

Datasheet - BN 325-R-1389

Magnetic reed switch / BN 325



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

- Flat plug-in connector 6.3 mm and 2 shielding plates
- Non-contact principle
- 1 Reed kontakts
- Long life
- Actuating surface and direction of actuation marked by switch symbol
- 85 mm x 26 mm x 24 mm
- Thermoplastic enclosure
- Spade connector


Ordering details

Product type description	BN 325-R-1389
Article number	101147103
EAN code	4030661141411

Approval

Approval	-
----------	---

Global Properties

Product name	BN 325
Standards	-
Compliance with the Directives (Y/N) 	Yes
suitable for elevators (Y/N)	No
Mounting	rear with 2 Threaded bolt
Active principle	Magnetic drive
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic
Housing construction form	rectangular, flat
Weight	44 g
Recommended actuator	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, BE 20 N(S) ST 24VDC, BE 20 N(S) 48VDC

Mechanical data

Design of electrical connection	Flat plug-in connector 6.3 mm and 2 shielding plates
Mechanical life	1.000.000.e+9 operations
Electrical lifetime	1.000.000 ... 1.000.000.e+9 operations
Switching frequency	max. 300/s
Actuating planes	Actuation from side
Active area	lateral
Switch distance S_n	5 mm ... 55 mm

BP 10N = 10 mm
 BP 10S = 10 mm
 2 x BP 10N = 15 mm
 2 x BP 10S = 15 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 20 = 20 mm
 BE 20N = 15 mm
 BE 20S = 15 mm

- notice

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

Type of actuation

Magnet

restistance to shock

50 g / 11 ms

Resistance to vibration

10 ... 55 Hz, Amplitude 1 mm

Bounce duration

0,3 ms ... 0,6 ms

Latching (Y/N)

Yes

Actuating speed

max. 18 m/s

Switching point accuracy

± 0,25 mm

Ambient conditions

Ambient temperature

- Min. environmental temperature

-25 °C

- Max. environmental temperature

+70 °C

Protection class

IP40

Electrical data

Design of control element

bistable contact

Number of snap-in contacts

1

Switching time - Close

max. 1.5 ms

Switching time - Open

max. 0,5 ms

Voltage type

VAC

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 kontakts

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

- Width of sensor	85 mm
- Height of sensor	26 mm
- Length of sensor	24 mm

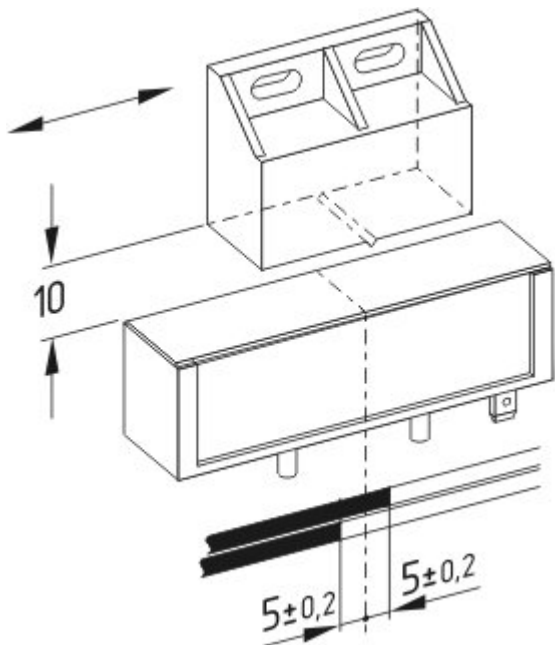
notice

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

- positive break NC contact
- active
- no active
- Normally-open contact
- Normally-closed contact

Documents

Operating instructions and Declaration of conformity (fr) 344 kB, 28.04.2014

Code: mrl_bn325-r-g_fr

Operating instructions and Declaration of conformity (jp) 292 kB, 12.06.2014

Code: mrl_bn325-r-g_jp

Operating instructions and Declaration of conformity (pl) 381 kB, 24.03.2014

Code: mrl_bn325-r-g_pl

Operating instructions and Declaration of conformity (it) 192 kB, 19.02.2014

Code: mrl_bn325-r-g_it

Operating instructions and Declaration of conformity (nl) 337 kB, 24.03.2014

Code: mrl_bn325-r-g_nl

Mounting and wiring instructions (de, en, fr) 61 kB, 13.06.2008

Code: m_n30p01

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_bnbsp01

notice - Switch distance (nl) 39 kB, 07.08.2009

Code: s_bnbsp04

notice - Switch distance (en) 42 kB, 07.08.2009

Code: s_bnbsp02

notice - Switch distance (fr) 41 kB, 07.08.2009

Code: s_bnbsp03

notice - Switch distance (pt) 39 kB, 07.08.2009

Code: s_bnbsp10

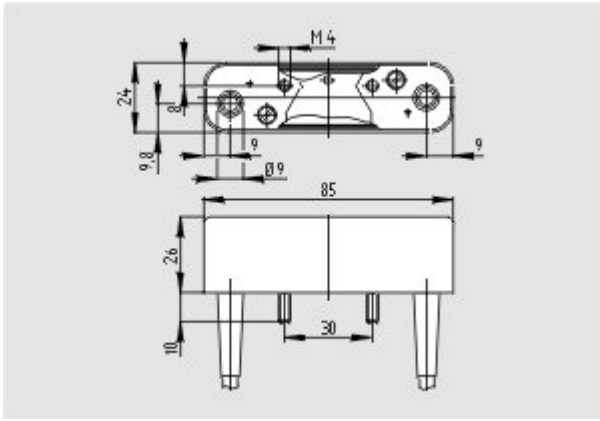
notice - Switch distance (it) 40 kB, 07.08.2009

Code: s_bnbsp05

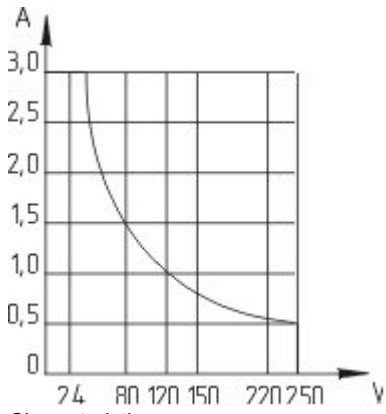
notice - Switch distance (es) 38 kB, 07.08.2009

Code: s_bnbsp09

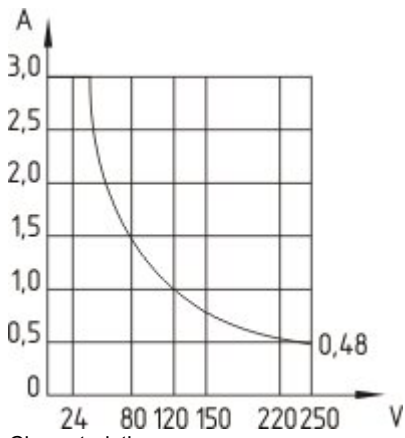
Images



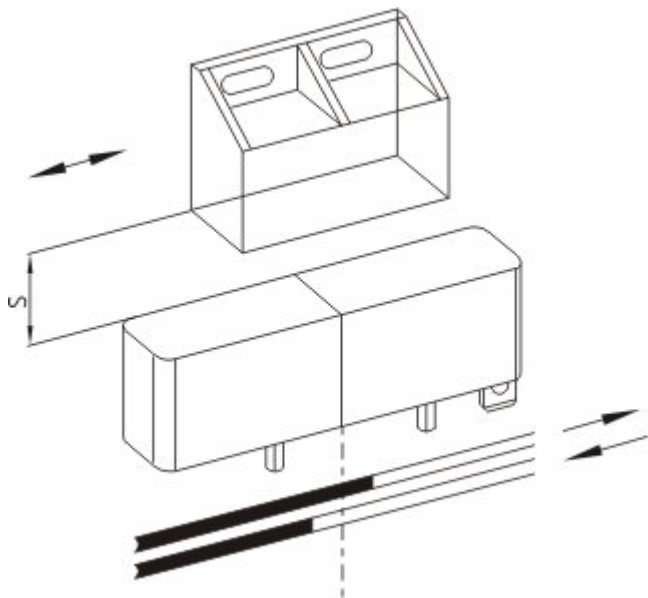
Dimensional drawing (basic component)



Characteristic curve



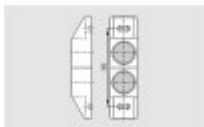
Characteristic curve



Diagram

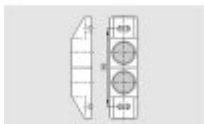
System components

Actuator



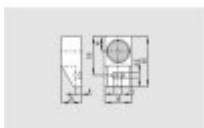
101059927 - BP 2x21 S

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



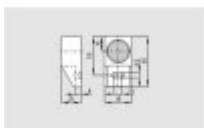
101059928 - BP 2x21 N

- 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

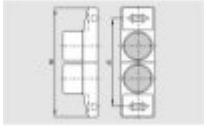


101057536 - BP 21 N

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

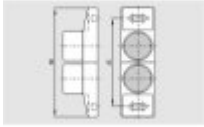
101059926 - BP 2x12 S

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



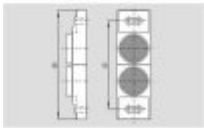
101059925 - BP 2x12 N

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



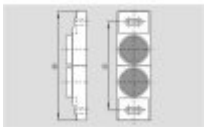
101059917 - BP 12 N

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



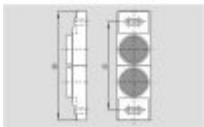
101059930 - BP 2x11 S

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



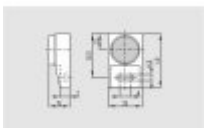
101059929 - BP 2x11 N

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



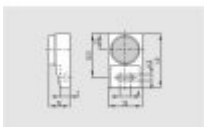
101057533 - BP 11 S

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



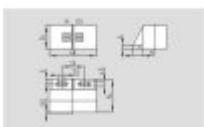
101059923 - BP 11 N

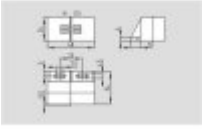
- Al-metal housing
- N-pole marked green
- Suitable for mounting on ferrous material



101057521 - BP 31 S

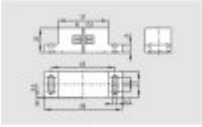
- thermoplastic enclosure
- S-pole marked red
- Suitable for mounting on ferrous material with a distance of 20 mm





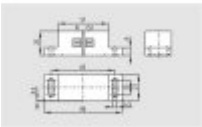
101057520 - BP 31 N

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



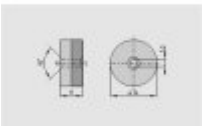
101057541 - BP 20 S

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



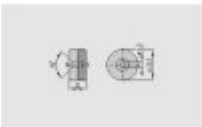
101057538 - BP 20 N

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



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 labels

