name	BN 65
Standards	-
Compliance with the Directives (Y/N)	Yes
suitable for elevators (Y/N)	No
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	66 g
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 11, BP 12, BP 21

Mechanical data

Design of electrical connection	Cable
Cable length	1 m
Conductors	2 x 0,75 mm²
AWG-Number	18
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
Actuating planes	Actuation from side
Active area	lateral
Switch distance S_n	5 mm … 50 mm 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
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 ms … 0,6 ms
Latching (Y/N)	No
bias magnet (Y/N)	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	
- Min. environmental temperature	−25 °C
- Max. environmental temperature	+75 °C
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	-
Switch frequency	< 300 Hz
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

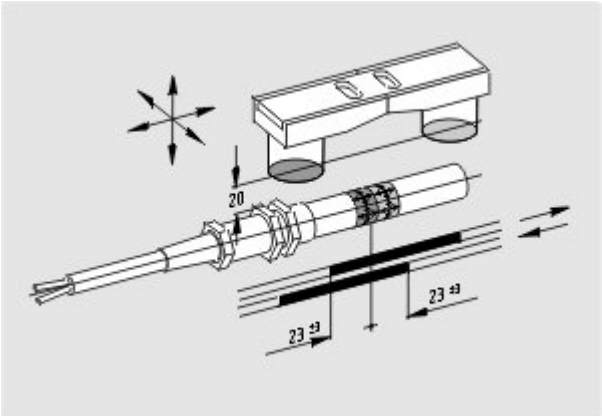
notice

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
active
no active
Normally-open contact
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

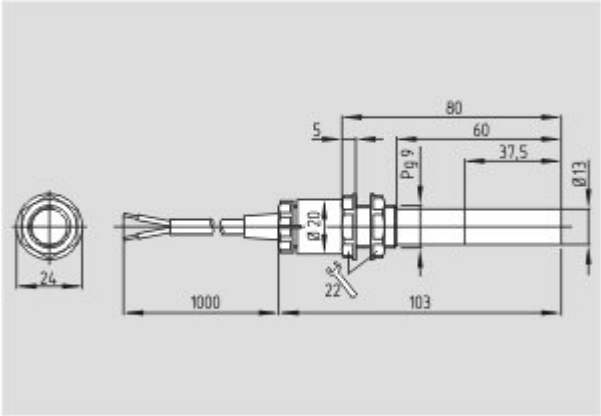
notice - Switch distance (fr) 41 kB, 07.08.2009
Code: s_bnsp03

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

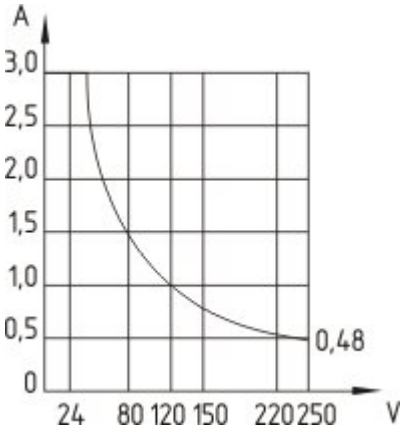
notice - Switch distance (it) 40 kB, 07.08.2009
Code: s_bnsp05

notice - Switch distance (es) 38 kB, 07.08.2009
Code: s_bnsp09

Images



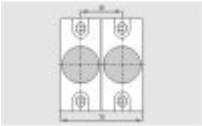
Dimensional drawing (basic component)



Characteristic curve

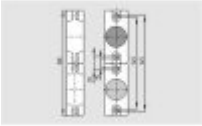
System components

Actuator



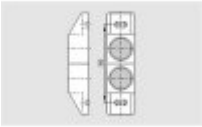
101057546 - BP 2x22/2 N(S)

- 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



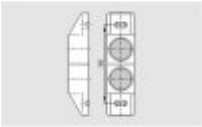
101057432 - BP 22 N (S)

- 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



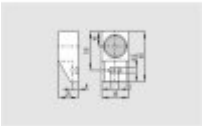
101059927 - BP 2x21 S

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



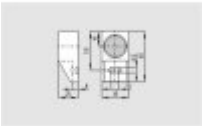
101059928 - BP 2x21 N

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



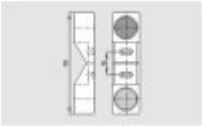
101057534 - BP 21 S

- 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

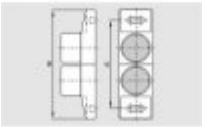


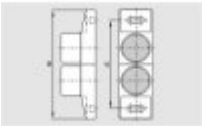
101059921 - BP 21

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

101059926 - BP 2x12 S

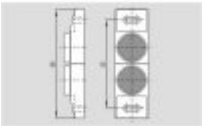
- Al-metal housing
- S-pole marked red
- Suitable for mounting on ferrous material





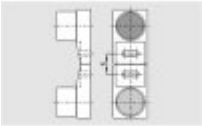
101059925 - BP 2x12 N

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



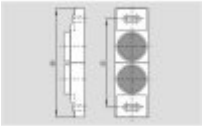
101059917 - BP 12 N

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



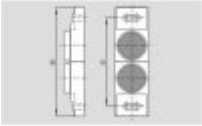
101059916 - BP 12

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



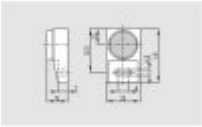
101059930 - BP 2x11 S

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



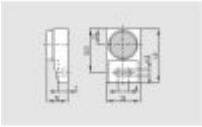
101059929 - BP 2x11 N

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



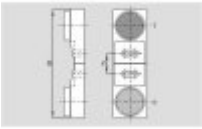
101057533 - BP 11 S

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



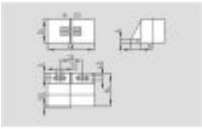
101059923 - BP 11 N

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



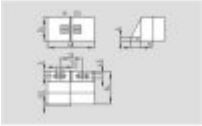
101059922 - BP 11

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



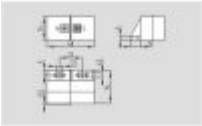
101057521 - BP 31 S

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



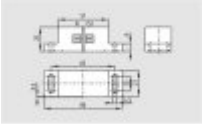
101057520 - BP 31 N

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



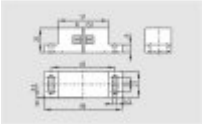
101057530 - BP 31

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



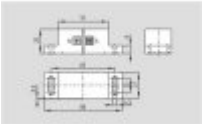
101057541 - BP 20 S

- 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

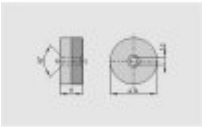


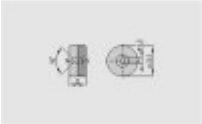
101057549 - BP 20

- 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





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

Image
Image et=sS