

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
- Actuation from front
- 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 |
| Article number | 101147009 |
| EAN code | 4030661140933 |

Approval

| | |
|----------|---|
| Approval | - |
|----------|---|

Global Properties

| | |
|--|--|
| Product name | BN 325 |
| Standards | IEC/EN 60947-5-2 |
| 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 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 |
| - 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.e+9 operations |
| Electrical lifetime | 1.000.000 ... 1.000.000.e+9 operations |
| Actuating planes | front side |
| 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

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 |
| resistance 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 |
| 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

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

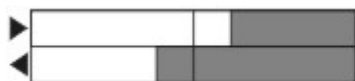
The opening and closing functions depend on the direction of actuation, the actuating magnets and the polarity of the actuating magnets.

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.

Switch travel diagram



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

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

Code: m_n30p01

Declaration of conformity (de) 188 kB, 10.07.2012

Code: __bn_p01

notice - Switch distance (pt) 39 kB, 07.08.2009

Code: s_bnbsp10

notice - Switch distance (es) 38 kB, 07.08.2009

Code: s_bnbsp09

notice - Switch distance (it) 40 kB, 07.08.2009

Code: s_bnbsp05

notice - Switch distance (nl) 39 kB, 07.08.2009

Code: s_bnbsp04

notice - Switch distance (fr) 41 kB, 07.08.2009

Code: s_bnbsp03

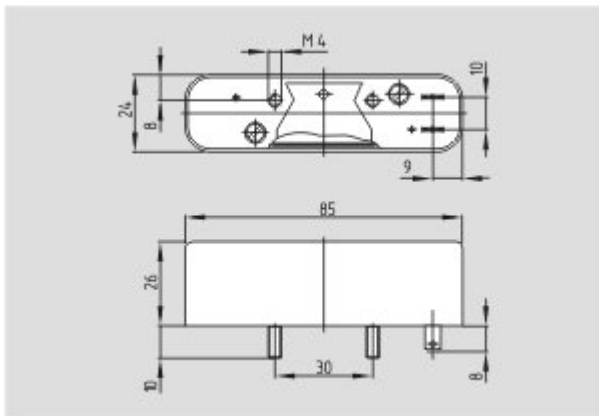
notice - Switch distance (en) 42 kB, 07.08.2009

Code: s_bnbsp02

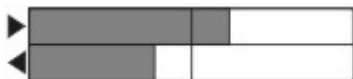
notice - Switch distance (de) 36 kB, 07.08.2009

Code: s_bnbsp01

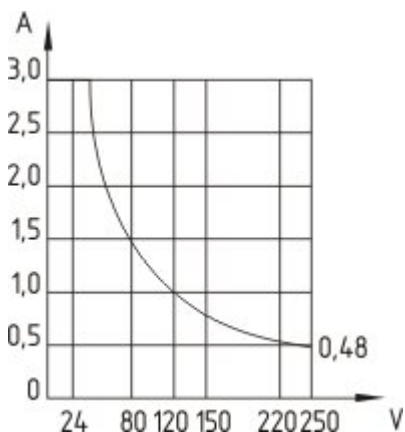
Images



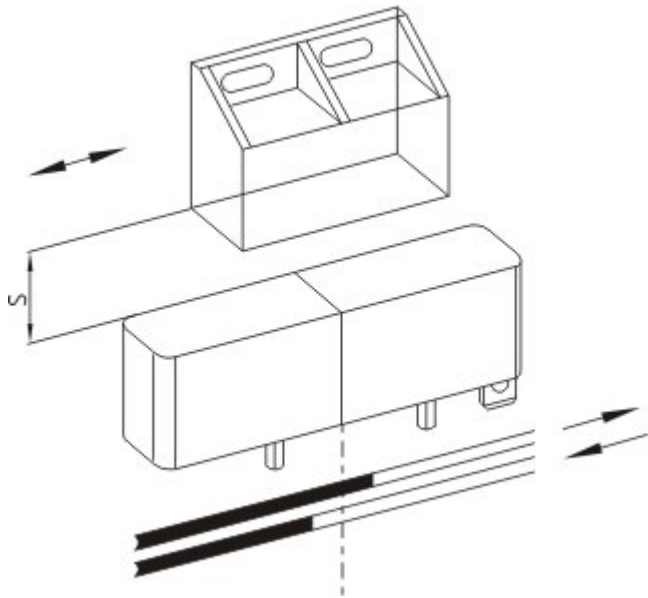
Dimensional drawing (basic component)



Switch travel diagram



Characteristic curve



Diagram

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

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