## Datasheet - BN 325-R-1239


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

- Non-contact principle
- Flat plug-in connector 4.8 mm and 2 shielding plates
- Actuation from front
- 1 Reed contakts
- Long life
- Actuating surface and direction of actuation marked by switch symbol
- $85 \mathrm{~mm} \times 26 \mathrm{~mm} \times 24 \mathrm{~mm}$
- Thermoplastic enclosure
- Spade connector


## Ordering details

Product type description
BN 325-R-1239
Article number
EAN Code
eCl@ss

101147090
4030661141282
27-27-01-04

## Approval

Approval

## Global Properties

Permanent light
Standards
Compliance with the Directives $(\mathrm{Y} / \mathrm{N}) \mathbf{C}$
suitable for elevators (Y/N)
Mounting
Active principle
Materials

- Material of the housings

Housing construction form
Weight
Recommended actuator

- Lift switchgear

BN 325

Yes
rear with 2 Threaded bolt
Yes

Magnetic drive

Plastic, glass-fibre reinforced thermoplastic
rectangular, flat
45
BP $10 \mathrm{~N}, \mathrm{BP} 10 \mathrm{~S}, 2 \times \mathrm{BP} 10 \mathrm{~N}, 2 \times \mathrm{BP} 10 \mathrm{~S}, \mathrm{BP} 15 \mathrm{~N}, \mathrm{BP} 15 \mathrm{~S}, 2 \times \mathrm{BP}$ 15/2 N, $2 \times$ BP 15/2 S, BP 34 N, BP 34 S, BP 20 N, BP 20 S, BP 31 N, BP $31 \mathrm{~S}, \mathrm{BP} 11 \mathrm{~N}, \mathrm{BP} 11 \mathrm{~S}, 2 \times \mathrm{BP} 11 \mathrm{~N}, 2 \times \mathrm{BP} 11 \mathrm{~S}, \mathrm{BP} 12 \mathrm{~N}, \mathrm{BP} 12 \mathrm{~S}, 2 \mathrm{x}$ BP $12 \mathrm{~N}, 2 \times \mathrm{BP} 12 \mathrm{~S}, \mathrm{BP} 21 \mathrm{~N}, \mathrm{BP} 21 \mathrm{~S}, 2 \times \mathrm{BP} 21 \mathrm{~N}, 2 \times \mathrm{BP} 21 \mathrm{~S}, \mathrm{BE}$ 20, BE $20 \mathrm{~N}(\mathrm{~S})$ ST 24VDC, BE $20 \mathrm{~N}(\mathrm{~S}) 48 \mathrm{VDC}$
BP 10, $2 \times$ BP 10, $2 \times$ BP 15/2, BP 15, BP 34

## Mechanical data

| Electrical lifetime | 1.000.000 .. 1.000.000.000 operations |
| :---: | :---: |
| Actuating planes | front side |
| Switch distance | 5... 55 |
|  | BP 10N $=10 \mathrm{~mm}$ |
|  | BP 10S $=10 \mathrm{~mm}$ |
|  | $2 \times \mathrm{BP} 10 \mathrm{~N}=15 \mathrm{~mm}$ |
|  | $2 \times \mathrm{BP} 10 \mathrm{~S}=15 \mathrm{~mm}$ |
|  | BP 15N = 12 mm |
|  | BP 15S $=12 \mathrm{~mm}$ |
|  | $2 \times \mathrm{BP} 15 / 2 \mathrm{~N}=17 \mathrm{~mm}$ |
|  | $2 \times B P 15 / 2 S=17 \mathrm{~mm}$ |
|  | BP $34 \mathrm{~N}=10 \ldots 25 \mathrm{~mm}$ |
|  | BP 34S = $10 \ldots 25 \mathrm{~mm}$ |
|  | BP 20N = 5 .. 20 mm |
|  | BP 20S $=5 \ldots 20 \mathrm{~mm}$ |
|  | BP $31 \mathrm{~N}=5 \ldots 20 \mathrm{~mm}$ |
|  | $\mathrm{BP} 31 \mathrm{~S}=5 \ldots 20 \mathrm{~mm}$ |
|  | BP 11N $=10 \mathrm{~mm}$ |
|  | $\mathrm{BP} 11 \mathrm{~S}=10 \mathrm{~mm}$ |
|  | $2 \times \mathrm{BP} 11 \mathrm{~N}=20 \mathrm{~mm}$ |
|  | $2 \times \mathrm{BP} 11 \mathrm{~S}=20 \mathrm{~mm}$ |
|  | BP 12N = 15 mm |
|  | BP 12S $=15 \mathrm{~mm}$ |
|  | $2 \times \mathrm{BP} 12 \mathrm{~N}=10 \ldots 25 \mathrm{~mm}$ |
|  | $2 \times \mathrm{BP} 12 \mathrm{~S}=10 \ldots 25 \mathrm{~mm}$ |
|  | BP $21 \mathrm{~N}=15 \ldots 40 \mathrm{~mm}$ |
|  | BP 21S = $15 \ldots 40 \mathrm{~mm}$ |
|  | $2 \times \mathrm{BP} 21 \mathrm{~N}=20 \ldots 55 \mathrm{~mm}$ |
|  | $2 \times \mathrm{BP} 21 \mathrm{~S}=20 \ldots 55 \mathrm{~mm}$ |
|  | BE $20=20 \mathrm{~mm}$ |
|  | BE 20N $=15 \mathrm{~mm}$ |
|  | BE 20S $=15 \mathrm{~mm}$ |
| - 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 | $10 \ldots 55 \mathrm{HZ}$, Amplitude 1 mm |
| Bounce duration | 0,3 .. 0,6 |
| Latching (Y/N) | Yes |
| Actuating speed | 18 |
| Switching point accuracy | $\pm 0,25 \mathrm{~mm}$ |

## Ambient conditions

Ambient temperature

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

## Electrical data

Design of control element
Number of snap-in contacts
Switching time - Close
bistable contact

Switching time - Open
1.5

- 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) No

## ATEX

Explosion protection categories for gases None

## Dimensions

Dimensions of the sensor

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


## notice

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

## Included in delivery

Actuators must be ordered separately.

## Switch travel diagram



Notes Switch travel diagramContact closedContact openSetting range
(b)

Break point
(P)

Positive opening sequence/- angle
VS adjustable range of NO contact
VÖ adjustable range of NC contact
$\mathbf{N}$ after travel

## Documents

Operating instructions and Declaration of conformity (en) $224 \mathrm{kB}, 22.11 .2017$
Code: mrl_bn325-r-g_en

Code: mrl_bn325-r-g_fr

Operating instructions and Declaration of conformity (jp) $308 \mathrm{kB}, 03.11 .2015$
Code: mrl_bn325-r-g_jp

Operating instructions and Declaration of conformity (pl) $259 \mathrm{kB}, 17.05 .2018$
Code: mrl_bn325-r-g_pl

Operating instructions and Declaration of conformity (pt) $227 \mathrm{kB}, 09.01 .2018$
Code: mrl_bn325-r-g_pt

Operating instructions and Declaration of conformity (it) $223 \mathrm{kB}, 09.01 .2018$
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) $221 \mathrm{kB}, 08.08 .2018$
Code: mrl_bn325-r-g_nl

Operating instructions and Declaration of conformity (de) $195 \mathrm{kB}, 22.11 .2017$
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: $\qquad$ bn_p01
notice - Switch distance (de) $36 \mathrm{kB}, 07.08 .2009$
Code: s_bnsp01
notice - Switch distance (nl) $39 \mathrm{kB}, 07.08 .2009$
Code: s_bnsp04
notice - Switch distance (en) $42 \mathrm{kB}, 07.08 .2009$
Code: s_bnsp02
notice - Switch distance (fr) 41 kB, 07.08.2009
Code: s_bnsp03
notice - Switch distance (pt) $39 \mathrm{kB}, 07.08 .2009$
Code: s_bnsp10
notice - Switch distance (it) $40 \mathrm{kB}, 07.08 .2009$
Code: s_bnsp05
notice - Switch distance (es) $38 \mathrm{kB}, 07.08 .2009$
Code: s_bnsp09


Dimensional drawing (basic component)


Switch travel diagram


Characteristic curve


Diagram

## System components

- -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


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 |

(9) |  | $101057531-$ BP 10 |
| :--- | :--- |
|  | $\bullet$ Unenclosed |
| $\bullet$ | Colour coding of poles by lables |

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