## Datasheet - BN 85-R-1824-3

- Mounting with clamping brackets and sheathed cable
- Non-contact principle
- 1 Reed contakts
- Actuation from front
- Long life
- Actuating distance up to 40 mm depending on actuating magnet and version
- $40 \mathrm{~mm} \times 35 \mathrm{~mm} \times 16,5 \mathrm{~mm}$
- Thermoplastic enclosure
- Reed-contact to clip-in, on-location assembly
(Minor differences between the printed image and the original product may exist!)


## Ordering details

Product type description
BN 85-R-1824-3
Article number
EAN Code
eCl@ss

101101624
4030661023533
27-27-01-04

## Approval

Approval

## Global Properties

Permanent light
Standards
Compliance with the Directives (Y/N) CE
suitable for elevators (Y/N)
Mounting
Active principle
Materials

- Material of the housings
- Material of the cable mantle

Housing construction form
Weight
Recommended actuator

- Lift switchgear

BN 85
-
Yes
Yes
clamping brackets and sheathed cable
Magnetic drive

Plastic, glass-fibre reinforced thermoplastic
LiY
Block
35
BP 6 S, BP 8 S, BP $10 \mathrm{~S}, 2 \times \mathrm{BP} 10 \mathrm{~S}, \mathrm{BP} 15 \mathrm{~S}, 2 \times \mathrm{BP} 15 \mathrm{~S}, \mathrm{BP} 34 \mathrm{~S}, \mathrm{BP}$ 20 S, BP 31 S, BP 11 S, BP 12 S

BP 6, BP 10, BP $2 \times 10, B P 15, B P 2 \times 15, B P 34$

## Mechanical data

| Design of electrical connection | Cable |
| :---: | :---: |
| Cable length | 1 |
| Conductors | $2 \times 0,25$ |
| AWG-Number | 23 |
| Mechanical life | 1.000.000.000 operations |
| Electrical lifetime | 500.000 .000 operations |
| Actuating planes | front side |
| Switch distance | 2 ... 40 <br> BP 6S = $2 \ldots 12 \mathrm{~mm}$ <br> BP $8 \mathrm{~S}=2 \ldots 10 \mathrm{~mm}$ <br> BP 10S $=5 \ldots 20 \mathrm{~mm}$ <br> $2 \times \mathrm{BP} 10 \mathrm{~S}=6 \ldots 27 \mathrm{~mm}$ <br> $\mathrm{BP} 15 \mathrm{~S}=5 \ldots 22 \mathrm{~mm}$ <br> $2 \times \mathrm{BP} 15 \mathrm{~S}=7 \ldots 28 \mathrm{~mm}$ <br> BP 34S = $10 \ldots 40 \mathrm{~mm}$ <br> BP 20S $=3 \ldots 28 \mathrm{~mm}$ <br> BP 31S $=4 \ldots 30 \mathrm{~mm}$ <br> BP 11S $=4 \ldots 23 \mathrm{~mm}$ <br> BP 12S = $5 \ldots 27 \mathrm{~mm}$ |
| - notice | Actuating distance up to 40 mm depending on actuating magnet and version <br> 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 | 60 g , on sine wave oscillation |
| Bounce duration | 0,2 |
| Latching (Y/N) | Yes |
| Actuating speed | 18 |

## Ambient conditions

Ambient temperature

- Min. environmental temperature
- Max. environmental temperature

Protection class

0
$+75$
IP40 to IEC/EN 60529

## Electrical data

|  |  |
| :--- | :--- |
| Design of control element | bistable contact |
| Number of snap-in contacts | 1 |
| Switching time - Close | 2 |
| Switching time - Open | 0,07 |
| Voltage type |  |
| Dielectric strength | 400 |
| Switching voltage | 60 |
| Switching current | 1 A |
| Switching capacity | 30 |

## Outputs

## ATEX

| Explosion protection categories for gases | None |
| :--- | :--- |
| Explosion protected category for dusts | None |

## Dimensions

## Dimensions of the sensor

- Width of sensor 40
- Height of sensor 35
$\begin{array}{ll}\text { - Length of sensor } & 16.5\end{array}$


## 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.

## Diagram



Note Diagram
$\rightarrow$ positive break NC contact
(1) active
(1) no active
--_- Normally-open contact
Normally-closed contact

## Documents

Operating instructions (en) $124 \mathrm{kB}, 18.12 .2018$
Code: mrl_bn85_en

Operating instructions (de) 121 kB, 18.12.2018
Code: mrl_bn85_de

Code: $\qquad$ 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 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

Images



## System components

## Actuator

101057533 - BP 11 S


- -metal housing
- S-pole marked red
- 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


101057541 - BP 20 S

- -metal housing
- S-pole marked red
- 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


## 101054816 - BP 8

- Unenclosed
- S-pole marked red

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