

Datasheet - BN 85-R-1824-2 3M

Magnetic reed switch / BN 85



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

- Mounting on C DIN rail and sheathed cable with screws
- Non-contact principle
- 1 Reed kontakts
- Long life
- Actuating distance up to 40 mm depending on actuating magnet and version
- 40 mm x 35 mm x 16,5 mm
- Thermoplastic enclosure
- Reed-contact to clip-in, on-location assembly


Ordering details

| | |
|--------------------------|-------------------|
| Product type description | BN 85-R-1824-2 3M |
| Article number | 101095308 |
| EAN Code | 4030661268026 |
| eCl@ss | 27-27-01-04 |

Approval

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

Global Properties

| | |
|--|---|
| Permanent light | BN 85 |
| Standards | - |
| Compliance with the Directives (Y/N)  | Yes |
| suitable for elevators (Y/N) | Yes |
| Mounting | C DIN rail and sheathed cable with screws |
| Active principle | Magnetic drive |
| Materials | |
| - Material of the housings | Plastic, glass-fibre reinforced thermoplastic |
| - Material of the cable mantle | LiY |
| Housing construction form | Block |
| Weight | 80 |
| Recommended actuator | BP 6 S, BP 8 S, BP 10 S, 2 x BP 10 S, BP 15 S, 2 x BP 15 S, BP 34 S, BP 20 S, BP 31 S, BP 11 S, BP 12 S |

Mechanical data

| | |
|---------------------------------|---|
| Design of electrical connection | Cable |
| Cable length | 3 |
| Conductors | 2 x 0,75 |
| AWG-Number | 18 |
| Mechanical life | 1.000.000.000 operations |
| Electrical lifetime | 500.000.000 operations |
| Actuating planes | front side |
| Active area | lateral |
| Switch distance | 2 ... 40 BP 6S = 2 ... 12 mm BP 8S = 2 ... 10 mm BP 10S = 5 ... 20 mm 2 x BP 10S = 6 ... 27 mm BP 15S = 5 ... 22 mm 2 x BP 15S = 7 ... 28 mm BP 34S = 10 ... 40 mm BP 20S = 3 ... 28 mm BP 31S = 4 ... 30 mm BP 11S = 4 ... 23 mm BP 12S = 5 ... 27 mm |
| - notice | Actuating distance up to 40 mm depending on actuating magnet and version |
| Type of actuation | Magnet |
| resistance to shock | 60 g, on sine wave oscillation |
| Bounce duration | 0,2 |
| Latching (Y/N) | Yes |

Ambient conditions

| | |
|----------------------------------|----------------------|
| Ambient temperature | |
| - Min. environmental temperature | 0 |
| - Max. environmental temperature | +75 |
| Protection class | 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

| | |
|--------------------------|---------------|
| 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 | 40 |
| - Height of sensor | 35 |
| - Length of sensor | 16.5 |

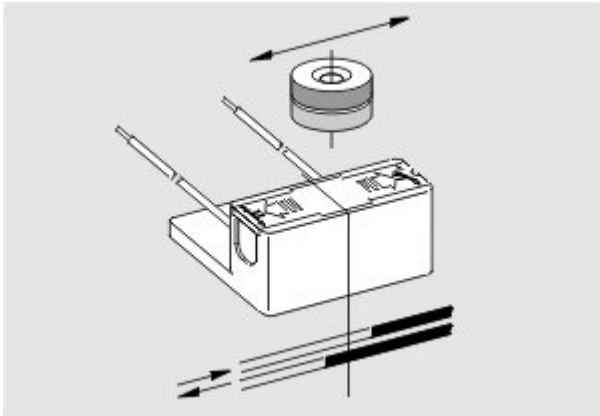
notice

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

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

Documents

Operating instructions (en) 124 kB, 18.12.2018

Code: mrl_bn85_en

Operating instructions (de) 121 kB, 18.12.2018

Code: mrl_bn85_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

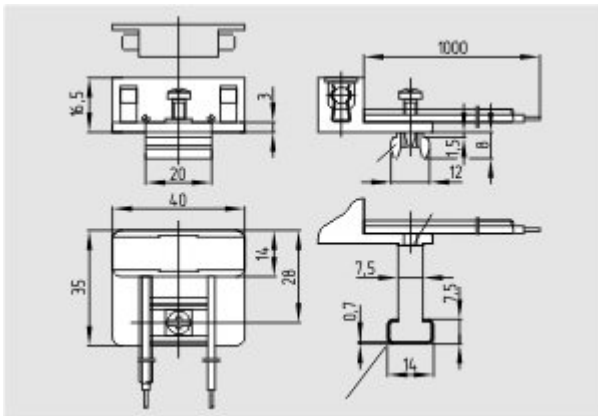
notice - Switch distance (it) 40 kB, 07.08.2009

Code: s_bnbsp05

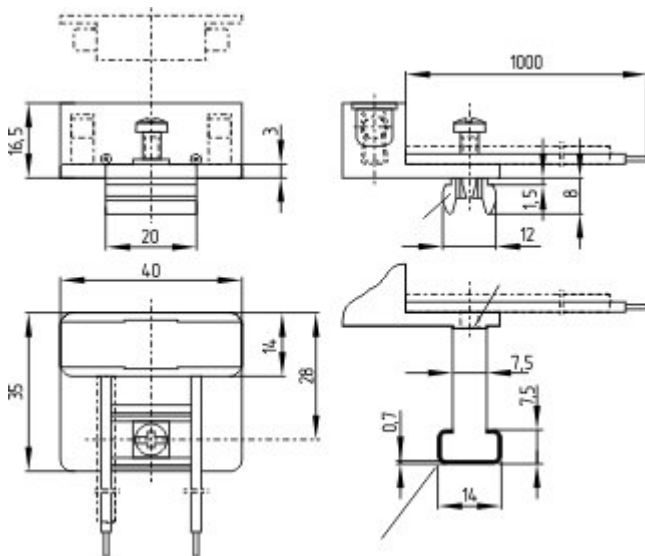
notice - Switch distance (es) 38 kB, 07.08.2009

Code: s_bnbsp09

Images



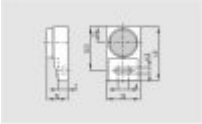
Dimensional drawing (basic component)



Dimensional drawing (basic component)

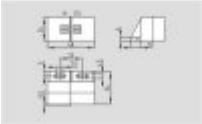
System components

Actuator



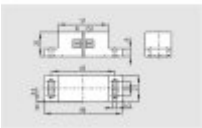
101057533 - BP 11 S

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



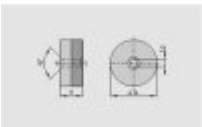
101057521 - BP 31 S

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



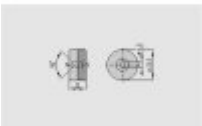
101057541 - BP 20 S

- -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 labels

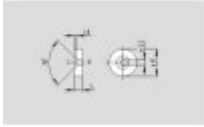


101054816 - BP 8

- Unenclosed
- S-pole marked red

101091837 - BP 6

- Unenclosed
- S-pole marked red



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

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