

## Datasheet - BN 325-R

Magnetic reed switch / BN 325


 Preferred typ


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

- Flat plug-in connector and 1 shielding plate
- Non-contact principle
- 1 Reed kontakts
- Actuation from front
- 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
Article number	101147009
EAN Code	4030661140933
eCl@ss	27-27-01-04

### Approval

Approval	-
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### Global Properties

Permanent light	BN 325
Standards	-
Compliance with the Directives (Y/N) 	Yes
suitable for elevators (Y/N)	Yes
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	35
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
- Lift switchgear	BP 10, 2 x BP 10, 2 x BP 15/2, BP 15, BP 34

### Mechanical data

Design of electrical connection	Flat plug-in connector 4.8 mm and 1 shielding plate
Mechanical life	1.000.000.000 operations

Electrical lifetime	1.000.000 ... 1.000.000.000 operations
Actuating planes	front side
Switch distance	5 ... 55 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  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	50 / 11
Resistance to vibration	10 ... 55 HZ, Amplitude 1 mm
Bounce duration	0,3 ... 0,6
Latching (Y/N)	Yes
Actuating speed	18
Switching point accuracy	± 0,25 mm

## Ambient conditions

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Ambient temperature	
- Min. environmental temperature	-25
- Max. environmental temperature	+70
Protection class	IP40

## Electrical data

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Design of control element	bistable contact
Number of snap-in contacts	1
Switching time - Close	1.5
Switching time - Open	0,5
Switch frequency	< 300
Dielectric strength	> 600 (50 )

Switching voltage	250
Switching current	3 A
Switching capacity	120

## Outputs

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Design of control output	Reed contacts
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## LED switching conditions display

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LED switching conditions display (Y/N)	No
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## ATEX

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Explosion protection categories for gases	None
Explosion protected category for dusts	None

## Dimensions

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Dimensions of the sensor	
- Width of sensor	85
- Height of sensor	26
- Length of sensor	24

## notice

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

## Included in delivery

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



Actuators must be ordered separately.

## Switch travel diagram

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Notes Switch travel diagram

-  Contact closed
-  Contact open
-  Setting range
-  Break point
-  Positive opening sequence/- angle
- VS** adjustable range of NO contact
- VÖ** adjustable range of NC contact
- N** after travel

## Documents

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**Operating instructions and Declaration of conformity** (en) 224 kB, 22.11.2017

Code: mrl\_bn325-r-g\_en

**Operating instructions and Declaration of conformity** (fr) 228 kB, 05.03.2018

Code: mrl\_bn325-r-g\_fr

**Operating instructions and Declaration of conformity** (jp) 308 kB, 03.11.2015

Code: mrl\_bn325-r-g\_jp

**Operating instructions and Declaration of conformity** (pl) 259 kB, 17.05.2018

Code: mrl\_bn325-r-g\_pl

**Operating instructions and Declaration of conformity** (pt) 227 kB, 09.01.2018

Code: mrl\_bn325-r-g\_pt

**Operating instructions and Declaration of conformity** (it) 223 kB, 09.01.2018

Code: mrl\_bn325-r-g\_it

**Operating instructions and Declaration of conformity** (es) 192 kB, 10.09.2014

Code: mrl\_bn325-r-g\_es

**Operating instructions and Declaration of conformity** (es) 226 kB, 21.12.2017

Code: mrl\_bn325-r-g\_es

**Operating instructions and Declaration of conformity** (nl) 221 kB, 08.08.2018

Code: mrl\_bn325-r-g\_nl

**Operating instructions and Declaration of conformity** (de) 195 kB, 22.11.2017

Code: mrl\_bn325-r-g\_de

**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\_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

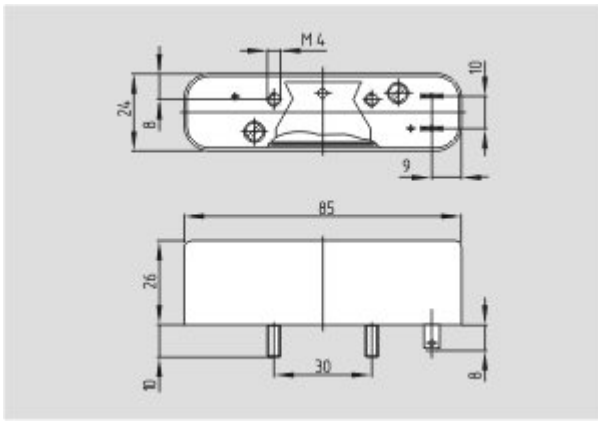
Code: s\_bnbsp10

**notice - Switch distance** (it) 40 kB, 07.08.2009

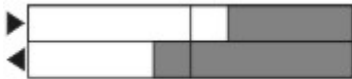
Code: s\_bnbsp05

**notice - Switch distance** (es) 38 kB, 07.08.2009

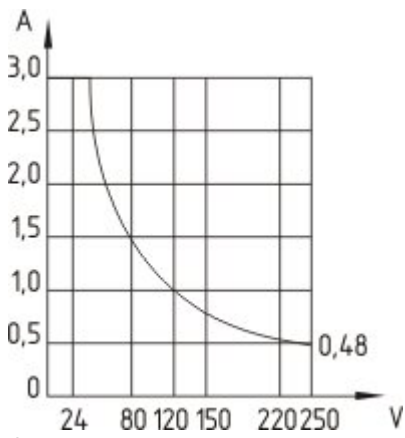
Code: s\_bnbsp09



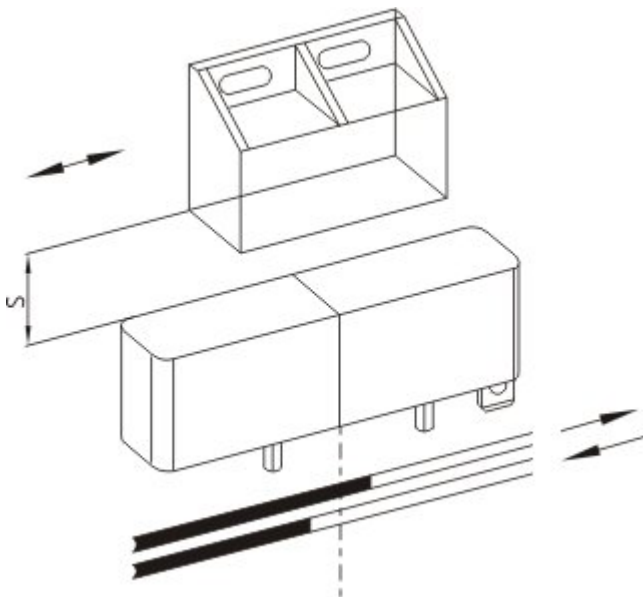
Dimensional drawing (basic component)



Switch travel diagram



Characteristic curve



Diagram

## System components

### Actuator

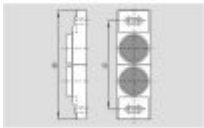


- -metal housing
- S-pole marked red
- Suitable for mounting on ferrous material



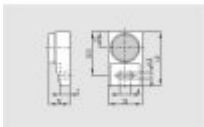
**101057536 - BP 21 N**

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



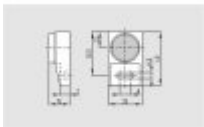
**101059917 - BP 12 N**

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



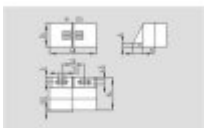
**101057533 - BP 11 S**

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



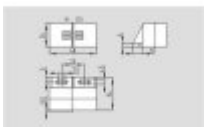
**101059923 - BP 11 N**

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



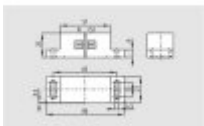
**101057521 - BP 31 S**

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



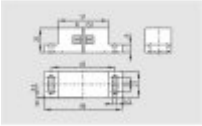
**101057520 - BP 31 N**

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



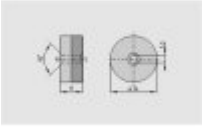
**101057541 - BP 20 S**

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



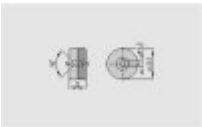
#### 101057538 - BP 20 N

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



#### 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

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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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